DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

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CENSUS OF MANUFACTURES 1914

SOUTH DAKOTA

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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.

SOUTH DAKOTA.

By Walter H. Booth.

GENERAL STATISTICS.

General character of the state.—The gross area of South Dakota is 77,615 square miles, of which 76,868 represent land surface. Its population in 1900 was 401,570, in 1910, 583,888, and the estimated population in 1914 was 661,583. South Dakota ranked fourteenth in area and thirty-seventh in population in 1914. In 1914 the density of population was 8.6 inhabitants per square mile, as compared with 5.2 in 1900.

The urban population of the state in 1910—that is, the population residing in cities or other incorporated places of 2,500 inhabitants or more—was 76,673, or 13.1 per cent of the total, as against 10.2 per cent in 1900. In 1914 there were two cities estimated to have more than 10,000 inhabitants; namely, Aberdeen and Sioux Falls. The aggregate population of these two cities—29,525—formed 4.5 per cent of the estimated total population of the state, and reported 47.9 per cent of its manufactured products.

South Dakota is essentially an agricultural state. Lying in the Great Plains region, its surface, with the exception of the Black Hills district, varies from level plain to rolling upland. Agriculture is by far the most important industry. The total value of all farm crops grown in 1909 was $125,507,249, and of cereals alone $98,953,050; and the value of domestic animals sold or slaughtered on farms during that year was $38,359,140. South Dakota ranked fifth among the states in 1909 in the production of wheat.

The United States Geological Survey reports for 1914 the mineral output of the state as valued at $7,861,601, of which gold and silver represented $7,431,191.

The eastern part of the state and the mining regions of the southwestern part are well provided with transportation facilities. The Interstate Commerce Commission reported 4,238 miles of steam railway in 1914.

Importance and growth of manufactures.—In 1914, measured by the value of products of its manufacturing industries—$24,138,566—South Dakota ranked forty-fifth among the 48 states comprising continental United States, holding the same rank in respect to wage earners, with an average of 3,788 engaged in such industries. In 1909 the state ranked forty-sixth, both in value of products and average number of wage earners. Of the total value of products manufactured in the United States in 1914, South Dakota's proportion was small, but one-tenth of 1 per cent, the same as in 1909 and 1904.

Table 1 summarizes the more important data relative to all classes of manufactures combined in South Dakota, 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	898	1,020	686	624	−12.0	48.7	9.9
Persons engaged	5,346	5,226	3,582	(2)	2.3	45.9	.....
Proprietors and firm members	762	942	649	(2)	−19.1	45.1	.....
Salaried employees	796	682	441	288	16.7	54.6	53.1
Wage earners (average number)	3,788	3,602	2,492	2,224	5.2	44.5	12.1
Primary horsepower	16,324	17,666	11,154	11,775	−7.6	58.4	−5.3
Capital	$15,059,583	$13,017,932	$7,585,142	$6,051,288	15.7	71.6	25.3
Salaries and wages	3,462,869	2,913,133	1,716,033	1,305,274	18.9	69.8	31.5
Salaries	834,717	615,621	294,353	175,487	35.6	109.1	67.7
Wages	2,628,152	2,297,512	1,421,680	1,129,787	14.4	61.6	25.8
Paid for contract work	51,329	196,243	55,731	(2)	−73.8	252.1	.....
Rent and taxes (including internal revenue)	353,275	239,705	[3]100,807	(2)	47.4	.....	.....
Cost of materials	17,079,357	11,476,350	8,696,831	6,483,677	48.8	32.0	34.1
Value of products	24,138,566	17,870,135	13,085,333	9,529,946	35.1	36.6	37.3
Value added by manufacture (value of products less cost of materials)	7,059,209	6,393,785	4,388,502	3,046,269	10.4	45.7	44.1

[1] A minus sign (−) denotes decrease; percentages are omitted where comparable figures can not be given. [2] Figures not available. [3] Exclusive of internal revenue.

All of the items except cost of materials show smaller increases from 1909 to 1914 than for the preceding five-year period, while three show an actual decrease. The decrease in the number of establishments and proprietors and firm members is due chiefly to decreases in the artificial stone, the butter, and the flour-mill and gristmill industries.

Mills engaged exclusively in custom grinding for consumption in the immediate neighborhood should not be included in the census of manufactures, but it is not always possible to conduct the canvass in regard to the omission of these establishments on uniform lines in all sections of the country at different censuses.

The value of products and value added by manufacture show an increase, although a smaller percentage from 1909 to 1914 than for the two preceding five-year periods.

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.

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	898	3,788	100.0	$24,138,566	100.0	$7,059,209	100.0	5.2	44.5	12.1	35.1	36.6	37.3	10.4	45.7	44.1
Flour-mill and gristmill products	72	255	6.7	5,556,996	23.0	835,305	11.8	−10.5	−17.9	26.2	−10.5	−4.8	103.1	−4.2	−24.9	121.6
Butter	62	134	3.5	2,920,342	12.1	342,983	4.9	−3.6	−27.6	29.7	8.7	23.0	82.1	−9.3	8.0	80.4
Printing and publishing	379	801	21.2	2,135,580	8.8	1,673,916	23.7	−2.9	39.4	19.8	8.1	61.7	63.8	10.1	55.1	67.5
Bread and other bakery products	88	255	6.7	1,256,121	5.2	552,590	7.8	−10.8	146.6	.....	8.2	199.2	391.1	25.7	158.8	240.0
Cars and general shop construction and repairs by steam-railroad companies	6	579	15.3	1,177,759	4.9	518,723	7.4	77.1	77.7	57.3	168.3	74.9	41.0	89.4	128.3	31.9
Lumber and timber products	51	281	7.4	860,143	3.6	404,996	5.7	−37.7	136.1	−48.5	−9.0	150.7	−23.8	−32.0	112.9	−7.6
Confectionery	4	105	2.8	545,710	2.3	172,847	2.5	−0.9	.....	.....	36.5	20.5	.....	34.1	−8.5	.....
Tobacco, cigars	40	197	5.2	434,028	1.8	274,970	3.9	−3.0	21.6	29.5	−4.4	38.4	66.5	−5.2	44.3	57.0
Gas, illuminating and heating	17	80	2.1	379,543	1.6	243,116	3.4	−25.9	.....	.....	36.3	87.8	.....	53.8	58.0	.....
Liquors, malt	4	71	1.9	362,128	1.5	229,495	3.3	.....	.....	.....	−40.3	50.2	38.6	−38.9	56.9	−1.2
Mineral and soda waters	27	63	1.7	225,953	0.9	130,436	1.8	.....	.....	.....	8.1	85.0	50.7	.....	60.5	52.8
Marble and stone work	11	29	0.8	174,750	0.7	87,288	1.2	−75.0	.....	80.8	−20.5	.....	−14.9	−40.8	188.2	−51.0
Foundry and machine-shop products	20	60	1.6	169,011	0.7	102,242	1.4	.....	−36.6	.....	−24.9	1.8	.....	−32.9	−9.0	.....
Copper, tin, and sheet-iron work	5	24	0.6	162,749	0.7	78,060	1.1	.....	.....	.....	50.9	.....	.....	32.2	.....	.....
All other industries	112	854	22.5	7,777,753	32.2	1,412,242	20.0	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 23; a minus sign (−) denotes decrease; percentages are omitted where base is less than 100 or when comparable figures can not be given.

Separate statistics are presented for 14 industries, or industry groups, each with products valued at more than $150,000 in 1914. These industries include 1 with products exceeding $5,000,000 in value, 4 with products between $1,000,000 and $5,000,000, and 9 with products valued at less than $1,000,000. Included under the head of "all other industries," are several having products in excess of $100,000, the statistics for which can not be shown separately without the possibility of disclosing the operations of individual establishments. Among these industries are the following: Automobile bodies and parts, patent medicines and compounds and druggists' preparations, and slaughtering and meat packing, the latter being one of the most important industries in the state.

The industries in this table are arranged in the order of their importance 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. Flour-mill and gristmill products, which ranked first in value, was fourth in number of wage earners, and second in value added by manufacture. Printing and publishing, third in value, was first in wage earners and value added by manufacture. Cars and general shop construction and repairs by steam-railroad companies, fifth in value, was second in wage earners and fourth in value added by manufacture.

In rank according to value of products, there were a few changes in 1914 as compared with 1909. Of the more important industries shown in the table, flour-mill and gristmill products, butter, printing and publishing, and bread and other bakery products held the same rank at both censuses.

Flour-mill and gristmill products.—This industry, which excludes custom mills grinding for toll or local consumption, continues to lead in value of products among the industries shown. In 1914 the value of products represented less than one-fourth of the total for all industries in the state as against more than one-third in 1909, there being a decrease of $651,220, or 10.5 per cent, during the five-year period.

Butter.—During the five-year period 1909–1914 there was an increase in the value of products of $234,831, or 8.7 per cent, but a decrease of $34,495, or 9.3 per cent, in value added by manufacture. The average number of wage earners decreased from 139 in 1909 to 134 in 1914.

Printing and publishing.—This industry embraced over two-fifths of the total number of establishments in the state, and gave employment to 801 wage earners, the largest number shown among the industries reported. Of the 379 establishments, 363 were engaged in the publication of newspapers and periodicals, and 16 operated job printing offices only. There was an increase of $159,604, or 8.1 per cent, in value of products, from 1909 to 1914, and of $154,434, or 10.1 per cent, in value added by manufacture, while the average number of wage earners decreased 2.9 per cent.

Bread and other bakery products.—This industry shows an increase, from 1909 to 1914, in value of products and in value added by manufacture, but the number of establishments and the average number of wage earners show slight decreases. Included in this

industry is one establishment engaged almost exclusively in the production of biscuits and crackers.

Cars and general shop construction and repairs by steam-railroad companies.—This industry represents the work done in the repair shops operated by steam-railroad companies, and consists almost exclusively of repairs to the rolling stock and equipment. It does not include minor repairs made in roundhouses. The value of products represents practically the expenditures in salaries, wages, and materials. The industry employed 579 wage earners in 1914 and was exceeded in this respect by only one industry—printing and publishing.

Lumber and timber products.—This industry embraces 34 establishments operating sawmills, and the logging connected therewith, and 17 operating planing mills not connected with sawmills. The depletion of the forests naturally reduces the output in the lumber industry, and the decline of the industry in South Dakota is no doubt due to this cause. From 1909 to 1914 there was a decrease in value of products, average number of wage earners, and value added by manufacture. In 1909 this industry employed an average of 451 wage earners as compared with 281 in 1914.

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	5,346	4,712	634	88.1	11.9
	1909	5,226	4,588	638	87.8	12.2
Proprietors and officials	1914	1,061	1,025	36	96.6	3.4
	1909	1,227	1,188	39	96.8	3.2
Proprietors and firm members	1914	762	730	32	95.8	4.2
	1909	942	906	36	96.2	3.8
Salaried officers of corporations	1914	71	70	1	98.6	1.4
	1909	96	95	1	99.0	1.0
Superintendents and managers	1914	228	225	3	98.7	1.3
	1909	189	187	2	98.9	1.1
Clerks and other subordinate salaried employees.	1914	497	352	145	70.8	29.2
	1909	397	255	142	64.2	35.8
Wage earners (average number)	1914	3,788	3,335	453	88.0	12.0
	1909	3,602	3,145	457	87.3	12.7
16 years of age and over	1914	3,731	3,283	448	88.0	12.0
	1909	3,556	3,099	457	87.1	12.9
Under 16 years of age	1914	57	52	5	91.2	8.8
	1909	46	46	.....	100.0	.....

In 1914 the number of persons engaged in manufactures was 5,346, of whom 3,788 were wage earners, 1,061 were proprietors and officials, and 497 were clerks. Of the wage earners, 3,335 were males and 453 females, or 88 per cent and 12 per cent, respectively. Figures for individual industries will be found in Table 24.

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 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	2.3	2.7	−0.6	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	−13.5	−13.7	.....	19.8	23.5	21.8	25.9	5.7	6.1
Proprietors and firm members	−19.1	−19.4	.....	14.2	18.0	15.5	19.7	5.0	5.6
Salaried officers of corporations	.....	.....	.....	1.3	1.8	1.5	2.1	0.2	0.2
Superintendents and managers	20.6	20.3	.....	4.3	3.6	4.8	4.1	0.5	0.3
Clerks and other subordinate salaried employees	25.2	38.0	2.1	9.3	7.6	7.5	5.6	22.9	22.3
Wage earners (average number)	5.2	6.0	−0.9	70.9	68.9	70.8	68.5	71.5	71.6
16 years of age and over	4.9	5.9	−2.0	69.8	68.0	69.7	67.5	70.7	71.6
Under 16 years of age	.....	.....	.....	1.1	0.9	1.1	1.0	0.8	.....

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

This table shows a decrease during the five-year period in the total number of proprietors and firm members of 19.1 per cent. The total number of superintendents and managers increased 20.6 per cent; clerks, 25.2 per cent; and wage earners, 5.2 per cent. Of all persons engaged in manufacturing industries in 1914, 70.9 per cent were wage earners, as compared with 68.9 per cent in 1909. Only 1.1 per cent were children under 16 years of age in 1914, and nine-tenths of 1 per cent in 1909.

The average number of wage earners employed, for all industries combined, with per cent distribution of males and females 16 years of age and over and of children under 16 years of age, is given in Table 5 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 table shows an actual increase from census to census in the total average number of wage earners. Of the 7 industries

shown in the table, however, for 1909 and 1914, each shows a decrease in this respect for that five-year period except cars and general shop construction and repairs by steam-railroad companies.

Table 5

INDUSTRY.	Census year.	WAGE EARNERS. Average number.[1]	Per cent of total. 16 years of age and over. Male.	Per cent of total. 16 years of age and over. Female.	Per cent of total. Under 16 years of age.
All industries	1914	3,788	86.7	11.8	1.5
	1909	3,602	86.0	12.7	1.3
	1904	2,492	87.5	11.2	1.3
Bread and other bakery products	1914	255	72.2	27.8	.....
	1909	286	65.7	32.9	1.4
Butter	1914	134	93.3	6.7	.....
	1909	139	95.7	4.3	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	579	100.0	.....	.....
	1909	327	100.0	.....	.....
Flour-mill and gristmill products	1914	255	99.6	0.4	.....
	1909	285	99.6	.....	0.4
Lumber and timber products	1914	281	100.0	.....	.....
	1909	451	99.8	.....	0.2
Printing and publishing	1914	801	70.2	24.7	5.1
	1909	825	69.5	28.0	2.5
Tobacco, cigars	1914	197	80.7	16.2	3.0
	1909	203	80.3	15.3	4.4
All other industries	1914	1,286	88.6	10.7	0.8
	1909	1,086	90.3	8.7	0.9

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

For all industries combined, the proportion of male wage earners and children under 16 years of age was slightly more in 1914 than in 1909, while the proportion of females was slightly less.

Of the seven industries for which separate figures are presented, four show an increase from 1909 to 1914 in proportion of males, and three an increase in proportion of females, while only one—printing and publishing—shows an increase in 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.

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.

In 1914 the maximum number of wage earners was employed in October, and the minimum number in February; in 1909 the maximum month was September, and in 1904, July. It will be noticed that for all three periods the least activity in manufactures is during the months from January to April, inclusive, while the period of greatest activity is more variable, running from July to October. The greatest difference in employment between maximum and minimum months in any one of the three census years was 817 in 1909. Based upon the number of wage earners reported for each of the 12 months, the average number per month would be 3,788 in 1914, and 3,602 in 1909.

Table 6

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES. Number.[1] 1914	Number.[1] 1909	Number.[1] 1904	Per cent of maximum. 1914	Per cent of maximum. 1909	Per cent of maximum. 1904
January	3,490	3,108	2,337	85.4	79.2	88.0
February	3,462	3,235	2,332	84.7	82.4	87.8
March	3,560	3,374	2,355	87.1	86.0	88.7
April	3,588	3,373	2,385	87.8	85.9	89.8
May	3,715	3,543	2,482	90.9	90.3	93.5
June	3,794	3,763	2,572	92.8	95.9	96.9
July	3,878	3,824	2,655	94.9	97.4	100.0
August	3,992	3,779	2,632	97.7	96.3	99.1
September	3,990	3,925	2,654	97.6	100.0	99.9
October	4,087	3,800	2,565	100.0	98.3	96.6
November	4,007	3,869	2,510	98.0	98.6	94.5
December	3,893	3,572	2,425	95.3	91.0	91.3

[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 in each of the two cities having more than 10,000 inhabitants.

The lumber industry shows the greatest fluctuation in monthly employment, the percentage which the minimum formed of the maximum being 47.6. The great fluctuation in wage earners in this industry was due to the fact that a large establishment was in operation only during the last three months of the year.

Butter manufactures also show a considerable fluctuation in monthly employment, the percentage which the minimum formed of the maximum being 64.2.

Printing and publishing and bread and other bakery products are the industries which show the most stable employment, the percentage which the minimum is of the maximum in 1914 being 95.9 and 89.6, respectively.

The monthly employment of wage earners in the two cities shows less fluctuation than for the state as a whole, in 1914 the per cent that the minimum month of employment formed of the maximum being 89.1 for Aberdeen and 87.9 for Sioux Falls.

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.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries	3,788	3,490	*3,462*	3,560	3,588	3,715	3,794	3,878	3,992	3,990	**4,087**	4,007	3,893	84.7
Bread and other bakery products	255	243	242	*242*	244	249	256	259	261	257	269	**270**	268	89.6
Butter	134	*106*	108	120	129	146	158	**165**	150	134	126	133	133	64.2
Cars and general shop construction and repairs by steam-railroad companies	579	*542*	551	581	561	574	560	584	593	**619**	610	610	563	87.6
Confectionery	105	101	105	108	95	94	*92*	100	98	111	**124**	116	116	74.2
Flour-mill and gristmill products	255	255	246	255	240	247	242	*240*	249	281	269	271	265	85.4
Foundry and machine-shop products	60	56	57	57	55	63	**66**	65	64	64	61	59	*53*	80.3
Gas, illuminating and heating	80	69	*69*	74	**102**	82	82	95	87	82	71	76	71	67.6
Liquors, malt	71	65	66	65	71	73	82	**84**	82	71	67	64	*62*	73.8
Lumber and timber products	281	226	223	*211*	224	254	249	238	227	230	443	427	420	47.6
Printing and publishing	801	800	802	795	789	*788*	795	798	794	793	817	**822**	819	95.9
Tobacco, cigars	197	168	*168*	175	180	186	192	205	209	216	**226**	217	222	74.3
All other industries	970	859	*825*	877	898	959	1,020	1,045	**1,173**	1,132	1,004	942	901	70.0
Total for cities	1,485	1,438	1,444	1,427	1,408	*1,401*	1,458	1,515	1,540	1,532	1,520	**1,570**	1,560	89.2
ABERDEEN	379	370	364	374	*360*	372	386	378	369	378	391	**404**	404	89.1
SIOUX FALLS	1,106	1,068	1,080	1,053	1,048	*1,029*	1,072	1,137	**1,171**	1,154	1,129	1,166	1,156	87.9

Prevailing hours of labor.—In Table 8 the average number of wage earners employed for 1914 and 1909, 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 smaller number of hours.

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	3,788	846	172	953	87	1,496	181	46	7
	1909	3,602	516	82	746	40	1,932	131	39	116
Bread and other bakery products	1914	255	20	4	31	2	186	5	6	1
	1909	286	19	3	26	.....	219	1	14	4
Butter	1914	134	10	.....	28	2	61	32	1	.....
	1909	139	7	.....	18	.....	85	29	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	1914	579	194	.....	356	.....	.....	29	.....	.....
	1909	327	.....	.....	.....	.....	313	14	.....	.....
Confectionery	1914	105	.....	.....	.....	34	71	.....	.....	.....
	1909	106	.....	.....	33	.....	73	.....	.....	.....
Flour-mill and gristmill products	1914	255	37	.....	8	.....	102	66	39	3
	1909	285	28	.....	9	.....	175	48	25	.....
Foundry and machine-shop products	1914	60	5	.....	14	9	32	.....	.....	.....
	1909	78	2	.....	4	.....	72	.....	.....	.....
Gas, illuminating and heating	1914	80	2	.....	1	.....	33	41	.....	3
	1909	108	6	.....	1	16	36	37	.....	12
Liquors, malt	1914	71	17	.....	34	.....	20	.....	.....	.....
	1909	76	15	.....	43	.....	18	.....	.....	.....
Lumber and timber products	1914	281	11	.....	88	2	180	.....	.....	.....
	1909	451	8	3	13	.....	425	2	.....	.....
Printing and publishing	1914	801	274	141	315	13	58	.....	.....	.....
	1909	825	207	73	447	7	91	.....	.....	.....
Tobacco, cigars	1914	197	191	.....	6	.....	.....	.....	.....	.....
	1909	203	198	.....	3	.....	2	.....	.....	.....
All other industries	1914	970	85	27	72	25	753	8	.....	.....
	1909	718	26	3	149	17	423	.....	.....	100
Total for cities	1914	1,485	196	92	277	43	832	39	6	.....
ABERDEEN	1914	379	48	86	140	39	58	8	.....	.....
SIOUX FALLS	1914	1,106	148	6	137	4	774	31	6	.....

This table shows the tendency toward a shortening of the working day of wage earners, the prevailing hours per week being generally less in 1914 than in 1909. In 1914, 2,058, or more than one-half of the total average number of wage earners for all industries combined, were employed in establishments where the prevailing hours of labor were less than 60 hours per week, whereas 1,384, or only a little over one-third,

were so employed in 1909. On the other hand, the number of wage earners whose prevailing hours of labor were 60 or more per week decreased from 2,218, or 61.6 per cent of the total for the state in 1909, to 1,730, or 45.7 per cent of the total in 1914.

Of the industries shown in this table, car repairs by steam-railroad companies shows the most pronounced decrease in hours of labor. In 1914 about two-thirds of the wage earners were employed in establishments reporting their prevailing hours of labor as 54 per week, while one-third were employed in establishments reporting 48 hours and under. In 1909 almost the entire number were employed in establishments operated 60 hours per week. In 1914 and 1909, bread and other bakery products and lumber and timber products were conducted mainly on the basis of 60 hours per week. In the printing and publishing industry, more than nine-tenths of the wage earners were employed in establishments reporting their prevailing hours of labor as 54 or less per week.

In Aberdeen more than one-third of the wage earners were in establishments where the prevailing hours were 54 per week and in Sioux Falls about two-thirds were in establishments where the prevailing hours were 60 per week.

Location of establishments.—Table 9 shows, for 1914, 1909, and 1899, the extent to which manufactures in South Dakota were centralized in the two cities having more than 10,000 inhabitants.

Aberdeen in 1900 had less than 10,000 inhabitants and the statistics for the city in that year were included with those for the outside districts. For the five-year period 1909–1914 there was a decided increase in the amounts shown for the two cities, which in 1914 contained 4.5 per cent of the estimated population of the state, reported 39.2 per cent of the total average number of wage earners and 47.9 per cent of the total value of products. The corresponding proportions for 1909 were 4.3, 27, and 25 per cent, respectively.

Table 9

	Census year.	Aggregate.	Cities having a population of 10,000 or over.		Districts outside of cities having a population of 10,000 or over.	
			Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.
Number of places	1914	.....	2	.....	.....	.....
	1910	.....	2	.....	.....	.....
	1900	.....	1	.....	.....	.....
Population [1]	1914	661,583	29,525	4.5	632,058	95.5
	1910	583,888	24,847	4.3	559,041	95.7
	1900	401,570	10,266	2.6	391,304	97.4
Number of establishments.	1914	898	123	13.7	775	86.3
	1909	1,020	120	11.8	900	88.2
	1899	624	48	7.7	576	92.3
Average number of wage earners.	1914	3,788	1,485	39.2	2,303	60.8
	1909	3,602	972	27.0	2,630	73.0
	1899	2,224	311	14.0	1,913	86.0
Value of products	1914	$24,138,566	$11,557,021	47.9	$12,581,545	52.1
	1909	17,870,135	4,464,069	25.0	13,406,066	75.0
	1899	9,529,946	883,624	9.3	8,646,322	90.7
Value added by manufacture.	1914	7,059,209	2,894,295	41.0	4,164,914	59.0
	1909	6,393,785	1,823,764	28.5	4,570,021	71.5
	1899	3,046,269	562,096	18.5	2,484,173	81.5

[1] Census estimate of population for 1914.

Character of ownership.—Table 10 presents statistics concerning 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.

Table 10

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	531	208	159	3,788	984	2,140	664	26.0	56.5	17.5	$24,138,566	$3,461,258	$13,293,057	$7,384,251	14.3	55.1	30.6
	1909	583	216	221	3,602	1,045	2,076	481	29.0	57.6	13.4	17,870,135	4,047,905	9,870,131	3,952,099	22.7	55.2	22.1
	1904	376	112	198	2,492	816	1,145	531	32.7	45.9	21.3	13,085,333	3,222,105	6,003,547	3,859,681	24.6	45.9	29.5
Bread and other bakery products.	1914	63	9	16	255	88	116	51	34.5	45.5	20.0	1,256,121	440,362	615,469	200,290	35.1	49.0	15.9
	1909	69	3	20	286	111	140	35	38.8	49.0	12.2	1,160,536	470,964	511,682	177,890	40.6	44.1	15.3
Butter	1914	16	14	32	134	22	70	42	16.4	52.2	31.3	2,920,342	378,666	1,871,533	670,143	13.0	64.1	22.9
	1909	30	12	53	139	26	47	66	18.7	33.8	47.5	2,685,511	548,852	1,036,131	1,100,528	20.4	38.6	40.9
Flour-mill and gristmill products.	1914	16	38	18	255	29	190	36	11.4	74.5	14.1	5,556,996	514,971	4,370,399	671,626	9.3	78.6	12.1
	1909	31	35	29	285	47	174	64	16.5	61.1	22.5	6,208,216	892,441	3,942,605	1,373,170	14.4	63.5	22.1
Lumber and timber products.	1914	32	11	8	281	76	174	31	27.0	61.9	11.0	860,143	154,846	611,360	93,937	18.0	71.1	10.9
	1909	34	15	9	451	83	337	31	18.4	74.7	6.9	944,777	202,684	631,523	110,570	21.5	66.8	11.7
Printing and publishing	1914	284	60	35	801	439	325	37	54.8	40.6	4.6	2,135,580	1,016,146	999,019	120,415	47.6	46.8	5.6
	1909	272	74	46	825	402	350	73	48.7	42.4	8.8	1,975,976	851,676	941,037	183,263	43.1	47.6	9.3
Total for cities	1914	47	47	29	1,485	176	865	444	11.9	58.2	29.9	11,557,021	522,121	5,498,318	5,536,582	4.5	47.6	47.9
Aberdeen	1914	11	17	7	379	43	305	31	11.3	80.5	8.2	1,849,142	108,046	1,650,899	90,197	5.8	89.3	4.9
Sioux Falls	1914	36	30	22	1,106	133	560	413	12.0	50.6	37.4	9,707,879	414,075	3,847,419	5,446,385	4.3	39.6	56.1

In order to avoid disclosing the operations of individual establishments, it is necessary to omit several important industries from table.

For all industries combined, the table shows that since 1904 there has been a decreased percentage in value of products for individual ownership, an increase in that for corporation, and a fluctuation in that for all other. The proportion of establishments in the state operated by corporations was 23.2 per cent in 1914 and 21.2 per cent in 1909. The proportion under individual ownership was 59.1 per cent in 1914 and 57.2 per cent in 1909. The establishments operated by corporations reported 56.5 per cent of the average number of wage earners in 1914, 57.6 per cent in 1909, and 45.9 per cent in 1904. Of the total value of products, establishments operated by corporations reported 55.1 per cent in 1914, 55.2 per cent in 1909, and 45.9 per cent in 1904. Of the value of products reported in 1914 by the flour-mill and gristmill and the lumber industries, 78.6 per cent and 71.1 per cent, respectively, were returned by establishments under corporate form of ownership; in 1909 the proportions were 63.5 per cent and 66.8 per cent, respectively. In the butter industry the proportion of value of products reported under corporate form of ownership increased from 38.6 per cent in 1909 to 64.1 per cent in 1914.

In Aberdeen the value of products reported by corporate ownership comprised 89.3 per cent of the total for the city. In Sioux Falls the largest proportion, however, 56.1 per cent, was for all other. Individual ownership reported but a small part of the total value of products; for the two cities combined it was only 4.5 per cent.

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is indicated by the statistics given in Table 11.

Table 11

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	898	1,020	686	3,788	3,602	2,492	$24,138,566	$17,870,135	$13,085,333	$7,059,209	$6,393,785	$4,388,502
Less than $5,000	463	533	319	475	558	384	1,125,820	1,264,398	751,832	824,516	876,341	553,810
$5,000 to $20,000	265	309	216	749	878	687	2,692,739	3,144,801	2,202,435	1,342,801	1,541,435	1,076,446
$20,000 to $100,000	133	142	130	1,035	1,056	895	5,483,729	5,652,440	5,885,287	2,079,917	1,923,520	1,869,290
$100,000 and over [1]	37	36	21	1,529	1,110	526	14,836,278	7,808,496	4,245,779	2,811,975	2,052,489	888,956
	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	51.6	52.3	46.5	12.5	15.5	15.4	4.7	7.1	5.7	11.7	13.7	12.6
$5,000 to $20,000	29.5	30.3	31.5	19.8	24.4	27.6	11.2	17.6	16.8	19.0	24.1	24.5
$20,000 to $100,000	14.8	13.9	19.0	27.3	29.3	35.9	22.7	31.6	45.0	29.5	30.1	42.6
$100,000 and over [1]	4.1	3.5	3.1	40.4	30.8	21.1	61.5	43.7	32.4	39.8	32.1	20.3

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

For 1914 only 37 establishments, or 4.1 per cent of the total number in the state, reported products exceeding $100,000 in value, as compared with 36, or 3.5 per cent of the total, in 1909 and 21, or 3.1 per cent, in 1904. In 1914 these establishments had 1,529 wage earners, or 40.4 per cent of the total for the state, 61.5 per cent of the total value of products, and 39.8 per cent of the total value added by manufacture. The small establishments—those having products valued at less than $5,000—in 1914 represented 51.6 per cent of the total number of establishments, but reported only 12.5 per cent of the total average number of wage earners and 4.7 per cent of the total value of products for the state.

Table 12 gives, for 1914 and 1909, for five 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 11, for all industries combined.

In order to avoid the possibility of disclosing the operations of individual establishments, the separation of industries into groups can not be made as complete as is given for the state, consequently, the specified industries are not fully comparable for 1914 and 1909.

In 1914, in the flour-mill and gristmill industry, 66.1 per cent of the total value of products was reported by establishments having products of $100,000 and over, as compared with 60.4 per cent in 1909; and in the butter industry, 55.9 per cent in 1914, as compared with 31.2 per cent in 1909. In the lumber, the bakery, and the printing industries in 1914, the proportions of the total value of products in establishments having products of $20,000 and over was 76.7, 55.4, and 44.4 per cent, respectively.

Table 13 shows the size of establishments in 1914 as measured by the average number of wage earners employed. The figures given are for all industries combined, for 11 of the more important industries, and for the two cities having more than 10,000 inhabitants.

Table 14 presents, for 1914, percentages based on the figures in Table 13, and for 1909, similar percentages for all industries combined and for individual industries in the state as a whole.

Table 12

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
BREAD AND OTHER BAKERY PRODUCTS	88	92	100.0	100.0	255	286	100.0	100.0	$1,256,121	$1,160,536	100.0	100.0	$552,590	$439,170	100.0	100.0
Less than $5,000	36	41	40.9	44.6	23	29	9.0	10.1	106,038	119,905	8.4	10.3	50,721	55,796	9.2	12.7
$5,000 to $20,000	45	44	51.0	47.8	101	94	39.6	32.9	453,998	408,128	36.1	35.2	196,971	171,558	35.6	39.1
$20,000 and over[1]	7	7	8.0	7.6	131	163	51.4	57.0	696,085	632,503	55.4	54.5	304,898	211,816	55.2	48.2
BUTTER	62	95	100.0	100.0	134	139	100.0	100.0	2,920,342	2,685,511	100.0	100.0	342,983	377,478	100.0	100.0
Less than $20,000[2]	27	55	43.5	57.9	24	45	17.9	32.4	314,991	631,515	10.8	23.5	40,045	94,282	11.7	25.0
$20,000 to $100,000	29	36	46.8	37.9	62	63	46.3	45.3	973,093	1,215,578	33.3	45.3	130,503	151,083	38.0	40.0
$100,000 to $1,000,000	6	4	9.7	4.2	48	31	35.8	22.3	1,632,258	838,418	55.9	31.2	172,435	132,113	50.3	35.0
FLOUR-MILL AND GRISTMILL PRODUCTS	72	95	100.0	100.0	255	285	100.0	100.0	5,556,996	6,208,216	100.0	100.0	835,305	872,451	100.0	100.0
Less than $5,000	5	11	6.9	11.6	3	6	1.2	2.1	15,162	33,809	0.3	0.5	3,943	6,340	0.5	0.7
$5,000 to $20,000	22	22	30.6	23.2	28	21	11.0	7.4	342,055	285,406	6.2	4.6	75,187	58,526	9.0	6.7
$20,000 to $100,000	32	45	44.4	47.4	81	120	31.8	42.1	1,524,962	2,139,453	27.4	34.5	279,445	391,756	33.4	44.9
$100,000 to $1,000,000	13	17	18.1	17.9	143	138	56.1	48.4	3,674,817	3,749,548	66.1	60.4	476,730	415,829	57.1	47.7
LUMBER AND TIMBER PRODUCTS	51	58	100.0	100.0	281	451	100.0	100.0	860,143	944,777	100.0	100.0	404,996	595,866	100.0	100.0
Less than $5,000	32	22	62.7	37.9	35	30	12.5	6.7	73,215	60,845	8.5	6.4	53,958	44,767	13.3	7.5
$5,000 to $20,000	13	28	25.5	48.3	67	95	23.8	21.1	127,293	258,664	14.8	27.4	86,520	156,284	21.4	26.2
$20,000 and over[1]	6	8	11.8	13.8	179	326	63.7	72.3	659,635	625,268	76.7	66.2	264,518	394,815	65.3	66.3
PRINTING AND PUBLISHING	379	392	100.0	100.0	801	825	100.0	100.0	2,135,580	1,975,976	100.0	100.0	1,673,916	1,519,482	100.0	100.0
Less than $5,000	305	316	80.5	80.6	326	363	40.7	44.0	722,619	693,406	33.8	35.1	586,504	557,958	35.0	36.7
$5,000 to $20,000	54	60	14.2	15.3	183	229	22.8	27.8	465,763	522,699	21.8	26.5	368,800	412,152	22.0	27.1
$20,000 and over[1]	20	16	5.3	4.1	292	233	36.5	28.2	947,198	759,871	44.4	38.5	718,612	549,372	42.9	36.2

[1] Includes the group "$100,000 to $1,000,000."

[2] Includes the group "less than $5,000."

Table 13

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.	
	Establishments.	Wage earners (average number).	Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries	898	3,788	131	654	1,239	87	913	17	523	4	273	4	516	1	324
Bread and other bakery products	88	255	17	64	120	6	47			1	88				
Butter	62	134	5	53	92	4	42								
Cars and general shop construction and repairs by steam-railroad companies	6	579						2	63			4	516		
Confectionery	4	105				2	28	2	77						
Flour-mill and gristmill products	72	255	8	52	118	11	115	1	22						
Foundry and machine-shop products	20	60	4	15	52	1	8								
Gas, illuminating and heating	17	80	1	13	28	2	20	1	32						
Liquors, malt	4	71		1	3	2	34	1	34						
Lumber and timber products	51	281	3	38	56	7	71	1	45	2	109				
Printing and publishing	379	801	77	278	466	19	208	5	127						
Tobacco, cigars	40	197	5	27	61	6	80	2	56						
All other industries	155	970	11	113	243	27	260	2	67	1	76			1	324
Total for cities	123	1,485	11	64	157	34	397	10	324	2	165	1	118	1	324
ABERDEEN	35	379	1	21	55	9	114	3	92			1	118		
SIOUX FALLS	88	1,106	10	43	102	25	283	7	232	2	165			1	324

There were 131 establishments for which no wage earners are shown. In these establishments all the work is done by the proprietors, firm members, or their families, or persons classed as salaried employees. For some of them the number of wage earners employed was so small or the term of employment so short that in computing the average, as described in the "Explanation of terms," the number was less than one person and the establishment was classed as one having "no wage earners." The small establishments—those employing from 1 to 20 wage earners—formed 82.5 per cent of the total for the state, but gave employment to only 56.8 per cent of the total wage earners reported. The group of establishments having more than 100 wage earners, although representing but six-tenths of 1 per cent of the total number of establishments in the state, gave employment to 22.2 per cent of the total number of wage earners.

For all of the industries shown in Table 14, except steam-railroad repair shops, confectionery, and malt liquors, the majority of the establishments were in the group employing from one to five wage earners.

Table 14

INDUSTRY.	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
All industries	1914	32.7	24.1	13.8	7.2	13.6	8.6
	1909	40.4	23.2	14.4	8.6	13.4	.....
Bread and other bakery products	1914	47.1	18.4	.....	34.5	.....	.....
	1909	46.9	6.6	.....	.....	46.5	.....
Butter	1914	68.7	31.3	.....	.....	.....	.....
	1909	82.0	18.0	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	.....	.....	10.9	.....	89.1	.....
	1909	.....	10.4	22.3	.....	67.3	.....
Confectionery	1914	.....	26.7	73.3	.....	.....	.....
	1909	.....	.....	100.0	.....	.....	.....
Flour-mill and gristmill products	1914	46.3	45.1	8.6	.....	.....	.....
	1909	56.8	33.7	9.5	.....	.....	.....
Lumber and timber products	1914	19.9	25.3	16.0	38.8	.....	.....
	1909	23.5	9.5	4.9	33.0	29.0	.....
Printing and publishing	1914	58.2	26.0	15.8	.....	.....	.....
	1909	65.2	21.6	13.2	.....	.....	.....
Tobacco, cigars	1914	31.0	40.6	28.4	.....	.....	.....
	1909	32.0	54.2	13.8	.....	.....	.....
All other industries	1914	25.1	26.8	6.9	7.8	.....	33.4
	1909	35.1	35.7	6.8	22.4	.....	.....
Total for cities	1914	10.6	26.7	21.8	11.1	7.9	21.8
ABERDEEN	1914	14.5	30.1	24.3	.....	31.1	.....
SIOUX FALLS	1914	9.2	25.6	21.0	14.9	.....	29.3

Engines and power.—Table 15 shows, for 1914, 1909, and 1904, for all industries combined, the number and horsepower of engines or motors, classified according to their character, employed in generating power.

During the five-year period 1909–1914, the total primary power decreased 1,342 horsepower, or 7.6 per cent. This decrease may be accounted for by the fact that an establishment, which reported power in 1909 in excess of the decrease shown, was idle in 1914. This falling off was wholly in owned power, which decreased 4,070 horsepower, or 25.5 per cent, since rented electric power, which forms part of the total primary power, increased 2,731 horsepower, or 162.3 per cent.

Table 15

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	1,247	972	436	16,324	17,666	11,154	100.0	100.0	100.0
Owned	548	648	436	11,910	15,980	10,963	73.0	90.5	98.3
Steam engines and turbines [1]	186	253	214	8,972	12,257	8,483	55.0	69.4	76.1
Internal-combustion engines	343	366	186	2,364	2,784	1,397	14.5	15.8	12.5
Water wheels, turbines, and motors	19	29	36	574	939	1,083	3.5	5.3	9.7
Rented	699	324	(2)	4,414	1,686	191	27.0	9.5	1.7
Electric	699	324	(2)	4,414	1,683	181	27.0	9.5	1.6
Other	.....	.....	.....	.....	3	10	.....	(3)	0.1
Electric	723	346	23	4,632	2,084	339	100.0	100.0	100.0
Rented	699	324	(2)	4,414	1,683	181	95.3	80.8	53.4
Generated by establishments reporting	24	22	23	218	401	158	4.7	19.2	46.6

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

The increased use of rented electric power is emphasized by the fact that in 1909 it formed 9.5 per cent of the total primary power and 27 per cent of the total in 1914. The horsepower developed by electric motors run by current generated within the same establishment has decreased since 1909.

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 16 gives, 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 16

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	2,607	81,759	6,879	20,456	2,959
Bread and other bakery products	464	1,362	748	35	963
Butter	205	3,152	.....	228	.....
Cars and general shop construction and repairs by steam-railroad companies	.....	33,474	.....	.....	.....
Flour-mill and gristmill products	459	15,855	1,092	1,601	.....
Gas, illuminating and heating	152	4,539	4,800	16,710	.....
Liquors, malt	4	6,677	.....	9	.....
Printing and publishing	583	2,457	28	873	1,165
All other products	740	14,243	211	1,000	831
Total for cities	693	19,700	3,351	10,051	1,934
ABERDEEN	71	4,929	1,122	2,530	430
SIOUX FALLS	622	14,771	2,229	7,521	1,504

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 three important industries in South Dakota are here presented. Statistics for power laundries are also given.

Flour-mill and gristmill products.—Table 17 gives the quantities and values of flour-mill and gristmill products for the last three census years.

Table 17	1914	1909	1904
Total value	$5,556,996	$6,208,216	$6,519,364
Wheat flour:			
Barrels	920,070	968,286	1,148,024
Value	$4,458,144	$5,067,797	$5,383,370
Rye flour:			
Barrels	1,474	2,579	2,835
Value	$6,679	$12,022	$11,414
Buckwheat flour:			
Pounds	17,820	219,675	26,000
Value	$708	$7,199	$1,010
Barley meal:			
Pounds	.....	361,000	40,000
Value	.....	$7,500	$700
Corn meal and corn flour:			
Barrels	5,244	6,845	23,308
Value	$18,555	$23,413	$49,571
Bran and middlings:			
Tons	42,684		
Value	$817,037	54,121	72,558
Feed and offal:		$1,084,808	$1,072,809
Tons	7,895		
Value	$196,329		
Breakfast foods:			
Pounds	161,498		
Value	$8,500	$1,043	.....
All other cereal products, value	$7,498		
All other products, value	$43,546	$4,434	$490

Wheat flour is the chief product of this industry in South Dakota, forming 80.2 per cent of the total value of products in 1914, 81.6 per cent in 1909, and 82.6 per cent in 1904. Since 1904, at each succeeding census, there has been a decline in the number of barrels of wheat flour produced. Bran and middlings is shown separately for 1914 only, when it formed 14.7 per cent of the total value of products.

The equipment for 1914 consisted of 405 stands of rolls 12, runs of stone, and 24 attrition mills.

Butter.—The quantity and value of products, for 1914, 1909, and 1904, are given in Table 18.

Table 18	1914	1909	1904
Total value	$2,920,342	$2,685,511	$2,182,653
Butter:			
Pounds	10,538,747	9,495,608	11,058,460
Value	$2,760,251	$2,598,413	$2,161,323
Packed solid—			
Pounds	8,335,726	8,880,010	10,835,596
Value	$2,164,290	$2,424,897	$2,116,900
Prints or rolls—			
Pounds	2,203,021	615,598	222,864
Value	$595,961	$173,516	$44,423
Cream sold:			
Pounds	152,759	390,108	2,140
Value	$19,475	$43,147	$215
All other products, value	$140,616	$43,951	$21,115

There was an increase in total value of products from 1909 to 1914 of $234,831, or 8.7 per cent, and between 1904 and 1909 of $502,858, or 23 per cent. During the former five-year period the quantity of butter manufactured shows an increase of 1,043,139 pounds, but from 1904 to 1909 there was a decrease of 1,562,852 pounds. The value of products, however, increased at each successive five-year period.

The value of butter put up in prints or rolls, although forming the smaller part of such manufactures, shows a decided increase at each succeeding census, representing 21.6 per cent of the total value of butter manufactured in 1914, 6.7 per cent in 1909, and 2.1 per cent in 1904.

Printing and publishing.—Table 19 gives the number of publications and the aggregate circulation per issue for all newspapers and periodicals published in South Dakota during 1914, 1909, and 1904.

Table 19 — Period of issue	Number of publications			Aggregate circulation per issue		
	1914	1909	1904	1914	1909	1904
Total	381	402	302	416,671	485,101	330,705
Daily	[1] 20	[2] 23	[3] 21	55,834	69,679	33,260
Semiweekly	[4] 4	3	5	6,210	4,400	6,850
Weekly	347	360	263	268,243	277,127	198,604
All other classes	10	16	13	86,384	133,895	91,991

[1] Includes two Sunday newspapers.
[2] Includes four Sunday newspapers.
[3] Includes five Sunday newspapers.
[4] Includes one triweekly publication.

There was a loss of 21 in the total number of publications during the five-year period from 1909 to 1914, due to the discontinuance since 1909 of 1 daily, 2 Sunday, and 13 weekly papers, and 6 in "all other classes"; there was an increase, however, of 1 semiweekly during this period. The aggregate circulation decreased 68,430 per issue, the greatest decrease, 47,511, being in "all other classes." The decrease shown in the daily circulation was due wholly to the disappearance of the two Sunday papers. Of the 18 dailies reported in 1914, 13 were evening papers, having a circulation of 30,850. "All other classes" in 1914 comprise 8 monthly publications, 1 quarterly, and 1 semimonthly. Seven weeklies, with a circulation of 31,208, were printed in foreign languages, including 4 in German, with a circulation of 26,500, 2 in Norwegian, and 1 in English and German.

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for manufacturing industries, but Table 20 summarizes these statistics for South Dakota for 1914 and 1909.

Table 20 — Power laundries	Number or amount		Per cent of increase,[1] 1909–1914
	1914	1909	
Number of establishments	26	28	.....
Persons engaged	454	447	1.6
Proprietors and firm members	29	33	.....
Salaried employees	25	28	.....
Wage earners (average number)	400	386	3.6
Primary horsepower	520	519	0.2
Capital	$352,747	$336,276	4.9
Salaries and wages	215,051	190,830	12.7
Salaries	24,559	22,864	7.4
Wages	190,492	167,966	13.4
Paid for contract work	2,469	.....	.....
Rent and taxes	12,465	10,416	19.7
Cost of materials	112,555	81,770	37.6
Amount received for work done	477,474	423,092	12.9

Percentages are omitted where base is less than 100.

South Dakota ranked forty-third among the states in 1914 and forty-first in 1909 in the number of persons engaged in the industry and forty-second in 1914 and forty-first in 1909 in amount received for work done.

Table 21 shows, for 1914 and 1909, the wage earners employed in the laundries on the 15th day 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 21

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January	381	352	88.8	85.0
February	378	352	88.1	85.0
March	384	356	89.5	86.0
April	388	369	90.4	89.1
May	398	384	92.8	92.8
June	429	394	100.0	95.2
July	429	410	100.0	99.0
August	429	414	100.0	100.0
September	410	406	95.6	98.1
October	397	398	92.5	96.1
November	388	395	90.4	95.4
December	387	397	90.2	95.9

Table 22 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 increase for the five-year period.

Table 22

POWER.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase, 1909–1914.[1]
	1914	1909	1914	1909	
Primary power, total	52	49	520	519	0.2
Owned	17	26	305	396	−23.0
Steam engines and turbines	14	19	288	360	−20.0
Internal-combustion engines	3	7	17	36	.....
Rented—Electric	35	23	215	123	74.8
Electric—Generated in establishments reporting	.....	.....	11	.....	.....

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

GENERAL TABLES.

Table 23 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 24 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 23.—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	898	3,788	16,324	$2,628	$17,079	$24,139
	1909	1,020	3,602	17,666	2,298	11,476	17,870
	1904	686	2,492	11,154	1,422	8,697	13,085
Artificial stone products	1914	18	37	80	23	28	75
	1909	38	104	139	62	120	253
	1904	4	35	20	18	27	63
Bread and other bakery products.	1914	88	255	279	166	704	1,256
	1909	92	286	126	151	721	1,161
	1904	32	116	81	49	218	388
Butter	1914	62	134	988	105	2,577	2,920
	1909	95	139	1,456	112	2,308	2,686
	1904	97	192	1,410	125	1,833	2,183
Carriages and wagons and repairs.	1914	8	41	111	27	22	87
	1909	10	48	94	38	60	131
	1904	3	19	16	13	10	31
Cars and general shop construction and repairs by steam-railroad companies.	1914	6	579	765	462	659	1,178
	1909	5	327	557	243	165	439
	1904	6	184	270	106	131	251
Confectionery	1914	4	105	154	51	373	546
	1909	3	106	69	36	271	400
	1904	5	97	15	35	191	332
Copper, tin, and sheet-iron work.	1914	5	24	58	21	85	163
	1909	8	20	8	14	49	108
Flour-mill and gristmill products.	1914	72	255	6,412	184	4,722	5,557
	1909	95	285	7,364	187	5,336	6,208
	1904	96	347	6,777	203	5,358	6,519
Foundry and machine-shop products.	1914	[1] 20	60	182	$45	$67	$169
	1909	37	78	307	62	73	225
	[2] 1904	11	123	269	124	54	221
Gas, illuminating and heating.	1914	17	80	651	57	136	380
	1909	17	108	318	64	120	278
	1904	7	47	115	26	48	148
Liquors, malt	1914	4	71	586	54	133	362
	1909	4	76	796	59	231	606
	1904	4	70	267	44	149	388
Lumber and timber products.	1914	[3] 51	281	2,358	211	455	860
	1909	58	451	2,260	301	349	945
	1904	26	191	833	114	97	377
Marble and stone work	1914	11	29	71	24	87	175
	1909	15	116	213	76	73	220
	[4] 1904	5	24	41	20	46	97
Mineral and soda waters	1914	27	63	114	39	96	226
	1909	25	61	97	37	79	209
	1904	17	29	59	17	32	113
Printing and publishing	1914	379	801	1,159	533	462	2,136
	1909	392	825	931	493	456	1,976
	[2] 1904	279	592	426	312	242	1,222
Tobacco, cigars	1914	40	197	.....	130	159	434
	1909	59	203	.....	122	164	454
	1904	47	167	.....	87	127	328
All other industries	1914	86	776	2,356	496	6,314	7,615
	1909	67	369	2,931	241	901	1,571
	1904	47	259	555	129	134	424
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.							
ABERDEEN	1914	35	379	880	$252	$1,161	$1,849
	1909	37	295	540	178	1,011	1,575
SIOUX FALLS	1914	88	1,106	2,509	$734	$7,501	$9,708
	1909	83	677	1,402	385	1,629	2,889
	1904	61	465	.....	248	1,066	1,898

[1] Includes "automobile repairing"; "engines, steam, gas, and water"; "gas machines"; and "structural ironwork, not made in steel works or rolling mills."
[2] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[3] Includes "lumber, planing-mill products, not connected with sawmills."
[4] Excludes statistics for two establishments, to avoid disclosure of individual operations.

TABLE 24.—DETAIL STATEMENT FOR THE STATE, BY INDUSTRIES,

	Industry and city.	Number of establishments.	Persons engaged in the industry.									Wage earners Dec. 15, or nearest representative day.					Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.				Total.	16 and over.		Under 16.		
						Male.	Female.	Average number.	Number, 15th day of— Maximum month.		Number, 15th day of— Minimum month.		Male.	Female.	Male.	Female.	
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
1	All industries	898	5,346	762	299	352	145	3,788	Oc	4,087	Fe	3,462	(2)	(2)	(2)	(2)	(2)	$15,059,583
2	Artificial stone products	18	60	20	.....	1	2	37	My	64	De[3]	6	70	70	.....	.....	.....	92,948
3	Bread and other bakery products	88	406	92	9	35	15	255	No	270	Mh[3]	242	270	195	75	.....	.....	622,821
4	Brick	3	31	1	3	1	.....	26	Jy	41	Fe	2	34	34	.....	.....	.....	125,927
5	Butter	62	216	24	22	23	13	134	Jy	165	Ja	106	129	120	9	.....	.....	638,321
6	Carriages, wagons, and repairs	8	56	6	5	3	1	41	.....	.....	.....	.....	50	50	.....	.....	.....	97,575
7	Carriages and wagons	5	45	2	5	3	1	34	Jy	52	My[3]	24	42	42	.....	.....	.....	69,412
8	Repair work only	3	11	4	.....	.....	.....	7	Jy[3]	8	Oc[3]	6	8	8	.....	.....	.....	28,163
9	Cars and general shop construction and repairs by steam-railroad companies.	6	620	.....	27	13	1	579	Se	619	Ja	542	591	591	.....	.....	.....	327,542
10	Confectionery and ice cream	13	178	8	13	21	7	129	.....	.....	.....	.....	137	72	65	.....	.....	251,044
11	Confectionery	4	139	.....	9	19	6	105	Oc	124	Je	92	116	51	65	.....	.....	203,966
12	Ice cream	9	39	8	4	2	1	24	Jy	31	De[3]	19	21	21	.....	.....	.....	47,078
13	Copper, tin, and sheet-iron work	5	40	4	4	4	4	24	Jy	31	No	19	23	23	.....	.....	.....	122,483
14	Flour-mill and gristmill products	72	373	43	42	23	10	255	Se	281	Jy[3]	240	264	263	1	.....	.....	2,856,335
15	Food preparations, not elsewhere specified.	3	14	2	.....	.....	.....	12	Mh	16	My	8	16	16	.....	.....	.....	29,284
16	Foundry and machine-shop products	14	67	11	3	3	.....	50	Se[3]	53	De	46	49	48	1	.....	.....	207,365
17	Gas, illuminating and heating	17	120	4	14	14	8	80	Ap	102	Fe[3]	69	72	71	1	.....	.....	2,034,648
18	Jewelry	5	9	5	.....	.....	.....	4	De	5	Oc	3	5	5	.....	.....	.....	7,293
19	Liquors, malt	4	92	3	8	9	1	71	Jy	84	De	62	62	62	.....	.....	.....	1,126,593
20	Lumber and timber products	34	231	33	5	5	1	187	Oc	352	Mh	120	409	409	.....	.....	.....	575,925
21	Lumber, planing-mill products, not including planing mills connected with sawmills.	17	133	14	5	17	3	94	Se[3]	98	De[3]	91	94	94	.....	.....	.....	317,624
22	Marble and stone work	11	57	14	3	9	2	29	Au[3]	33	Fe[3]	24	29	29	.....	.....	.....	172,498
23	Mineral and soda waters	27	114	24	13	12	2	63	Jy	86	De[3]	50	59	55	.....	4	.....	269,392
24	Patent medicines and compounds	3	3	2	.....	.....	.....	1	Ap[3]	2	Se[3]	1	2	2	.....	.....	.....	1,378
25	Paving materials	3	82	1	4	1	1	75	Au	139	Fe	33	83	83	.....	.....	.....	81,015
26	Printing and publishing, job printing	16	121	13	9	14	6	79	Fe	86	Se	75	79	67	12	.....	.....	230,583
27	Printing and publishing, newspapers and periodicals.	363	1,234	332	58	69	53	722	.....	.....	.....	.....	740	507	191	37	5	2,240,481
28	Printing and publishing	18	62	20	.....	14	2	26	No	27	Fe	25	27	24	2	1	.....	48,307
29	Printing, publishing, and job printing.	333	1,152	308	50	54	45	695	No	716	My	683	712	482	189	36	5	2,183,195
30	Publishing without printing	12	20	4	8	1	6	1	(4)	1	(4)	1	1	1	.....	.....	.....	8,979
31	Saddlery and harness	6	38	3	4	6	1	24	Je[3]	25	De[3]	23	24	23	.....	.....	.....	110,491
32	Tobacco, cigars	40	261	43	5	14	2	197	Oc	226	Fe[3]	168	219	177	35	7	.....	276,768
33	All other industries*	60	790	60	43	55	12	620	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,243,249
	CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																	
1	ABERDEEN	35	510	24	28	43	36	379	No[3]	404	Ap	360	396	298	97	1	.....	$1,472,736
2	SIOUX FALLS	88	1,471	83	87	161	34	1,106	Au	1,171	My	1,029	1,178	996	166	13	3	4,743,148

[1] Owned power only.

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

* All other industries embrace—

Agricultural implements	2	Brooms, from broom corn	3	Clothing, men's	1
Automobile bodies and parts	3	Canning, vegetables	2	Coffee, roasting and grinding	1
Automobile repairing	1	Carpets, rag	2	Dairymen's and poultrymen's supplies	2
Awnings, tents, and sails	2	Cars and general shop construction and repairs by electric-railroad companies	2	Druggists' preparations	2
Bookbinding and blank-book making	1	Chemicals	1	Engines, steam, gas, and water	2
Boxes and cartons, paper	1			Flavoring extracts	2

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.	Water wheels and motors.[1]	Electric (rented).		
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$415,856	$418,861	$2,628,152	$51,329	$174,180	$179,095	$16,551,758	$527,599	$24,138,566	$7,059,209	16,324	8,972	2,364	574	4,414	218	1
.....	565	23,475	.....	118	572	27,628	870	75,176	46,678	80	24	20	.....	36	.....	2
13,715	37,576	166,055	764	22,172	6,657	674,448	29,083	1,256,121	552,590	279	2	34	.....	243	.....	3
3,100	885	15,222	.....	.....	314	5,366	10,192	37,607	22,049	265	265	.....	.....	.....	.....	4
22,708	25,834	104,503	.....	4,569	3,672	2,552,348	25,011	2,920,342	342,983	988	578	139	.....	271	.....	5
5,220	1,350	27,108	2,544	2,100	1,214	19,773	2,321	86,799	64,705	111	.....	27	.....	84	.....	6
5,220	1,350	22,816	.....	2,100	948	15,222	2,034	69,999	52,743	92	.....	8	.....	84	.....	7
.....	.....	4,292	2,544	.....	266	4,551	287	16,800	11,962	19	.....	19	.....	.....	.....	8
37,620	10,856	461,725	.....	.....	1,295	595,722	63,314	1,177,759	518,723	765	765	.....	.....	.....	106	9
28,554	32,168	68,585	.....	7,294	2,184	449,858	8,759	687,813	229,196	223	28	22	.....	173	.....	10
23,754	30,618	50,826	.....	4,404	1,753	366,771	6,092	545,710	172,847	154	.....	.....	.....	154	.....	11
4,800	1,550	17,759	.....	2,890	431	83,087	2,667	142,103	56,349	69	28	22	.....	19	.....	12
5,400	8,533	20,580	.....	2,453	816	83,471	1,218	162,749	78,060	58	.....	.....	.....	58	.....	13
53,110	36,728	183,607	.....	4,213	16,946	4,610,760	110,931	5,556,996	835,305	6,412	3,970	1,018	565	859	23	14
.....	.....	8,887	.....	.....	85	25,449	450	39,281	13,382	55	.....	.....	.....	55	.....	15
3,356	2,312	39,754	1,060	698	1,504	41,783	3,855	118,493	72,855	144	.....	103	1	40	.....	16
23,520	19,832	57,076	.....	1,600	9,431	31,703	104,724	379,543	243,116	651	523	55	.....	73	.....	17
.....	.....	4,002	.....	804	78	13,374	162	25,358	11,822	5	.....	.....	.....	5	.....	18
19,783	15,601	54,495	4,569	.....	55,435	111,152	21,481	362,128	229,495	586	436	6	.....	144	85	19
8,534	3,180	148,003	3,600	408	10,497	179,154	1,195	394,248	213,899	2,009	1,874	15	.....	120	.....	20
5,700	19,251	62,635	.....	3,897	1,874	269,211	5,587	465,895	191,097	349	.....	84	.....	265	.....	21
3,670	9,798	23,790	1,200	1,745	1,114	85,601	1,861	174,750	87,288	71	.....	22	.....	49	.....	22
15,715	8,937	39,375	200	4,358	2,189	91,323	4,194	225,953	130,436	114	18	40	4	52	.....	23
.....	.....	710	.....	60	61	1,413	.....	3,790	2,377	.....	.....	.....	.....	.....	.....	24
3,600	1,020	46,015	.....	.....	398	16,659	4,700	70,455	49,096	180	60	.....	.....	120	.....	25
16,648	14,466	55,315	2,521	7,102	1,886	63,128	3,452	226,561	159,981	113	.....	2	.....	111	.....	26
75,761	85,745	478,126	22,402	42,322	16,675	353,353	41,731	1,909,019	1,513,935	1,046	.....	591	4	451	4	27
.....	14,200	20,240	50	1,473	345	12,493	1,262	98,444	84,689	37	.....	11	.....	26	.....	28
72,628	69,369	457,586	5,772	40,261	16,321	340,610	40,383	1,775,534	1,394,541	1,009	.....	580	4	425	4	29
3,133	2,176	300	16,580	588	9	250	86	35,041	34,705	.....	.....	.....	.....	.....	.....	30
5,900	9,500	20,188	.....	3,070	1,144	68,563	705	146,513	77,245	11	.....	.....	.....	11	.....	31
6,050	12,177	129,705	30	7,981	31,829	157,701	1,357	434,028	274,970	.....	.....	.....	.....	.....	.....	32
58,192	62,547	389,216	12,439	57,156	11,225	6,022,817	80,446	7,201,189	1,097,926	1,809	429	186	.....	1,194	.....	33
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
$48,258	$61,626	$252,450	$5,264	$10,745	$10,675	$1,119,450	$41,864	$1,849,142	$687,828	880	531	28	.....	321	2	1
139,572	184,685	734,156	25,375	82,922	56,301	7,364,825	136,587	9,707,879	2,206,467	2,509	465	85	.....	1,959	2	2

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

[4] Same number reported throughout the year.

Flax and hemp, dressed	1	Ice, manufactured	1	Shipbuilding, wooden, small boats	1
Fur goods	2	Lime	3	Shirts	1
Furnishing goods, men's	1	Mattresses and spring beds	1	Slaughtering and meat packing	4
Furniture, wood, other than rattan and willow	2	Optical goods	1	Structural ironwork, not made in steel works or rolling mills	2
Furs, dressed	1	Photo-engraving	1	Trunks and valises	1
Gas machines	1	Pumps, not including power pumps	1	Wall plaster	2
Grease and tallow, soap stock	1	Sand-lime brick	2		

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES 1914

TENNESSEE

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

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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.

TENNESSEE.

By Martin T. Webb.

GENERAL STATISTICS.

General character of the state.—Tennessee was admitted to the Union as a state in 1796. With a gross area of 42,022 square miles, of which 41,687 represent land surface, it ranks thirty-fourth in size among the states. The inhabitants of the state in 1900 numbered 2,020,616, and in 1910, 2,184,789, and its estimated population in 1914 was 2,254,754. In total population Tennessee ranked seventeenth among the states in 1910, and in density of population it ranked thirteenth, with 52.4 inhabitants per square mile, as compared with 48.5 in 1900.

The urban population of the state in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 441,045, or 20.2 per cent of the total, as against 16.2 per cent in 1900. There were in the state in 1914 six cities, each having an estimated population of more than 10,000, namely, Chattanooga, Jackson, Johnson City, Knoxville, Memphis, and Nashville. The aggregate population of these cities formed 16.9 per cent of the estimated population of Tennessee in that year, while they reported 50 per cent of the total value of the state's manufactured products.

The steam-railway mileage in 1914, as reported by the Interstate Commerce Commission, was 4,106 and the electric-railway mileage in 1912 (the latest year for which figures are available) was 350.

The transportation facilities of the state are good, as the Mississippi, Tennessee, and Cumberland Rivers afford advantages for communication by water, while the trunk lines of a number of large railway systems, several of which center at Memphis, cross the state and afford direct connection with all parts of the country.

Tennessee is primarily an agricultural state, but the products of its soil give rise to a diversity of manufacturing interests. The climatic conditions as well as the soil, especially in the eastern and middle sections, are adapted to the growing of wheat and corn. The total value of farm crops grown in Tennessee in 1909 was $120,706,211, of which $55,302,278, or 45.8 per cent, represented cereals.

The United States Geological Survey's report for 1914 gives the total mineral production of the state for that year as valued at $19,645,213, the principal product being bituminous coal, $6,776,573.

Importance and growth of manufactures.—The manufactures of the state in 1914 were valued at $212,071,489, and gave employment to an average of 74,373 wage earners. Tennessee's proportion of the total value of manufactured products of the United States was small—less than 1 per cent—in 1914, 1909, and 1904.

Table 1 summarizes the more important data relative to all classes of manufactures combined in the state of Tennessee 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	4,775	4,609	3,175	3,116	3.6	45.2	1.9
Persons engaged	88,514	87,672	69,287	(2)	1.0	26.5	.....
Proprietors and firm members	5,142	5,415	3,805	(2)	−5.0	42.3	.....
Salaried employees	8,999	8,417	4,910	3,329	6.9	71.4	47.5
Wage earners (average number)	74,373	73,840	60,572	45,963	0.7	21.9	31.8
Primary horsepower	286,857	242,277	175,780	130,318	18.4	37.8	34.9
Capital	$211,423,167	$167,923,784	$102,439,481	$63,140,657	25.9	63.9	62.2
Salaries and wages	44,911,678	37,437,834	27,886,057	17,775,169	20.0	34.3	56.9
Salaries	11,828,691	9,186,243	5,080,429	3,047,663	28.8	80.8	66.7
Wages	33,082,987	28,251,591	22,805,628	14,727,506	17.1	23.9	54.8
Paid for contract work	2,100,640	1,814,598	1,546,732	(2)	15.8	17.3	.....
Rent and taxes (including internal revenue)	3,524,414	3,768,979	[3] 909,368	(2)	−6.5	.....	.....
Cost of materials	123,430,135	104,015,834	79,351,746	54,559,039	18.7	31.1	45.4
Value of products	212,071,489	180,216,548	137,960,476	92,749,129	17.7	30.6	48.7
Value added by manufacture (value of products less cost of materials)	88,641,354	76,200,714	58,608,730	38,190,090	16.3	30.0	53.5

[1] A minus sign (−) denotes decrease; percentages are omitted where comparable figures can not be given. [2] Figures not available. [3] Exclusive of internal revenue.

There was a substantial increase in the manufactures for the five-year period 1909–1914, but the percentage of increase for no item was as great as that for the preceding five-year period 1904–1909. Although the number of establishments and average number of wage earners showed only slight gains, 3.6 per cent and seven-tenths of 1 per cent, respectively, manufactured products advanced 17.7 per cent.

Table 2 shows the relative importance of the leading 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	4,775	74,373	100.0	$212,071,489	100.0	$88,641,354	100.0	0.7	21.9	31.8	17.6	30.6	48.7	16.3	30.0	53.5
Lumber and timber products	1,972	18,276	24.6	31,430,208	14.8	16,653,885	18.8	−18.4	29.6	20.8	3.2	13.4	40.2	−1.0	10.1	55.2
Flour-mill and gristmill products	512	1,497	2.0	26,413,574	12.5	4,341,853	4.9	−5.1	−1.1	51.2	−9.1	14.7	32.3	14.7	10.0	21.2
Oil, cottonseed, and cake	24	1,054	1.4	11,414,243	5.4	2,212,754	2.5	30.8	15.0	−6.7	73.1	76.1	25.6	59.0	110.9	−6.0
Food preparations, not elsewhere specified	33	523	0.7	9,955,350	4.7	1,691,527	1.9	69.8	.....	(2)	197.5	.....	(2)	166.3	.....	(2)
Foundry and machine-shop products	142	4,309	5.8	9,802,222	4.6	5,107,070	5.7	6.6	22.0	−1.2	6.7	50.1	31.9	10.3	41.6	38.6
Cars and general shop construction and repairs by steam-railroad companies	17	7,201	9.7	9,688,409	4.6	5,102,061	5.7	29.4	16.9	69.0	43.0	16.1	87.6	39.4	28.0	80.5
Printing and publishing	437	2,665	3.6	8,200,681	3.9	5,872,254	6.6	−8.5	25.1	30.3	14.3	40.9	47.4	12.5	38.5	46.4
Hosiery and knit goods	26	5,690	7.7	7,522,846	3.5	3,123,676	3.5	82.5	72.2	254.2	111.0	119.0	312.2	116.2	119.3	351.4
Cotton goods	15	3,403	4.6	6,485,640	3.1	1,931,571	2.2	10.6	34.2	8.8	24.7	46.1	78.5	4.0	40.7	54.9
Patent medicines and compounds and druggists' preparations	82	648	0.9	4,942,445	2.3	3,118,377	3.5	49.7	−11.5	22.6	40.6	26.0	85.4	43.4	15.1	92.8
Fertilizers	15	706	0.9	4,372,427	2.1	1,780,688	2.0	26.3	−28.4	76.3	34.6	20.3	84.2	57.9	14.0	46.3
Bread and other bakery products	151	1,152	1.5	4,092,664	1.9	1,700,319	1.9	34.7	41.8	67.5	41.5	46.5	79.0	54.3	15.6	126.9
Furniture and refrigerators	58	2,172	2.9	3,739,558	1.8	2,012,180	2.3	−10.2	−7.3	144.4	13.0	2.1	172.6	8.1	1.7	188.0
Bags, other than paper	4	471	0.6	3,245,504	1.5	439,142	0.5	16.3	191.4	.....	41.7	162.1	.....	109.0	75.0	.....
Confectionery	35	774	1.0	2,989,507	1.5	1,139,573	1.3	−13.4	59.6	66.2	18.7	34.5	130.1	32.1	−5.4	133.8
Clothing, men's, including shirts	32	1,647	2.2	2,964,672	1.4	1,307,865	1.5	3.2	−18.9	24.2	−11.8	9.5	74.4	5.7	3.9	60.2
Stoves, hot-air furnaces, and ranges	13	1,412	1.9	2,795,359	1.3	1,809,763	2.0	30.1	32.5	.....	43.3	74.8	.....	46.7	60.9	.....
Carriages and wagons and materials	108	1,371	1.8	2,677,381	1.3	1,380,051	1.6	−19.6	−9.7	63.3	−11.9	−7.3	93.7	−13.8	−0.6	76.5
Iron and steel, blast furnaces	6	503	0.7	2,245,329	1.1	563,394	0.6	−56.0	−15.8	−23.0	−51.8	35.7	−27.0	−55.7	55.3	−40.3
Slaughtering and meat packing	25	218	0.3	2,011,235	0.9	367,847	0.4	−22.1	374.6	−64.5	−2.2	445.6	−77.9	−17.7	338.2	−56.0
Leather goods	70	517	0.7	1,851,120	0.9	692,322	0.8	−14.4	−17.1	36.8	−13.5	19.7	59.3	−16.2	0.6	75.1
Ice, manufactured	70	927	1.2	1,762,193	0.8	1,357,205	1.5	19.0	103.9	−0.8	33.1	93.6	27.1	30.1	85.9	31.1
Brick, tile, pottery, and other clay products	77	1,688	2.3	1,695,431	0.8	1,175,065	1.3	5.2	4.8	5.4	3.6	16.1	49.1	−0.4	10.8	51.1
Marble and stone work	97	1,273	1.7	1,689,315	0.8	1,169,295	1.3	26.5	47.7	−0.6	15.3	55.2	11.7	18.7	62.8	−4.0
Coffee, roasting and grinding	7	92	0.1	1,648,199	0.8	448,433	0.5	.....	.....	.....	14.1	336.2	.....	50.8	11.0	.....
Gas, illuminating and heating	12	506	0.7	1,571,006	0.7	1,052,703	1.2	19.9	17.9	64.2	22.5	54.5	45.1	13.8	47.8	43.2
Woolen goods	17	1,069	1.4	1,546,591	0.7	623,277	0.7	−35.4	.....	.....	−14.2	.....	.....	−7.7	.....	.....
Dyestuffs and extracts	6	365	0.5	1,535,503	0.7	765,285	0.9	8.6	29.7	.....	17.0	82.4	.....	14.0	87.4	.....
Liquors, malt	4	337	0.5	1,345,386	0.6	855,567	1.0	−14.0	9.8	24.0	−34.2	11.6	55.9	−38.4	−0.3	52.8
Mineral and soda waters	86	276	0.4	1,263,128	0.6	492,755	0.6	2.6	64.0	.....	61.9	73.3	.....	14.9	57.7	.....
Copper, tin, and sheet-iron products	71	586	0.8	1,225,971	0.6	678,993	0.8	2.4	49.3	71.0	−0.2	41.1	147.4	6.8	45.9	123.6
Coffins, burial cases, and undertakers' goods	8	411	0.6	1,145,894	0.5	608,220	0.7	−14.4	11.6	49.8	−3.6	28.8	47.7	−8.8	16.2	93.9
Agricultural implements	17	517	0.7	1,121,694	0.5	730,612	0.8	−19.8	5.2	64.3	11.8	30.6	66.1	23.7	29.9	74.3
Mattresses and spring beds	20	316	0.4	981,407	0.5	442,594	0.5	16.2	14.8	121.5	49.5	50.5	65.8	50.7	33.6	168.3
Wood, turned and carved	24	555	0.7	908,528	0.4	372,652	0.4	−34.3	36.7	.....	−22.4	26.3	.....	−41.9	38.7	.....
Confectionery (ice cream)	23	146	0.2	768,973	0.4	339,169	0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooperage and wooden goods, not elsewhere specified	22	506	0.7	687,965	0.3	194,589	0.2	−40.9	127.7	−30.2	−40.1	63.5	22.7	−62.4	134.8	−25.1
Paints	9	84	0.1	620,889	0.3	231,683	0.3	.....	.....	.....	56.4	−17.5	218.5	45.9	−17.6	211.3
Coke, not including gas-house coke	5	170	0.2	605,084	0.3	91,924	0.1	−32.0	−33.7	−21.0	3.2	−27.7	5.9	−14.8	−45.7	−17.8
Boxes and cartons, paper	8	281	0.4	569,076	0.3	227,393	0.3	39.1	8.0	7.5	120.5	31.6	48.5	66.9	47.8	33.3
Canning and preserving, fruits and vegetables	62	381	0.5	496,225	0.2	135,279	0.2	25.7	49.3	75.0	140.8	−14.9	236.1	80.0	−17.6	167.6
Vinegar and cider	6	28	(2)	391,954	0.2	176,842	0.2	.....	.....	.....	55.6	.....	.....	37.2	.....	.....
Lime	9	432	0.6	356,829	0.2	249,282	0.3	4.1	−0.2	.....	10.5	−0.9	.....	8.3	12.2	.....
All other industries	338	7,218	9.7	29,293,874	13.8	13,874,365	15.7	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 34; 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.

In addition to the 43 industries, or industry groups, presented separately in the above table, there are 11 other industries, each of which reported products valued at more than $350,000 in 1914. These are included under the head of "all other industries" because if they were shown separately, the operations of individual establishments would be disclosed. These industries are: Boots and shoes; cars, steam-railroad, not including operations of railroad companies; cement; chemicals; iron and steel, steel works and rolling mills; iron and steel, cast-iron pipe; leather, tanned, curried, and finished; roofing materials; smelting and refining, copper; sulphuric, nitric, and mixed acids; and tobacco manufactures.

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 employed or value added by manufacture. Lumber takes first rank in all three items, but the flour-mill and gristmill industry and the manufacture of cottonseed oil and cake, second and third in value of products, respectively, drop to tenth and sixteenth places in number of wage earners and to fifth and eighth places, respectively, in value added by manufacture. The last-mentioned industries require few employees because the process of grinding grain and crushing cotton seed are largely done by machinery. The pro-

portional value added to the raw materials by such processes is small in comparison with most other industries.

In rank according to value of products, there were a few changes in 1914 as compared with 1909. Of the more important industries shown in the table, lumber and timber products and flour-mill and gristmill products held the same rank at both censuses. Cottonseed oil and cake, which held sixth place in 1909, advanced to third in 1914, while foundry and machine-shop products and printing and publishing, ranking third and fourth, respectively, in 1909, dropped to fifth and seventh places, respectively, in 1914. For the other industries slight variations are noticeable from census to census.

Lumber and timber products.—This classification includes logging operations, sawmills, planing mills, the manufacture of wooden packing boxes, and window and door screens and weather strips. No statistics were collected for mills engaged exclusively in custom sawing for local consumption. Notwithstanding the fact that the rate of increase in the value of products for this industry was comparatively small (3.2 per cent) for the period from 1909 to 1914, it still leads all other industries in the state, having in 1914 over two-fifths of the number of establishments and reporting more than one-sixth of the value of products, and nearly one-fourth of the total number of wage earners. Separate statistics are shown in Table 35 for lumber and timber products and lumber, planing-mill products.

Flour-mill and gristmill products.—The manufacture of flour-mill and gristmill products is governed largely by crop conditions, and an increase or a decrease for any particular year does not signify that the industry as a whole is on the increase or decline. There was a decrease of 9.1 per cent in value of products for this industry from 1909 to 1914, but an increase of 4.2 per cent for the 10-year period from 1904 to 1914, and of 37.9 per cent for the 15-year period 1899 to 1914. The wage earners in this industry decreased 1.1 per cent from 1904 to 1909 and 5.1 per cent from 1909 to 1914. This may be due to improved methods of manufacturing and handling materials and manufactured products.

Oil, cottonseed, and cake.—The statistics include those for all establishments engaged primarily in extracting oil from cotton seed or refining crude cottonseed oil. The industry is entirely dependent upon the production of cotton, as it utilizes the seed which prior to 1870 were comparatively little used. The number of wage earners increased 30.8 per cent from 1909 to 1914, while the value of products increased 73.1 per cent.

Food preparations.—This industry includes breadstuff preparations, principally self-rising flour, sweetening sirups, lard compounds, and other prepared food for human and animal consumption. The industry ranks fourth in value of products, and fourteenth in value added by manufacture. It is undergoing a rapid development, shown by the increase in value of products from $3,346,000 in 1909 to $9,955,000 in 1914 or 197.5 per cent. There are separate classifications for several other kinds of food products, as follows: Bread and other bakery products; butter, cheese, and condensed milk; canning and preserving fish; canning and preserving fruits and vegetables; canning and preserving oysters; flour-mill and gristmill products; oleomargarine; pickles, preserves, and sauces; sausage; slaughtering and meat packing; sugar, beet; sugar, cane; sugar, refining; and vinegar and cider.

Foundry and machine-shop products.—Under this classification are included not only foundries and machine shops, but establishments engaged in the manufacture of engines, gas machines, hardware, cast-iron and steel pipe, steam fittings and heating apparatus, structural ironwork, and automobile repair work. Separate statistics are given in Table 35 for automobile repairing, boiler shops and foundries, 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 therefore assigned to other classifications. The number of establishments engaged in the industry increased from 124 in 1909 to 142 in 1914. During this period the value of products increased 6.7 per cent and the number of wage earners 6.6 per cent.

Cars and general shop construction and repairs by steam-railroad companies.—This industry represents the work done in the car shops of steam-railroad companies and is practically confined to the repairs to the rolling stock and equipment of their own roads, although, to a limited extent, there may be some new construction of rolling stock. The statistics exclude minor repairs in roundhouses. Nearly 10 per cent of all the wage earners reported for the state were employed in the railroad repair shops. The number reported for 1914 was an increase of 29.4 per cent over 1909.

Printing and publishing.—All establishments engaged in bookbinding and blank-book making, steel engraving and plate printing, lithographing, job printing, and the printing and publishing of newspapers, periodicals, books, and music are included under this head. There was a decrease of 8.5 per cent from 1909 to 1914 in the number of wage earners employed in this industry, but the value of products increased 14.3 per cent.

Textiles.—The textile industries of the state, consisting of the manufacture of cotton goods, hosiery and knit goods, and woolen goods, are important branches of the state's manufacturing interests. Separate figures are given in the table for the three allied branches of this industry. Combined, they gave

employment to an average of 10,162 wage earners in 1914, and the value of their products amounted to $15,555,077, this being an increase over 1909 of 29.5 per cent and 47.2 per cent, respectively. Hosiery and knit goods form the largest proportion of the textile manufactures and show a rate of increase in all items given in the table far in excess of that reported for cotton goods. The manufacture of woolen goods shows a marked decrease in both wage earners and value of products.

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."

Of the 88,514 persons engaged in manufactures during 1914, 74,373 were wage earners, distributed between the sexes in the proportions of 85.6 per cent male and 14.4 per cent female. Proprietors and officials numbered 8,234, of whom only 1.5 per cent were females, while the 5,907 clerks were divided between males and females in the ratio of 4 to 1. Corresponding figures for individual industries will be found in Table 35. The number of persons engaged in manufactures in 1909 was 87,672, divided as follows: Proprietors and officials, 8,393; clerks, 5,439; and wage earners, 73,840. The sex distribution of each class in 1909 shows only slight variations from the 1914 proportions.

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Total.	Male.	Female.	Per cent of total. Male.	Female.
All classes	1914	88,514	76,573	11,941	86.5	13.5
	1909	87,672	77,277	10,395	88.1	11.9
Proprietors and officials	1914	8,234	8,107	127	98.5	1.5
	1909	8,393	8,252	141	98.3	1.7
Proprietors and firm members	1914	5,142	5,068	74	98.6	1.4
	1909	5,415	5,303	112	97.9	2.1
Salaried officers of corporations	1914	1,305	1,276	29	97.8	2.2
	1909	1,216	1,203	13	98.9	1.1
Superintendents and managers	1914	1,787	1,763	24	98.7	1.3
	1909	1,762	1,746	16	99.1	0.9
Clerks and other subordinate salaried employees.	1914	5,907	4,780	1,127	80.9	19.1
	1909	5,439	4,377	1,062	80.5	19.5
Wage earners (average number)	1914	74,373	63,686	10,687	85.6	14.4
	1909	73,840	64,648	9,192	87.6	12.4
16 years of age and over	1914	73,018	62,928	10,090	86.2	13.8
	1909	71,395	63,016	8,379	88.3	11.7
Under 16 years of age	1914	1,355	758	597	55.9	44.1
	1909	2,445	1,632	813	66.7	33.3

Table 4 gives, for the several classes of persons engaged in manufactures, the percentage 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	1.0	−0.9	14.9	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	−1.9	−1.8	−9.9	9.3	9.6	10.6	10.7	1.1	1.4
Proprietors and firm members	−5.0	−4.4	−33.9	5.8	6.2	6.6	6.9	0.6	1.1
Salaried officers of corporations	7.3	6.1	.....	1.5	1.4	1.7	1.6	0.2	0.1
Superintendents and managers	1.4	1.0	.....	2.0	2.0	2.3	2.3	0.2	0.2
Clerks and other subordinate salaried employees	8.6	9.2	6.1	6.7	6.2	6.2	5.7	9.4	10.2
Wage earners (average number)	0.7	−1.5	16.3	84.0	84.2	83.2	83.7	89.5	88.4
16 years of age and over	2.3	−0.1	20.4	82.5	81.4	82.2	81.5	84.5	80.6
Under 16 years of age	−44.6	−53.6	−26.6	1.5	2.8	1.0	2.1	5.0	7.8

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

The total number of persons engaged in manufactures in 1914 shows an increase of only 1 per cent over the number reported in 1909. Each class, except proprietors and firm members and wage earners under 16 years of age, contributed to the increase. The decrease of 5 per cent in proprietors and firm members is due in part to changes in character of ownership, partnership organizations in many cases incorporating between censuses.

Wage earners under 16 years of age decreased 44.6 per cent and the proportion which this class formed of the total persons engaged in manufactures was reduced from 2.8 per cent in 1909 to 1.5 per cent in 1914.

Although there was a slight increase from 1909 to 1914 in the total for all classes engaged in manufactures, both sexes did not share in the increase. The decrease of nine-tenths of 1 per cent shown for males was more than offset by the increase of 14.9 per cent for females. Male wage earners under 16 years of age show the largest percentage of decrease (53.6) and female wage earners 16 years of age and over the largest increase (20.4).

In order to compare the distribution of persons engaged in manufactures in 1914 with that shown at the census of 1904, it is necessary to use the classification employed at 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.			Per cent distribution.			Per cent of increase.[1]	
	1914	1909	1904	1914	1909	1904	1909-1914	1904-1909
Total	88,514	87,672	69,287	100.0	100.0	100.0	1.0	26.5
Proprietors and firm members	5,142	5,415	3,805	5.8	6.2	5.5	−5.0	42.3
Salaried employees	8,999	8,417	4,910	10.2	9.6	7.1	6.9	71.4
Wage earners (av. number)	74,373	73,840	60,572	84.0	84.2	87.4	0.7	21.9

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

Salaried employees show the greatest relative gain for each of the five-year periods. There was an increase of 42.3 per cent in proprietors and firm members from 1904 to 1909, but a decrease of 5 per cent from 1909 to 1914. Wage earners, the largest class, showed an increase of only seven-tenths of 1 per cent during the last five-year period, as compared with 21.9 per cent for the preceding five years.

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, 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.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS.			
		Average number.[1]	Per cent of total.		
			16 years of age and over.		Under 16 years of age.
			Male.	Female.	
All industries	1914	74,373	84.6	13.6	1.8
	1909	73,840	85.3	11.3	3.3
	1904	60,572	85.5	10.9	3.6
Bread and other bakery products	1914	1,152	70.6	28.5	0.9
	1909	855	71.9	26.1	2.0
Brick, tile, pottery, and other clay products.	1914	1,688	97.9	.....	2.1
	1909	1,604	95.6	0.2	4.2
Carriages and wagons and materials	1914	1,371	99.0	0.7	0.3
	1909	1,706	99.1	0.2	0.6
Cars and general shop construction and repairs by steam-railroad companies.	1914	7,201	99.8	0.2	.....
	1909	5,566	99.7	0.3	(2)
Clothing, men's, including shirts	1914	1,647	13.7	83.5	2.8
	1909	1,596	19.2	79.1	1.7
Confectionery	1914	774	57.1	42.6	0.3
	1909	894	51.2	47.7	1.1
Cotton goods	1914	3,403	49.8	39.8	10.4
	1909	3,078	44.5	37.9	17.6
Fertilizers	1914	706	100.0	.....	.....
	1909	559	100.0	.....	.....
Flour-mill and gristmill products	1914	1,497	99.5	0.4	0.1
	1909	1,577	99.0	0.1	0.9
Foundry and machine-shop products	1914	4,309	99.7	0.2	0.1
	1909	4,041	98.6	0.2	1.2
Furniture and refrigerators	1914	2,172	97.6	1.3	1.1
	1909	2,419	91.4	2.8	5.8
Hosiery and knit goods	1914	5,690	33.1	58.6	8.3
	1909	3,117	25.8	57.6	16.6
Ice, manufactured	1914	927	99.5	0.4	0.1
	1909	779	99.1	.....	0.9
Lumber and timber products	1914	18,276	97.9	1.4	0.7
	1909	22,389	98.0	0.6	1.4
Marble and stone work	1914	1,273	100.0	.....	.....
	1909	1,006	99.6	0.2	0.2
Oil, cottonseed, and cake	1914	1,054	99.2	0.8	.....
	1909	806	99.9	0.1	.....
Patent medicines and compounds and druggists' preparations.	1914	648	44.4	52.5	3.1
	1909	433	41.3	58.2	0.5
Printing and publishing	1914	2,665	81.8	17.5	0.7
	1909	2,914	76.9	20.2	3.0
Stoves, hot-air furnaces, and ranges	1914	1,412	99.3	.....	0.7
	1909	1,085	95.6	3.6	0.8
Woolen goods	1914	1,069	53.0	41.3	5.7
	1909	1,654	44.6	44.7	10.8
All other industries	1914	15,439	87.3	11.6	1.1
	1909	15,762	86.7	10.5	2.8

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

In 1914, 84.6 per cent of the average number of wage earners, in all industries combined, were males 16 years of age and over, 13.6 per cent females, and 1.8 per cent children under 16 years of age. Corresponding figures for 1909 are 85.3 per cent, 11.3 per cent, and 3.3 per cent, respectively, while for 1904 they were 85.5 per cent, 10.9 per cent, and 3.6 per cent, respectively. The industries giving employment to the largest number of women and children were men's clothing and the textile industries. In the cotton-goods industry nearly two-fifths of the wage earners were females over 16 years of age, in the woolen goods industry a little more than two-fifths, in the hosiery and knit-goods industry nearly three-fifths, and in the men's clothing industry over four-fifths. Two other industries in the above table, namely, confectionery and patent medicines and compounds and druggists' preparations, show relatively large numbers of female wage earners, but the actual number is small. The same industries which furnish employment to women to any considerable extent also show the greatest proportion of children, but among these industries a decreasing proportion of wage earners under 16 years of age is shown in all except men's clothing and patent medicines.

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the six 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— Chattanooga.	Jackson.	Johnson City.	Knoxville.	Memphis.	Nashville.
Total	1914	7,182	1,509	611	2,420	8,389	8,573
	1909	6,410	1,405	.....	[1] 2,362	7,927	9,721
	1904	6,420	1,268	.....	2,999	7,374	8,032
16 years of age and over: Male	1914	6,382	1,434	581	1,800	7,628	6,818
	1909	5,807	1,280	.....	[1] 1,722	7,198	7,776
	1904	5,844	1,118	.....	2,192	6,556	6,200
Female	1914	743	47	14	599	740	1,659
	1909	494	112	.....	[1] 596	383	1,755
	1904	399	112	.....	732	671	1,658
Under 16 years of age	1914	57	28	16	21	21	96
	1909	109	13	.....	44	346	190
	1904	177	38	.....	75	147	174
Per cent of total: 16 years of age and over—Male	1914	88.9	95.0	95.1	74.4	90.9	79.5
	1909	90.6	91.1	.....	72.9	90.8	80.0
	1904	91.0	88.2	.....	73.1	88.9	77.2
Female	1914	10.3	3.1	2.3	24.8	8.8	19.4
	1909	7.7	8.0	.....	25.2	4.8	18.1
	1904	6.2	8.8	.....	24.4	9.1	20.6
Under 16 years of age	1914	0.8	1.9	2.6	0.9	0.3	1.1
	1909	1.7	0.9	.....	1.9	4.4	2.0
	1904	2.8	3.0	.....	2.5	2.0	2.2

[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.

Table 8 gives percentages of increase from census to census, based on the figures in Table 7, for cities where per cent of increase can be computed.

Table 8

CITY.	PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS.[1] Period.	Total.	16 years of age and over. Male.	Female.	Under 16 years of age.
Chattanooga	1904–1914	11.9	9.2	86.2	−67.8
	1909–1914	12.0	9.9	50.4	−47.7
	1904–1909	−0.2	−0.6	23.8	−38.4
Jackson	1904–1914	19.0	28.3	−58.0	.....
	1909–1914	7.4	12.0	−58.0	.....
	1904–1909	10.8	14.5	(2)	.....
Knoxville	1904–1914	−19.3	−17.9	−18.2	.....
	1909–1914	2.5	4.5	0.5	.....
	1904–1909	−21.2	−21.4	−18.6	.....
Memphis	1904–1914	13.8	16.4	10.3	−85.7
	1909–1914	5.8	6.0	93.2	−93.9
	1904–1909	7.5	9.8	−42.9	135.4
Nashville	1904–1914	6.7	10.0	0.1	−44.8
	1909–1914	−11.8	−12.3	−5.5	−49.5
	1904–1909	21.0	25.4	5.9	9.2

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100.
[2] Same number reported for both years.

With the exception of Chattanooga and Nashville all cities in Table 7 show increases in the proportion of male wage earners over 16 years of age, while only Chattanooga, Memphis, and Nashville show increases in the proportion of females of the same age.

Jackson was the only city which did not show a decrease from 1909 to 1914 in the proportion of children employed.

For the ten-year period 1904 to 1914 the total average number of wage earners in Chattanooga increased 11.9 per cent; in Jackson, 19 per cent; in Memphis, 13.8 per cent; and in Nashville, 6.7 per cent; while Knoxville showed a decrease of 19.3 per cent. The number of wage earners under 16 years of age decreased for the same period in each city shown in the table.

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 of the same year:

Table 9

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES. Number.[1] 1914	1909	1904	Per cent of maximum. 1914	1909	1904
January	73,538	69,305	58,526	95.1	85.9	93.5
February	74,236	69,974	58,660	96.0	86.7	93.7
March	76,116	71,073	60,412	98.5	88.1	96.5
April	77,312	70,666	60,559	100.0	87.6	96.8
May	76,040	69,713	60,398	98.4	86.4	96.5
June	76,450	70,123	60,037	98.9	86.9	95.9
July	76,034	71,155	59,657	98.3	88.2	95.3
August	76,047	74,956	61,000	98.4	92.9	97.5
September	75,559	78,850	62,470	97.7	97.7	99.8
October	72,672	80,011	62,574	94.0	99.2	100.0
November	70,269	80,676	61,747	90.9	100.0	98.7
December	68,203	79,587	60,824	88.2	98.7	97.2

[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 greatest industrial activity was during the spring months, the maximum number for the year, 77,312, being reported for April. For 1909 and 1904 the period of greatest activity was during the fall months, the maximum appearing for November in 1909 and for October in 1904. The greatest actual difference between the maximum and minimum months in any one of the three census years was 11,371 in 1909, or 14.1 per cent of the maximum.

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 six cities having more than 10,000 inhabitants.

The figures in Table 10 reflect a fair degree of stability of employment in 1914 for all industries, except those which are seasonal in character. The manufacture of cottonseed oil and cake gave employment to 1,957 wage earners in November but to only 20.3 per cent of that number in August. Marked fluctuations between the months of greatest and least activity are also shown for the manufacture of ice and fertilizer, in which industries the minimum represented 33.3 per cent and 34.5 per cent, respectively, of the maximum. Printing and publishing and the manufacture of cotton goods furnish the most steady employment, the proportion of the maximum formed by the minimum being 97.6 per cent and 96 per cent, respectively.

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	74,373	73,538	74,236	76,116	**77,312**	76,040	76,450	76,034	76,047	75,559	72,672	70,269	*68,203*	88.2
Bread and other bakery products	1,152	*967*	1,112	1,137	1,146	1,162	1,199	1,192	**1,204**	1,173	1,200	1,175	1,157	80.3
Brick, tile, pottery, and other clay products	1,688	1,234	1,266	1,431	1,931	2,074	2,073	**2,090**	2,021	1,990	1,588	1,333	*1,225*	58.6
Carriages and wagons and materials	1,371	1,423	1,470	**1,501**	1,493	1,473	1,424	1,434	1,469	1,390	1,194	1,130	*1,051*	70.0
Cars and general shop construction and repairs by steam-railroad companies	7,201	7,368	7,231	7,329	7,291	7,241	7,305	7,342	**7,420**	7,282	7,102	*6,734*	6,767	90.8
Clothing, men's, including shirts	1,647	1,760	**1,779**	1,696	1,771	1,752	1,768	1,495	1,686	1,572	1,579	*1,418*	1,493	79.4
Confectionery	774	776	741	784	788	774	738	*732*	774	800	787	771	**823**	88.9
Cotton goods	3,403	3,413	3,408	*3,334*	3,409	3,435	3,415	3,337	3,344	3,352	**3,473**	3,456	3,460	96.0
Fertilizers	706	592	816	1,110	**1,291**	731	*446*	466	550	860	588	511	511	34.5
Flour-mill and gristmill products	1,497	1,478	1,450	1,437	1,419	*1,367*	1,496	1,602	**1,626**	1,537	1,512	1,549	1,491	84.1
Foundry and machine-shop products	4,309	4,314	4,425	**4,593**	4,506	4,402	4,393	4,571	4,543	4,566	4,091	3,679	*3,625*	78.9
Furniture and refrigerators	2,172	2,125	2,314	2,447	2,430	**2,508**	2,428	2,188	2,215	2,095	1,890	1,776	*1,648*	65.7
Hosiery and knit goods	5,690	5,861	5,869	6,052	**6,091**	5,964	5,964	5,674	5,588	5,439	5,334	5,243	*5,201*	85.4
Ice, manufactured	927	*478*	523	592	914	1,116	1,403	**1,437**	1,417	1,259	820	610	555	33.3
Lumber and timber products	18,276	18,143	18,461	**19,262**	19,228	18,917	18,763	18,614	18,565	18,262	17,358	17,644	*16,095*	83.5
Marble and stone work	1,273	1,300	1,246	1,272	1,298	1,307	**1,353**	1,297	1,250	1,265	1,241	1,251	*1,196*	88.4
Oil, cottonseed, and cake	1,054	1,659	1,210	1,102	804	463	414	424	*398*	614	1,720	**1,957**	1,883	20.3
Patent medicines and compounds and druggists' preparations	648	627	649	665	690	**703**	679	698	674	650	598	578	*565*	80.4
Printing and publishing	2,665	2,673	2,674	2,686	2,688	**2,691**	2,666	2,655	*2,626*	2,651	2,652	2,646	2,672	97.6
Stoves, hot-air furnaces, and ranges	1,412	1,314	1,371	1,520	**1,532**	1,531	1,502	1,404	1,485	1,369	1,363	1,291	*1,262*	82.4
Woolen goods	1,069	**1,190**	1,180	1,172	1,118	1,121	1,139	1,019	1,016	1,016	*946*	953	958	79.5
All other industries	15,439	14,843	15,041	14,994	15,474	15,308	15,882	16,363	16,176	**16,417**	15,636	14,569	*14,565*	88.7
Total for cities	28,684	28,990	29,251	29,750	29,836	29,298	**30,024**	29,258	28,811	28,715	27,955	26,434	*25,886*	86.2
CHATTANOOGA	7,182	6,979	7,370	7,529	7,540	7,562	**7,650**	7,417	7,438	7,338	6,878	6,386	*6,097*	79.7
JACKSON	1,509	**1,695**	1,628	1,596	1,613	1,514	1,556	1,582	1,553	1,592	1,474	1,158	*1,147*	67.7
JOHNSON CITY	611	638	590	629	613	*528*	644	**676**	654	629	599	578	554	78.1
KNOXVILLE	2,420	2,367	2,356	2,420	2,531	2,500	2,629	**2,636**	2,467	2,368	2,371	2,245	*2,150*	81.6
MEMPHIS	8,389	8,548	8,604	**8,776**	8,720	8,246	8,431	8,399	8,328	8,153	8,317	8,186	*7,960*	90.7
NASHVILLE	8,573	8,763	8,703	8,800	8,819	8,948	**9,114**	8,548	8,371	8,635	8,316	*7,881*	7,978	86.5

Of the six cities, Jackson shows the greatest and Memphis the least degree of fluctuation, the minimum for Jackson being 67.7 per cent of the maximum and that for Memphis being 90.7 per cent.

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 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 less number of hours.

The figures in Table 11 emphasize the tendency toward a shortening of the working day of wage earners. In 1909, 50,848, or 68.9 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, while for 1914 only 34,508, or 46.4 per cent of the total, were so employed. On the other hand, the number of wage earners whose working hours were less than 60 per week increased from 22,992 in 1909 to 39,865 in 1914, forming 31.1 per cent and 53.6 per cent, respectively, of the total number in the state. The most pronounced increase in the shorter-hour groups was in that between 54 and 60 hours per week where the number of wage earners increased from 7,416 in 1909 to 18,796 in 1914, or 153.5 per cent.

Among the separate industries the most marked decrease in hours of labor is shown for lumber and timber products. Notwithstanding the fact that the total average number of wage earners in this industry decreased from 22,389 in 1909 to 18,276 in 1914, the number working in establishments where the prevailing hours per week were less than 60, increased from 3,192 in 1909 to 4,903 in 1914. The three textile industries—cotton goods, hosiery and knit goods, and woolen goods—in 1909 employed 973 wage earners working less than 60 hours per week and 9,083, in 1914.

Of the 28,684 wage earners in the six cities in 1914, 25,386, or 88.5 per cent, were in establishments where the prevailing hours were 60 or fewer per week, while only 3,298 were in establishments in which the hours were more than 60 per week.

Table 11

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	74,373	4,548	3,147	13,374	18,796	26,725	3,522	2,745	1,516
	1909	73,840	3,579	2,040	9,957	7,416	39,806	6,126	2,419	2,497
Bread and other bakery products	1914	1,152	82	17	477	90	363	83	31	9
	1909	855	34	15	161	57	412	113	38	25
Brick, tile, pottery, and other clay products	1914	1,688	119	14	40	414	979	112	8	2
	1909	1,604	67	27	43	51	1,053	274	78	11
Carriages and wagons and materials	1914	1,371	85	30	248	387	616	1	4	.....
	1909	1,706	102	89	100	201	1,211	1	2	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	7,201	.....	10	6,219	.....	300	672	.....	.....
	1909	5,566	218	.....	4,305	887	14	142	.....	.....
Clothing, men's, including shirts	1914	1,647	372	62	69	787	357	.....	.....	.....
	1909	1,596	103	205	423	551	314	.....	.....	.....
Confectionery	1914	774	112	12	175	241	191	43	.....	.....
	1909	894	4	8	18	373	428	55	8	.....
Cotton goods	1914	3,403	.....	130	115	2,995	163	.....	.....	.....
	1909	3,078	.....	.....	65	.....	1,333	1,643	37	.....
Fertilizers	1914	706	.....	.....	160	.....	383	160	.....	3
	1909	559	1	.....	.....	46	512	.....	.....	.....
Flour-mill and gristmill products	1914	1,497	47	4	24	102	484	230	606	.....
	1909	1,577	167	5	3	.....	410	78	913	1
Foundry and machine-shop products	1914	4,309	160	117	1,349	875	1,803	5	.....	.....
	1909	4,041	10	13	1,005	441	2,551	19	2	.....
Furniture and refrigerators	1914	2,172	6	223	401	629	899	14	.....	.....
	1909	2,419	.....	31	256	580	1,321	207	24	.....
Hosiery and knit goods	1914	5,690	.....	.....	.....	4,994	696	.....	.....	.....
	1909	3,117	.....	.....	.....	840	1,323	954	.....	.....
Ice, manufactured	1914	927	3	.....	5	4	50	84	210	571
	1909	779	2	.....	.....	.....	23	56	87	611
Lumber and timber products	1914	18,276	921	529	1,495	1,958	11,749	1,179	438	7
	1909	22,389	729	704	826	933	17,973	1,177	46	1
Marble and stone work	1914	1,273	61	28	156	307	720	1	.....	.....
	1909	1,006	80	6	188	23	434	246	.....	29
Oil, cottonseed, and cake	1914	1,054	.....	83	.....	54	.....	39	878	.....
	1909	806	.....	.....	.....	.....	.....	.....	806	.....
Patent medicines and compounds and druggists' preparations	1914	648	65	227	171	71	106	3	5	.....
	1909	433	46	70	90	175	50	2	.....	.....
Printing and publishing	1914	2,665	1,621	469	354	74	142	5	.....	.....
	1909	2,914	1,149	386	782	262	335	.....	.....	.....
Stoves, hot-air furnaces, and ranges	1914	1,412	22	.....	598	792	.....	.....	.....	.....
	1909	1,085	5	98	239	7	736	.....	.....	.....
Woolen goods	1914	1,069	.....	.....	146	703	180	.....	40	.....
	1909	1,654	1	.....	.....	67	1,029	557	.....	.....
All other industries	1914	15,439	872	1,192	1,172	3,319	6,544	891	525	924
	1909	15,762	861	383	1,453	1,922	8,344	602	378	1,819
Total for cities	1914	28,684	3,080	1,899	6,997	5,052	8,358	2,026	676	596
CHATTANOOGA	1914	7,182	471	366	1,248	1,584	3,113	329	2	69
JACKSON	1914	1,509	40	.....	723	74	330	233	74	35
JOHNSON CITY	1914	611	14	6	50	11	417	3	35	75
KNOXVILLE	1914	2,420	121	326	288	1,051	350	98	130	56
MEMPHIS	1914	8,389	1,028	464	2,538	951	1,743	1,146	195	324
NASHVILLE	1914	8,573	1,406	737	2,150	1,381	2,405	217	240	37

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

In accepting the statistics in this table it must be remembered that Johnson City, which had a population of 10,000 and over at the census of 1914 was included in the district outside of the cities at prior censuses. The table shows, however, that in 1914 the manufactures of the state were evenly divided between urban and rural communities. The six cities which contained 16.9 per cent of the estimated population of the state reported 50 per cent of the total value of products and 50.6 per cent of the total value added by manufacture. Only 25.2 per cent of the total number of establishments were located in the cities, and only 38.6 per cent of the wage earners found employment in urban districts.

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	.....	6	.....	2	.....	2	.....	2	.....	.....	.....
	1910	.....	5	.....	1	.....	2	.....	2	.....	.....	.....
	1900	.....	5	.....	1	.....	3	.....	1	.....	.....	.....
Population [1]	1914	2,254,754	380,805	16.9	27,674	1.2	95,001	4.2	258,130	11.4	1,873,941	83.1
	1910	2,184,789	338,198	15.5	15,779	0.7	80,950	3.7	241,469	11.1	1,846,591	84.5
	1900	2,020,616	260,814	12.9	14,511	0.7	143,656	7.1	102,647	5.1	1,759,802	87.1
Number of establishments	1914	4,775	1,202	25.2	76	1.6	418	8.8	708	14.8	3,573	74.8
	1909	4,609	1,096	23.8	42	0.9	341	7.4	713	15.5	3,513	76.2
	1899	3,116	744	23.9	33	1.1	488	15.7	223	7.2	2,372	76.1
Average number of wage earners	1914	74,373	28,684	38.6	2,120	2.9	9,602	12.9	16,962	22.8	45,689	61.4
	1909	73,840	27,825	37.7	1,405	1.9	8,772	11.9	17,648	23.9	46,015	62.3
	1899	45,963	23,302	50.7	1,018	2.2	15,658	34.1	6,626	14.4	22,661	49.3
Value of products	1914	$212,071,489	$106,141,727	50.0	$6,017,329	2.8	$27,714,662	13.1	$72,409,736	34.1	$105,929,762	50.0
	1909	180,216,548	86,406,462	47.9	2,709,773	1.5	23,805,473	13.2	59,891,216	33.2	93,810,086	52.1
	1899	92,749,129	47,831,174	51.6	1,576,869	1.7	32,020,822	34.5	14,233,438	15.3	44,917,955	48.4
Value added by manufacture	1914	88,641,354	44,875,005	50.6	2,225,824	2.5	12,605,837	14.2	30,043,344	33.9	43,766,349	49.4
	1909	76,200,714	36,451,786	47.8	1,495,202	2.0	10,372,966	13.6	24,583,618	32.2	39,748,928	52.2
	1899	38,190,090	20,259,432	53.0	884,181	2.3	13,021,019	34.1	6,354,232	16.6	17,930,658	47.0

[1] Census estimate of population for 1914.

The relative importance in manufactures of each of the six 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. Comparable figures for Johnson City are not available, as that city had less than 10,000 inhabitants prior to 1914.

Table 13 City.	Average number of wage earners.			Value of products.		
	1914	1909	1904	1914	1909	1904
Memphis	8,389	7,927	7,374	$39,133,497	$30,241,519	$20,043,192
Nashville	8,573	9,721	8,032	33,276,239	29,649,697	21,567,013
Chattanooga	7,182	6,410	6,420	20,368,555	16,036,455	14,261,390
Knoxville	2,420	[1] 2,362	2,999	7,346,107	[1] 7,769,018	6,698,850
Jackson	1,509	1,405	1,268	3,417,168	2,709,773	2,317,715
Johnson City	611	.....	.....	2,600,161	.....	.....

[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.

All of the cities in the foregoing table except Knoxville, show an increase from 1909 to 1914 in value of products, and all except Nashville report a greater number of wage earners in the later year.

Memphis, the leading city in industrial importance as well as in population, had its period of greatest growth in manufactures between 1904 and 1909. During the last five years, however, the city showed an advance of $8,891,978, or 29.4 per cent, in value of products and an increase of 462, or 5.8 per cent, in average number of wage earners. The industries contributing most to the increase were cottonseed oil and cake, tobacco, and food preparations.

Nashville and Chattanooga, the next largest cities, showed an increase of 12.2 per cent and 27 per cent, respectively, in value of products, from 1909 to 1914, as compared with 37.5 per cent and 12.4 per cent, respectively, during the preceding five-year period. The leading industries in Nashville are the manufacture of flour-mill and gristmill products and of food preparations and printing and publishing. In Chattanooga, foundry and machine-shop products, flour-mill and gristmill products, and lumber and timber products lead all others.

Knoxville's output of manufactures decreased slightly during the five years 1909 to 1914 but increased somewhat during the preceding five years, while Jackson gained gradually from census to census. Flour mills and gristmills, the manufacture of men's clothing, and confectionery and ice cream are the leading industries in Knoxville. In Jackson the railroad repair shops, the lumber industry, and the manufacture of cottonseed oil and cake lead all others.

The statistics for that part of Bristol which lies in Tennessee are included with those for the outside districts in Table 12. Table 14 presents the totals for the entire city and for the parts situated in Tennessee and Virginia, respectively.

The leading industries of Bristol, Tenn., are the manufacture of flour-mill and gristmill products, the patent medicines and men's clothing, and those for Bristol, Va., are the manufacture of paper and wood pulp, men's clothing, and flour-mill and gristmill products.

Table 14	TOTAL.			BRISTOL, TENN.			BRISTOL, VA.		
	1914	1909	Per cent of increase,[1] 1909-1914.	1914	1909	Per cent of increase,[1] 1909-1914.	1914	1909	Per cent of increase,[1] 1909-1914.
Population[2]	14,906	13,395	11.3	7,948	7,148	11.2	6,958	6,247	11.4
Number of establishments	57	51	.....	26	23	.....	31	28	.....
Persons engaged in manufactures	1,385	1,319	5.0	390	377	3.4	995	942	5.6
Proprietors and firm members	31	42	.....	12	22	.....	19	20	.....
Salaried employees	225	148	52.0	90	68	.....	135	80	68.8
Wage earners (average number)	1,129	1,129	.....	288	287	0.3	841	842	−0.1
Primary horsepower	3,651	3,914	−6.7	666	1,289	−48.3	2,985	2,625	13.7
Capital	$2,940,791	$3,062,409	−4.0	$907,621	$1,345,671	−32.5	$2,033,170	$1,716,738	18.4
Salaries and wages	689,533	631,813	9.1	195,236	160,327	21.8	494,297	471,486	4.8
Salaries	239,862	142,741	68.0	98,125	53,615	83.0	141,737	89,126	59.0
Wages	449,671	489,072	−8.1	97,111	106,712	−9.0	352,560	382,360	−7.8
Cost of materials	2,087,120	1,828,296	14.2	441,332	593,974	−25.7	1,645,788	1,234,322	33.3
Value of products	3,397,426	2,848,777	19.3	854,575	878,109	−2.7	2,542,851	1,970,668	29.0
Value added by manufacture	1,310,306	1,020,481	28.4	413,243	284,135	45.4	897,063	736,346	21.8

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

[2] Census estimates of population for 1914.

Character of ownership.—Table 15 presents statistics concerning 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.

Table 15		NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.							VALUE OF PRODUCTS.						
						In establishments owned by—			Per cent of total.				Of establishments owned by—			Per cent of total.		
INDUSTRY AND CITY.	Census year.	Individuals.	Corporations.	All others.	Total.	Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.	Total.	Individuals.	Corporations.	All others.	Individuals.	Corporations.	All others.
All industries	1914	2,418	1,150	1,207	74,373	9,719	55,808	8,846	13.1	75.0	11.9	$212,071,489	$19,752,525	$167,891,900	$24,427,064	9.3	79.2	11.5
	1909	2,182	1,068	1,359	73,840	11,349	51,716	10,775	15.4	70.0	14.6	180,216,548	22,206,362	133,750,538	24,259,648	12.3	74.2	13.5
	1904	1,345	785	1,045	60,572	8,717	42,049	9,806	14.4	69.4	16.2	137,960,476	17,339,985	97,285,799	23,334,692	12.6	70.5	16.9
Bread and other bakery products.	1914	113	21	17	1,152	291	707	154	25.2	61.4	13.4	4,092,664	986,573	2,570,561	535,530	24.1	62.8	13.1
	1909	98	10	23	855	271	465	119	31.7	54.4	13.9	2,891,821	910,769	1,527,870	453,182	31.5	52.8	15.7
Carriages and wagons and materials.	1914	45	25	38	1,371	167	906	298	12.2	66.1	21.7	2,677,381	267,059	1,932,603	477,719	10.0	72.2	17.8
	1909	46	39	44	1,706	284	1,125	297	16.7	65.9	17.4	3,039,613	404,778	2,129,293	505,542	13.3	70.1	16.6
Confectionery	1914	11	20	4	774	48	707	19	6.2	91.3	2.5	2,989,507	100,589	2,813,854	75,064	3.4	94.1	2.5
	1909	9	16	6	894	33	778	83	3.7	87.0	9.3	2,520,070	100,935	2,220,074	199,061	4.0	88.1	7.9
Flour-mill and gristmill products.	1914	257	70	185	1,497	312	905	280	20.8	60.5	18.7	26,413,574	3,847,636	18,506,701	4,059,237	14.6	70.0	15.4
	1909	203	64	187	1,577	359	857	361	22.8	54.3	22.9	29,070,019	5,493,218	17,706,707	5,870,094	18.9	60.9	20.2
Foundry and machine-shop products.	1914	45	70	27	4,309	257	3,875	177	6.0	89.9	4.1	9,802,222	463,595	8,934,912	403,715	4.7	91.2	4.1
	1909	35	60	29	4,041	413	3,469	159	10.2	85.9	3.9	9,189,791	868,751	7,968,271	352,769	9.5	86.7	3.8
Furniture and refrigerators.	1914	18	26	14	2,172	367	1,702	103	16.9	78.4	4.7	3,739,558	448,110	3,144,838	146,610	12.0	84.1	3.9
	1909	7	31	4	2,419	222	2,104	93	9.2	87.0	3.8	3,309,385	194,084	3,045,614	69,687	5.9	92.0	2.1
Lumber and timber products.	1914	1,197	199	576	18,276	5,118	9,057	4,101	28.0	49.6	22.4	31,430,208	6,155,529	19,218,129	6,056,550	19.6	61.1	19.3
	1909	1,101	211	665	22,389	6,676	9,807	5,906	29.8	43.8	26.4	30,456,807	6,690,074	17,199,340	6,567,393	22.0	56.5	21.5
Patent medicines and compounds and druggist's preparations.	1914	21	51	10	648	35	408	205	5.4	63.0	31.6	4,942,445	116,561	3,185,609	1,640,275	2.4	64.4	33.2
	1909	15	46	15	433	12	227	194	2.8	52.4	44.8	3,514,676	53,072	1,683,423	1,778,181	1.5	47.9	50.6
Printing and publishing	1914	244	104	89	2,665	502	1,859	304	18.8	69.8	11.4	8,200,681	1,078,817	6,192,290	929,574	13.2	75.5	11.3
	1909	208	84	121	2,914	426	1,663	825	14.6	57.1	28.3	7,173,230	793,011	4,488,645	1,891,574	11.0	62.6	26.4
Total for cities	1914	439	549	214	28,684	2,210	24,042	2,432	7.7	83.8	8.5	106,141,727	6,007,427	91,136,179	8,998,121	5.7	85.9	8.5
CHATTANOOGA	1914	102	132	42	7,182	513	6,401	268	7.2	89.1	3.7	20,368,555	1,431,987	18,302,499	634,069	7.0	89.9	3.1
JACKSON	1914	16	23	7	1,509	60	1,355	94	4.0	89.8	6.2	3,417,168	160,361	2,951,305	305,502	4.7	86.4	8.9
JOHNSON CITY	1914	12	16	2	611	[1] 67	544	.....	11.0	89.0	.....	2,600,161	[1] 140,937	2,459,224	.....	5.4	94.6	.....
KNOXVILLE	1914	58	58	26	2,420	301	1,684	435	12.4	69.6	18.0	7,346,107	606,011	5,899,637	840,459	8.3	80.3	11.4
MEMPHIS	1914	148	162	44	8,389	597	7,278	514	7.1	86.8	6.1	39,133,497	2,056,453	34,846,386	2,230,658	5.3	89.0	5.7
NASHVILLE	1914	103	158	93	8,573	672	6,780	1,121	7.8	79.1	13.1	33,276,239	1,611,678	26,677,128	4,987,433	4.8	80.2	15.0

[1] Includes the group "all others."

This table shows an increase during the decade in number of establishments throughout the state under individual and corporate forms of ownership. The greatest proportion of the establishments—more than one-half the total in 1914—is shown for those under individual ownership; but in value of products and average number of wage earners, those owned by corporations greatly predominate. Although only 24.1 per cent of the total number of establishments were under corporate ownership, this class reported 79.2 per cent of the total value of products and 75 per cent of the total average number of wage earners. In 1909 and 1904 the corresponding proportions were only slightly less. For both 1914 and 1909 the largest pro-

portion of the wage earners and value of products for each of the nine industries for which separate statistics are given is shown for establishments under corporate control. This condition prevails also in 1914, in each of the six cities. Here, however, a greater proportion of the total number of establishments for all the cities taken as a group is under corporate ownership.

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments is indicated by the statistics given in Table 16.

Table 16

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	4,775	4,609	3,175	74,373	73,840	60,572	$212,071,489	$180,216,548	$137,960,476	$88,641,354	$76,200,714	$58,608,730
Less than $5,000	2,298	2,082	1,015	4,825	5,541	1,784	5,140,687	4,640,418	2,607,791	3,124,602	3,058,539	1,766,725
$5,000 to $20,000	1,311	1,352	1,084	6,626	8,675	6,260	12,936,810	13,380,348	11,301,086	6,843,063	7,335,137	6,129,232
$20,000 to $100,000	735	789	766	13,821	15,379	16,318	32,359,591	34,700,071	33,535,276	14,824,135	15,749,778	15,427,691
$100,000 to $1,000,000	401	369	299	38,355	37,822	30,419	111,065,606	96,928,666	71,720,062	45,759,064	40,751,742	29,694,696
$1,000,000 and over	30	17	11	10,746	6,423	5,791	50,568,795	30,567,045	18,796,261	18,090,490	9,305,518	5,590,386
	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	48.1	45.2	32.0	6.5	7.5	2.9	2.4	2.6	1.9	3.5	4.0	3.0
$5,000 to $20,000	27.5	29.3	34.1	8.9	11.7	10.3	6.1	7.4	8.2	7.7	9.6	10.5
$20,000 to $100,000	15.4	17.1	24.1	18.6	20.8	26.9	15.3	19.2	24.3	16.7	20.7	26.3
$100,000 to $1,000,000	8.4	8.0	9.4	51.6	51.2	50.2	52.4	53.8	52.0	51.6	53.5	50.7
$1,000,000 and over	0.6	0.4	0.3	14.4	8.7	9.6	23.8	17.0	13.6	20.4	12.2	9.5

In 1914, 431 establishments, or 9 per cent of the total number in the state, each reported products exceeding $100,000 in value. These establishments furnished employment to about two-thirds of the total wage earners engaged in manufactures and reported more than three-fourths of the total value of products. In the same year, the small establishments—those reporting products valued at less than $5,000—although representing 48.1 per cent of the total, employed only 6.5 per cent of the wage earners and contributed only 2.4 per cent of the total value of products. During the ten years, 1904 to 1914, there was a proportional increase in the value of the output of the large establishments, the percentages being, 76.2, 70.8 and 65.6 for 1914, 1909, and 1904, respectively. On the other hand, the smaller establishments—those reporting products valued at less than $100,000—showed a decreasing proportion for this item, from census to census, namely, 23.8 per cent in 1914, 29.2 per cent in 1909, and 34.4 per cent in 1904.

Table 17 gives, for 1914 and 1909, for nine 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 16 for all industries combined.

Table 17

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
BREAD AND OTHER BAKERY PRODUCTS	151	131	100.0	100.0	1,152	855	100.0	100.0	$4,092,664	$2,891,821	100.0	100.0	$1,700,319	$1,102,219	100.0	100.0
Less than $5,000	53	47	35.1	35.9	68	58	5.9	6.8	154,137	136,354	3.8	4.7	77,464	54,744	4.6	5.0
$5,000 to $20,000	67	64	44.4	48.9	169	197	14.7	23.0	593,720	628,319	14.5	21.7	273,126	276,533	16.1	25.1
$20,000 to $100,000	21	13	13.9	9.9	185	135	16.0	15.8	675,910	538,402	16.5	18.6	294,571	228,849	17.3	20.8
$100,000 to $1,000,000	10	7	6.6	5.3	730	465	63.4	54.4	2,668,897	1,588,746	65.2	54.9	1,055,158	542,093	62.1	49.2
CARRIAGES AND WAGONS AND MATERIALS	108	129	100.0	100.0	1,371	1,706	100.0	100.0	2,677,380	3,039,613	100.0	100.0	1,380,051	1,600,187	100.0	100.0
Less than $5,000	44	47	40.7	36.4	98	150	7.1	8.8	123,826	135,408	4.6	4.5	80,130	88,742	5.8	5.5
$5,000 to $20,000	34	45	31.5	34.9	214	298	15.6	17.5	339,908	432,681	12.7	14.2	190,847	263,791	13.8	16.5
$20,000 to $100,000	23	30	21.3	23.3	550	753	40.1	44.1	967,550	1,290,524	36.1	42.5	524,066	665,244	38.0	41.6
$100,000 to $1,000,000	7	7	6.5	5.4	509	505	37.1	29.6	1,246,096	1,181,000	46.5	38.9	585,008	582,410	42.4	36.4
CONFECTIONERY	35	31	100.0	100.0	774	894	100.0	100.0	2,989,507	2,520,070	100.0	100.0	1,139,573	862,881	100.0	100.0
Less than $5,000	4	4	11.4	12.9	7	5	0.9	0.6	13,089	7,650	0.4	0.3	8,492	4,037	0.7	0.5
$5,000 to $20,000	11	7	31.4	22.6	73	39	9.4	4.4	132,083	87,095	4.4	3.5	68,990	36,374	6.1	4.2
$20,000 to $100,000	12	11	34.3	35.5	129	131	16.7	14.7	449,718	431,728	15.0	17.1	204,091	174,348	17.9	20.2
$100,000 to $1,000,000	8	9	22.9	29.0	565	719	73.0	80.4	2,394,617	1,993,597	80.1	79.1	858,000	648,122	75.3	75.1
FLOUR-MILL AND GRISTMILL PRODUCTS	512	454	100.0	100.0	1,497	1,577	100.0	100.0	26,413,574	29,070,019	100.0	100.0	4,341,853	3,784,153	100.0	100.0
Less than $5,000	134	69	26.2	15.2	51	49	3.4	3.1	377,588	190,545	1.4	0.7	82,154	38,529	1.9	1.0
$5,000 to $20,000	202	190	39.4	41.8	212	217	14.2	13.8	2,330,851	2,131,595	8.8	7.3	503,491	414,268	11.6	10.9
$20 000 to $100,000	142	160	27.7	35.2	409	453	27.3	28.7	5,681,092	6,842,747	21.5	23.5	1,067,330	1,144,602	24.6	30.2
$100,000 to $1,000,000	29	29	5.7	6.4	387	382	25.8	24.2	8,230,556	6,902,173	31.2	23.7	1,310,108	801,445	30.2	21.2
$1,000,000 and over	5	6	1.0	1.3	438	476	29.3	30.2	9,793,487	13,002,959	37.1	44.7	1,378,770	1,385,309	31.7	36.6

Table 17—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	142	124	100.0	100.0	4,309	4,041	100.0	100.0	$9,802,222	$9,189,791	100.0	100.0	$5,107,070	$4,629,591	100.0	100.0
Less than $5,000	31	29	21.8	23.4	44	52	1.0	1.3	82,424	72,293	0.8	0.8	57,312	46,655	1.1	1.0
$5,000 to $20,000	51	34	35.9	27.4	297	209	6.9	5.2	559,692	345,965	5.7	3.8	379,049	197,597	7.4	4.3
$20,000 to 100,000	37	42	26.1	33.9	1,017	1,138	23.6	28.2	1,803,909	1,964,688	18.4	21.4	979,090	1,108,527	19.2	23.9
$100,000 to $1,000,000	23	19	16.2	15.3	2,951	2,642	68.5	65.4	7,356,197	6,806,845	75.1	74.1	3,691,619	3,276,812	72.3	70.8
FURNITURE AND REFRIGERATORS	58	42	100.0	100.0	2,172	2,419	100.0	100.0	3,739,558	3,309,385	100.0	100.0	2,012,180	1,861,512	100.0	100.0
Less than $5,000	15	3	25.9	7.1	29	7	1.3	0.3	31,776	6,672	0.8	0.2	20,115	5,250	1.0	0.3
$5,000 to $20,000	17	12	29.3	28.6	158	99	7.3	4.1	170,151	120,911	4.6	3.7	109,146	70,918	5.4	3.8
$20,000 to $100,000	12	13	20.7	31.0	302	635	13.9	26.2	656,470	687,780	17.6	20.8	299,126	347,046	14.9	18.6
$100,000 to $1,000,000	14	14	24.1	33.3	1,683	1,678	77.5	69.4	2,881,161	2,494,022	77.0	75.4	1,583,793	1,438,298	78.7	77.3
LUMBER AND TIMBER PRODUCTS	1,972	1,977	100.0	100.0	18,276	22,389	100.0	100.0	31,430,208	30,456,807	100.0	100.0	16,653,885	16,815,366	100.0	100.0
Less than $5,000	1,304	1,198	66.1	60.6	3,537	4,085	19.4	18.2	2,815,462	2,572,282	9.0	8.4	1,758,585	1,771,090	10.6	10.5
$5,000 to $20,000	424	536	21.5	27.1	3,090	4,961	16.9	22.2	3,785,689	4,956,787	12.0	16.3	2,300,170	3,177,175	13.8	18.9
$20,000 to $100,000	165	174	8.4	8.8	3,882	4,565	21.2	20.4	6,713,155	7,316,344	21.4	24.0	3,485,729	3,975,519	20.9	23.6
$100,000 and over	[1] 79	69	4.0	3.5	7,767	8,778	42.5	39.2	18,115,902	15,611,394	57.6	51.3	9,109,401	7,891,582	54.7	46.9
PATENT MEDICINES AND COMPOUNDS AND DRUGGISTS' PREPARATIONS	82	76	100.0	100.0	648	433	100.0	100.0	4,942,445	3,514,676	100.0	100.0	3,118,377	2,173,870	100.0	100.0
Less than $5,000	29	30	35.4	39.5	21	12	3.2	2.8	61,019	52,462	1.2	1.5	44,064	36,915	1.4	1.7
$5,000 to $20,000	25	23	30.5	30.3	65	59	10.0	13.6	263,596	239,750	5.3	6.8	155,639	161,394	5.0	7.4
$20,000 to $100,000	16	18	19.5	23.7	136	117	21.0	27.0	667,215	982,421	13.5	28.0	408,944	531,720	13.1	24.5
$100,000 and over [1]	12	5	14.6	6.6	426	245	65.8	56.6	3,950,615	2,240,043	79.9	63.7	2,509,730	1,443,841	80.5	66.4
PRINTING AND PUBLISHING	437	413	100.0	100.0	2,665	2,914	100.0	100.0	8,200,681	7,173,230	100.0	100.0	5,872,254	5,219,645	100.0	100.0
Less than $5,000	266	268	60.9	64.9	311	375	11.7	12.9	549,323	587,609	6.7	8.2	424,299	462,082	7.2	8.9
$5,000 to $20,000	115	91	26.3	22.0	401	382	15.0	13.1	1,051,870	831,443	12.8	11.6	813,712	645,754	13.9	12.4
$20,000 to $100,000	40	35	9.2	8.5	672	667	25.2	22.9	1,945,612	1,377,535	23.7	19.2	1,364,917	955,725	23.2	18.3
$100,000 to $1,000,000	16	19	3.7	4.6	1,281	1,490	48.1	51.1	4,653,876	4,376,643	56.7	61.0	3,269,326	3,156,084	55.7	60.5

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

The industries selected for presentation in the above table reflect the same general trend as that shown for all industries combined, namely, a tendency toward concentration into large establishments. In the manufacture of confectionery and of patent medicines and compounds, 80.1 per cent and 79.9 per cent, respectively, of the value of products, in 1914 was reported by establishments whose products were valued at $100,000 or more. The remainder of the industries shown in the table, with the exception of manufacture of carriages and wagons and materials, each reported more than 50 per cent of the total value of products as being the output of such establishments in 1914. The largest proportion of manufactures produced by the small establishments was reported for the lumber industry, 9 per cent of the value of products being contributed by establishments valuing their products at less than $5,000.

Table 18 presents, for 1914, for all industries combined in each of the six cities having more than 10,000 inhabitants, statistics similar to those given in Table 16 for the state as a whole.

In the cities, as throughout the state, a preponderance as to number of wage earners, value of products, and value added by manufacture was reported by establishments whose products exceeded $100,000 in value. The highest percentages of total value of products reported by establishments in this class, 88.1 and 85.2, appear for Johnson City and Memphis, respectively, and the lowest, 68.2, is shown for Knoxville.

Table 18

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.
CHATTANOOGA	276	7,182	100.0	$20,368,555	100.0	$9,615,360	100.0
Less than $5,000	76	91	1.3	186,489	0.9	112,653	1.2
$5,000 to $20,000	90	443	6.2	972,611	4.8	577,379	6.0
$20,000 to $100,000	58	1,043	14.5	2,890,396	14.2	1,422,364	14.8
$100,000 and over [1]	52	5,605	78.0	16,319,059	80.1	7,502,964	78.0
JACKSON	46	1,509	100.0	3,417,168	100.0	1,577,263	100.0
Less than $5,000	8	9	0.6	17,304	0.5	9,363	0.6
$5,000 to $20,000	15	75	5.0	137,783	4.0	78,016	4.9
$20,000 to $100,000	13	205	13.6	620,491	18.2	311,673	19.8
$100,000 to $1,000,000	10	1,220	80.8	2,641,590	77.3	1,178,211	74.7
JOHNSON CITY	30	611	100.0	2,600,161	100.0	648,561	100.0
Less than $5,000	9	20	3.3	32,077	1.2	22,706	3.5
$5,000 to $100,000 [2]	15	144	23.6	277,093	10.7	130,159	20.1
$100,000 and over [1]	6	447	73.2	2,290,991	88.1	495,696	76.4
KNOXVILLE	142	2,420	100.0	7,346,107	100.0	2,990,477	100.0
Less than $5,000	46	63	2.6	120,227	1.6	76,927	2.6
$5,000 to $20,000	38	201	8.3	418,307	5.7	225,139	7.5
$20,000 to $100,000	40	829	34.3	1,796,375	24.5	935,502	31.3
$100,000 and over [1]	18	1,327	54.8	5,011,198	68.2	1,752,909	58.6
MEMPHIS	354	8,389	100.0	39,133,497	100.0	16,128,500	100.0
Less than $5,000	84	97	1.2	246,516	0.6	176,174	1.1
$5,000 to $20,000	101	438	5.2	1,126,667	2.9	693,761	4.3
$20,000 to $100,000	98	1,684	20.1	4,448,055	11.4	2,349,835	14.6
$100,000 to $1,000,000	66	4,486	53.5	21,706,386	55.5	8,477,242	52.6
$1,000,000 and over	5	1,684	20.1	11,605,873	29.7	4,431,488	27.5
NASHVILLE	354	8,573	100.0	33,276,239	100.0	13,914,844	100.0
Less than $5,000	90	96	1.1	203,777	0.6	139,930	1.0
$5,000 to $20,000	100	447	5.2	1,128,205	3.4	693,947	5.0
$20,000 to $100,000	93	1,467	17.1	4,434,684	13.3	2,200,409	15.8
$100,000 to $1,000,000	67	5,821	67.9	19,138,933	57.5	8,074,495	58.0
$1,000,000 and over	4	742	8.7	8,370,640	25.2	2,806,063	20.2

[1] Includes the group, "$1,000,000" and over.
[2] Includes the group, "$20,000 to $100,000."

Table 19 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 six cities having more than 10,000 inhabitants.

Table 19

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	4,775	74,373	424	2,819	6,534	919	9,663	297	9,899	158	11,344	117	17,688	31	10,270	6	3,697	4	5,278
Bread and other bakery products	151	1,152	12	110	242	17	135	7	213	2	131	3	431	.....	.....	.....	.....	.....	.....
Brick, tile, pottery, and other clay products	77	1,688	.....	30	74	32	359	6	187	3	198	6	870	.....	.....	.....	.....	.....	.....
Carriages and wagons and materials	108	1,371	3	56	143	31	341	11	351	7	536	.....	.....	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	17	7,201	.....	.....	.....	3	26	2	59	.....	.....	2	480	6	1,975	1	583	3	4,078
Clothing, men's, including shirts	32	1,647	2	2	5	9	131	8	283	8	548	2	380	1	300	.....	.....	.....	.....
Confectionery	35	774	.....	12	30	14	155	5	167	2	156	2	266	.....	.....	.....	.....	.....	.....
Cotton goods	15	3,403	.....	.....	.....	.....	.....	.....	.....	6	445	5	701	3	1,057	.....	.....	1	1,200
Fertilizers	15	706	.....	4	13	3	31	2	80	4	319	2	263	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products	512	1,497	130	343	621	30	315	4	105	4	283	1	173	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products	142	4,309	8	56	152	37	393	20	714	7	540	11	1,582	3	928	.....	.....	.....	.....
Furniture and refrigerators	58	2,172	3	18	42	15	179	7	205	5	380	10	1,366	.....	.....	.....	.....	.....	.....
Hosiery and knit goods	26	5,690	.....	1	4	.....	.....	1	47	7	524	10	1,815	4	1,262	3	2,038	.....	.....
Ice, manufactured	70	927	.....	41	115	17	209	11	367	.....	.....	1	236	.....	.....	.....	.....	.....	.....
Lumber and timber products	1,972	18,276	44	1,333	3,229	436	4,306	91	2,931	42	2,982	22	3,239	4	1,589	.....	.....	.....	.....
Marble and stone work	97	1,273	18	54	112	13	154	5	176	3	190	4	641	.....	.....	.....	.....	.....	.....
Oil, cottonseed, and cake	24	1,054	.....	1	2	6	96	10	416	6	407	1	133	.....	.....	.....	.....	.....	.....
Patent medicines and compounds and druggists' preparations	82	648	12	47	97	15	156	7	211	.....	.....	1	184	.....	.....	.....	.....	.....	.....
Printing and publishing	437	2,665	122	242	544	46	493	17	604	5	348	5	676	.....	.....	.....	.....	.....	.....
Stoves, hot-air furnaces, and ranges	13	1,412	.....	2	4	.....	.....	4	136	3	213	2	255	1	301	1	503	.....	.....
Woolen goods	17	1,069	.....	5	5	3	37	3	111	2	162	3	479	1	275	.....	.....	.....	.....
All other industries	875	15,439	70	462	1,100	192	2,147	76	2,536	42	2,982	24	3,518	8	2,583	1	573	.....	.....
Total for cities	1,202	28,684	128	493	1,248	302	3,515	139	4,783	66	4,848	58	8,492	14	4,172	1	503	1	1,123
Chattanooga	276	7,182	29	120	289	58	664	28	917	17	1,221	18	2,368	6	1,723	.....	.....	.....	.....
Jackson	46	1,509	2	19	63	14	211	3	74	3	195	4	605	1	361	.....	.....	.....	.....
Johnson City	30	611	.....	16	43	6	45	4	138	3	211	1	174	.....	.....	.....	.....	.....	.....
Knoxville	142	2,420	10	68	184	34	433	17	601	10	754	3	448	.....	.....	.....	.....	.....	.....
Memphis	354	8,389	28	156	377	91	1,065	43	1,547	17	1,273	16	2,319	2	685	.....	.....	1	1,123
Nashville	354	8,573	59	114	292	99	1,097	44	1,506	16	1,194	16	2,578	5	1,403	1	503	.....	.....

Table 20 presents, for 1914, percentages based on the figures in Table 19, and for 1909 similar percentages for all industries combined and for individual industries in the state as a whole.

There were 424 establishments for which no wage earners are shown. These are small establishments in which the work is done by the proprietors or firm members. In some cases they employ a few wage earners for short periods, but the number is so small and the period so short that in computing the average member, as described in the "Explanation of terms," no wage earners could be shown for the establishment. The small establishments—those employing from 1 to 20 wage earners—formed 78.3 per cent of the total for the state, but gave employment to only 21.8 per cent of the total wage earners reported. The groups of establishments having more than 100 wage earners, although representing only 3.3 per cent of the total number of establishments in the state, gave employment to 49.7 per cent of the total number of wage earners.

Table 20

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	8.8	13.0	13.3	15.3	23.8	13.8	5.0	7.1
	1909	8.4	16.8	14.1	14.7	23.3	12.4	8.5	1.8
Bread and other bakery products.	1914	21.0	11.7	18.5	11.4	37.4	.....	.....	.....
	1909	27.1	19.3	7.5	15.8	30.3	.....	.....	.....
Brick, tile, pottery, and other clay products.	1914	4.4	21.3	11.1	11.7	51.5	.....	.....	.....
	1909	9.7	18.8	26.2	12.7	32.6	.....	.....	.....
Carriages and wagons and materials.	1914	10.4	24.9	25.6	29.1	.....	.....	.....	.....
	1909	9.8	30.1	23.7	29.2	7.2	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	.....	0.4	0.8	.....	6.7	27.4	8.1	56.6
	1909	0.1	0.7	.....	.....	12.4	30.4	33.0	23.4
Clothing, men's, including shirts	1914	0.3	8.0	17.2	33.3	23.1	18.2	.....	.....
	1909	0.9	6.5	17.5	32.0	43.0	.....	.....	.....
Confectionery	1914	3.9	20.0	21.6	20.2	34.4	.....	.....	.....
	1909	1.5	15.3	13.2	22.4	47.7	.....	.....	.....
Cotton goods	1914	.....	.....	.....	13.1	20.6	31.1	.....	35.3
	1909	.....	.....	4.7	13.1	21.1	9.7	51.3	.....
Fertilizers	1914	1.8	4.4	11.3	45.2	37.3	.....	.....	.....
	1909	2.0	2.3	17.2	34.3	44.2	.....	.....	.....
Flour-mill and gristmill products.	1914	41.5	21.0	7.0	18.9	11.6	.....	.....	.....
	1909	43.1	16.7	15.1	13.1	12.0	.....	.....	.....

Table 20—Continued

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
Foundry and machine-shop products.	1914	3.5	9.1	16.6	12.5	36.7	21.5	.....	.....
	1909	2.6	12.0	12.4	20.7	23.9	28.5	.....	.....
Furniture and refrigerators	1914	1.9	8.2	9.4	17.5	62.9	.....	.....	.....
	1909	1.5	2.7	14.6	24.1	46.8	10.4	.....	.....
Hosiery and knit goods	1914	0.1	.....	0.8	9.2	31.9	22.2	35.8	.....
	1909	0.2	1.5	2.2	8.3	44.5	22.1	21.3	.....
Ice, manufactured	1914	12.4	22.5	39.6	.....	25.5	.....	.....	.....
	1909	13.7	17.6	35.2	33.5	.....	.....	.....	.....
Lumber and timber products	1914	17.7	23.6	16.0	16.3	17.7	8.7	.....	.....
	1909	13.1	30.7	14.5	8.9	19.8	10.2	2.8	.....
Marble and stone work	1914	8.8	12.1	13.8	14.9	50.4	.....	.....	.....
	1909	11.8	23.0	28.7	.....	36.5	.....	.....	.....
Oil, cottonseed, and cake	1914	0.2	9.1	39.5	38.6	12.6	.....	.....	.....
	1909	0.2	2.9	42.2	37.8	16.9	.....	.....	.....
Patent medicines and compounds and druggists' preparations.	1914	15.0	24.1	32.6	.....	28.4	.....	.....	.....
	1909	20.6	24.9	17.3	.....	37.2	.....	.....	.....
Printing and publishing	1914	20.4	18.5	22.7	13.1	25.4	.....	.....	.....
	1909	18.4	13.5	21.6	20.2	17.6	8.7	.....	.....
Stoves, hot-air furnaces, and ranges.	1914	0.3	.....	9.6	15.1	18.1	21.3	35.6	.....
	1909	0.6	4.8	14.0	10.6	31.4	38.6	.....	.....
Woolen goods	1914	0.5	3.5	10.4	15.2	44.8	25.7	.....	.....
	1909	0.2	1.5	2.2	14.8	24.7	25.9	30.7	.....
All other industries	1914	7.1	13.9	16.4	19.3	22.8	16.7	3.7	.....
	1909	6.3	15.4	16.9	21.2	22.4	10.9	6.9	.....
Total for cities	1914	4.4	12.3	16.7	16.9	29.6	14.5	1.8	3.9
CHATTANOOGA	1914	4.0	9.2	12.8	17.0	33.0	24.0	.....	.....
JACKSON	1914	4.2	14.0	4.9	12.9	40.1	23.9	.....	.....
JOHNSON CITY	1914	7.0	7.4	22.6	34.5	28.5	.....	.....	.....
KNOXVILLE	1914	7.6	17.9	24.8	31.2	18.5	.....	.....	.....
MEMPHIS	1914	4.5	12.7	18.4	15.2	27.6	8.2	.....	13.4
NASHVILLE	1914	3.4	12.8	17.6	13.9	30.1	16.4	5.9	.....

The single group having the largest number of wage earners was the group comprising the establishments employing from 101 to 250 wage earners. This group employed 17,688 wage earners, or 23.8 per cent of the total. The industries in which the comparatively large establishments are found are steam-railroad repair shops, the textile industries, and foundries and machine shops. In bakeries, flour mills and gristmills, and lumber mills, a majority of the establishments employ from 1 to 5 wage earners.

Among the cities the highest percentages of the total number of wage earners reported by establishments employing more than 100 wage earners were shown for Jackson, 64; Chattanooga, 57; and Nashville 52.4.

Engines and power.—Table 21 shows, for 1914, 1909, and 1904, for all industries combined, the number and total horsepower of engines and 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.

This table shows an increase in primary power amounting to 44,580 horsepower, or 18.4 per cent, from 1909 to 1914, due almost entirely to an increase in rented power. The use of rented power, almost wholly electric, has greatly increased since 1904, when it represented only 1.5 per cent of the total primary power. In 1909 this class of power had increased to 6.3 per cent of the total and in 1914 to 20.2 per cent. The increase in the use of electric motors run by current generated within the same establishments has not kept pace with that in rented power. The power of motors operated by current generated in the same establishments represented 66.1 per cent of the total electric power in 1904 but only 30.4 per cent in 1914.

Table 21

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	8,821	6,058	3,205	286,857	242,277	175,780	100.0	100.0	100.0
Owned	4,312	4,441	3,205	228,986	226,972	173,123	79.8	93.7	98.5
Steam engines and turbines [1]	3,581	3,764	2,756	216,156	215,338	161,919	75.4	88.9	92.1
Internal-combustion engines	346	317	128	3,435	1,853	1,084	1.2	0.8	0.6
Water wheels, turbines, and motors	385	360	321	9,395	9,781	10,120	3.3	4.0	5.8
Rented	4,509	1,617	.....	57,871	15,305	2,657	20.2	6.3	1.5
Electric	4,509	1,617	(2)	57,858	14,666	2,230	20.2	6.1	1.3
Other	.....	.....	.....	13	639	427	(3)	0.3	0.2
Electric	5,983	2,579	.....	83,107	29,586	6,586	100.0	100.0	100.0
Rented	4,509	1,617	(2)	57,858	14,666	2,230	69.6	49.6	33.9
Generated by establishments reporting	1,474	962	186	25,249	14,920	4,356	30.4	50.4	66.1

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

The increase from 1909 to 1914 in owned power was only 2,014 horsepower, or nine-tenths of 1 per cent. Over three-fourths of this increase was in internal-combustion engines, steam engines showing a small increase in total horsepower and water wheels a decrease.

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 22 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 22

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	2,231	1,830,582	371,945	64,113	60,634
Bread and other bakery products	818	4,476	3,768	15	2,949
Brick, tile, pottery, and other clay products	.....	128,964	1,730	156	.....
Cars and general shop construction and repairs by steam-railroad companies	18	89,386	738	5,522	.....
Coke, not including gas-house coke	.....	455,598	.....	9	.....
Cotton goods	.....	51,620	4,000	15	.....
Flour-mill and gristmill products	.....	61,272	700	1,835	25
Foundry and machine-shop products	20	39,964	28,914	2,029	3,649
Furniture and refrigerators	.....	17,179	59	152	100
Gas, illuminating and heating	.....	63,275	13,386	45,767	790
Hosiery and knit goods	.....	28,690	.....	139	2
Ice, manufactured	.....	130,069	.....	71	.....
Iron and steel, blast furnaces	.....	19,808	235,760	.....	.....
Liquors, malt	.....	29,372	.....	38	.....
Lumber and timber products	.....	43,268	282	329	677
Oil, cottonseed, and cake	.....	78,582	.....	361	.....
Printing and publishing	21	5,961	510	245	11,914
Woolen goods	.....	10,607	.....	26	.....
All other industries	1,354	572,491	82,098	7,404	40,528
Total for cities	2,170	506,649	104,823	50,447	131,768
CHATTANOOGA	.....	125,711	29,421	1,934	5,972
JACKSON	.....	28,766	1,021	59	3,620
JOHNSON CITY	2	8,040	45,943	11	100
KNOXVILLE	22	34,581	1,767	678	5,644
MEMPHIS	2,001	179,045	12,606	45,185	25,129
NASHVILLE	145	130,506	14,065	2,580	91,303

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 seven important industries and for power laundries in Tennessee are here presented.

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

Table 23

	1914	1909	1904
Total value	$26,413,574	$29,070,019	$25,350,758
Wheat flour:			
Barrels	3,093,197	3,009,089	3,186,677
Value	$15,620,227	$17,267,395	$17,024,123
Corn meal and corn flour:			
Barrels	1,601,617	1,981,746	2,052,765
Value	$5,460,920	$6,505,710	$4,771,722
Bran and middlings:			
Tons	124,783	191,993	168,784
Value	$2,890,257	$4,846,630	$3,119,194
Feed and offal:			
Tons	74,659		
Value	$2,240,085		
All other cereal products, value	$127,935	$442,411	$426,207
All other products, value	$74,150	$7,873	$9,512

As shown in the table, wheat flour formed the major part of the flour-mill and gristmill products, followed by corn meal, the two together representing nearly four-fifths of the total in 1914. The equipment reported for 1914 consists of 1,961 stands of rolls, 516 runs of stone, and 197 attrition mills. There were 20 establishments that manufactured their own barrels and three which manufactured sacks.

Oil, cottonseed, and cake.—Although Tennessee produced only 2.7 per cent of the cotton crop of 1913 the state ranked eighth in the value of cottonseed products manufactured in 1914. Memphis is the most important cottonseed-crushing center in the world. The city has 12 mills which during the season covered by the report crushed 182,235 tons of seed. Large quantities of seed are brought to the city from Arkansas and Mississippi and, occasionally, smaller amounts from Missouri, Louisiana, and Alabama.

Table 24 gives the quantity of cottonseed used for oil extraction and the quantities of the several crude products obtained, for the census years 1914, 1909, and 1904.

Table 24

MATERIAL AND PRODUCT.	QUANTITY. 1914	1909	1904
Cottonseed crushed, tons	267,466	179,475	143,479
Crude products manufactured:			
Oil, gallons	10,860,022	7,525,409	5,760,599
Meal and cake, tons (2,000 lbs.)	117,886	76,963	58,477
Hulls, tons (2,000 lbs.)	78,761	59,434	53,738
Linters, pounds	19,826,252	8,533,484	5,918,496

The statistics in this table for 1914 relate to the crushing season of 1913–14 that is, to the handling of seed from the crop of 1913. They cover the operations of all establishments which crushed cottonseed during the season, regardless of the extent to which they were engaged in other branches of industry. Furthermore, the crude products reported represent the total production derived from crushing cottonseed, whether sold as such or used as intermediate products in further processes of manufacture, such as the refining of oil and the mixing of fertilizer and feed.

The total quantity of cottonseed crushed increased from 143,479 tons in 1904 to 267,466 tons in 1914, or 86.4 per cent. Of the 23 mills reported in 1914 as crushing cottonseed, 1 crushed 1,000 but less than 2,000 tons; 1 crushed 2,000 but less than 5,000 tons; 10 crushed 5,000 but less than 10,000 tons; 9 crushed 10,000 but less than 20,000 tons; and 2 crushed 20,000 tons or over.

The quantities of the various products obtained in 1914 per ton of seed, as received at the mill, were as follows: Crude oil, 40.6 gallons; cake and meal, 882 pounds; hulls, 589 pounds; and linters, 74.1 pounds. The ratios which the several products bore to the total

weight of the seed when received at the mill were: Crude oil, 15.2 per cent; cake and meal, 44.1 per cent; hulls, 29.4 per cent; and linters, 3.7 per cent.

Printing and publishing.—The following table shows the number and circulation of the newspapers and periodicals published in Tennessee as reported at the censuses of 1914, 1909, and 1904:

Table 25 — Period of issue	Number of publications			Aggregate circulation per issue		
	1914	1909	1904	1914	1909	1904
Total	344	330	334	6,966,391	5,601,541	3,157,803
Daily	17	16	17	301,583	245,658	183,050
Sunday	6	7	9	171,558	183,196	125,905
Semiweekly	8	10	3	11,382	16,925	8,720
Weekly	224	223	230	923,117	923,431	753,290
Monthly	50	49	33	875,688	517,643	247,143
Quarterly	31	19	31	4,497,800	3,649,100	1,760,021
All other classes	8	6	11	185,263	65,588	79,674

From 1909 to 1914 there was an increase both in the total number of publications and the aggregate circulation. The weeklies showed a very slight change; the monthlies, an increase of 358,045, or 69.2 per cent, in circulation; the quarterlies, which have by far the largest circulation of all publications, showed an increase of 12 in number and 848,700, or 23.3 per cent, in circulation. The Sunday-school quarterlies comprise a large part of this class and contribute to the gain from census to census.

All of the publications reported were printed in the English language except two weeklies, which were in German. This class shows a decrease from 1909, when there were two Spanish quarterlies also.

Textiles.—The growth of the textile industry, as a whole, is shown by the increase in the number of spindles, looms, and knitting machines. In Table 26 the number of each of the principal kinds of machines used at the last three censuses is given.

Table 26 — Machine	Census year	Total	Cotton goods	Hosiery and knit goods	Woolen goods
Producing spindles	1914	342,639	281,996	31,644	28,999
	1909	286,506	225,638	11,892	48,976
	1904	200,047	153,375	.....	46,672
Looms	1914	6,033	5,160	.....	873
	1909	5,143	4,283	.....	860
	1904	4,086	3,008	.....	1,078
Knitting machines	1914	6,749	.....	6,749	.....
	1909	3,929	.....	3,929	.....
	1904	1,787	.....	1,787	.....
Woolen cards (sets)	1914	62	.....	.....	62
	1909	82	.....	.....	82
	1904	82	.....	.....	82

The total number of producing spindles shows an increase from 1909 to 1914 of 56,133, or 19.6 per cent; looms, an increase of 890, or 17.3 per cent; and knitting machines, an increase of 2,820, or 71.8 per cent. The number of woolen cards decreased from 82 in 1909 to 62 in 1914. Of the three textile industries, cotton goods heretofore has been the most important in the state, followed by hosiery and knit goods; but, for 1914, these two industries exchange rank, hosiery and knit goods taking first place and cotton goods second.

Hosiery and knit goods.—The table which follows shows, for 1914, 1909, and 1904, the quantity and cost of the principal materials and the quantity and value of the principal products of the hosiery and knit-goods industry.

Table 27	1914	1909	1904
MATERIALS.			
Total cost	$4,399,170	$2,120,225	$969,196
Cotton yarn purchased:			
Pounds	10,100,327	4,746,986	4,701,653
Cost	$2,544,195	$1,203,887	$841,092
Chemicals and dyestuffs, cost	$208,071	$121,614	$40,915
Fuel and rent of power, cost	$75,790	$42,916	$18,146
All other materials, cost	$1,571,114	$751,808	$69,043
PRODUCTS.			
Total value	$7,522,846	$3,565,436	$1,627,823
Hose:			
Dozen pairs	4,491,264	2,420,817	1,155,692
Value	$4,307,949	$2,075,719	$917,233
Half hose:			
Dozen pairs	1,045,985	846,339	659,754
Value	$1,163,127	$770,547	$368,792
All other products, value	$2,051,770	$719,170	$341,798

The hosiery and knitting mills of Tennessee are engaged almost exclusively in the production of cotton hosiery. In 1914 the value of hosiery constituted 72.7 per cent of the total, a slightly lower percentage than in 1909. There was an increase of 69.5 per cent in quantity and of 92.2 per cent in value from 1909 to 1914. Three mills were engaged in the manufacture of underwear in 1914, the statistics for which are included with "all other products," to avoid the disclosure of the operations of individual establishments.

Cotton goods.—The quantity and cost of materials used, and the kind, quantity, and value of the products reported at the last three censuses are given below:

Table 28	1914	1909	1904
MATERIALS.			
Total cost	$4,554,069	$3,343,672	$2,240,073
Cotton:			
Pounds	33,531,384	28,312,077	19,292,275
Cost	$4,075,406	$2,941,046	$2,045,800
Starch, cost	$18,219	$8,085	$10,554
Fuel and rent of power, cost	$141,963	$103,111	$55,654
All other materials, cost	$318,481	$291,430	$128,965
PRODUCTS.			
Total value	$6,485,640	$5,200,791	$3,560,984
Brown or bleached sheetings and shirtings:			
Square yards	24,862,255	7,696,680	6,184,888
Value	$918,841	$435,958	$341,630
Yarns, for sale:			
Pounds	8,601,057	7,443,170	5,062,494
Value	$1,783,607	$1,378,695	$992,260
Cotton waste, for sale:			
Pounds	2,246,044	2,164,304	2,263,961
Value	$68,806	$56,954	$84,322
All other products, value	$3,714,386	$3,329,184	$2,142,872

In 1914, 33,531,384 pounds of cotton, all domestic, costing $4,075,406, were consumed in this industry.

This was an increase of 5,219,307 pounds, or 18.4 per cent, in quantity and of $1,134,360, or 38.6 per cent, in cost over the figures for 1909. The industry shows a gain of 24.7 per cent in value of products from 1909 to 1914, as against a gain of 46 per cent from 1904 to 1909.

Both the quantity and the value of the output of brown or bleached sheetings and shirtings show large increases over the figures for 1909, 223 per cent for quantity and 110.8 per cent for value. In 1909 there were 7,443,170 pounds of yarn produced for sale, and in 1914 there were 8,601,057 pounds, an increase of 1,157,887 pounds, or 15.6 per cent.

Woolen goods.—Measured by value of products, this industry is less important than either hosiery and knit goods or cotton goods. The larger part of the output is woolen goods for men's wear woven on cotton warp.

Fertilizers.—The following table gives the statistics for the fertilizers manufactured in 1914, 1909, and 1904:

Table 29	1914	1909	1904
Total value	$4,372,427	$3,249,343	$2,700,561
Fertilizers:			
Tons	[1] 325,417	179,356	159,493
Value	$4,335,817	$3,234,114	$2,661,012
Complete and ammoniated fertilizers—			
Tons	160,517	139,343	83,370
Value	$2,806,126	$2,776,372	$1,596,764
Superphosphates and concentrated phosphates—			
Tons	47,327	25,322	29,416
Value	$444,664	$244,278	$308,284
All other fertilizers—			
Tons	117,573	14,691	46,707
Value	$1,085,027	$213,464	$755,964
All other products, value	$36,610	$15,229	$39,549

[1] In addition, 4,040 tons, valued at $73,105, were produced by cottonseed-oil mills and establishments engaged primarily in the manufacture of other products.

The industry shows a large growth for each census period. The increase in the quantity of fertilizers manufactured in 1914, as compared with 1909, was 146,061 tons, or over 80 per cent, and in value $1,101,703, or 34.1 per cent, the average value per ton being somewhat less in 1914 than in either of the prior years. In addition to the product of the regular fertilizer establishments, there was produced in 1914 by cottonseed mills and establishments engaged primarily in the manufacture of commodities other than fertilizers, 4,040 tons of fertilizers, valued at $73,105, giving a total production of 329,457 tons, valued at $4,408,922.

Iron and steel, blast furnaces.—The blast-furnace industry was greatly affected by the industrial depression of 1914, and the pig-iron product of the state was not only less than that of 1913 and the years immediately preceding, but less than that reported at the census of 1889 and all censuses subsequent thereto. In 1914 the total value of products for the industry was $2,245,329, as compared with $4,653,125 in 1909, a decrease of 51.7 per cent, and the pig-iron product was but 158,751 tons in 1914, as compared with 333,416 tons in 1909, a decrease of 52.4 per cent. The iron is chiefly of foundry grade and, with the exception of a small amount of charcoal iron, was all made with coke fuel. According to the report of the American Iron and Steel Institute, there were 18 blast furnaces in the state at the close of the year 1914, of 781,650 tons annual capacity, this including active and idle establishments. Only 6 furnaces were in operation in 1914 and the production was only about one-fifth of the capacity of all furnaces.

Laundries.—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 30, however, summarizes these statistics for Tennessee for 1914 and 1909.

Table 30	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase,[1] 1909–1914
	1914	1909	
Number of establishments	67	63	.....
Persons engaged	2,898	2,392	21.2
Proprietors and firm members	62	68	.....
Salaried employees	256	175	46.3
Wage earners (average number)	2,580	2,149	20.1
Primary horsepower	3,107	1,863	66.8
Capital	$1,558,029	$1,283,583	21.4
Salaries and wages	1,123,490	811,213	38.5
Salaries	214,819	137,680	56.0
Wages	908,671	673,533	34.9
Paid for contract work	1,519	6,612	−77.0
Rent and taxes	66,312	48,903	35.6
Cost of materials	437,720	297,691	47.0
Amount received for work done	2,296,797	1,643,407	39.8

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

In 1914 Tennessee ranked sixteenth among the states in amount received for work done and fourteenth in number of persons engaged in the industry.

Table 31 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 31	WAGE EARNERS.			
MONTH.	Number.		Per cent of maximum.	
	1914	1909	1914	1900
January	2,507	2,041	90.9	90.9
February	2,510	2,039	91.0	90.8
March	2,520	2,059	91.4	91.7
April	2,509	2,130	91.0	94.8
May	2,583	2,117	93.7	94.3
June	2,714	2,196	98.4	97.8
July	2,757	2,236	100.0	99.6
August	2,690	2,246	97.6	100.0
September	2,642	2,183	95.8	97.2
October	2,568	2,189	93.1	97.5
November	2,489	2,171	90.3	96.7
December	2,473	2,177	89.7	96.9

Table 32 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 increase for the five-year period.

Table 32

KIND.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase,[1] 1909–1914.
	1914	1909	1914	1909	
Primary power, total	193	104	3,107	1,863	66.8
Owned	90	65	2,715	1,801	50,7
Steam	67	64	2,683	1,797	49.3
Internal combustion	1	1	2	5	.....
Water wheels and motors	22	.....	30	.....	.....
Rented	103	39	392	61	.....
Electric	103	39	391	61	.....
Other	.....	.....	1	.....	.....
Electric—generated in establishments reporting	297	.....	870	.....	.....

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

Table 33 shows the kinds and quantities of fuel used in the laundries, as reported at the censuses of 1914 and 1909, with the percentages of increase.

Table 33

KIND.	Unit.	QUANTITY.		Per cent of increase,[1] 1909–1914.
		1914	1909	
Anthracite coal	Tons (2,240 lbs.)	315	.....	.....
Bituminous coal	Tons (2,000 lbs.)	39,431	29,395	34.1
Coke	Tons (2,000 lbs.)	280	313	−10.5
Oil	Barrels	64	94	.....
Gas	1,000 feet	16,897	9,108	85.5

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

GENERAL TABLES.

Table 34 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 more than 10,000 inhabitants, similar data for all industries combined.

Table 35 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 more than 10,000 inhabitants.

TABLE 34.—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	4,775	74,373	286,857	$33,083	$123,430	$212,071
	1909	4,609	73,840	242,277	28,252	104,016	180,217
	1904	3,175	60,572	175,780	22,806	79,352	137,960
Agricultural implements	1914	17	517	1,450	253	391	1,122
	1909	16	645	1,236	268	413	1,004
	1904	12	613	692	216	314	769
Bags, other than paper	1914	4	471	395	156	2,806	3,246
	1909	5	405	576	130	2,081	2,291
Boxes and cartons, paper	1914	8	281	213	92	342	569
	1909	6	202	114	58	122	258
	1904	6	187	70	46	104	196
Bread and other bakery products.	1914	151	1,152	887	527	2,392	4,093
	1909	131	855	645	376	1,790	2,892
	1904	81	603	316	237	1,021	1,974
Brick, tile, pottery, and other clay products.	1914	77	1,688	5,195	724	520	1,695
	1909	97	1,604	5,309	569	456	1,636
	1904	92	1,531	3,700	506	344	1,409
Canning and preserving, fruits and vegetables.	1914	62	381	738	62	361	496
	1909	37	303	450	39	131	206
	1904	16	203	360	30	151	242
Carriages and wagons and materials.	1914	108	1,371	4,221	674	1,297	2,677
	1909	129	1,706	4,537	693	1,439	3,040
	1904	97	1,889	4,408	759	1,668	3,278
Cars and general shop construction and repairs by steam-railroad companies	1914	17	7,201	6,323	4,622	4,586	9,688
	1909	17	5,566	5,145	3,252	3,116	6,777
	1904	16	4,760	1,904	2,617	2,978	5,839
Clothing, men's, including shirts.	1914	32	1,647	579	477	1,657	2,965
	1909	34	1,596	503	402	2,123	3,361
	1904	32	1,968	656	413	1,877	3,069
Coffee, roasting and grinding.	1914	7	92	331	40	1,200	1,648
	1909	8	66	206	25	1,147	1,444
	1904	5	46	61	18	264	331
Coffins, burial cases, and undertakers' goods.	1914	8	411	961	227	538	1,146
	1909	8	480	976	201	522	1,189
	1904	8	430	712	185	349	923
Coke, not including gas-house coke.	1914	5	170	493	74	513	605
	1909	8	250	370	87	478	586
	1904	9	377	405	129	611	810
Confectionery	1914	35	774	1,247	300	1,850	2,990
	1909	31	894	1,154	276	1,657	2,520
	1904	25	560	313	181	961	1,873
Cooperage and wooden goods, not elsewhere specified.	1914	22	506	991	123	493	688
	1909	19	856	2,209	253	629	1,148
	1904	[1] 25	376	884	134	481	702
Copper, tin, and sheet-iron products.	1914	[2] 71	586	489	327	547	1,226
	1909	57	572	154	261	593	1,229
	1904	35	383	150	204	435	871
Cotton goods	1914	15	3,403	12,311	1,046	4,554	6,486
	1909	17	3,078	11,129	857	3,344	5,201
	1904	16	2,294	8,301	531	2,241	3,561
Dyestuffs and extracts	1914	6	365	4,065	$173	$770	$1,536
	1909	6	336	4,119	156	642	1,313
	1904	5	259	2,541	103	362	720
Fertilizers	1914	15	706	3,752	329	2,592	4,372
	1909	12	559	2,152	204	2,122	3,249
	1904	10	781	1,970	210	1,712	2,701
Flour-mill and gristmill products.	1914	512	1,497	28,246	642	22,072	26,414
	1909	454	1,577	27,176	559	25,286	29,070
	1904	387	1,595	23,441	591	21,912	25,351
Food preparations	1914	33	523	4,886	242	8,264	9,955
	1909	23	308	1,661	133	2,711	3,346
Foundry and machine-shop products.	1914	[3] 142	4,309	10,405	2,385	4,695	9,802
	1909	124	4,041	7,488	2,006	4,560	9,190
	1904	100	3,313	4,742	1,482	2,854	6,124
Furniture and refrigerators.	1914	58	2,172	6,187	959	1,727	3,740
	1909	42	2,419	3,758	897	1,448	3,309
	1904	[1] 40	2,610	3,623	923	1,409	3,238
Gas, illuminating and heating.	1914	12	506	655	292	518	1,571
	1909	11	422	613	164	357	1,282
	1904	11	358	624	127	204	830
Hosiery and knit goods	1914	26	5,690	4,754	1,527	4,399	7,523
	1909	22	3,117	2,758	724	2,120	3,565
	1904	16	1,810	1,052	341	969	1,628
Ice, manufactured	1914	70	927	13,056	492	405	1,762
	1909	57	779	9,327	362	281	1,324
	1904	37	382	6,312	191	123	684
Iron and steel, blast furnaces.	1914	6	503	6,580	233	1,682	2,245
	1909	13	1,143	18,150	519	3,381	4,653
	1904	13	1,358	21,011	546	2,609	3,428
Leather goods	1914	[4] 70	517	428	260	1,159	1,851
	1909	47	604	344	243	1,313	2,139
	1904	36	729	268	258	966	1,787
Lime	1914	9	432	670	137	108	357
	1909	20	415	668	139	93	323
	1904	17	416	505	118	121	326
Liquors, malt	1914	4	337	2,755	228	490	1,345
	1909	5	392	3,005	238	653	2,044
	1904	4	357	1,774	162	437	1,832
Lumber and timber products.	1914	[5] 1,972	18,276	84,046	6,853	14,776	31,430
	1909	1,977	22,389	83,382	6,966	13,641	30,457
	1904	1,122	17,277	52,831	6,456	11,590	26,864
Marble and stone work	1914	97	1,273	4,601	632	520	1,689
	1909	81	1,006	2,781	515	480	1,465
	1904	32	681	1,204	331	339	944
Mattresses and spring beds	1914	20	316	750	149	539	981
	1909	17	272	1,690	104	362	656
	1904	12	237	217	72	216	436
Mineral and soda waters	1914	86	276	477	140	770	1,263
	1909	83	269	251	101	351	780
	1904	36	164	83	66	178	450

[1] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[2] Includes "stamped and enameled ware," not elsewhere specified, and "tinware," not elsewhere specified.
[3] Includes "automobile repairing"; "engines, steam, gas, and water"; "gas machines and gas and water meters"; "hardware"; "hardware, saddlery"; "iron and steel, cast-iron pipe"; "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."

TABLE 34.—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.	Cost of materials.	Value of products.
					Expressed in thousands.		
Oil, cottonseed, and cake	1914	24	1,054	10,802	$419	$9,201	$11,414
	1909	20	806	7,472	290	5,201	6,593
	1904	20	701	6,606	245	3,084	3,744
Paints	1914	9	84	1,180	48	389	621
	1909	6	71	1,045	37	238	397
	1904	4	76	295	30	288	481
Patent medicines and compounds and druggists' preparations.	1914	[1] 82	648	802	249	1,824	4,942
	1909	76	433	418	148	1,341	3,515
	1904	[2] 47	489	371	143	901	2,789
Printing and publishing	1914	[3] 437	2,665	2,892	1,871	2,328	8,201
	1909	413	2,914	2,965	1,701	1,954	7,173
	1904	340	2,330	1,913	1,231	1,323	5,091
Slaughtering and meat packing.	1914	[4] 25	218	1,278	100	1,643	2,011
	1909	27	280	1,242	140	1,610	2,057
	1904	[2] 12	59	936	23	275	377
Stoves, hot-air furnaces, and ranges.	1914	13	1,412	1,638	$867	$986	$2,795
	1909	17	1,085	1,380	519	717	1,951
	1904	10	819	830	404	349	1,116
Vinegar and cider	1914	6	28	86	15	215	392
	1909	6	28	2	14	123	252
Wood, turned and carved	1914	24	555	1,790	237	536	909
	1909	42	845	2,519	273	529	1,171
	1904	24	618	1,857	212	464	927
Woolen goods	1914	17	1,069	2,302	289	923	1,547
	1909	21	1,654	2,371	419	1,127	1,802
	1904	27	1,415	2,590	327	945	1,706
All other industries	1914	361	7,364	59,950	3,591	15,852	30,063
	1909	367	6,598	18,827	2,934	11,334	22,359
	1904	338	5,518	15,252	2,008	11,923	18,539

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.	Cost of materials.	Value of products.
					Expressed in thousands.		
MEMPHIS—All industries.	1914	354	8,389	24,693	$4,901	$23,005	$39,133
	1909	329	7,927	21,320	4,288	17,851	30,242
	1904	289	7,374	.....	3,543	11,338	20,043
Bread and other bakery products.	1914	45	531	334	237	843	1,709
	1909	31	421	312	202	864	1,452
	1904	27	266	.....	113	446	787
Carriages and wagons and materials.	1914	10	339	930	206	367	796
	1909	16	374	714	200	386	882
	1904	15	479	.....	262	466	971
Confectionery	1914	13	272	734	118	733	1,248
	1909	9	297	62	123	830	1,128
	1904	7	186	.....	82	442	849
Copper, tin, and sheet-iron products.	1914	[5] 17	74	38	59	132	327
	1909	14	114	5	68	111	242
	1904	11	109	.....	77	129	292
Foundry and machine-shop products.	1914	[6] 20	437	637	264	609	1,276
	1909	18	437	1,557	284	565	1,130
	1904	15	446	.....	256	372	881
Ice, manufactured	1914	6	377	2,990	201	107	506
	1909	6	272	1,726	154	80	495
	1904	4	179	.....	110	40	310
MEMPHIS—Continued. Leather goods	1914	[7] 11	58	59	$36	$174	$283
	1909	9	64	54	39	151	262
	1904	[8] 5	60	.....	27	116	171
Lumber and timber products.	1914	[9] 17	932	4,262	537	1,577	2,901
	1909	18	1,126	3,250	563	1,504	2,830
	1904	16	945	.....	421	1,059	1,917
Oil, cottonseed, and cake.	1914	11	578	4,312	231	5,408	6,522
	1909	9	419	3,962	161	3,509	4,316
	1904	11	485	.....	181	2,261	2,681
Patent medicines and compounds and druggists' preparations.	1914	[1] 24	155	293	62	760	1,063
	1909	21	70	17	29	360	639
	1904	[2] 8	42	.....	14	174	374
Printing and publishing	1914	[10] 50	525	699	475	611	2,104
	1909	45	516	622	407	520	1,793
	1904	[2] 46	423	.....	278	382	1,322
All other industries	1914	130	4,111	9,405	2,475	11,684	19,738
	1909	133	3,817	9,039	2,058	8,971	15,073
	1904	124	3,754	.....	1,722	5,451	9,488

[1] Includes "perfumery and cosmetics."
[2] Excludes statistics for 1 establishment, to avoid disclosure of individual operations.
[3] Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."
[4] Includes "sausage, not made in slaughtering and meat-packing establishments."
[5] Includes "stamped and enameled ware, not elsewhere specified."
[6] Includes "automobile repairing" and "structural ironwork, not made in steel works or rolling mills."
[7] Includes "saddlery and harness" and "trunks and valises."
[8] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[9] Includes "boxes, wooden packing," "lumber, planing-mill products, not including planing mills connected with sawmills" and "window and door screens."
[10] Includes "bookbinding and blank-book making."

TABLE 34.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

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.)
NASHVILLE—All industries.	1914	354	8,573	21,930	$4,321	$19,361	$33,276
	1909	384	9,721	19,538	4,336	17,456	29,650
	1904	257	8,032	.....	3,224	12,482	21,567
Bread and other bakery products.	1914	18	109	105	55	579	744
	1909	23	87	65	49	203	336
	1904	14	119	.....	45	208	586
Carriages and wagons and materials.	1914	13	172	187	98	236	431
	1909	17	193	148	96	158	337
	1904	[1] 11	168	.....	81	169	319
Clothing, men's, including shirts.	1914	6	369	123	130	387	758
	1909	5	398	127	112	522	836
	1904	7	528	.....	121	424	768
Confectionery	1914	11	143	94	54	278	455
	1909	11	283	131	63	315	454
	1904	9	195	.....	50	248	583
Copper, tin, and sheet-iron products.	1914	[2] 12	81	19	43	53	130
	1909	12	68	16	30	75	160
	1904	[1] 4	59	.....	37	44	114
Flour-mill and gristmill products.	1914	7	237	3,150	97	4,202	5,042
	1909	10	243	2,227	89	4,888	5,719
	1904	4	178	.....	86	3,690	4,242
Foundry and machine-shop products.	1914	[3] 19	257	469	167	349	757
	1909	11	142	193	80	114	280
	1904	9	162	.....	83	143	298
NASHVILLE—Contd. Furniture	1914	8	290	803	$155	$261	$580
	1909	5	476	463	204	248	673
	1904	6	458	.....	199	289	639
Leather goods	1914	[4] 13	188	161	92	423	658
	1909	11	182	93	86	508	789
	1904	[5] 7	209	.....	76	330	564
Lumber and timber products.	1914	[6] 23	786	4,550	326	1,264	2,097
	1909	25	1,244	3,352	547	1,539	2,673
	1904	19	1,015	.....	358	1,635	2,418
Mattresses and spring beds.	1914	4	66	109	27	101	195
	1909	4	71	111	27	103	187
	1904	3	42	.....	14	70	130
Patent medicines and compounds and druggists' preparations.	1914	[7] 12	65	18	31	173	341
	1909	14	30	13	10	82	206
	1904	7	41	.....	10	110	280
Printing and publishing	1914	[8] 76	1,060	1,044	679	1,019	3,555
	1909	86	1,235	1,227	728	896	3,285
	1904	54	1,045	.....	552	591	2,292
All other industries	1914	129	4,750	11,098	2,367	10,036	17,533
	1909	150	5,069	11,372	2,215	7,805	13,715
	1904	103	3,813	.....	1,512	4,531	8,334

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

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.)
CHATTANOOGA	1914	276	7,182	21,227	$3,836	$10,753	$20,369
	1909	185	6,410	17,509	2,816	8,434	16,036
	1904	177	6,420	.....	2,564	7,474	14,261
JACKSON	1914	46	1,509	3,858	856	1,840	3,417
	1909	42	1,405	2,789	673	1,215	2,710
	1904	42	1,268	.....	498	1,183	2,318
KNOXVILLE	1914	142	2,420	6,168	$1,063	$4,356	$7,346
	1909	[9] 156	2,362	4,816	887	4,998	7,769
	1904	138	2,999	.....	1,048	4,101	6,699

[1] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[2] Includes "stamped and enameled ware, not elsewhere specified."
[3] Includes "automobile repairing" and "structural ironwork, not made in steel works or rolling mills."
[4] Includes "saddlery and harness" and "trunks and valises."
[5] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[6] Includes "boxes, wooden packing;" "lumber, planing-mill products, not including planing mills connected with sawmills;" and "window and door screens."
[7] Includes "perfumery and cosmetics."
[8] Includes "bookbinding and blank-book making;" "engraving, steel and copper plate, including plate printing;" and "lithographing."
[9] Figures do not agree with those published in 1909, because it was necessary to revise them in order to include data only for those establishments located within the corporate limits of the city.

TABLE 35.—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	4,775	88,514	5,142	3,092	4,780	1,127	74,373	Ap 77,312	De 68,203	(3)	(3)	(3)	(3)	(3)	$211,423,167
2	Agricultural implements	17	582	14	18	23	10	517	Ja 621	No 464	539	537	2	.....	.....	1,727,111
3	Artificial limbs	5	9	5	1	.....	.....	3	[4] 3	[4] 3	3	3	.....	.....	.....	10,550
4	Artificial stone products	21	238	22	8	4	2	202	Je 303	Ja 45	226	225	.....	1	.....	128,081
5	Automobile repairing	13	64	14	.....	3	1	46	Jy [5] 47	Ja 44	46	46	.....	.....	.....	69,861
6	Awnings, tents, and sails	10	58	8	6	3	.....	41	Jy [5] 59	Ja 27	46	29	17	.....	.....	69,923
7	Bags, other than paper	4	536	.....	14	41	10	471	Jy 581	No 395	498	154	337	1	6	1,588,036
8	Belting, leather	4	21	3	2	2	.....	14	Ap [5] 15	Se 12	14	14	.....	.....	.....	50,341
9	Bookbinding and blank-book making.	8	38	10	.....	1	.....	27	Ja [5] 28	Oc [5] 25	29	19	10	.....	.....	30,149
10	Boxes and cartons, paper	8	323	2	20	15	5	281	Se 321	De 248	278	135	140	2	1	329,351
11	Bread and bakery products	151	1,503	169	43	107	32	1,152	.....	.....	1,156	816	330	8	2	1,743,399
12	Biscuit and crackers	3	509	.....	4	68	6	431	Au 477	Ja 303	435	173	262	.....	.....	520,818
13	All other	148	994	169	39	39	26	721	Jy 752	Ja 664	721	643	68	8	2	1,222,581
14	Brick and tile, terra-cotta, and fire-clay products:	72	1,833	76	65	44	8	1,640	Jy 2,054	Ja 1,174	1,950	1,907	.....	43	.....	3,008,183
15	Brooms	36	168	39	6	6	1	116	Au 122	Oc 112	130	121	7	2	.....	95,155
16	Canning and preserving, fruits and vegetables.	62	496	92	15	6	2	381	Se 1,394	Ja [6] 28	1,412	415	891	60	46	297,426
17	Carriage and wagon materials	27	734	22	31	19	5	657	Ja 725	De 470	671	662	6	3	.....	1,362,982
18	Carriages, wagons, and repairs	81	895	112	38	21	10	714	.....	.....	721	716	4	1	.....	1,881,095
19	Carriages and wagons	76	885	106	38	21	10	710	Mh 775	De 577	717	712	4	1	.....	1,874,920
20	Repair work only	5	10	6	.....	.....	.....	4	[4] 4	[4] 4	4	4	.....	.....	.....	6,175
21	Cars and general shop construction and repairs by electric-railroad companies.	6	335	.....	5	8	1	321	Ap 355	Fe 285	321	317	4	.....	.....	369,931
22	Cars and general shop construction and repairs by steam-railroad companies.	17	7,610	.....	102	293	14	7,201	Au 7,420	No 6,734	7,221	7,206	15	.....	.....	6,028,029
23	Clothing, men's and youths'	26	1,806	12	55	136	14	1,589	Fe 1,715	No 1,355	1,627	228	1,364	10	25	1,778,953
24	Coffee, roasting and grinding	7	158	3	12	45	6	92	Ja 111	No 68	105	46	59	.....	.....	465,293
25	Coffins, burial cases, and undertakers' goods.	8	503	.....	27	55	10	411	Jy 422	No 393	415	391	24	.....	.....	1,358,066
26	Coke, not including gas-house coke	5	183	.....	9	4	.....	170	Ja 186	Ap 159	197	197	.....	.....	.....	661,358
27	Confectionery and ice cream	58	1,268	43	79	184	42	920	.....	.....	987	619	365	2	1	1,843,243
28	Confectionery and chewing gum.	35	1,051	20	56	165	36	774	De 823	Jy 732	820	468	350	1	1	1,529,710
29	Ice cream	23	217	23	23	19	6	146	Jy 198	Ja 97	167	151	15	1	.....	313,533
30	Cooperage and wooden goods, not elsewhere specified.	22	549	21	14	7	1	506	Mh 522	Jy 492	512	496	10	6	.....	506,367
31	Copper, tin, and sheet-iron work	62	427	73	18	24	5	307	Jy 334	Mh 268	304	304	.....	.....	.....	418,554
32	Cordials and flavoring sirups	9	38	7	7	9	3	12	Oc 14	Ja 10	13	13	.....	.....	.....	102,012
33	Cotton goods	15	3,484	.....	44	31	6	3,403	Oc 3,473	Mh 3,334	3,454	1,721	1,374	192	167	7,142,847
34	Druggists' preparations	9	193	6	18	57	6	106	Mh 109	De [5] 102	103	46	57	.....	.....	534,553
35	Dyestuffs and extracts	6	397	.....	19	12	1	365	No 399	Ja 321	389	389	.....	.....	.....	2,101,854
36	Fertilizers	15	839	5	28	91	9	706	Ap 1,291	Je 446	717	717	.....	.....	.....	6,460,457
37	Flour-mill and gristmill products	512	2,563	693	167	166	40	1,497	Au 1,626	My 1,367	1,532	1,524	6	2	.....	10,338,947
38	Food preparations not elsewhere specified.	33	768	26	49	155	15	523	.....	.....	590	574	16	.....	.....	2,892,708
39	Breadstuff preparations, lard compounds, and sweetening sirups.	11	413	6	21	104	8	274	Oc 385	Je 199	260	251	9	.....	.....	1,849,035
40	Other food products for human consumption.	8	37	7	2	4	.....	24	De [5] 25	Ja [5] 23	24	19	5	.....	.....	24,214
41	For animals and fowls	14	318	13	26	47	7	225	De 307	Se 162	306	304	2	.....	.....	1,019,549
42	Foundry and machine-shop products.	106	3,613	79	181	208	73	3,072	.....	.....	3,020	3,011	7	2	.....	7,885,782
43	Boiler shops and foundries	27	1,558	17	68	85	22	1,366	Au 1,486	No 1,167	1,324	1,315	7	2	.....	2,521,439
44	Machine shops	79	2,055	62	113	123	51	1,706	Jy 1,792	De 1,500	1,696	1,696	.....	.....	.....	5,364,343
45	Furniture and refrigerators	58	2,439	47	95	106	19	2,172	My 2,508	De 1,648	2,207	2,153	29	12	13	4,634,602
46	Gas, illuminating and heating	12	646	.....	22	103	15	506	My 595	Mh 394	539	539	.....	.....	.....	13,634,170
47	Hosiery and knit goods	26	5,872	1	80	61	40	5,690	Ap 6,091	De 5,201	5,700	1,886	3,343	185	286	6,064,071
48	Ice, manufactured	70	1,147	41	93	71	15	927	Jy 1,437	Ja 478	999	994	4	1	.....	4,556,740
49	Iron and steel, blast furnaces	6	571	1	23	42	2	503	Je 639	De 396	647	638	.....	9	.....	3,936,893
50	Jewelry	8	45	9	1	.....	1	34	[4] 34	[4] 34	34	30	3	.....	1	50,822
51	Lime	9	462	8	20	2	.....	432	Au 448	Fe 412	442	442	.....	.....	.....	431,145
52	Liquors, malt	4	389	19	10	18	5	337	Jy 422	De 181	361	361	.....	.....	.....	2,081,889
53	Lumber and timber products	1,821	17,561	2,356	366	340	47	14,452	Mh 15,184	De 12,769	19,002	18,889	1	112	.....	22,609,433
54	Lumber, planing-mill products, not including planing mills connected with sawmills.	134	3,461	116	163	140	30	3,012	Je 3,212	De 2,724	3,101	2,884	188	23	6	6,055,005
55	Marble and stone work	97	1,460	99	42	35	11	1,273	Je 1,353	De 1,196	1,304	1,304	.....	.....	.....	1,473,553
56	Mattresses and spring beds	20	401	16	26	33	10	316	Ja 339	De 257	322	272	47	3	.....	629,750
57	Millinery and lace goods	5	74	2	7	3	2	60	Fe 64	De 54	62	16	28	7	11	204,803
58	Mineral and soda waters	86	426	75	41	28	6	276	Jy 365	De 208	306	299	1	6	.....	707,054
59	Oil, cottonseed, and cake	24	1,270	1	71	136	8	1,054	No 1,957	Au 398	1,825	1,812	13	.....	.....	5,076,407
60	Optical goods	5	39	8	6	3	5	17	No [5] 18	Ja [5] 16	17	15	2	.....	.....	66,309
61	Paints	9	134	3	19	18	10	84	Ap [5] 91	Ja 72	76	68	8	.....	.....	532,996

[1] Owned power only. [2] Includes rented power, other than electric. [3] No figures shown for reasons given in "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.																
$5,789,573	$6,039,118	$33,082,987	$2,100,640	$755,924	$2,768,490	$118,301,172	$5,128,963	$212,071,489	$88,641,354	286,857	216,156	3,448	9,395	57,858	25,249	1
48,410	40,293	252,616	.....	.....	13,782	365,044	26,038	1,121,694	730,612	1,450	810	27	.....	613	40	2
1,000	.....	1,140	.....	1,058	11	2,611	159	15,123	12,353	6	.....	.....	.....	6	.....	3
12,691	8,891	84,390	185	1,169	1,143	158,059	2,825	300,323	139,439	250	188	40	.....	22	.....	4
.....	2,476	34,794	.....	7,767	546	18,177	2,459	94,619	73,983	119	32	4	.....	83	.....	5
8,136	1,830	20,366	45	3,941	387	103,547	921	169,616	65,148	19	.....	.....	.....	19	.....	6
42,543	81,094	156,460	.....	792	7,753	2,797,564	8,798	3,245,504	439,142	395	.....	.....	.....	395	.....	7
2,240	1,694	10,752	.....	2,190	209	79,756	1,079	115,055	34,220	54	15	.....	.....	39	.....	8
.....	720	12,732	.....	2,690	109	6,912	640	40,055	32,503	12	.....	.....	.....	12	.....	9
34,133	22,990	92,289	.....	7,940	2,605	336,346	5,337	569,076	227,393	213	30	.....	.....	183	.....	10
83,656	133,592	527,328	1,875	67,798	15,350	2,334,503	57,842	4,092,664	1,700,319	887	230	14	.....	643	93	11
16,045	96,249	150,168	.....	13,300	3,962	677,514	13,007	1,276,315	585,794	314	185	.....	.....	129	90	12
67,611	37,343	377,160	1,875	54,498	11,388	1,656,989	44,835	2,816,349	1,114,525	573	45	14	.....	514	3	13
104,013	34,297	704,444	10,853	2,359	12,469	222,271	282,746	1,637,972	1,132,955	4,892	4,324	70	.....	498	.....	14
5,565	3,560	63,562	500	4,264	887	132,895	1,959	252,349	117,495	53	.....	18	.....	35	.....	15
7,716	4,525	61,785	926	912	1,226	356,459	4,487	496,225	135,279	738	717	21	.....	.....	.....	16
56,537	21,724	295,903	1,904	802	8,606	670,038	8,867	1,282,377	603,472	3,099	2,859	10	.....	230	.....	17
67,740	32,646	378,453	292	23,380	13,291	596,941	21,484	1,395,004	776,579	1,122	561	99	.....	462	10	18
67,740	32,646	376,189	292	22,980	13,244	591,316	21,188	1,379,789	767,285	1,112	561	91	.....	460	10	19
.....	.....	2,264	.....	400	47	5,625	296	15,215	9,294	10	.....	8	.....	2	.....	20
8,050	7,380	132,874	.....	.....	7,245	145,319	2,267	300,852	153,266	441	.....	.....	.....	441	75	21
157,627	271,445	4,622,354	.....	.....	22,455	4,447,015	139,333	9,688,409	5,102,061	6,323	4,106	40	.....	2,177	2,601	22
99,404	171,115	457,984	53,407	19,664	6,608	1,611,983	13,500	2,872,617	1,247,134	561	157	10	75	319	.....	23
45,650	92,785	39,825	.....	14,468	4,079	1,193,456	6,310	1,648,199	448,433	331	25	.....	.....	306	.....	24
54,687	68,460	227,447	1,280	.....	8,971	526,714	10,960	1,145,894	608,220	961	930	.....	.....	31	.....	25
9,670	3,360	74,461	.....	.....	3,664	6,062	507,098	605,084	91,924	493	485	8	.....	.....	.....	26
137,813	210,469	382,858	160	56,536	18,112	2,235,639	44,099	3,758,480	1,478,742	1,895	547	10	.....	1,338	60	27
104,575	196,086	300,074	40	41,820	15,329	1,821,465	28,469	2,989,507	1,139,573	1,247	369	.....	.....	878	60	28
33,238	14,383	82,784	120	14,716	2,783	414,174	15,630	768,973	339,169	648	178	10	.....	460	.....	29
17,812	6,800	122,646	22,126	1,968	3,596	491,577	1,799	687,965	194,589	991	970	4	.....	17	225	30
28,811	23,496	185,139	1,038	19,879	2,596	342,949	3,626	789,760	443,185	62	.....	5	.....	57	.....	31
12,371	9,220	7,637	.....	5,532	735	118,540	778	229,276	109,958	40	.....	10	.....	30	.....	32
93,268	35,584	1,045,920	5,682	17	34,197	4,412,106	141,963	6,485,640	1,931,571	12,311	9,428	.....	225	2,658	687	33
36,970	58,545	43,716	.....	4,802	4,030	349,991	1,236	685,027	333,800	20	.....	.....	.....	20	.....	34
46,249	14,248	173,358	.....	.....	15,190	674,683	95,535	1,535,503	765,285	4,065	3,665	400	.....	.....	394	35
70,235	125,772	329,174	9,376	3,416	21,535	2,537,847	53,892	4,372,427	1,780,688	3,752	1,952	25	.....	1,775	208	36
229,405	206,141	642,485	4,733	11,273	62,592	21,846,248	225,473	26,413,574	4,341,853	28,246	16,746	930	7,697	2,873	148	37
94,532	165,282	242,442	45,061	8,714	18,266	8,152,765	111,058	9,955,350	1,691,527	4,886	2,315	90	.....	2,481	5	38
42,168	110,508	115,384	37,932	1,403	9,499	5,834,229	39,834	6,843,847	969,784	1,666	975	.....	.....	691	.....	39
1,974	2,681	9,045	67	1,740	501	42,777	720	68,630	25,133	14	.....	.....	.....	14	.....	40
50,390	52,093	118,013	7,062	5,571	8,266	2,275,759	70,504	3,042,873	696,610	3,206	1,340	90	.....	1,776	5	41
366,258	329,950	1,669,195	17,583	25,148	52,345	2,821,626	147,551	6,345,881	3,376,704	7,545	3,521	84	20	3,920	1,009	42
156,596	107,285	650,964	3,064	4,735	16,070	1,178,671	76,084	2,739,180	1,484,425	2,624	1,102	15	20	1,487	153	43
209,662	222,665	1,018,231	14,519	20,413	36,275	1,642,955	71,467	3,606,701	1,892,279	4,921	2,419	69	.....	2,433	856	44
175,696	143,563	959,013	6,416	13,162	24,801	1,679,613	47,765	3,739,558	2,012,180	6,187	3,690	84	.....	2,413	552	45
46,125	97,851	292,127	.....	180	94,414	170,060	348,243	1,571,006	1,052,703	655	645	.....	.....	10	.....	46
183,660	130,335	1,527,474	62,750	8,323	23,016	4,323,380	75,790	7,522,846	3,123,676	4,754	3,203	.....	.....	1,551	134	47
131,256	62,357	492,037	930	14,805	38,660	155,440	249,548	1,762,193	1,357,205	13,056	12,446	19	90	501	310	48
49,447	27,345	232,912	985	.....	14,227	856,942	824,993	2,245,329	563,394	6,580	6,580	.....	.....	.....	47	49
500	300	30,542	.....	6,119	.....	39,272	855	97,257	57,130	10	.....	.....	.....	10	.....	50
35,290	1,140	136,599	17,000	2,695	2,423	51,107	56,440	356,829	249,282	670	520	150	.....	.....	.....	51
43,403	41,593	228,305	1,046	.....	180,481	433,404	56,415	1,345,386	855,567	2,755	2,755	.....	.....	.....	758	52
629,055	366,875	5,129,412	1,456,088	22,219	112,153	9,138,847	53,792	21,679,782	12,487,143	69,788	67,823	440	956	569	1,576	53
279,648	169,201	1,353,149	22,522	16,798	41,578	4,509,369	50,965	7,859,496	3,299,162	11,513	9,693	65	80	1,675	70	54
71,813	33,566	632,370	30,571	8,791	8,382	456,571	63,449	1,689,315	1,169,295	4,601	3,364	132	.....	1,105	165	55
52,282	50,430	148,808	12	14,972	3,933	525,729	13,084	981,407	442,594	750	100	.....	.....	650	.....	56
12,600	3,804	21,518	.....	4,836	1,515	61,909	664	131,943	69,370	4	.....	.....	.....	4	.....	57
54,663	26,196	140,036	1,369	11,271	11,859	759,161	11,212	1,263,128	492,755	477	221	54	3	199	5	58
161,709	106,159	418,517	5,881	388	36,107	9,059,085	142,404	11,414,243	2,212,754	10,802	10,659	123	.....	20	568	59
7,775	3,228	8,289	.....	3,240	351	44,495	946	89,171	43,730	12	.....	.....	.....	12	.....	60
32,764	29,716	48,158	400	2,380	3,268	378,212	10,994	620,889	231,683	1,180	940	.....	.....	240	350	61

[4] Same number reported throughout the year.

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

TABLE 35.—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.
	THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.															
62	Patent medicines and compounds	62	1,043	29	78	294	126	516	My 569	De 434	519	234	268	2	15	$3,007,693
63	Paving materials	12	248	8	13	4	.....	223	Je 261	De 190	223	223	.....	.....	.....	226,750
64	Perfumery and cosmetics	11	49	5	6	7	5	26	Ap 33	Ja 19	26	8	15	2	1	131,853
65	Photo-engraving	5	56	.....	8	.....	6	42	My 44	No [3] 41	40	37	1	2	.....	39,725
66	Pottery	5	61	4	6	2	1	48	Fe 84	De 30	68	68	.....	.....	.....	246,940
67	Printing and publishing, book and job.	142	1,598	124	109	143	61	1,161	.....	.....	1,164	901	260	3	.....	2,095,332
68	Job printing	133	1,556	121	105	140	61	1,129	My 1,162	No 1,092	1,121	858	260	3	.....	2,000,716
69	Book publishing and printing, including linotype work.	9	42	3	4	3	.....	32	De 43	Au 25	43	43	.....	.....	.....	94,616
70	Printing and publishing, newspapers and periodicals.	282	2,417	265	126	431	155	1,440	.....	.....	1,425	1,228	183	13	1	5,063,767
71	Printing and publishing	24	782	14	35	192	49	492	De 503	Se 485	460	446	14	.....	.....	1,587,237
72	Printing, publishing and job printing.	193	1,428	211	56	168	51	942	Se 959	Au 929	959	776	169	13	1	3,044,269
73	Publishing without printing	65	207	40	35	71	55	6	[4] 6	[4] 6	6	6	.....	.....	.....	432,261
74	Saddlery and harness	63	567	61	36	46	11	413	Fe 509	Au 313	468	434	18	10	6	1,228,908
75	Sausage	7	29	10	.....	.....	.....	19	Ja [3] 21	Au [3] 17	21	21	.....	.....	.....	14,950
76	Shirts	6	72	3	4	6	1	58	Mh 65	Jy 46	56	2	42	2	10	44,966
77	Slaughtering and meat packing	18	255	25	12	15	4	199	No 278	Ap 172	305	282	23	.....	.....	567,628
78	Stoves, hot-air furnaces, and ranges	13	1,722	17	54	188	51	1,412	Ap 1,532	De 1,262	1,490	1,479	.....	11	.....	2,453,946
79	Structural ironwork, not made in steel works or rolling mills.	13	456	6	27	39	5	379	Ja 503	De 253	419	419	.....	.....	.....	1,330,276
80	Tobacco, cigars and cigarettes	25	240	30	3	8	1	198	Ja 234	No 175	199	170	26	3	.....	174,945
81	Trunks and valises	7	134	5	10	13	2	104	Fe 128	No 73	96	83	8	5	.....	182,768
82	Vinegar and cider	6	65	4	5	27	1	28	Mh 32	My [3] 25	28	28	.....	.....	.....	268,182
83	Wood, turned and carved	24	614	18	25	12	4	555	Ja 606	My 484	604	571	26	7	.....	551,086
84	Woolen goods	17	1,123	13	25	12	4	1,069	Ja 1,190	Oc 946	1,155	613	476	43	23	1,984,504
85	All other industries*	228	9,136	157	359	614	131	7,875	.....	.....	.....	.....	.....	.....	.....	55,782,569

*All other industries embrace—
Automobile bodies and parts 3
Automobiles 1
Babbitt metal 1
Baking powders 2
Blacking, stains, and dressings 1
Boots and shoes 2
Boxes, wooden, packing 13
Brass and bronze products 3
Brushes, toilet 1
Butter 2
Buttons 2
Carpets, rag 1
Cars, steam-railroad, not including operations of railroad companies 2
Cement 2
Charcoal, not including production in the lumber and wood distillation industries 3
Chemicals 6
Cleansing and polishing preparations 3
Clothing, women's 1
Cordage and twine 2
Corsets 1
Dairymen's supplies 1
Dyeing and finishing textiles 2
Electrical machinery, apparatus, and supplies 3
Electroplating 1
Engines, steam, gas, and water 3
Engraving, steel and copper plate, including plate printing 2
Explosives 2
Flavoring extracts 6
Furnishing goods, men's 3
Gas fixtures 3
Gas machines and gas and water meters 2
Glass 1
Glass, cutting, staining, and ornamenting 1
Grease and tallow, not including lubricating greases 1
Hair work 2
Hand stamps 3
Hardware 1
Hardware, saddlery 1
House-furnishing goods, not elsewhere specified 3
Ink, printing 1
Iron and steel, steel works and rolling mills 1
Iron and steel, cast-iron pipe 2
Iron and steel, doors and shutters 1
Leather, tanned, curried, and finished 9
Lithographing 1
Looking-glass and picture frames 2

	CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.															
1	**MEMPHIS**—All industries	354	10,269	256	459	978	187	8,389	Mh 8,776	De 7,960	9,070	8,247	800	10	13	$44,435,414
2	Artificial limbs	3	6	2	1	.....	.....	3	[4] 3	[4] 3	3	3	.....	.....	.....	6,275
3	Bookbinding and blank-book making.	3	23	3	.....	1	.....	19	De 20	No 18	20	14	6	.....	.....	17,625
4	Bread and other bakery products	45	661	39	14	68	9	531	Jy 560	Ja 404	538	333	205	.....	.....	883,467
5	Brooms	5	54	5	3	2	1	43	No 47	Je [3] 40	44	39	5	.....	.....	27,348
6	Carriages and wagons and materials	10	378	4	16	14	5	339	Se 414	De 282	321	320	.....	1	.....	1,156,363
7	Confectionery and ice cream	16	451	10	33	87	13	308	.....	.....	327	206	121	.....	.....	821,119
8	Confectionery and chewing gum	13	399	7	26	83	11	272	De [3] 292	Jy 245	284	166	118	.....	.....	707,356
9	Ice cream	3	52	3	7	4	2	36	Jy 72	De [3] 18	43	40	3	.....	.....	113,763
10	Copper, tin, and sheet-iron work	17	117	17	11	13	2	74	Se 82	Ja 60	68	68	.....	.....	.....	206,233
11	Cordials and flavoring sirups	6	22	3	4	3	3	9	Mh 11	No [3] 8	10	10	.....	.....	.....	48,872
12	Flour-mill and gristmill products	4	81	1	11	6	.....	63	Mh 69	De [3] 56	61	61	.....	.....	.....	331,125
13	Food preparations, not elsewhere specified.	6	241	8	11	29	4	189	De 265	Se 130	265	263	2	.....	.....	760,340
14	Foundry and machine-shop products.	20	499	16	20	18	8	437	Ja 559	De 272	427	427	.....	.....	.....	1,029,701
15	Ice, manufactured	6	424	.....	19	24	4	377	Au 567	Ja 187	303	300	3	.....	.....	744,840
16	Leather goods, not elsewhere specified.	11	80	8	9	5	.....	58	Ja 84	Se 37	61	56	5	.....	.....	244,874
17	Lumber and timber products	17	1,064	8	44	69	11	932	Ap 1,015	De 713	887	887	.....	.....	.....	2,826,724
18	Marble and stone work	7	89	9	3	1	2	74	No 79	Mh 70	76	76	.....	.....	.....	64,058
19	Mattresses and spring beds	5	175	3	10	19	5	138	Je 147	De 113	150	128	22	.....	.....	263,648
20	Mineral and soda waters	4	66	1	3	9	1	52	Se 62	No 44	54	54	.....	.....	.....	65,825
21	Oil, cottonseed, and cake	11	677	1	34	59	5	578	De 986	Au 210	988	976	12	.....	.....	2,276,402
22	Paints	4	78	3	10	13	4	48	Se 51	De [3] 47	47	42	5	.....	.....	275,952

[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.										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—Continued.																
$180,823	$521,238	$196,520	$1,438	$29,706	$34,837	$1,384,895	$7,810	$4,025,646	$2,632,941	736	156	3	.....	577	.....	62
17,280	3,984	87,692	553	2,673	982	36,472	11,946	212,019	163,601	1,189	818	41	.....	330	.....	63
11,300	11,717	8,455	.....	2,342	2,933	79,511	625	231,772	151,636	46	4	.....	.....	42	.....	64
11,650	3,675	38,084	500	4,568	208	12,890	1,561	97,222	82,771	23	.....	.....	.....	23	.....	65
6,143	2,002	19,606	.....	.....	1,029	7,444	7,905	57,459	42,110	303	300	3	.....	.....	.....	66
233,160	175,571	905,173	38,037	90,170	13,836	930,320	32,238	2,961,955	1,999,397	1,128	25	17	1	1,085	69	67
223,052	173,291	876,946	19,712	87,311	13,193	926,413	29,571	2,845,262	1,889,278	1,119	25	17	1	1,076	69	68
10,108	2,280	28,227	18,325	2,859	643	3,907	2,667	116,693	110,119	9	.....	.....	.....	9	.....	69
241,482	558,499	930,270	188,247	71,699	32,835	1,268,311	53,105	5,077,180	3,755,764	1,695	225	171	10	1,289	27	70
105,551	231,437	387,776	7,084	19,316	16,961	582,096	21,468	2,107,323	1,503,759	640	188	6	.....	446	27	71
85,176	241,168	538,458	3,236	45,581	15,176	631,185	31,024	2,409,174	1,746,965	1,054	37	165	10	842	.....	72
50,755	85,894	4,036	177,927	6,802	698	55,030	613	560,683	505,040	1	.....	.....	.....	1	.....	73
45,685	46,332	226,228	1,000	20,018	5,347	1,043,184	8,632	1,624,813	572,997	328	50	25	1	252	.....	74
.....	.....	12,579	.....	1,456	158	80,138	1,802	122,144	40,204	65	40	.....	.....	25	.....	75
7,600	5,885	19,302	.....	2,860	160	30,599	725	92,055	60,731	18	.....	.....	.....	18	.....	76
17,315	10,414	87,357	2,750	684	4,604	1,540,077	21,371	1,889,091	327,643	1,213	1,107	4	.....	102	.....	77
126,734	184,416	866,831	21,798	5,930	32,055	921,061	64,535	2,795,359	1,809,763	1,638	445	.....	.....	1,193	4	78
44,850	39,857	280,328	.....	10,632	6,560	739,156	25,278	1,554,601	790,167	1,392	750	2	.....	640	1,488	79
4,019	10,606	106,908	.....	3,186	30,895	113,436	559	322,278	208,283	75	.....	.....	.....	75	.....	80
14,600	13,300	33,463	.....	4,520	991	105,424	1,558	226,307	119,325	100	47	.....	.....	53	.....	81
16,500	52,687	14,750	.....	3,970	1,027	212,350	2,762	391,954	176,842	86	45	4	.....	37	.....	82
34,159	13,088	237,417	850	505	3,573	534,031	1,845	908,528	372,652	1,790	1,728	26	.....	36	.....	83
38,978	25,532	288,557	468	460	11,282	893,867	29,447	1,546,591	623,277	2,302	1,412	37	45	808	159	84
786,417	876,272	3,827,672	62,003	71,887	1,623,420	15,629,767	915,581	31,217,143	14,671,795	52,704	31,752	129	192	20,631	13,412	85

Lubricating greases	1	Roofing materials	1	Statuary and art goods	1	Toys and games	2
Minerals and earths, ground	3	Saws	4	Steam fittings and steam and hot-water heating apparatus	1	Typewriters and supplies	1
Mirrors, framed and unframed	4	Scales and balances	1	Stencils and brands	2	Umbrellas and canes	1
Models and patterns, not including paper patterns	4	Shipbuilding, wooden, including boat building	3	Stereotyping and electrotyping	3	Upholstering materials, not elsewhere specified	2
Oil, essential	1	Show cases	1	Sulphuric, nitric, and mixed acids	1	Wall plaster	1
Oil, not elsewhere specified	1	Signs and advertising novelties	8	Surgical appliances	2	Wheelbarrows	1
Pickles and sauces	1	Smelting and refining, copper	2	Suspenders, garters, and elastic woven goods	3	Window and door screens	4
Poultry, killing and dressing	4	Soap	3	Tinware, not elsewhere specified	6	Window shades and fixtures	1
Printing and publishing, music	2	Soda-water apparatus	2	Tobacco, chewing and smoking, and snuff	26	Wirework	3
Printing materials	1	Stamped and enameled ware, not elsewhere specified	3	Tools, not elsewhere specified	1	Wood distillation, not including turpentine and rosin	1
Regalia and society badges and emblems	1	Stationery goods, not elsewhere specified	2			Wool shoddy	1
Rice, cleaning and polishing	1						

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

$971,978	$1,281,316	$4,901,358	$48,593	$223,857	$1,052,952	$22,400,491	$604,506	$39,133,497	$16,128,500	24,693	19,094	284	.....	5,315	3,683	1
1,000	.....	1,140	.....	758	10	2,036	99	8,123	5,988	4	.....	.....	.....	4	.....	2
.....	720	8,824	.....	1,180	77	6,025	441	27,210	20,744	6	.....	.....	.....	6	.....	3
35,835	85,982	237,314	1,760	34,402	7,451	817,322	25,960	1,709,399	866,117	334	185	3	.....	146	93	4
3,795	2,500	21,620	.....	2,068	689	57,055	857	103,664	45,752	15	.....	6	.....	9	.....	5
40,065	20,393	205,521	.....	5,000	11,648	360,411	6,177	796,265	429,677	930	799	.....	.....	131	10	6
53,739	99,028	142,985	40	30,014	6,046	781,285	20,920	1,427,753	625,548	850	295	.....	.....	555	60	7
41,439	94,654	117,730	40	22,810	5,558	720,300	12,955	1,247,809	514,554	734	220	.....	.....	514	60	8
12,300	4,374	25,255	.....	7,204	488	60,985	7,965	179,944	110,994	116	75	.....	.....	41	.....	9
19,743	14,425	59,000	.....	8,542	1,739	129,963	1,934	326,745	194,848	38	.....	4	.....	34	.....	10
8,271	4,100	6,607	.....	4,844	349	67,736	640	134,175	65,799	35	.....	10	.....	25	.....	11
15,915	4,040	36,229	.....	600	2,807	1,131,412	11,119	1,253,008	110,477	1,114	1,075	4	.....	35	.....	12
19,416	34,452	98,753	3,056	1,200	8,077	2,987,461	41,268	3,464,786	436,057	1,812	1,165	.....	.....	647	.....	13
32,076	28,799	264,122	.....	6,608	7,121	585,941	23,162	1,275,953	666,850	637	578	9	.....	50	1,293	14
40,600	26,778	200,830	.....	10,000	14,319	14,954	92,334	506,236	398,948	2,990	2,925	.....	.....	65	125	15
15,420	6,135	35,930	.....	7,525	1,537	172,304	1,890	282,765	108,571	59	.....	25	.....	34	.....	16
95,198	87,781	537,468	15,032	5,658	16,066	1,565,484	11,350	2,960,903	1,384,069	4,262	3,950	.....	.....	312	1,151	17
7,200	2,580	64,346	.....	420	442	36,390	4,550	138,567	97,627	115	80	.....	.....	35	20	18
25,522	35,026	72,893	.....	12,374	991	272,185	6,836	499,214	220,193	311	.....	.....	.....	311	.....	19
7,200	2,960	31,125	209	1,060	1,928	173,077	1,742	268,204	93,385	22	.....	.....	.....	22	.....	20
75,328	53,926	230,708	874	.....	19,805	5,343,754	64,642	6,521,895	1,113,499	4,312	4,192	120	.....	.....	151	21
20,464	20,380	28,398	.....	.....	2,092	214,220	3,334	391,848	174,294	286	240	.....	.....	46	.....	22

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

[4] The same number reported throughout the year.

TABLE 35.—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 OE 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																	
	MEMPHIS—Continued.																	
23	Patent medicines and compounds, and druggists' preparations.	24	251	12	24	40	20	155	My	182	De	117	122	75	44	2	1	$1,659,922
24	Printing and publishing, book and job.	28	402	19	40	38	16	289	My	311	Oc	263	277	242	35	.....	.....	578,347
25	Printing and publishing, newspapers and periodicals.	19	374	18	15	98	26	217	De	224	No	207	224	213	9	2	.....	955,084
26	All other industries*.....	83	4,056	66	124	362	48	3,456	.....		.....		3,797	3,454	326	5	12	29,190,670

* All other industries embrace—

Agricultural implements..... 1
Artificial stone products..... 3
Awnings, tents, and sails..... 4
Bags, other than paper..... 2
Belting, leather..... 3
Boxes and cartons, paper..... 2
Brass and bronze products..... 1
Brushes, toilet..... 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
Cars, steam-railroad, not including operations of railroad companies... 1
Chemicals..... 3
Cleansing and polishing operations... 1
Clothing, men's..... 1
Coffee, roasting and grinding..... 2
Coffins, burial cases, and undertakers' goods..... 1
Cooperage..... 1
Electrical machinery, apparatus, and supplies..... 1
Fertilizers..... 1
Flavoring extracts..... 2
Furniture..... 5
Gas, illuminating and heating..... 3

1	**NASHVILLE**—All industries.....	354	10,747	269	459	1,152	294	8,573	Je	9,114	No	7,881	8,827	7,020	1,708	54	45	$28,966,300
2	Bread and other bakery products...	18	167	43	6	2	7	109	De [3]	112	Je [3]	108	111	106	3	1	1	211,494
3	Brick	3	442	1	16	10	4	411	Je	485	Ja	309	405	405	.....	.....	.....	479,265
4	Brooms.....	7	29	8	.....	.....	.....	21	Ap	27	Je	18	23	23	.....	.....	.....	21,940
5	Carriages and wagons and materials.	13	198	15	7	3	1	172	Je	203	De	113	176	173	3	.....	.....	276,017
6	Clothing, men's, including shirts....	6	423	.....	13	41	.....	369	Fe	435	Jy	156	364	23	341	.....	.....	343,817
7	Coffee, roasting and grinding.....	3	84	2	5	24	4	49	De	65	Jy [3]	30	65	24	41	.....	.....	288,396
8	Confectionery and ice cream.....	21	243	18	17	21	13	174	.....		.....		209	124	85	.....	.....	295,173
9	Confectionery and chewing gum.	11	190	10	11	16	10	143	De	166	Fe	110	166	87	79	.....	.....	234,205
10	Ice cream.....	10	53	8	6	5	3	31	Au	46	Ja [3]	20	43	37	6	.....	.....	60,968
11	Copper, tin, and sheet-iron products.	12	102	14	2	3	2	81	Jy	114	Fe	66	70	70	.....	.....	.....	72,883
12	Flour-mill and gristmill products...	7	307	10	11	39	10	237	Au	297	My	172	214	209	5	.....	.....	1,232,472
13	Food preparations, not elsewhere specified.	12	251	9	19	70	5	148	Se	244	My	120	131	119	12	.....	.....	854,619
14	Foundry and machine-shop products.	19	338	16	23	36	6	257	Oc	275	My	243	249	249	.....	.....	.....	741,163
15	Furniture.....	8	331	6	15	19	1	290	Mh	329	De	239	240	237	3	.....	.....	570,751
16	Leather goods, not elsewhere specified.	13	257	10	22	29	8	188	Mh	243	No	115	212	203	9	.....	.....	644,990
17	Lumber and timber products.....	23	899	21	37	47	8	786	Je	928	De	592	880	875	.....	5	.....	2,326,282
18	Marble and stone work.....	6	60	2	5	5	.....	48	Je	55	Ja [3]	41	48	48	.....	.....	.....	97,817
19	Mattresses and spring beds.....	4	80	.....	7	4	3	66	Fe [3]	71	De	39	67	49	15	3	.....	144,100
20	Patent medicines and compounds and druggists' preparations.	12	140	3	14	47	11	65	De	67	Ja [3]	63	66	24	42	.....	.....	162,055
21	Printing and publishing, book and job.	33	716	27	40	80	26	543	Mh	555	Je	530	545	387	156	2	.....	1,001,901
22	Printing and publishing, newspapers and periodicals.	43	846	16	49	226	78	477	.....		.....		487	371	115	1	.....	2,694,864
23	Printing and publishing.....	4	258	.....	8	64	11	175	De [3]	180	Jy [3]	174	180	136	44	.....	.....	616,501
24	Printing, publishing, and job printing.	7	440	6	14	100	23	297	De	301	Au	291	302	230	71	1	.....	1,686,612
25	Publishing without printing....	32	148	10	27	62	44	5		[4] 5		[4] 5	5	5	.....	.....	.....	391,751
26	Tobacco manufactures.....	12	727	6	18	76	16	611	Fe	713	Au	366	590	310	279	1	.....	3,511,001
27	All other industries *.....	79	4,107	42	133	370	91	3,471	.....		.....		3,675	2,991	599	41	44	12,995,300

*All other industries embrace—

Artificial limbs..... 1
Automobiles..... 1
Awnings, tents, and sails..... 2
Bags, other than paper..... 1
Baking powders..... 1
Belting, leather..... 1
Bookbinding and blank-book making 1
Boots and shoes..... 1
Boxes and cartons, paper..... 2
Buttons..... 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
Chemicals..... 1
Coffins, burial cases, and undertakers' goods..... 1
Cooperage..... 3
Corsets..... 1
Cotton goods..... 1
Dairymen's supplies..... 1
Engraving, steel and copper plate, including plate printing..... 1
Flavoring extracts..... 2
Gas, illuminating and heating..... 2
Hair work..... 1
Hand stamps..... 2
Hosiery and knit goods..... 1
House-furnishing goods, not elsewhere specified..... 2
Ice, manufactured..... 4
Jewelry..... 2
Liquors, malt..... 1

1	**CHATTANOOGA**—All industries.	276	8,569	212	364	621	190	7,182	Je	7,650	De	6,097	7,212	6,409	746	34	23	$20,715,601
2	Bread and other bakery products..	16	302	12	11	15	10	254	Au	285	Ja	216	236	151	84	1	.....	234,339
3	Carriages and wagons.....	8	51	14	.....	.....	1	36	Au	37	No	35	36	36	.....	.....	.....	91,900
4	Food preparations, not elsewhere specified.	4	11	4	.....	.....	.....	7		[4] 7		[4] 7	7	7	.....	.....	.....	4,594
5	Foundry and machine-shop products.	43	2,535	19	111	151	52	2,202	Se	2,310	No	2,023	2,224	2,176	34	14	.....	5,142,486
6	Furniture and refrigerators.....	6	536	2	21	36	4	473	Mh	640	De	250	423	423	.....	.....	.....	1,226,385

[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.										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—Continued.																
$43,168	$36,820	$62,047	.....	$9,801	$17,046	$757,815	$2,087	$1,662,707	$902,805	293	.....	.....	.....	293	.....	23
68,227	57,135	225,622	$17,404	31,674	2,508	215,690	8,377	764,037	539,970	304	25	.....	.....	279	69	24
45,171	127,817	240,669	6,582	11,373	12,537	368,285	12,586	1,312,692	931,821	389	.....	.....	.....	389	.....	25
298,625	529,539	2,089,207	3,636	38,756	917,667	6,339,686	262,201	13,297,348	6,695,461	5,575	3,585	103	.....	1,887	711	26

Glass, cutting, staining, and ornamenting 1
Grease and tallow, not including lubricating greases 1
Hair work 1
Ink, printing 1
Iron and steel, doors and shutters 1
Jewelry 4
Liquors, malt 1
Mirrors, framed and unframed 1
Photo-engraving 2
Pickles, preserves, and sauces 1
Refrigerators 1
Saws 1
Scales and balances 1
Shipbuilding, wooden, including boat building 2
Shirts 2
Stencils and brands 1
Stereotyping and electrotyping 1
Tobacco, chewing and smoking, and snuff 3
Tobacco, cigars and cigarettes 7
Toys and games 1
Umbrellas and canes 1
Vinegar and cider 4
Wirework 2

$987,626	$1,381,343	$4,321,314	$246,348	$184,790	$823,965	$18,838,733	$522,662	$33,276,239	$13,914,844	21,930	13,020	26	.....	8,884	439	1
19,420	5,760	55,228	.....	4,530	2,709	569,570	9,103	743,917	165,244	105	.....	.....	.....	105	.....	2
22,283	9,202	188,870	.....	300	2,870	29,993	48,471	360,803	282,339	465	270	.....	.....	195	.....	3
.....	.....	14,433	.....	828	.....	19,531	342	33,187	13,314	11	.....	.....	.....	11	.....	4
16,000	2,740	98,234	1,500	8,322	2,149	233,080	2,992	431,225	195,153	187	80	6	.....	101	.....	5
29,658	49,085	129,680	.....	7,805	2,119	384,375	2,885	757,911	370,651	123	.....	.....	.....	123	.....	6
28,050	49,506	19,300	.....	7,688	2,445	682,278	3,465	949,803	264,060	207	.....	.....	.....	207	.....	7
24,768	33,826	68,969	120	11,622	3,848	410,930	6,400	714,673	297,343	277	26	2	.....	249	.....	8
18,825	28,214	53,850	.....	7,210	2,824	274,841	3,338	454,545	176,366	94	15	.....	.....	79	.....	9
5,943	5,612	15,119	120	4,412	1,024	136,089	3,062	260,128	120,977	183	11	2	.....	170	.....	10
2,424	2,548	43,486	.....	4,986	261	52,740	593	130,218	76,885	19	.....	.....	.....	19	.....	11
21,738	53,861	96,804	.....	1,750	7,643	4,176,610	25,098	5,042,320	840,612	3,150	2,520	.....	.....	630	.....	12
40,818	67,301	56,872	37,942	6,731	6,379	2,662,325	17,956	3,584,657	904,376	440	300	.....	.....	140	95	13
42,424	38,332	166,951	1,694	8,496	4,913	333,788	14,881	757,390	408,721	469	90	12	.....	367	9	14
21,002	20,198	154,544	6,363	4,635	4,610	253,808	6,942	579,869	319,119	803	70	.....	.....	733	.....	15
25,900	31,997	91,955	.....	8,270	2,360	418,987	3,702	657,683	234,994	161	.....	.....	.....	161	.....	16
64,300	49,150	325,699	.....	11,467	21,609	1,249,251	14,863	2,097,212	833,098	4,550	3,970	.....	.....	580	47	17
11,980	3,000	17,526	.....	120	600	59,875	3,354	113,531	50,302	275	80	.....	.....	195	.....	18
11,340	4,860	27,114	.....	1,218	957	98,663	2,007	195,141	94,471	109	.....	.....	.....	109	.....	19
18,695	45,697	31,147	.....	4,747	857	172,492	746	341,109	167,871	18	.....	.....	.....	18	.....	20
115,731	85,165	370,835	15,700	29,934	7,685	469,607	13,612	1,467,551	984,332	524	.....	1	.....	523	.....	21
111,120	325,692	283,244	132,255	15,674	10,097	484,666	17,010	1,983,162	1,481,486	461	165	.....	.....	296	.....	22
37,490	73,598	97,447	.....	2,700	2,910	168,816	6,598	529,285	353,871	198	163	.....	.....	35	.....	23
28,960	177,838	182,281	1,200	8,512	6,527	265,110	9,885	1,013,134	738,139	262	2	.....	.....	260	.....	24
44,670	74,256	3,516	131,055	4,462	660	50,740	527	440,743	389,476	1	.....	.....	.....	1	.....	25
58,488	119,281	218,837	.....	3,593	562,116	885,956	12,896	2,747,307	1,848,455	835	748	.....	.....	87	132	26
301,487	384,142	1,861,586	50,774	42,074	177,738	5,190,208	315,344	9,587,570	4,082,018	8,741	4,701	5	.....	4,035	156	27

Lithographing 1
Lubricating greases 1
Millinery and lace goods 3
Mineral and soda waters 2
Mirrors, framed and unframed 1
Models and patterns, not including paper patterns 2
Oil, cottonseed, and cake 1
Optical goods 1
Paints 2
Photo-engraving 1
Printing materials 1
Showcases 1
Signs and advertising novelties 2
Slaughtering and meat packing 3
Soap 1
Stationery goods, not elsewhere specified 2
Statuary and art goods 1
Stencils and brands 1
Stereotyping and electrotyping 1
Stoves and hot-air furnaces and ranges 3
Surgical appliances 1
Suspenders, garters, and elastic woven goods 1
Toys and games 1
Wirework 1
Wood, turned and carved 2
Woolen goods 1

$806,758	$845,875	$3,836,214	$47,162	$137,558	$231,197	$10,310,136	$443,059	$20,368,555	$9,615,360	21,227	13,306	.....	.....	7,921	3,126	1
18,421	30,194	112,235	.....	13,924	1,019	535,374	8,256	864,193	320,563	210	.....	.....	.....	210	.....	2
.....	660	25,084	.....	3,584	620	15,916	1,408	58,913	41,589	61	.....	.....	.....	61	.....	3
.....	.....	1,044	.....	780	46	19,149	259	26,859	7,451	3	.....	.....	.....	3	.....	4
257,100	238,771	1,241,571	11,534	23,971	39,574	2,397,269	146,139	5,031,607	2,488,199	6,562	3,570	.....	.....	2,992	1,792	5
53,496	43,844	243,687	.....	5,432	9,231	466,193	11,904	1,087,315	609,218	1,383	1,050	.....	.....	333	549	6

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

[4] Same number reported throughout the year.

TABLE 35.—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.																
	CHATTANOOGA—Continued.																
7	Ice, manufactured	5	129	3	7	13	3	103	Jy	165	Ja	60	101	100	1	.....	.....	$927,541
8	Leather goods	5	11	2	1	1	.....	7		[3] 7		[3] 7	7	7	.....	.....	.....	10,931
9	Lumber and timber products	10	563	2	27	18	3	513	Fe	568	No	432	520	517	.....	3	.....	987,466
10	Marble and stone work	5	37	5	.....	6	.....	26	De [4]	30	Mh [4]	23	27	27	.....	.....	.....	40,111
11	Patent medicines and compounds and druggists' preparations.	15	220	5	19	74	11	111	Ap	132	No	87	117	44	73	.....	.....	588,293
12	Printing and publishing, book and job.	27	177	27	10	10	8	122	No	135	Au	113	132	106	26	.....	.....	161,530
13	Printing and publishing, newspapers and periodicals.	13	253	17	11	31	23	171	Au	177	De [4]	169	169	151	18	.....	.....	252,130
14	Stoves and ranges	3	208	.....	9	17	4	178	My	224	De	129	173	173	.....	.....	.....	434,064
15	All other industries*	116	3,536	100	137	249	71	2,979	.....		.....		3,040	2,491	510	16	23	10,613,831

*All other industries embrace—

Agricultural implements 2
Artificial stone products 1
Automobile bodies and parts 1
Awnings, tents, and sails 2
Babbitt metal 1
Baking powders 1
Bookbinding and blank-book making 2
Boxes and cartons, paper 2
Brass products 1
Brick 4
Brooms 3
Carpets, rag 1
Cars and general shop construction and repairs by electric-railroad companies 1
Cars and general shop construction and repairs by steam-railroad companies 1
Clothing, men's 2
Coffee, roasting and grinding 2
Coffins, burial cases, and undertakers' goods 1
Confectionery and ice cream 5
Cooperage 7
Copper, tin, and sheet-iron work 5
Cordials and flavoring sirups 2
Dyeing and finishing textiles 1
Dyestuffs and extracts 1
Electrical machinery, apparatus, and supplies 1
Electroplating 1
Engraving, steel and copper plate, including plate printing 1
Flour-mill and gristmill products 5
Furnishing goods, men's 1
Gas fixtures 2
Gas, illuminating and heating 1
Hand stamps 1

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

1	JACKSON	46	1,767	28	78	134	18	1,509	Ja	1,695	De	1,147	1,551	1,474	48	29	.....	$3,096,454
2	JOHNSON CITY	30	684	16	28	23	6	611	Jy	676	My	528	660	628	15	17	.....	1,736,278
3	KNOXVILLE	142	3,032	120	172	259	61	2,420	Jy	2,636	De	2,150	2,474	1,840	612	16	6	4,772,888

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

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—Continued.																
$12,253	$13,233	$60,148	.....	$2,345	$7,324	$37,020	$30,107	$224,878	$157,751	1,828	1,750	.....	.....	78	113	7
1,000	400	5,071	.....	1,860	71	4,758	241	13,750	8,751	9	.....	.....	.....	9	.....	8
65,315	23,665	236,915	.....	4,439	8,930	906,654	3,264	1,455,883	545,965	1,684	1,677	.....	.....	7	.....	9
.....	3,314	13,004	$2,417	1,286	427	17,428	554	48,842	30,860	80	.....	.....	.....	80	.....	10
38,712	118,798	33,693	763	8,209	3,826	213,718	1,928	623,865	408,219	100	40	.....	.....	60	.....	11
20,580	14,906	196,269	4,170	13,200	1,898	118,926	4,059	327,291	204,306	132	.....	.....	.....	132	.....	12
17,440	27,313	116,163	24,499	19,660	4,290	110,399	5,636	500,847	384,812	262	.....	.....	.....	262	.....	13
15,613	14,966	99,081	329	2,105	3,037	80,587	6,603	308,014	220,824	216	40	.....	.....	176	.....	14
306,828	315,811	1,452,249	3,450	36,763	150,904	5,386,745	222,701	9,796,298	4,186,852	8,697	5,179	.....	.....	3,518	672	15

Hosiery and knit goods 2
Leather, tanned, curried, and finished 1
Liquors, malt 1
Looking-glass and picture frames 2
Mattresses and spring beds 4
Mineral and soda waters 5
Mirrors, framed and unframed 1
Models and patterns, not including paper patterns 2
Oil, not elsewhere specified 1
Optical goods 2
Paints 1
Photo-engraving 1
Printing and publishing, music 1
Regalia and society badges and emblems 1
Roofing materials 1
Sausage, not made in slaughtering and meat-packing establishments 5
Saws 3
Shipbuilding, wooden, including boat building 1
Shirts 1
Signs and advertising novelties 3
Slaughtering and meat packing 1
Soda-water apparatus 2
Stamped and enameled ware 1
Stereotyping and electrotyping 1
Surgical appliances 1
Suspenders, garters, and elastic woven goods 1
Tobacco, cigars and cigarettes 4
Tools, not elsewhere specified 1
Typewriter ribbons 1
Wheelbarrows 1
Wool shoddy 1

CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
$120,312	$118,945	$855,709	$563	$5,002	$22,148	$1,772,712	$67,193	$3,417,168	$1,577,263	3,858	3,406	51	.....	401	137	1
45,832	26,692	271,256	167	3,243	8,599	1,794,981	156,619	2,600,161	648,561	3,211	2,377	18	.....	816	223	2
287,478	278,852	1,063,298	32,184	60,606	44,089	4,261,273	94,357	7,346,107	2,990,477	6,168	4,286	9	135	1,738	101	3

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

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES: 1914

TEXAS

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

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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.

TEXAS.

By Frank Adams.

GENERAL STATISTICS.

General character of the state.—Texas was admitted to the Union in 1845. With a gross area of 265,896 square miles, of which 262,398 represent land surface, it ranks first in size among the states. Its inhabitants, in 1900, numbered 3,048,710 and in 1910 3,896,542, and its estimated population in 1914 was 4,257,854. In total population Texas ranked fifth in 1910; and in density of population it ranked thirty-sixth, with 14.8 inhabitants per square mile, the corresponding number in 1900 being 11.6.

The urban population of the state in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 938,104, or 24.1 per cent of the total, as against 17.1 per cent in 1900. There were in the state in 1914, 24 cities each having an estimated population of more than 10,000. These cities, whose aggregate population formed 18.8 per cent of the estimated total population of Texas in that year, reported 38.7 per cent of the value of the state's manufactured products.

The steam-railway mileage in 1914 was 15,758, the greatest for any state, and the electric-railway mileage in 1912 was 680. Important transportation facilities are also provided by the numerous harbors on the Gulf of Mexico and by the canals and navigable rivers within the state.

Agriculture is the leading industry. In 1909 the total value of all farm crops was $298,133,466 and the value of domestic animals sold or slaughtered on farms $93,799,753. Texas is the first state in the production of cotton. In 1909 it produced 25.3 per cent of the total for the United States; and the value of this crop, including seed, was $188,673,954. The state's production of cotton in 1914 was 4,592,112 equivalent 500-pound bales, or about one-fourth of the total yield in the United States.

The aggregate value of the mineral products of Texas in 1914, according to the annual report of the United States Geological Survey, was $30,363,426, of which nearly half—$14,942,848—represented the value of 20,068,184 barrels of petroleum. In the production of this commodity the state ranked fourth with respect to quantity and sixth with respect to value.

The value of merchandise exported from the various Texas ports during the fiscal year ended June 30, 1914, was $289,156,195, and the value of merchandise imported through the same ports in that year was $31,070,840.

Importance and growth of manufactures.—In 1914, measured by the value of the products of its manufacturing industries, $361,279,303, Texas ranked fifteenth among the states and, with an average of 74,853 wage earners employed in such industries, it ranked twenty-third in this respect. In 1899 the state ranked twenty-fifth in value of products and twenty-seventh in average number of wage earners. The proportion which the manufactures of the state represented of the total value of products of manufacturing industries in the United States advanced from eight-tenths of 1 per cent in 1899 to 1.5 per cent in 1914.

Table 1 summarizes the more important data relative to all classes of manufactures combined in the state of Texas 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	5,084	4,588	3,158	3,107	10.8	45.3	1.6
Persons engaged	91,114	84,575	57,892	(2)	7.7	46.1	.....
Proprietors and firm members	4,787	4,496	3,073	(2)	6.5	46.3	.....
Salaried employees	11,474	9,849	5,753	2,861	16.5	71.2	101.1
Wage earners (average number)	74,853	70,230	49,066	38,604	6.6	43.1	27.1
Primary horsepower	335,791	282,471	164,637	116,157	18.9	71.6	41.7
Capital	$283,543,820	$216,875,579	$115,664,871	$63,655,616	30.7	87.5	81.7
Salaries and wages	59,179,344	48,774,827	30,586,651	19,830,357	21.3	59.5	54.2
Salaries	14,357,967	10,867,555	6,117,709	2,918,676	32.1	77.6	109.6
Wages	44,821,377	37,907,272	24,468,942	16,911,681	18.2	54.9	44.7
Paid for contract work	1,342,170	1,324,435	1,456,004	(2)	1.3	−9.0	.....
Rent and taxes (including internal revenue)	3,939,184	2,618,836	[3] 1,064,791	(2)	50.4	.....	.....
Cost of materials	253,144,261	178,178,515	91,603,630	54,388,303	42.1	94.5	68.4
Value of products	361,279,303	272,895,635	150,528,389	92,894,433	32.4	81.3	62.0
Value added by manufacture (value of products less cost of materials)	108,135,042	94,717,120	58,924,759	38,506,130	14.2	60.7	53.0

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

This table brings out the fact that the manufacturing industries of Texas in most respects show a lower rate of increase during the five-year period 1909–1914 than during the preceding periods 1904–1909 and 1899–1904. For the three census periods, however, a satisfactory percentage of increase is shown for each

item except contract work. As amount paid for contract work depends upon the methods of operation and not upon the magnitude of the transactions, the decrease has no significance.

During the decade 1904 to 1914 the value of manufactures in Texas increased at a much greater rate than for the United States as a whole. For this period the increase in the number of establishments was 61 per cent; in average number of wage earners employed, 52.6 per cent; in value of products, 140 per cent; and in value added by manufacture, 83.5 per cent. For the five-year period from 1909 to 1914 the corresponding percentages were 10.8 per cent, 6.6 per cent, 32.4 per cent, and 14.2 per cent, respectively.

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.

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	5,084	74,853	100.0	$361,279,303	100.0	$108,135,042	100.0	6.6	43.1	27.1	32.4	81.3	62.0	14.2	60.7	53.0
Slaughtering and meat packing	21	3,491	4.7	52,990,000	14.7	8,532,880	7.9	−4.1	80.2	387.7	24.6	172.3	300.1	66.7	152.5	176.7
Oil, cottonseed, and cake	233	4,471	6.0	41,944,689	11.6	5,768,113	5.3	45.5	12.2	10.5	40.2	60.0	33.5	−10.9	123.8	−20.3
Flour-mill and gristmill products	191	1,300	1.7	35,110,301	9.7	5,537,114	5.1	6.9	23.3	44.6	8.1	47.1	84.8	44.6	22.7	68.2
Lumber and timber products	587	19,956	26.7	28,740,614	8.0	17,100,884	15.8	−15.1	60.8	17.4	−10.7	70.6	6.2	−19.3	52.2	48.9
Cars and general shop construction and repairs by steam-railroad companies	63	10,915	14.6	15,276,387	4.2	9,297,959	8.6	11.6	13.8	29.5	14.3	27.6	26.0	19.0	30.3	35.2
Printing and publishing[2]	1,188	4,690	6.3	15,051,269	4.2	11,054,001	10.2	6.4	28.0	34.5	29.9	48.0	70.0	25.9	44.7	67.1
Foundry and machine-shop products	177	3,036	4.0	8,782,481	2.4	4,761,397	4.4	3.8	40.6	45.2	8.8	55.8	83.8	13.1	46.3	82.1
Liquors, malt	13	958	1.3	8,470,630	2.3	5,541,942	5.1	25.2	22.2	7.0	31.0	55.6	54.4	16.2	55.9	49.7
Bread and other bakery products	530	1,949	2.6	7,503,298	2.1	3,361,461	3.1	40.1	63.5	86.2	41.3	74.2	134.0	49.4	73.4	109.9
Rice, cleaning and polishing	16	345	0.5	7,216,359	2.0	850,172	0.8	−19.8	−0.5	.....	−11.4	75.5	.....	−16.7	−9.9	.....
Ice, manufactured	255	1,926	2.6	5,328,302	1.5	3,668,772	3.4	34.0	65.4	40.6	38.6	84.5	76.0	33.3	82.1	74.9
Food preparations	26	317	0.4	4,051,956	1.1	720,425	0.7	11.6	85.6	.....	−22.5	1,294.4	621.2	10.9	291.0	690.5
Cotton goods	12	1,875	2.5	3,754,785	1.0	1,111,597	1.0	17.9	60.1	0.9	33.4	77.4	32.2	8.8	79.6	1.8
Leather goods	87	640	0.9	3,567,371	1.0	1,085,049	1.0	−11.2	−3.6	−15.0	−17.9	29.2	24.3	−28.0	15.0	26.7
Coffee, roasting and grinding	36	145	0.2	3,325,861	0.9	773,103	0.7	7.4	.....	.....	49.4	812.3	.....	59.0	1,057.1	.....
Wood preserving	6	350	0.5	3,095,503	0.9	454,311	0.4	−16.1	37.2	.....	−19.8	156.8	.....	−16.4	106.1	.....
Confectionery	46	773	1.0	2,565,310	0.7	1,113,204	1.0	7.8	46.6	46.4	4.7	112.2	49.6	12.2	103.7	40.3
Brick, tile, pottery, and other clay products	81	1,811	2.4	2,378,419	0.7	1,444,636	1.3	−23.1	54.3	−17.9	−24.3	92.5	34.6	−33.8	82.4	28.2
Cement	4	583	0.8	2,331,094	0.6	1,067,210	1.0	61.0	.....	.....	172.6	.....	.....	136.1	.....	.....
Butter	51	174	0.2	2,280,779	0.6	528,779	0.5	.....	.....	.....	245.6	947.6	−22.2	306.9	828.6	−53.3
Copper, tin, and sheet-iron work	247	728	1.0	2,238,381	0.6	1,221,701	1.1	−0.7	57.6	42.2	1.1	85.3	58.5	7.8	79.8	63.6
Gas, illuminating and heating	27	613	0.8	2,185,114	0.6	1,416,657	1.3	6.6	250.6	.....	32.9	128.6	89.2	28.9	110.5	82.5
Clothing, men's	18	1,062	1.4	2,086,136	0.6	801,533	0.8	7.1	.....	.....	18.6	.....	.....	6.6	.....	.....
Mineral and soda waters	262	545	0.7	1,913,375	0.5	1,010,887	1.0	36.2	24.6	39.0	49.0	30.5	53.8	24.7	25.3	54.8
Marble and stone work	135	464	0.6	1,366,901	0.4	843,771	0.8	−23.3	74.9	−4.4	−5.3	85.5	−8.8	−10.3	96.9	−13.4
Furniture and refrigerators	30	595	0.8	1,278,028	0.4	761,578	0.7	−15.1	138.4	93.4	−15.5	207.9	165.4	2.0	159.4	160.2
Canning and preserving	22	213	0.3	1,210,969	0.3	580,630	0.5	34.8	32.8	.....	143.2	50.0	.....	95.6	139.5	.....
Mattresses and spring beds	59	283	0.4	1,059,587	0.3	457,916	0.4	21.5	−25.1	111.6	61.1	−5.6	136.3	54.7	−0.3	123.3
Confectionery (ice cream)	78	207	0.3	1,029,047	0.3	427,278	0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cooperage	6	218	0.3	769,101	0.2	174,424	0.2	−10.2	3.4	27.7	7.0	−3.0	117.3	−24.7	−6.1	72.0
Patent medicines and compounds and druggists' preparations	61	116	0.2	739,891	0.2	452,004	0.4	−20.0	.....	.....	−27.0	.....	.....	−25.0	.....	.....
Cars and general shop construction and repairs by electric-railroad companies	19	583	0.8	734,566	0.2	466,766	0.4	153.5	.....	.....	164.4	.....	.....	195.6	.....	.....
Fertilizers	8	101	0.1	638,277	0.2	271,828	0.3	.....	.....	.....	1,019.3	.....	.....	2,300.0	.....	.....
Paving materials	18	397	0.5	618,216	0.2	319,685	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Turpentine and rosin	6	809	1.1	608,374	0.2	510,098	0.5	269.4	.....	.....	178.9	.....	.....	189.8	.....	.....
Tobacco, cigars, and cigarettes	66	344	0.4	601,973	0.2	361,689	0.3	1.5	−2.3	14.5	18.3	−7.5	4.6	10.7	−3.5	5.0
Brass and bronze products	7	91	0.1	494,763	0.1	143,637	0.1	−18.8	.....	.....	−4.4	.....	.....	−31.1	.....	.....
Carriages and wagons and materials	32	205	0.3	488,741	0.1	332,429	0.3	−50.2	95.3	−27.2	−41.1	125.5	−27.3	−35.0	114.7	−27.0
Wall plaster	3	200	0.3	487,617	0.1	317,620	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Shipbuilding, wooden, including boat building	14	168	0.2	473,524	0.1	194,874	0.2	.....	.....	.....	523.7	49.0	−59.5	364.3	20.0	.....
Brooms from broom corn	31	177	0.2	459,550	0.1	195,178	0.2	−3.8	33.3	.....	16.8	52.7	.....	6.5	58.6	.....
Vinegar	6	28	(3)	455,402	0.1	227,150	0.2	.....	.....	.....	369.1	.....	.....	272.1	.....	.....
Awnings, tents, and sails	16	108	0.1	428,823	0.1	140,603	0.1	.....	.....	.....	38.4	78.2	.....	53.3	37.3	.....
Salt	3	140	0.2	424,869	0.1	198,021	0.2	−13.6	−5.8	−9.9	4.4	16.0	36.6	3.7	22.4	34.5
All other industries	287	6,753	9.0	84,722,670	23.5	12,534,066	11.6	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 32; a minus sign (−) denotes decrease; percentages are omitted where base is less than 100, or where comparable figures can not be given.
[2] Does not include printing and publishing, music (2 establishments), to avoid disclosing operations of individual establishments.
[3] Less than one-tenth of 1 per cent.

Separate statistics are presented in this table for 44 industries, or industry groups, each of which reported products valued at more than $400,000 in 1914. These industries include 1 with products exceeding $50,000,000 in value, 5 with products between $15,000,000 and $50,000,000, 5 with products between $5,000,000 and $10,000,000, 18 with products between $1,000,000 and $5,000,000, and 15 with products valued at less than $1,000,000 but more than $400,000. Among those included in the table under

"all other industries" are petroleum refining, smelting and refining copper, sugar refining, the manufacture of bags other than paper, the making of cordials and flavoring sirups, each having products valued at more than $1,000,000, and the manufacture of felt goods, with a product of more than $400,000. These 6 industries could not be shown separately without disclosing individual operations.

The industries shown in the table are arranged in the order of their importance by value of products, but the arrangement would vary considerably from that given if based on the average number of wage earners or the value added by manufacture. Petroleum refining, one of the industries statistics for which can not be shown, ranked first in the state in the value of its products, while copper smelting and refining ranked among the first 10 industries. Slaughtering and meat packing, which ranked second in value of products, was fifth in average number of wage earners and fourth in value added by manufacture. Cottonseed oil and cake ranked third in value of products, fourth in average number of wage earners, and fifth in value added by manufacture. Flour-mill and gristmill products, fourth in value of products, held seventh place in value added by manufacture and twelfth in average number of wage earners. Lumber and timber products, fifth in value of products, was first in both average number of wage earners and value added by manufacture. The rank of the slaughtering and meat-packing and flour and grist mill industries in average number of wage earners and value added by manufacture is much lower in proportion to the value of the product than is the case with most other industries.

Compared with the ranking in 1909, there were a number of changes in 1914. Petroleum refining, which ranked fifth as measured by value of products in 1909, advanced to first place in 1914, slaughtering and meat packing dropping to second; oil, cottonseed, and cake, holding fourth place in 1909, held third in 1914; flour-mill and gristmill products and lumber and timber products, ranking second and third, respectively, in 1909, ranked fourth and fifth in 1914; steam-railroad repair shops, the manufacture of foundry products, and of malt liquors are the only industries among the 10 most important that held the same rank in both census years—sixth, ninth, and tenth, respectively.

The greatest relative increases in value of products from 1909 to 1914 were shown for fertilizers, 1,019.3 per cent; shipbuilding, wooden, including boat building, 523.7 per cent; vinegar, 369.1 per cent; and butter 245.6 per cent.

Petroleum, refining.—This, the most important industry in Texas in 1914 with respect to value of products, represented more than one-eighth of the total petroleum refined in the United States in that year. The principal products were gasoline; illuminating, fuel, and lubricating oils; greases; and paraffin wax. The figures, however, can not be shown without disclosing the operations of individual establishments.

Slaughtering and meat packing.—This classification includes establishments doing wholesale slaughtering and meat packing and those engaged in the manufacture of sausage exclusively. It does not, however, include the numerous retail establishments where a large number of animals are slaughtered for local trade. At the 1914 census 18 establishments were engaged in slaughtering and meat packing and 3 in the making of sausage. During the five-year period 1909–1914 the total value of products of this industry shows an increase of $10,460,254, or 24.6 per cent, while the average number of wage earners decreased by 148, or 4.1 per cent.

Oil, cottonseed, and cake.—The statistics include those for all establishments engaged primarily in extracting oil from cotton seed or refining crude cottonseed oil. Texas ranked first in the manufacture of cottonseed oil. In 1914 it contributed 19.8 per cent of the total value of cottonseed products reported for the United States, as compared with 20.2 per cent in 1909. From 1909 to 1914 the number of wage earners increased by 45.5 per cent and the value of products by 40.2 per cent.

Flour-mill and gristmill products.—This industry does not include custom mills grinding exclusively for toll or local consumption, or factories making fancy cereals or breakfast foods as a chief product. There were increases in number of wage earners and value of products during the five-year period, but a decrease in number of establishments. The value of the products of this industry formed 9.7 per cent of the total for all manufactures of the state, a slightly smaller proportion than in 1909, when it was 11.9 per cent.

Lumber and timber products.—This industry embraces not only logging operations, sawmills, and planing mills, but also includes the manufacture of wooden packing boxes and window and door screens and weather strips. As compared with 1909, a decrease of 26.5 per cent in number of establishments is shown in 1914, 15.1 per cent in number of wage earners, 10.7 per cent in value of products, and 19.3 per cent in value added by manufacture. These decreases are due to a depression in the industry and also, to some extent, to the fact that some of the smaller mills reported as engaged in merchant sawing in 1909 were doing only custom work in 1914 and, therefore, were not enumerated.

Cars and general shop construction and repairs by steam-railroad companies.—This industry represents the work done in the car shops of steam-railroad companies and is largely confined to repairs to rolling stock and equipment. It does not include minor repairs made in roundhouses. The value of the product is the value of the work performed, and this increased from $13,358,948 in 1909 to $15,276,387 in 1914, or 14.4 per

cent. The average number of wage earners employed increased by 11.6 per cent for the five year period 1909 to 1914.

Printing and publishing.—All establishments primarily engaged in printing and publishing newspapers, periodicals, and books, job printing, bookbinding and blank-book making, lithographing, and engraving are included under this head. Two establishments engaged in printing and publishing music are excluded in order to avoid disclosure of individual operations. There were 1,188 establishments reported for the industry in 1914, an increase of 11.3 per cent over 1909, while the value of products increased 29.9 per cent.

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."

In 1914 the total number of persons engaged in manufactures was 91,114, of whom 74,853, or 82.2 per cent, were wage earners; 8,540, or 9.4 per cent, proprietors and officials; and 7,721, or 8.5 per cent, clerks. Of the wage earners 16 years of age and over 94.3 per cent were males and 5.7 per cent were females.

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Total.	Male.	Female.	Per cent of total. Male.	Female.
All classes	1914	91,114	85,700	5,414	94.1	5.9
	1909	84,575	79,696	4,879	94.2	5.8
Proprietors and officials	1914	8,540	8,359	181	97.9	2.1
	1909	7,911	7,763	148	98.1	1.9
Proprietors and firm members	1914	4,787	4,638	149	96.9	3.1
	1909	4,496	4,373	123	97.3	2.7
Salaried officers of corporations	1914	1,124	1,109	15	98.7	1.3
	1909	940	929	11	98.8	1.2
Superintendents and managers	1914	2,629	2,612	17	99.4	0.6
	1909	2,475	2,461	14	99.4	0.6
Clerks and other subordinate salaried employees	1914	7,721	6,794	927	88.0	12.0
	1909	6,434	5,808	626	90.3	9.7
Wage earners (average number)	1914	74,853	70,547	4,306	94.2	5.8
	1909	70,230	66,125	4,105	94.2	5.8
16 years of age and over	1914	74,315	70,076	4,239	94.3	5.7
	1909	68,974	65,092	3,882	94.4	5.6
Under 16 years of age	1914	538	471	67	87.5	12.5
	1909	1,256	1,033	223	82.2	17.8

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	7.7	7.5	11.0	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	8.0	7.7	22.3	9.4	9.4	9.8	9.7	3.3	3.0
Proprietors and firm members	6.5	6.0	21.1	5.3	5.3	5.4	5.5	2.8	2.5
Salaried officers of corporations	19.6	19.4	(2)	1.2	1.1	1.3	1.2	0.3	0.2
Superintendents and managers	6.2	6.1	(2)	2.9	2.9	3.0	3.1	0.3	0.3
Clerks and other subordinate salaried employees	20.0	17.0	48.1	8.5	7.6	7.9	7.3	17.1	12.8
Wage earners (average number)	6.6	6.7	4.9	82.2	83.0	82.3	83.0	79.5	84.1
16 years of age and over	7.7	7.6	9.2	81.6	81.5	81.8	81.7	78.3	79.6
Under 16 years of age	−57.2	−54.4	−70.0	0.6	1.5	0.5	1.3	1.2	4.6

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

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

This table shows increases for the five-year period in the number of employees in each of the classes except wage earners under 16 years of age; this class, however, was small, 538, or six-tenths of 1 per cent of the total number of persons engaged in 1914, and 1,256, or 1.5 per cent, in 1909. Wage earners over 16 years of age formed by far the largest class, 81.6 per cent of the total persons engaged in manufacturing industries in 1914 and 81.5 per cent in 1909.

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

The number of employees in each class shows an increase at each successive census, the larger percentages of increase being shown for the five-year period 1904–1909. A slight increase is shown in the proportion of salaried employees in 1914 as compared with 1909, and a slight decrease in the number of proprietors, probably accounted for by changes in organization.

Table 5

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Number. 1914	1909	1904	Per cent distribution. 1914	1909	1904	Per cent of increase. 1909–1914	1904–1909
Total	91,114	84,575	57,892	100.0	100.0	100.0	7.7	46.1
Proprietors and firm members	4,787	4,496	3,073	5.3	5.3	5.3	6.5	46.3
Salaried employees	11,474	9,849	5,753	12.6	11.6	9.9	16.5	71.2
Wage earners (average)	74,853	70,230	49,066	82.2	83.0	84.8	6.6	43.1

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, are given in Table 6 for 1914, 1909, and 1904. The table also shows for some of the important industries a similar distribution of wage earners for 1914 and 1909.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS.			
		Average number.[1]	Per cent of total.		
			16 years of age and over.		Under 16 years of age.
			Male.	Female.	
All industries	1914	74,853	93.6	5.7	0.7
	1909	70,230	92.7	5.5	1.8
	1904	49,066	93.3	5.1	1.7
Bread and other bakery products	1914	1,949	80.7	17.0	2.3
	1909	1,391	71.2	25.7	3.0
Brick, tile, pottery, and other clay products.	1914	1,811	98.8	.....	1.2
	1909	2,355	98.0	.....	2.0
Cars and general shop construction and repairs by electric-railroad companies.	1914	583	100.0	.....	.....
	1909	230	100.0	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	10,915	100.0	(2)	(2)
	1909	9,782	99.9	(2)	(2)
Cement	1914	583	100.0	.....	.....
	1909	362	100.0	.....	.....
Clothing, men's	1914	1,062	7.0	93.0	.....
	1909	992	8.1	88.7	3.2
Confectionery	1914	773	54.1	45.4	0.5
	1909	717	51.2	44.3	4.5
Copper, tin, and sheet-iron work	1914	728	98.4	.....	1.6
	1909	733	97.5	.....	2.5
Cotton goods	1914	1,875	64.3	32.4	3.3
	1909	1,590	53.1	32.7	14.2
Flour-mill and gristmill products	1914	1,300	99.9	0.1	.....
	1909	1,216	99.3	0.2	0.4
Foundry and machine-shop products	1914	3,036	99.3	0.3	0.4
	1909	2,925	99.2	0.1	0.8
Furniture and refrigerators	1914	595	97.3	2.4	0.3
	1909	701	95.5	2.2	2.3
Gas, illuminating and heating	1914	613	99.7	0.2	0.2
	1909	575	100.0	.....	.....
Ice, manufactured	1914	1,926	98.3	.....	1.7
	1909	1,437	99.4	0.1	0.5
Leather goods	1914	640	97.3	2.3	0.3
	1909	721	97.1	1.7	1.2
Liquors, malt	1914	958	100.0	.....	.....
	1909	765	99.9	0.1	.....
Lumber and timber products	1914	19,956	99.5	0.3	0.2
	1909	23,518	98.5	0.2	1.3
Mineral and soda waters	1914	545	93.0	1.3	5.7
	1909	400	95.0	1.1	4.0
Oil, cottonseed, and cake	1914	4,471	99.8	0.2	.....
	1909	3,073	99.9	0.1	.....
Printing and publishing	1914	4,690	84.8	11.6	3.6
	1909	4,408	80.3	13.9	5.8
Slaughtering and meat packing	1914	3,491	91.8	7.9	0.3
	1909	3,639	91.7	6.4	1.9
Turpentine and rosin	1914	809	96.8	.....	3.2
	1909	219	100.0	.....	.....
All other industries	1914	11,544	90.6	8.8	0.5
	1909	8,481	87.9	10.3	1.8

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

For all industries combined, the proportions which male and female wage earners 16 years of age and over represented of the total show a slight increase during the decade 1904–1914, while that for children under 16 years of age decreased from 1.7 per cent in 1904 to seven-tenths of 1 per cent in 1914.

Of the 22 industries for which separate figures are given in this table, 14 show increases from 1909 to 1914 in the proportion of males and 10 show increases in the proportion of females, while in only 4—gas illuminating and heating; ice, manufactured; mineral and soda waters; and turpentine and rosin—were there increases in the proportions of children under 16 years of age. In one industry—men's clothing—women constituted 93 per cent of the total number of wage earners; in the manufacture of confectionery and cotton goods the female wage earners over 16 years of age were 45.4 per cent and 32.4 per cent, respectively, of the total for the industry. In both of these industries the percentage of women was larger than in 1909, while the proportion of children employed showed a decided decrease. The largest number of children under 16 years of age employed in any industry in 1914 was 171, reported for printing and publishing, but this number was less, both actually and proportionately, than in 1909.

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the 24 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 8 gives percentages of increase from census to census, based on the figures in Table 7, for cities where per cent of increase can be computed.

Of the cities shown in the table, two gave employment to more than 5,000 wage earners, one to more than 4,000, and six other cities to more than 1,000 wage earners each. In every city the proportion of male wage earners 16 years of age and over was greatly in excess of that of females; in fact, there was none having the proportion of males as low as 80 per cent in 1914. Only five cities for which comparative figures are given show a larger proportion of female wage earners over 16 years of age in 1914 than in 1909, but with one exception the number of these wage earners was small. Dallas employed the largest number of females and they formed 18.6 per cent of the total number for the city. The women in this city were for the most part employed in the manufacture of men's clothing, bakery products, bags other than paper, and confectionery. Fort Worth ranks third in the number of female wage earners employed, and they formed 15.1 per cent of the wage earners of the city, and were employed largely in the clothing and confectionery industries.

A majority of the cities show decreases from 1909 to 1914 in both numbers and proportions of wage earners under 16 years of age, the exceptions being Denison, Palestine, Sherman, and Tyler. Four cities reported no wage earners under 16 years of age in 1914.

Table 7

City.	Average number of wage earners in manufacturing industries.												Per cent of total.								
	Total.			16 years of age and over.						Under 16 years of age.			16 years of age and over.						Under 16 years of age.		
				Male.			Female.						Male.			Female.					
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
Abilene	107	.....	.....	94	.....	.....	13	.....	.....	.....	.....	.....	87.9	.....	.....	12.1	.....	.....	.....	.....	.....
Amarillo	311	.....	.....	297	.....	.....	14	.....	.....	.....	.....	.....	95.5	.....	.....	4.5	.....	.....	.....	.....	.....
Austin	891	754	641	830	683	515	57	66	120	4	5	6	93.2	90.6	80.3	6.4	8.8	18.7	0.4	0.7	0.9
Beaumont	1,073	863	.....	1,053	832	.....	12	20	.....	8	11	.....	98.1	96.4	.....	1.1	2.3	.....	0.7	1.3	.....
Brownsville	76	51	.....	71	47	.....	1	4	.....	4	.....	.....	93.4	92.2	.....	1.3	7.8	.....	5.3	.....	.....
Cleburne	886	825	.....	855	820	.....	30	1	.....	1	4	.....	96.5	99.4	.....	3.4	0.1	.....	0.1	0.5	.....
Dallas	5,284	4,882	3,445	4,251	3,889	2,710	981	870	588	52	123	147	80.5	79.7	78.7	18.6	17.8	17.1	1.0	2.5	4.3
Denison	954	833	725	908	795	708	36	37	17	10	1	.....	95.2	95.4	97.7	3.8	4.4	2.3	1.0	0.1	.....
El Paso	2,347	1,752	1,158	2,255	1,556	950	83	143	200	9	53	8	96.1	88.8	82.0	3.5	8.2	17.3	0.4	3.0	0.7
Fort Worth	2,308	2,059	1,423	1,945	1,672	1,299	349	361	106	14	26	18	84.3	81.2	91.3	15.1	17.5	7.4	0.6	1.3	1.3
Galveston	1,410	1,094	761	1,264	940	633	133	124	108	13	30	20	89.6	85.9	83.2	9.4	11.3	14.2	0.9	2.7	2.6
Houston	5,607	5,338	5,056	5,168	4,826	4,750	418	450	249	21	62	57	92.2	90.4	93.9	7.5	8.4	4.9	0.4	1.2	1.1
Laredo	270	213	515	270	202	512	.....	8	3	.....	3	.....	100.0	94.8	99.4	.....	3.8	0.6	.....	1.4	.....
Marshall	1,166	977	.....	1,159	958	.....	6	7	.....	1	12	.....	99.4	98.1	.....	0.5	0.7	.....	0.1	1.2	.....
Palestine	648	745	.....	635	737	.....	6	7	.....	7	1	.....	98.0	98.9	.....	0.9	0.9	.....	1.1	0.1	.....
Paris	513	541	.....	443	478	.....	68	53	.....	2	10	.....	86.4	88.4	.....	13.3	9.8	.....	0.4	1.8	.....
San Angelo	161	115	.....	153	112	.....	6	3	.....	2	.....	.....	95.0	97.4	.....	3.7	2.6	.....	1.2	.....	.....
San Antonio	4,083	3,105	2,457	3,528	2,602	2,204	541	481	205	14	22	48	86.4	83.8	89.7	13.3	15.5	8.3	0.3	0.7	2.0
Sherman	389	273	[1] 307	327	232	[1] 276	55	39	25	7	2	6	84.1	85.0	89.9	14.1	14.3	8.1	1.8	0.7	2.0
Temple	342	366	.....	318	333	.....	24	26	.....	.....	7	.....	93.0	91.0	.....	7.0	7.1	.....	.....	1.9	.....
Texarkana	955	.....	.....	921	.....	.....	20	.....	.....	14	.....	.....	96.4	.....	.....	2.1	.....	.....	1.5	.....	.....
Tyler	506	484	.....	434	442	.....	62	40	.....	10	2	.....	85.8	91.3	.....	12.3	8.3	.....	2.0	0.4	.....
Waco	1,125	1,033	947	977	826	711	138	143	206	10	64	30	86.8	80.0	75.1	12.3	13.8	21.8	0.9	6.2	3.2
Wichita Falls	377	.....	.....	361	.....	.....	3	.....	.....	13	.....	.....	95.8	.....	.....	0.8	.....	.....	3.4	.....	.....

[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 highest percentage of increase during the last five-year period in total number of wage earners, 42.5 per cent, is shown for Sherman; the next highest, 40 per cent, for San Angelo; the third highest, 34 per cent, for El Paso. The greatest percentage of increase during the decade 1904–1914, 102.7 per cent, is shown for El Paso, and the next highest, 85.3 per cent, for Galveston.

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.	
Austin	1904–1914	39.0	61.2	−52.5	.....
	1909–1914	18.2	21.5	−13.6	.....
	1904–1909	17.6	32.6	−45.0	.....
Beaumont	1909–1914	24.3	26.6	.....	.....
Cleburne	1909–1914	7.4	4.3	.....	.....
Dallas	1904–1914	53.4	56.9	66.8	−64.6
	1909–1914	8.2	9.3	12.8	−57.7
	1904–1909	41.7	43.5	48.0	−16.3
Denison	1904–1914	31.6	28.2	111.8	.....
	1909–1914	14.5	14.2	−2.7	.....
	1904–1909	14.9	12.3	117.6	.....
El Paso	1904–1914	102.7	137.4	−58.5	.....
	1909–1914	34.0	44.9	−42.0	.....
	1904–1909	51.3	63.8	−28.5	.....
Fort Worth	1904–1914	62.2	49.7	229.2	.....
	1909–1914	12.1	16.3	−3.3	.....
	1904–1909	44.7	28.7	240.6	.....
Galveston	1904–1914	85.3	99.7	23.1	.....
	1909–1914	28.9	34.5	7.3	.....
	1904–1909	43.8	48.5	14.8	.....
Houston	1904–1914	10.9	8.8	67.9	.....
	1909–1914	5.0	7.1	−7.1	.....
	1904–1909	5.6	1.6	80.7	.....
Laredo	1904–1914	−47.6	−47.3	.....	.....
	1909–1914	26.8	33.7	.....	.....
	1904–1909	−58.6	−60.5	.....	.....
Marshall	1909–1914	19.3	21.0	.....	.....
Palestine	1909–1914	−13.0	−13.8	.....	.....
Paris	1909–1914	−5.2	−7.3	.....	.....
San Angelo	1909–1914	40.0	36.6	.....	.....
San Antonio	1904–1914	66.2	60.1	163.9	.....
	1909–1914	31.5	35.6	12.5	.....
	1904–1909	26.4	18.1	134.6	.....
Sherman	1904–1914	26.7	18.5	.....	.....
	1909–1914	42.5	40.9	.....	.....
	1904–1909	−11.1	−15.9	.....	.....
Temple	1909–1914	−6.6	−4.5	.....	.....
Tyler	1909–1914	4.5	−1.8	.....	.....
Waco	1904–1914	18.8	37.4	−33.0	.....
	1909–1914	8.9	18.3	−3.5	.....
	1904–1909	9.1	16.2	−30.6	.....

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

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 9

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number.[1]			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January	76,993	68,563	49,280	100.0	90.6	92.7
February	75,559	66,485	48,023	98.1	87.9	90.3
March	74,217	68,082	47,847	96.4	90.0	90.0
April	73,261	67,772	46,719	95.2	89.6	87.9
May	72,219	66,079	46,818	93.8	87.4	88.1
June	73,078	68,037	46,712	94.9	89.9	87.6
July	75,779	69,153	47,209	98.4	91.4	88.8
August	76,587	69,192	47,982	99.5	91.5	90.2
September	76,983	73,196	50,263	100.0	96.8	94.5
October	75,588	75,291	52,849	98.2	99.5	99.4
November	73,654	75,648	53,166	95.7	100.0	100.0
December	74,318	75,258	51,924	96.5	99.5	97.7

[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.

In 1914, January shows the highest average number of wage earners, practically the same number being reported for September also. The minimum number was reported for May, and formed 93.8 per cent of the number shown for January. In 1909 and 1904 the month of maximum employment was November, and the months of minimum employment, May and June, respectively. The greatest difference between the maximum and minimum numbers in any one of the three census years, was 9,569, shown for 1909.

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 24 cities having more than 10,000 inhabitants.

Table 10

WAGE EARNERS: 1914.
[Month of maximum employment for each industry and city 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	74,853	**76,993**	75,559	74,217	73,261	*72,219*	73,078	75,779	76,587	76,983	75,588	73,654	74,318	93.8
Bread and other bakery products	1,949	*1,883*	1,927	1,940	1,950	1,895	1,923	1,946	**2,054**	1,959	1,977	1,954	1,980	91.7
Brick, tile, pottery, and other clay products	1,811	1,802	1,803	1,947	2,018	2,008	2,025	**2,044**	1,999	1,679	1,592	1,445	*1,370*	67.0
Cars and general shop construction and repairs by electric-railroad companies	583	606	643	606	569	599	**648**	581	557	548	570	537	*532*	82.1
Cars and general shop construction and repairs by steam-railroad companies	10,915	11,118	11,015	10,998	10,641	*10,410*	10,545	10,987	**11,190**	11,163	11,085	10,832	10,996	93.0
Cement	583	527	*436*	468	519	474	**720**	714	692	651	648	541	606	60.6
Clothing, men's	1,062	1,125	**1,155**	1,150	**1,155**	1,104	1,111	1,077	1,080	986	982	*903*	916	78.2
Confectionery	773	733	781	788	768	760	737	*730*	766	791	806	**809**	807	90.2
Copper, tin, and sheet-iron work	728	709	703	706	738	744	**765**	752	746	747	719	*691*	716	90.3
Cotton goods	1,875	1,812	*1,811*	1,839	1,873	1,839	1,846	1,888	1,910	1,867	1,943	1,912	**1,960**	92.4
Flour-mill and gristmill products	1,300	1,307	1,288	1,261	*1,246*	1,271	1,285	1,314	**1,379**	1,355	1,308	1,295	1,291	90.4
Foundry and machine-shop products	3,036	3,191	3,166	3,218	3,304	**3,342**	3,174	3,162	3,076	2,940	2,702	2,585	*2,572*	77.0
Furniture and refrigerators	595	705	739	**743**	711	680	662	660	611	423	418	*388*	400	52.2
Gas, illuminating and heating	613	559	*516*	549	550	591	569	626	620	582	685	718	**791**	65.2
Ice, manufactured	1,926	1,250	1,278	1,425	1,808	2,202	2,635	**2,810**	2,761	2,530	1,855	1,365	*1,195*	42.5
Leather goods	640	720	709	692	626	650	656	669	579	515	*480*	560	**824**	62.5
Liquors, malt	958	*859*	885	892	917	987	1,018	**1,094**	1,059	1,019	1,008	891	867	78.5
Lumber and timber products	19,956	20,892	20,816	20,597	20,712	20,385	20,346	**21,536**	21,190	19,247	18,192	*17,524*	18,035	81.4
Marble and stone work	464	471	455	484	476	**492**	486	476	459	469	449	434	*415*	84.3
Oil, cottonseed, and cake	4,471	6,240	4,821	2,991	1,828	1,344	*1,297*	1,678	3,018	6,916	7,801	**7,958**	7,760	16.3
Printing and publishing	4,690	**4,738**	4,656	4,704	4,707	4,727	4,692	4,699	*4,620*	4,641	4,709	4,680	4,707	97.5
Rice, cleaning and polishing	345	488	**502**	415	416	259	140	*131*	160	334	376	447	472	26.1
Slaughtering and meat packing	3,491	3,660	3,812	**3,867**	3,622	3,368	3,172	3,171	*2,945*	3,146	3,618	3,789	3,722	76.2
Turpentine and rosin	809	**862**	794	803	791	818	826	848	**862**	828	756	*731*	789	84.8
Wood preserving	350	430	389	411	**433**	346	283	373	340	*271*	302	291	331	62.6
All other industries	10,930	10,306	10,459	10,723	10,881	10,924	11,517	11,813	**11,914**	11,376	10,607	10,374	*10,266*	86.2
Total for cities	31,789	**32,552**	32,308	31,902	31,721	31,604	31,354	32,128	32,121	32,038	31,520	*30,831*	31,389	94.7
ABILENE	107	112	110	98	111	100	114	*90*	96	104	107	113	**129**	69.8
AMARILLO	311	315	302	307	298	321	*278*	308	**323**	322	323	318	317	86.1
AUSTIN	891	935	942	**952**	858	855	879	859	*853*	906	912	861	880	89.6
BEAUMONT	1,073	1,158	**1,195**	1,190	1,180	*991*	1,035	1,029	1,013	*991*	1,038	1,002	1,054	82.9
BROWNSVILLE	76	66	*63*	65	70	70	87	78	**89**	88	87	84	65	70.8
CLEBURNE	886	891	915	854	878	859	868	877	*827*	906	919	902	**936**	88.4
DALLAS	5,284	5,433	5,479	**5,570**	5,537	5,506	5,432	5,439	5,383	4,981	4,922	*4,786*	4,940	85.9
DENISON	954	832	841	812	832	*773*	864	1,111	1,078	**1,154**	1,059	1,057	1,035	67.0
EL PASO	2,347	2,269	2,256	2,312	2,402	**2,465**	2,397	2,393	2,413	2,387	2,342	*2,249*	2,279	91.2
FORT WORTH	2,308	2,280	2,259	2,326	2,369	2,356	2,361	2,388	**2,401**	2,314	2,274	*2,158*	2,210	89.9
GALVESTON	1,410	1,417	1,391	1,346	*1,345*	1,407	1,403	1,427	1,425	**1,487**	1,432	1,405	1,435	90.5
HOUSTON	5,607	6,037	5,774	5,520	5,582	5,790	5,576	5,550	5,560	5,619	5,519	*5,318*	5,439	88.1
LAREDO	270	269	265	276	297	**300**	296	264	255	249	273	251	*245*	81.7
MARSHALL	1,166	1,188	1,178	1,197	1,171	1,119	*1,104*	**1,131**	1,144	1,165	1,180	**1,211**	1,204	91.2
PALESTINE	648	704	765	687	489	*386*	443	583	700	784	**800**	673	762	48.3
PARIS	513	527	**594**	507	532	536	*462*	555	488	474	471	467	543	77.8
SAN ANGELO	161	147	*142*	146	154	170	**179**	176	174	178	154	154	158	79.3
SAN ANTONIO	4,083	4,114	4,082	4,021	3,960	*3,946*	3,985	4,146	**4,226**	4,131	4,148	4,146	4,091	93.4
SHERMAN	389	382	408	424	371	374	384	453	412	382	*327*	373	378	72.2
TEMPLE	342	387	324	*288*	292	303	311	320	339	**415**	374	376	375	69.4
TEXARKANA	955	1,030	**977**	1,053	1,032	**1,079**	917	873	928	883	*818*	955	915	75.8
TYLER	506	*472*	516	512	**526**	502	503	517	499	524	507	480	514	89.7
WACO	1,125	**1,219**	1,173	1,102	1,097	*1,063*	1,110	1,125	1,106	1,199	1,123	1,103	1,080	87.2
WICHITA FALLS	377	368	357	337	338	*333*	366	**436**	389	395	411	389	405	76.4

Of the industries shown in Table 10, oil, cotton seed and cake and rice, cleaning and polishing show the greatest fluctuation in number of wage earners reported, but as these are seasonal industries this fluctuation is not abnormal. The greatest stability of employment is shown for printing and publishing, while steam-railroad repair shops ranked second in this respect. For each of five other industries, bread and other bakery products, cotton goods, copper, tin, and sheet-iron work, confectionery, and flour-mill and gristmill products the fluctuation was less than 10 per cent.

San Antonio, the largest city in Texas, shows the greatest stability of employment, the least number employed representing 93.4 per cent of the greatest. In El Paso, Galveston, and Marshall, the minimum number employed was in each case more than 90 per cent of the maximum. In three other cities, Abilene, Denison, and Temple, the corresponding percentages were less than 70. Palestine shows the greatest fluctuation, the percentage that the minimum number formed of the maximum for this city being only 48.3, due largely to the curtailment of work during April, May, and June in the railroad repair shops of the town.

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, 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 smaller number of hours.

Table 11

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	74,853	12,374	1,684	16,633	2,765	28,679	5,577	4,693	2,448
	1909	70,230	6,575	1,856	12,945	2,981	30,583	8,318	4,188	2,784
Bread and other bakery products	1914	1,949	179	21	422	94	1,030	155	23	25
	1909	1,391	60	6	125	11	882	201	56	50
Brick, tile, pottery, and other clay products	1914	1,811	138	27	174	44	1,428	.....	.....	.....
	1909	2,355	20	31	222	43	1,907	128	4	.....
Cars and general shop construction and repairs by electric-railroad companies.	1914	583	92	11	15	7	131	159	.....	168
	1909	230	34	.....	.....	.....	89	106	.....	1
Cars and general shop construction and repairs by steam-railroad companies.	1914	10,915	4,727	130	3,180	.....	1,151	1,727	.....	.....
	1909	9,782	1,009	153	5,092	727	1,727	1,067	.....	7
Cement	1914	583	.....	.....	.....	.....	141	286	.....	156
	1909	362	.....	.....	.....	.....	38	.....	.....	324
Clothing, men's	1914	1,062	788	28	131	.....	115	.....	.....	.....
	1909	992	521	155	83	22	211	.....	.....	.....
Confectionery	1914	773	15	114	215	233	186	.....	10	.....
	1909	717	22	2	64	72	545	12	.....	.....
Copper, tin, and sheet-iron work	1914	728	467	23	159	10	68	1	.....	.....
	1909	733	461	.....	197	.....	74	.....	1	.....
Cotton goods	1914	1,875	.....	.....	170	.....	1,338	367	.....	.....
	1909	1,590	.....	.....	.....	.....	397	1,193	.....	.....
Flour-mill and gristmill products	1914	1,300	22	1	103	94	475	161	438	6
	1909	1,216	108	.....	2	.....	281	200	625	.....
Foundry and machine-shop products	1914	3,036	147	316	2,160	139	260	.....	.....	14
	1909	2,925	50	283	1,772	35	773	4	8	.....
Furniture and refrigerators	1914	595	171	4	252	.....	168	.....	.....	.....
	1909	701	17	.....	480	21	183	.....	.....	.....
Gas, illuminating and heating	1914	613	6	.....	141	7	89	318	.....	52
	1909	575	10	.....	33	65	186	134	45	102
Ice, manufactured	1914	1,926	12	.....	39	75	167	445	280	908
	1909	1,437	36	16	.....	46	121	97	181	940
Leather goods	1914	640	9	4	523	42	62	.....	.....	.....
	1909	721	6	1	32	382	300	.....	.....	.....
Liquors, malt	1914	958	851	53	.....	.....	4	50	.....	.....
	1909	765	273	.....	24	466	2	.....	.....	.....
Lumber and timber products	1914	19,956	376	406	965	346	16,625	1,120	12	106
	1909	23,518	632	355	784	315	16,961	4,471	.....	.....
Marble and stone work	1914	464	251	29	149	13	13	9	.....	.....
	1909	605	333	59	110	37	66	.....	.....	.....
Oil, cottonseed, and cake	1914	4,471	.....	.....	18	63	341	280	3,736	33
	1909	3,073	33	.....	.....	.....	206	110	2,565	159
Printing and publishing	1914	4,690	2,946	204	923	332	261	22	2	.....
	1909	4,408	2,191	608	759	320	497	29	4	.....

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.
Rice, cleaning and polishing	1914	345	16	18	.....	.....	37	153	121	.....
	1909	430	.....	.....	.....	.....	164	160	106	.....
Slaughtering and meat packing	1914	3,491	21	57	2,697	.....	714	2	.....	.....
	1909	3,639	9	.....	1,631	.....	1,949	.....	.....	50
Turpentine and rosin	1914	809	.....	.....	.....	.....	809	.....	.....	.....
	1909	219	100	.....	.....	.....	119	.....	.....	.....
Wood preserving	1914	350	.....	.....	.....	.....	350	.....	.....	.....
	1909	417	15	.....	.....	.....	363	39	.....	.....
All other industries	1914	10,930	1,140	238	4,197	1,266	2,716	322	71	980
	1909	7,429	635	187	1,535	419	2,542	367	593	1,151
Total for cities	1914	31,789	9,869	1,396	9,304	956	5,496	2,627	1,305	836
ABILENE	1914	107	30	5	.....	.....	30	18	24	.....
AMARILLO	1914	311	35	.....	39	1	200	22	11	3
AUSTIN	1914	891	274	.....	136	114	92	39	60	176
BEAUMONT	1914	1,073	92	29	331	26	460	100	35	.....
BROWNSVILLE	1914	76	.....	.....	24	2	7	14	25	4
CLEBURNE	1914	886	26	6	51	6	9	757	16	15
DALLAS	1914	5,284	988	643	2,146	62	1,075	116	141	113
DENISON	1914	954	808	.....	42	.....	19	44	11	30
EL PASO	1914	2,347	763	36	812	105	424	129	15	63
FORT WORTH	1914	2,308	984	173	280	119	519	158	43	32
GALVESTON	1914	1,410	544	42	315	142	132	221	1	13
HOUSTON	1914	5,607	1,288	165	2,776	59	742	131	382	64
LAREDO	1914	270	13	.....	9	.....	209	18	.....	21
MARSHALL	1914	1,166	889	.....	186	8	59	.....	24	.....
PALESTINE	1914	648	561	.....	10	.....	27	32	18	.....
PARIS	1914	513	80	4	72	.....	235	10	66	46
SAN ANGELO	1914	161	73	.....	31	7	26	24	.....	.....
SAN ANTONIO	1914	4,083	1,347	223	1,528	167	291	328	117	82
SHERMAN	1914	389	94	.....	32	14	97	56	85	11
TEMPLE	1914	342	45	7	74	.....	17	114	60	25
TEXARKANA	1914	955	78	57	25	3	490	202	44	56
TYLER	1914	506	444	.....	8	.....	14	.....	18	22
WACO	1914	1,125	262	6	336	121	188	60	92	60
WICHITA FALLS	1914	377	151	.....	41	.....	134	34	17	.....

The figures in this table, for the state as a whole and for the selected industries, emphasize the tendency toward a shorter working day for wage earners. In 1909, 45,873, or nearly two-thirds 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 only 41,397, or a little more than one-half, were so employed in 1914. On the other hand, the number of wage earners in establishments where the prevailing hours were 54 or less per week increased from 21,376, or more than three-tenths of the total for the state in 1909, to 30,691, or more than two-fifths of the total in 1914.

Among the separate industries, the steam-railroad repair shops and breweries, show the greatest decrease in hours of labor. In 1909, in these industries the wage earners in establishments where the prevailing working hours were less than 54 per week formed 11.9 per cent and 35.7 per cent, of the total, respectively, but in 1914 these proportions had increased to 44.5 and 94.4, respectively.

Five industries in 1914—clothing, men's; copper, tin, and sheet-iron work; liquors, malt; marble and stone work; and printing and publishing—show a majority of the wage earners employed less than 54 hours a week; while six industries—electric-railroad repair shops, cleaning and polishing rice, and the manufacture of cement, gas, ice, and cottonseed oil and cake—show a majority employed more than 60 hours per week.

Of the combined total average number of wage earners for the 24 cities—31,789—in 1914, 20,569 or 64.7 per cent, were in establishments where the prevailing hours were 54 or less per week, while only 4,768, or 15 per cent, were in establishments in which the hours of labor were over 60 per week. For the three largest cities, the greatest number of wage earners was reported by those establishments where the prevailing hours of labor were 54 per week, these wage earners with those working shorter hours together formed more than 70 per cent of the total for each city. In Denison, Marshall, Palestine, and Tyler, the greatest proportion of wage earners were employed 48 hours or less per week, these proportions being 84.7, 76.2, 86.6, and 87.7 per cent, respectively.

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

In accepting the statistics in this table, it must be remembered that Brownsville, Cleburne, Marshall, San Angelo, and Temple, each having a population of 10,000 or more in 1909, were included with the outside

districts in 1904, and that Abilene, Amarillo, Texarkana, and Wichita Falls, each having a population of 10,000 and over at the census of 1914, were included with the outside districts at prior censuses. The table shows that in 1914 the 24 cities, which represent 18.8 per cent of the estimated population of the state, reported 40.7 per cent of the total number of establishments, 42.5 per cent of the average number of wage earners, 49.8 per cent of the total value added by manufacture, and 38.7 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.		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	24	24	.....	15	.....	6	.....	3	.....	.....	.....
	1910	20	20	.....	12	.....	8	.....	.....	.....	.....	.....
	1900	11	11	.....	6	.....	5	.....	.....	.....	.....	.....
Population [1]	1914	4,257,854	801,465	18.8	[2]188,981	4.4	281,398	6.6	331,086	7.8	3,456,389	81.2
	1910	3,896,542	620,712	15.9	147,337	3.8	473,375	12.1	.....	.....	3,275,830	84.1
	1900	3,048,710	299,398	9.8	94,329	3.1	205,069	6.7	.....	.....	2,749,312	90.2
Number of establishments	1914	5,084	2,071	40.7	425	8.4	719	14.1	927	18.2	3,013	59.3
	1909	4,588	1,614	35.2	350	7.6	1,264	27.6	.....	.....	2,974	64.8
	1899	3,107	879	28.3	276	8.9	603	19.4	.....	.....	2,228	71.7
Average number of wage earners	1914	74,853	31,789	42.5	7,661	10.2	9,154	12.2	14,974	20.0	43,064	57.5
	1909	70,230	26,303	37.5	6,286	9.0	20,017	28.5	.....	.....	43,927	62.5
	1899	38,604	14,647	37.9	3,569	9.2	11,078	28.7	.....	.....	23,957	62.1
Value of products	1914	$361,279,303	$139,929,138	38.7	$26,171,984	7.2	$38,974,831	10.8	$74,782,323	20.7	$221,350,165	61.3
	1909	272,895,635	109,559,057	40.1	19,928,547	7.3	89,630,510	32.8	.....	.....	163,336,578	59.9
	1899	92,894,433	37,036,229	39.9	6,904,458	7.4	30,131,771	32.4	.....	.....	55,858,204	60.1
Value added by manufacture	1914	108,135,042	53,802,642	49.8	8,989,694	8.3	15,814,566	14.6	28,998,382	26.8	54,332,400	50.2
	1909	94,717,120	42,844,970	45.2	7,074,911	7.5	35,770,059	37.8	.....	.....	51,872,150	54.8
	1899	38,506,130	16,410,242	42.6	2,994,238	7.8	13,416,004	34.8	.....	.....	22,095,888	57.4

[1] Census estimate of population for 1914.
[2] The population as returned at the census of 1910 is used for San Angelo in 1914. Since that city was incorporated in 1903 no figures for 1900 are available for an estimate of population in 1914.

Dallas, Houston, and San Antonio, each having a population of more than 100,000 in 1914, reported one-fifth of all the wage earners employed in the state and over one-fifth of the total value of products. The 6 cities having a population between 25,000 and 100,000 reported more than one-tenth of the wage earners and value of products. Comparing the two groups mentioned with the larger group for 1909 shows an increase of more than 25 per cent in the value of products.

The relative importance in manufactures of each of the 24 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. Those for which comparative figures are not shown for 1909 and 1904 had fewer than 10,000 inhabitants in those years.

The greatest relative gain in value of products shown from 1909 to 1914—68.7 per cent—appears for El Paso. Next in order are Paris, Denison, San Angelo, Laredo, and Sherman, with 59.7, 57.5, 57, 56, and 50.3 per cent, respectively.

The greatest actual increase—$4,414,343—is shown for San Antonio. The cities held the same or nearly the same rank in 1914 as in 1909. El Paso moved up from ninth place in 1909 to seventh in 1914 and Paris from thirteenth to twelfth, while Marshall dropped from eleventh in 1909 to fourteenth in 1914.

Table 13

City.	Average number of wage earners.			Value of products.		
	1914	1909	1904	1914	1909	1904
Dallas	5,284	4,882	3,445	$31,065,073	$26,958,664	$15,627,668
Houston	5,607	5,338	5,056	25,868,010	23,015,556	13,564,019
San Antonio	4,083	3,105	2,457	17,849,240	13,434,897	7,402,262
Fort Worth	2,308	2,059	1,423	9,973,882	8,660,882	5,668,391
Galveston	1,410	1,094	761	8,691,969	6,308,076	2,996,654
Sherman	389	273	307	7,027,747	4,675,971	2,641,086
El Paso	2,347	1,752	1,158	6,135,214	3,637,577	2,377,813
Waco	1,125	1,033	947	5,611,737	4,769,358	2,979,800
Beaumont	1,073	863	732	5,191,055	4,830,591	2,609,829
Austin	891	754	641	3,370,974	2,845,500	1,569,353
Wichita Falls	377	.....	.....	2,572,785	.....	.....
Paris	513	541	210	2,283,875	1,429,943	854,930
Cleburne	886	825	.....	2,246,263	1,576,572	.....
Marshall	1,166	977	.....	2,099,355	1,787,146	.....
Denison	954	833	725	2,068,788	1,313,785	1,234,956
Texarkana	955	.....	.....	1,994,009	.....	.....
Temple	342	366	.....	1,451,925	1,345,770	.....
Palestine	648	745	544	1,222,160	1,312,845	735,162
Amarillo	311	.....	.....	986,087	.....	.....
Tyler	506	484	368	896,549	996,243	628,666
San Angelo	161	115	.....	499,148	317,861	.....
Laredo	270	213	515	344,811	221,074	453,974
Abilene	107	.....	.....	311,346	.....	.....
Brownsville	76	51	.....	167,136	120,746	.....

Dallas was the leading city in the state in the value of manufactured products. The principal industries are slaughtering and meat packing, flour milling and gristmilling, printing and publishing, the manufacture of cottonseed oil and cake, foundry and machine-shop products, leather goods, and bread and bakery products. Of these industries the first two and cottonseed oil and cake can not be shown separately without the possibility of disclosing individual operations. Dallas is the center of the leather-goods industry, including the manufacture of saddlery and harness and

trunks, and contributed over one-half of the total value of products for the state in 1914.

The leading industry in Houston in 1914 was the manufacture of cottonseed oil. Other important industries were slaughtering and meat packing, breweries, cleaning and polishing rice, printing and publishing, steam-railroad repair shops, foundries and machine shops, the manufacture of cotton and burlap bags, bread and bakery products, and roasting and grinding coffee. The statistics for slaughtering and meat packing, breweries, steam-railroad repair shops, and cotton and burlap bags can not be shown separately.

San Antonio ranked third in the value of manufactures in 1914, but some of the principal industries—the breweries and the slaughtering and meat-packing industry—can not be shown separately. Other important industries are the manufacture of flour-mill and gristmill products, foundry and machine-shop products, and cottonseed oil and cake.

Fort Worth is the fourth city in value of manufactured products. It should be stated, however, that important slaughtering and meat-packing establishments are located just outside the corporate limits of the city. If these were included in the total for the city, the rank of Fort Worth among the cities of the state in the value of its manufactures would be much higher. The leading industries within the city, named in the order of their importance, are flour mills and gristmills, printing and publishing, steam-railroad repair shops, and butter making.

In 1914 El Paso ranked fifth among the cities of the state in population and seventh in value of manufactures. The leading industries within the corporate limits of the city are steam-railroad repair shops, printing and publishing, wooden packing boxes, roasting and grinding coffee, and foundries and machine shops. Some of these, however, are not shown. The copper smelting works located near the city limits contributed a large amount to the value of the products of the state and reported wage earners equaling one-third of the number reported by establishments within the city limits.

In the remaining cities shown in Table 13, the most important industries in 1914 were the manufacture of flour-mill and gristmill and cottonseed products in Austin, Galveston, Paris, Sherman, and Waco; the steam-railroad repair shops in Cleburne, Denison, Laredo, Marshall, Palestine, San Angelo, and Tyler; the cottonseed-oil industry in Abilene and Temple; the flour-mill and gristmill industry in Amarillo and Wichita Falls; the cleaning and polishing of rice and flour mills in Beaumont; the manufacture of ice in Brownsville; and cooperage in Texarkana.

Character of ownership.—Table 14 presents statistics concerning 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.

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	2,651	1,486	947	74,853	8,569	60,541	5,743	11.4	80.9	7.7	$361,279,303	$24,816,967	$313,703,277	$22,759,059	6.9	86.8	6.3
	1909	2,290	1,352	946	70,230	9,295	54,697	6,238	13.2	77.9	8.9	272,895,635	23,161,308	231,059,361	18,674,966	8.5	84.7	6.8
	1904	1,676	839	643	49,066	7,320	36,905	4,841	14.9	75.2	9.9	150,528,389	16,408,988	120,133,146	13,986,255	10.9	79.8	9.3
Bread and other bakery products.	1914	442	15	73	1,949	1,017	633	299	52.2	32.5	15.3	7,503,298	3,933,192	2,385,990	1,184,116	52.4	31.8	15.8
	1909	324	14	47	1,391	697	554	140	50.1	39.8	10.1	5,310,785	2,817,158	1,821,283	672,344	53.0	34.3	12.7
Flour-mill and gristmill products.	1914	78	71	42	1,300	154	941	205	11.8	72.4	15.8	35,110,301	1,995,021	27,061,885	6,053,395	5.7	77.1	17.2
	1909	81	98	59	1,216	144	892	180	11.8	73.4	14.8	32,484,612	2,585,772	24,926,592	4,972,248	8.0	76.7	15.3
Foundry and machine-shop products.	1914	75	60	42	3,036	457	2,332	247	15.1	76.8	8.1	8,782,481	1,115,496	7,128,438	538,547	12.7	81.2	6.1
	1909	59	54	30	2,925	303	2,446	176	10.4	83.6	6.0	8,067,941	779,857	6,797,188	490,896	9.7	84.2	6.1
Ice, manufactured	1914	36	179	40	1,926	115	1,676	135	6.0	87.0	7.0	5,328,302	267,097	4,629,499	431,706	5.0	86.9	8.1
	1909	37	128	17	1,437	210	1,152	75	14.6	80.2	5.2	3,844,120	519,927	3,074,356	249,837	13.5	80.0	6.5
Leather goods	1914	43	19	25	640	87	432	121	13.6	67.5	18.9	3,567,371	268,897	2,768,158	530,316	7.5	77.6	14.9
	1909	33	19	15	721	117	491	113	16.2	68.1	15.7	4,347,445	384,933	3,347,763	614,749	8.9	77.0	14.1
Lumber and timber products.	1914	286	141	160	19,956	1,693	16,306	1,957	8.5	81.7	9.8	28,740,614	2,473,877	23,446,962	2,819,775	8.6	81.6	9.8
	1909	350	182	267	23,518	3,035	17,245	3,238	12.9	73.3	13.8	32,201,440	3,539,010	24,058,094	4,604,336	11.0	74.7	14.3
Oil, cottonseed, and cake	1914	21	192	20	4,471	353	3,899	219	7.9	87.2	4.9	41,944,689	2,757,792	37,300,135	1,886,762	6.6	88.9	4.5
	1909	17	172	5	3,073	254	2,779	40	8.3	90.4	1.3	29,915,772	2,350,319	27,377,843	187,610	7.9	91.5	0.6
Printing and publishing	1914	774	189	225	4,690	1,463	2,575	652	31.2	54.9	13.9	15,051,269	3,417,858	9,701,286	1,932,125	22.7	64.5	12.8
	1909	678	159	230	4,408	1,297	2,310	801	29.4	52.4	18.2	11,587,255	2,726,781	7,080,296	1,780,178	23.5	61.1	15.4
Total for cities	1914	993	699	379	31,789	4,509	24,504	2,776	14.2	77.1	8.7	139,929,138	14,207,149	110,812,897	14,909,092	10.2	79.2	10.7
Abilene	1914	10	6	2	107	[1] 38	69	.....	[1] 35.5	64.5	.....	311,346	[1] 129,155	182,191	.....	[1] 41.5	58.5	.....
Amarillo	1914	19	7	10	311	44	227	40	14.1	73.0	12.9	986,087	135,955	704,137	145,995	13.8	71.4	14.8
Austin	1914	58	20	36	891	208	493	190	23.3	55.3	21.3	3,370,974	848,436	1,603,512	919,026	25.2	47.6	27.3
Beaumont	1914	24	33	10	1,073	120	884	69	11.2	82.4	6.4	5,191,055	506,679	3,676,681	1,007,695	9.8	70.8	19.4
Brownsville	1914	10	3	1	76	[1] 34	42	.....	[1] 44.7	55.3	.....	167,136	[1] 60,454	106,682	.....	[1] 36.2	63.8	.....

[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.
CLEBURNE	1914	13	10	3	886	[1] 35	851	.....	[1] 4.0	96.0	.....	$2,246,263	[1] $180,015	$2,066,248	.....	[1] 8.0	92.0	.....
DALLAS	1914	193	138	81	5,284	604	4,020	660	11.4	76.1	12.5	31,065,073	1,911,873	25,703,554	$3,449,646	6.2	82.7	11.1
DENISON	1914	15	8	7	954	26	898	30	2.7	94.1	3.1	2,068,788	99,186	1,834,602	135,000	4.8	88.7	6.5
EL PASO	1914	54	43	20	2,347	411	1,797	139	17.5	76.6	5.9	6,135,214	969,758	4,890,626	274,830	15.8	79.7	4.5
FORT WORTH	1914	81	63	36	2,308	326	1,780	202	14.1	77.1	8.8	9,973,882	1,298,353	7,719,095	956,434	13.0	77.4	9.6
GALVESTON	1914	65	32	19	1,410	333	931	146	23.6	66.0	10.4	8,691,969	894,964	7,278,854	518,151	10.3	83.7	6.0
HOUSTON	1914	130	104	42	5,607	583	4,431	593	10.4	79.0	10.6	25,868,010	1,882,598	20,462,935	3,522,477	7.3	79.1	13.6
LAREDO	1914	16	5	7	270	84	144	42	31.1	53.3	15.6	344,811	158,528	123,906	62,377	46.0	35.9	18.1
MARSHALL	1914	8	15	5	1,166	22	1,134	10	1.9	97.3	0.9	2,099,355	46,861	2,027,243	25,251	2.2	96.6	1.2
PALESTINE	1914	11	6	3	648	49	592	7	7.6	91.4	1.1	1,222,160	118,591	1,066,769	36,800	9.7	87.3	3.0
PARIS	1914	17	15	10	513	82	380	51	16.0	74.1	9.9	2,283,875	440,203	1,595,238	248,434	19.3	69.8	10.9
SAN ANGELO	1914	15	8	7	161	48	86	27	29.8	53.4	16.8	499,148	132,651	241,749	124,748	26.6	48.4	25.0
SAN ANTONIO	1914	143	74	22	4,083	846	3,059	178	20.7	74.9	4.4	17,849,240	2,170,367	15,094,563	584,310	12.2	84.5	3.3
SHERMAN	1914	15	15	6	389	46	301	42	11.8	77.4	10.8	7,027,747	160,256	6,739,644	127,847	2.3	95.9	1.8
TEMPLE	1914	13	13	11	342	69	247	26	20.2	72.2	7.6	1,451,925	395,646	980,804	75,475	27.2	67.6	5.2
TEXARKANA	1914	10	16	3	955	186	749	20	19.5	78.4	2.1	1,994,009	284,461	1,676,331	33,217	14.3	84.0	1.7
TYLER	1914	5	8	7	506	12	454	40	2.4	89.7	7.9	896,549	30,937	725,937	139,675	3.4	81.0	15.6
WACO	1914	54	45	26	1,125	260	685	180	23.1	60.9	16.0	5,611,737	1,186,105	3,628,556	797,076	21.1	64.7	14.2
WICHITA FALLS	1914	14	12	5	377	43	250	84	11.4	66.3	22.3	2,572,785	165,117	683,040	1,724,628	6.4	26.5	67.0

[1] Includes the group "all others."

This table shows, for all industries combined, an increase during the decade in the number of establishments in the state for each form of ownership, the greatest increase being for those under individual ownership. In 1914 the number of establishments under corporate ownership represented only 29.2 per cent of the total number of establishments in the state, while the average number of wage earners and value of products of these establishments represented 80.9 and 86.8 per cent of the total, respectively.

For both 1914 and 1909, with the exception of bread and other bakery products, by far the largest proportion of the total value of products for each of the eight industries for which separate statistics are given is shown for establishments under corporate ownership. This condition prevailed also as regards all industries combined in each of the 24 cities except Laredo and Wichita Falls.

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

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	5,084	4,588	3,158	74,853	70,230	49,066	$361,279,303	$272,895,635	$150,528,389	$108,135,042	$94,717,120	$58,924,759
Less than $5,000	2,065	1,746	1,220	2,572	2,646	1,675	5,154,763	4,297,098	2,986,301	3,471,925	2,943,755	2,173,851
$5,000 to $20,000	1,617	1,512	1,003	6,658	7,780	5,307	15,938,725	15,442,319	9,965,884	9,676,621	9,636,311	6,481,730
$20,000 to $100,000	864	868	640	13,454	15,724	12,398	38,649,043	39,117,172	28,587,387	18,093,401	19,593,400	13,725,925
$100,000 to $1,000,000	497	426	278	40,022	34,894	21,438	136,447,043	111,984,740	69,958,763	49,266,767	43,521,809	27,653,294
$1,000,000 and over	41	36	17	12,147	9,186	8,248	165,089,729	102,054,306	39,030,054	27,626,328	19,021,845	8,889,959
	PER CENT DISTRIBUTION.											
All industries	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	40.6	38.1	38.6	3.4	3.8	3.4	1.4	1.6	2.0	3.2	3.1	3.7
$5,000 to $20,000	31.8	33.0	31.8	8.9	11.1	10.8	4.4	5.7	6.6	8.9	10.2	11.0
$20,000 to $100,000	17.0	18.9	20.3	18.0	22.4	25.3	10.7	14.3	19.0	16.7	20.7	23.3
$100,000 to $1,000,000	9.8	9.3	8.8	53.4	49.6	43.7	37.8	41.0	46.5	45.6	45.9	46.9
$1,000,000 and over	0.8	0.8	0.5	16.2	13.1	16.8	45.7	37.4	25.9	25.5	20.1	15.1

Forty-one establishments, or eight-tenths of 1 per cent of the total number in the state, each reported products exceeding $1,000,000 in value in 1914, as compared with 36, or eight-tenths of 1 per cent of the total, in 1909, and 17, or five-tenths of 1 per cent, in 1904. For 1914 these establishments reported 16.2 per cent of the total average number of wage earners for the state; 45.7 per cent of the total value of products; and 25.5 per cent of the total value added by manufacture.

In the same year the small establishments, those having products valued at less than $5,000, although representing 40.6 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 prod-

ucts valued at $100,000 and over. These establishments reported more than three-fifths of the wage earners and an increased proportion of the value of products at each successive census. This proportion was 72.4 per cent in 1904, 78.4 per cent in 1909, and 83.5 per cent in 1914.

Table 16 gives, for 1914 and 1909, for 11 of the more important industries, a classification of the number 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	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
Bread and other bakery products	530	385	100.0	100.0	1,949	1,391	100.0	100.0	$7,503,298	$5,310,785	100.0	100.0	$3,361,461	$2,248,540	100.0	100.0
Less than $5,000	221	163	41.7	42.3	131	93	6.7	6.7	632,186	443,254	8.4	8.3	284,641	192,032	8.5	8.5
$5,000 to $20,000	235	173	44.3	44.9	563	448	28.9	32.2	2,187,017	1,752,040	29.1	33.0	1,002,531	782,056	29.8	34.8
$20,000 to $100,000	69	45	13.0	11.7	689	403	35.4	29.0	2,612,829	1,575,177	34.8	29.7	1,059,848	670,329	31.5	29.8
$100,000 and over [1]	5	4	0.9	1.0	566	447	29.0	32.1	2,071,266	1,540,314	27.6	29.0	1,014,441	604,123	30.2	26.9
Brick, tile, pottery, and other clay products	81	106	100.0	100.0	1,811	2,355	100.0	100.0	2,378,419	3,141,928	100.0	100.0	1,444,636	2,181,103	100.0	100.0
Less than $5,000	18	28	22.2	26.4	62	98	3.4	4.2	48,868	76,946	2.1	2.4	34,608	61,333	2.4	2.8
$5,000 to $20,000	25	32	30.9	30.2	264	405	14.6	17.2	234,970	382,796	9.9	12.2	151,047	269,634	10.5	12.4
$20,000 and over [2]	38	46	46.9	43.4	1,485	1,852	82.0	78.6	2,094,581	2,682,186	88.1	85.4	1,258,981	1,850,136	87.1	84.8
Cars and general shop construction and repairs by steam-railroad companies	63	62	100.0	100.0	10,915	9,782	100.0	100.0	15,276,387	13,358,948	100.0	100.0	9,297,959	7,812,818	100.0	100.0
Less than $20,000 [3]	8	8	12.7	12.9	98	86	0.9	0.9	87,704	93,722	0.6	0.7	59,755	61,183	0.6	0.8
$20,000 to $100,000	19	21	30.2	33.9	640	738	5.9	7.5	843,028	1,039,944	5.5	7.8	524,071	610,285	5.6	7.8
$100,000 and over [1]	36	33	57.1	53.2	10,177	8,958	93.2	91.6	14,345,655	12,225,282	93.9	91.5	8,714,133	7,141,350	93.7	91.4
Flour-mill and gristmill products	191	238	100.0	100.0	1,300	1,216	100.0	100.0	35,110,301	32,484,612	100.0	100.0	5,537,114	3,827,971	100.0	100.0
Less than $5,000	44	55	23.0	23.1	28	39	2.1	3.2	120,014	157,754	0.3	0.5	34,559	33,860	0.6	0.9
$5,000 to $20,000	48	67	25.1	28.2	80	95	6.1	7.8	512,312	729,934	1.5	2.2	113,713	130,859	2.1	3.4
$20,000 to $100,000	41	60	21.5	25.2	123	187	9.5	15.4	1,752,997	2,847,449	5.0	8.8	267,558	365,954	4.8	9.6
$100,000 to $1,000,000	50	48	26.2	20.2	686	570	52.8	46.9	19,727,433	17,034,774	56.2	52.4	2,996,146	1,911,138	54.1	49.9
$1,000,000 and over	8	8	4.2	3.4	383	325	29.5	26.7	12,997,545	11,714,701	37.0	36.1	2,125,138	1,386,160	38.4	36.2
Foundry and machine-shop products	177	143	100.0	100.0	3,036	2,925	100.0	100.0	8,782,481	8,067,941	100.0	100.0	4,761,397	4,208,470	100.0	100.0
Less than $5,000	51	40	28.8	28.0	67	56	2.2	1.9	131,752	109,415	1.5	1.4	98,517	74,981	2.1	1.8
$5,000 to $20,000	66	41	37.3	28.7	324	182	10.7	6.2	667,986	420,361	7.6	5.2	468,654	259,018	9.8	6.2
$20,000 to $100,000	41	45	23.2	31.5	696	941	22.9	32.2	1,740,405	2,095,720	19.8	26.0	1,003,210	1,203,655	21.1	28.6
$100,000 to $1,000,000	19	17	10.7	11.9	1,949	1,746	64.2	59.7	6,242,338	5,442,445	71.1	67.5	3,191,016	2,670,816	67.0	63.5
Ice, manufactured	255	182	100.0	100.0	1,926	1,437	100.0	100.0	5,328,302	3,844,120	100.0	100.0	3,668,772	2,752,277	100.0	100.0
Less than $5,000	52	30	20.4	16.5	94	53	4.9	3.7	160,372	88,011	3.0	2.3	98,970	51,981	2.7	1.9
$5,000 to $20,000	118	89	46.3	48.9	499	422	25.9	29.4	1,233,164	996,416	23.1	25.9	845,778	690,331	23.1	25.1
$20,000 and over [2]	85	63	33.3	34.6	1,333	962	69.2	66.9	3,934,766	2,759,693	73.8	71.8	2,724,024	2,009,965	74.2	73.0
Leather goods	87	67	100.0	100.0	640	721	100.0	100.0	3,567,371	4,347,445	100.0	100.0	1,085,049	1,508,571	100.0	100.0
Less than $5,000	36	10	41.4	14.9	37	15	5.8	2.1	105,251	24,789	3.0	0.6	63,442	16,606	5.8	1.1
$5,000 to $20,000	35	29	40.2	43.3	103	85	16.1	11.8	335,420	304,523	9.4	7.0	169,748	156,002	15.6	10.3
$20,000 to $100,000	8	17	9.2	25.4	70	117	10.9	16.2	304,754	473,920	8.5	10.9	173,241	208,036	16.0	13.8
$100,000 to $1,000,000	8	11	9.2	16.4	430	504	67.2	69.9	2,821,946	3,544,213	79.1	81.5	678,618	1,127,927	62.5	74.8
Lumber and timber products	587	799	100.0	100.0	19,956	23,518	100.0	100.0	28,740,614	32,201,440	100.0	100.0	17,100,884	21,197,137	100.0	100.0
Less than $5,000	247	268	42.1	33.5	763	965	3.8	4.1	603,088	677,573	2.1	2.1	440,358	535,117	2.6	2.5
$5,000 to $20,000	179	277	30.5	34.7	1,364	2,536	6.8	10.8	1,816,379	2,865,585	6.3	8.9	1,223,546	2,167,802	7.2	10.2
$20,000 to $100,000	92	171	15.7	21.4	2,488	5,100	12.5	21.7	4,173,421	7,321,010	14.5	22.7	2,404,893	4,828,209	14.1	22.8
$100,000 and over [1]	69	83	11.7	10.4	15,341	14,917	76.9	63.4	22,147,726	21,337,272	77.1	66.3	13,032,087	13,666,009	76.2	64.5
Oil, cottonseed and cake	233	194	100.0	100.0	4,471	3,073	100.0	100.0	41,944,689	29,915,772	100.0	100.0	5,768,113	6,476,711	100.0	100.0
Less than $20,000 [3]	9	13	3.9	6.7	33	45	0.7	1.5	114,343	185,727	0.3	0.6	20,718	46,674	0.4	0.7
$20,000 to $100,000	75	84	32.2	43.3	804	864	18.0	28.1	5,052,173	5,611,685	12.0	18.8	680,275	1,185,847	11.8	18.3
$100,000 to $1,000,000	143	93	61.4	47.9	3,251	1,905	72.7	62.0	28,321,123	19,283,293	67.5	64.5	4,111,456	4,283,539	71.3	66.1
$1,000,000 and over	6	4	2.6	2.1	383	259	8.6	8.4	8,457,050	4,835,067	20.2	16.2	955,664	960,651	16.6	14.8
Printing and publishing	1,188	1,067	100.0	100.0	4,690	4,408	100.0	100.0	15,051,269	11,587,255	100.0	100.0	11,054,001	8,780,015	100.0	100.0
Less than $5,000	752	684	63.3	64.1	784	853	16.7	19.4	1,785,412	1,599,081	11.9	13.8	1,458,704	1,289,812	13.2	14.7
$5,000 to $20,000	326	304	27.4	28.5	1,258	1,333	26.8	30.2	3,019,565	2,810,953	20.1	24.3	2,425,857	2,255,737	21.9	25.7
$20,000 to $100,000	84	59	7.1	5.5	1,181	918	25.2	20.8	3,297,642	2,498,110	21.9	21.6	2,371,281	1,824,074	21.5	20.8
$100,000 and over [1]	26	20	2.2	1.9	1,467	1,304	31.3	29.6	6,948,650	4,679,111	46.2	40.4	4,798,159	3,410,392	43.4	38.8
Slaughtering and meat packing	21	14	100.0	100.0	3,491	3,639	100.0	100.0	52,990,000	42,529,746	100.0	100.0	8,532,880	5,119,961	100.0	100.0
Less than $100,000 [4]	8	5	38.1	35.7	26	17	0.7	0.5	229,767	58,481	0.4	0.1	39,434	23,774	0.5	0.5
$100,000 to $1,000,000	9	5	42.9	35.7	263	188	7.5	5.2	3,178,127	1,533,664	6.0	3.6	640,286	329,358	7.5	6.4
$1,000,000 and over	4	4	19.0	28.6	3,202	3,434	91.7	94.4	49,582,106	40,937,601	93.6	96.3	7,853,160	4,766,829	92.0	93.1

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

Four of the industries, foundry and machine-shop products, manufactured ice, leather goods, and lumber and timber products, show a larger proportion of establishments in the class having a value of products less

than $5,000 in 1914 than in 1909. The proportion of average number of wage earners, value of products, and value added by manufacture in this class has also increased for each of these industries except average number of wage earners and value of products for the lumber and timber industry.

For the class of establishments having products valued at $100,000 or more in 1914, steam-railroad repair shops, flour-mills and gristmills, lumber and timber mills, cottonseed-oil mills, and printing and publishing establishments show a larger proportion than in 1909 for every item in the table. The actual number of wage earners and amount of the value of product shown are also greater.

Table 17 presents, for 1914, for all industries combined in each of the 24 cities having more than 10,000 inhabitants, statistics similar to those given in Table 15 for the state as a whole.

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.
ABILENE	18	107	100.0	$311,346	100.0	$145,930	100.0
Less than $5,000	6	5	4.7	16,655	5.3	11,478	7.9
$5,000 to $20,000	6	24	22.4	71,365	22.9	41,706	28.6
$20,000 to $100,000	6	78	72.9	223,326	71.7	92,746	63.6
AMARILLO	36	311	100.0	986,087	100.0	476,639	100.0
Less than $5,000	13	16	5.1	43,118	4.4	27,614	5.8
$5,000 to $20,000	15	58	18.6	167,005	16.9	94,429	19.8
$20,000 and over [1]	8	237	76.2	775,964	78.7	354,596	74.4
AUSTIN	114	891	100.0	3,370,974	100.0	1,657,109	100.0
Less than $5,000	38	28	3.1	99,562	3.0	67,077	4.0
$5,000 to $20,000	49	150	16.8	471,010	14.0	283,247	17.1
$20,000 to $100,000	18	357	40.1	903,088	26.8	540,704	32.6
$100,000 to $1,000,000	9	356	40.0	1,897,314	56.3	766,081	46.2
BEAUMONT	67	1,073	100.0	5,191,055	100.0	1,748,794	100.0
Less than $5,000	16	23	2.1	40,699	0.8	23,470	1.3
$5,000 to $20,000	13	91	8.5	172,928	3.3	108,010	6.2
$20,000 to $100,000	26	404	37.7	1,051,922	20.3	571,115	32.7
$100,000 to $1,000,000	12	555	51.7	3,925,506	75.6	1,046,199	59.8
BROWNSVILLE	14	76	100.0	167,136	100.0	93,057	100.0
Less than $5,000	5	7	9.2	9,840	5.9	6,629	7.1
$5,000 and over [2]	9	69	90.8	157,296	94.1	86,428	92.9
CLEBURNE	26	886	100.0	2,246,263	100.0	887,182	100.0
Less than $5,000	4	2	0.2	6,765	0.3	3,812	0.4
$5,000 to $20,000	13	42	4.7	122,669	5.5	70,514	7.9
$20,000 and over [3]	9	842	95.0	2,116,829	94.2	812,856	91.6
DALLAS	412	5,284	100.0	31,065,073	100.0	11,494,716	100.0
Less than $5,000	129	106	2.0	337,994	1.1	251,449	2.2
$5,000 to $20,000	137	512	9.7	1,522,201	4.9	986,692	8.6
$20,000 to $100,000	108	1,476	27.9	5,075,840	16.3	2,887,244	25.1
$100,000 to $1,000,000	29	2,081	39.4	9,370,654	30.2	4,175,432	36.3
$1,000,000 and over	9	1,109	21.0	14,758,384	47.5	3,193,899	27.8
DENISON	30	954	100.0	2,068,788	100.0	894,136	100.0
Less than $5,000	10	10	1.0	23,940	1.2	14,514	1.6
$5,000 to $20,000	10	32	3.4	98,794	4.8	49,422	5.5
$20,000 to $100,000	6	61	6.4	254,449	12.3	122,959	13.8
$100,000 to $1,000,000	4	851	89.2	1,691,605	81.8	707,241	79.1
EL PASO	117	2,347	100.0	6,135,214	100.0	3,262,343	100.0
Less than $5,000	19	23	1.0	42,006	0.7	28,456	0.9
$5,000 to $20,000	48	209	8.9	530,429	8.6	314,448	9.6
$20,000 to $100,000	36	568	24.2	1,408,516	23.0	756,253	23.2
$100,000 to $1,000,000	14	1,547	65.9	4,154,263	67.7	2,163,186	66.3
FORT WORTH	180	2,308	100.0	9,973,882	100.0	4,141,655	100.0
Less than $5,000	49	54	2.3	142,128	1.4	100,729	2.4
$5,000 to $20,000	57	221	9.6	637,960	6.4	406,549	9.8
$20,000 to $100,000	55	599	26.0	2,164,296	21.7	1,113,521	26.9
$100,000 and over [4]	19	1,434	62.1	7,029,498	70.5	2,520,856	60.9
GALVESTON	116	1,410	100.0	8,691,969	100.0	2,976,118	100.0
Less than $5,000	25	19	1.3	64,662	0.7	44,662	1.5
$5,000 to $20,000	48	213	15.1	518,120	6.0	312,796	10.5
$20,000 to $100,000	28	383	27.2	1,213,539	14.0	553,793	18.6
$100,000 and over [4]	15	795	56.4	6,895,648	79.3	2,064,867	69.4
HOUSTON	276	5,607	100.0	25,868,010	100.0	9,744,040	100.0
Less than $5,000	66	59	1.1	161,459	0.6	118,931	1.2
$5,000 to $20,000	92	363	6.5	945,151	3.7	591,223	6.1
$20,000 to $100,000	72	974	17.4	3,068,802	11.9	1,573,498	16.1
$100,000 to $1,000,000	39	2,039	36.4	10,005,271	38.7	4,123,428	42.3
$1,000,000 and over	7	2,172	38.7	11,687,327	45.2	3,336,960	34.2
LAREDO	28	270	100.0	344,811	100.0	201,066	100.0
Less than $5,000	10	22	8.1	27,288	7.9	17,901	8.9
$5,000 to $20,000	12	101	37.4	121,615	35.3	72,149	35.9
$20,000 to $100,000	6	147	54.4	195,908	56.8	111,016	55.2
MARSHALL	28	1,166	100.0	2,099,355	100.0	1,033,631	100.0
Less than $5,000	8	9	0.8	18,579	0.9	11,123	1.1
$5,000 to $20,000	10	45	3.9	104,175	5.0	60,539	5.9
$20,000 to $100,000	6	110	9.4	202,618	9.7	126,489	12.2
$100,000 to $1,000,000	4	1,002	85.9	1,773,983	84.5	835,480	80.8
PALESTINE	20	648	100.0	1,222,160	100.0	638,064	100.0
Less than $5,000	6	10	1.5	16,295	1.3	12,623	2.0
$5,000 to $20,000	7	35	5.4	78,546	6.4	48,036	7.5
$20,000 and over [1]	7	603	93.1	1,127,319	92.2	577,405	90.5
PARIS	42	513	100.0	2,283,875	100.0	745,457	100.0
Less than $5,000	11	8	1.6	28,796	1.3	19,460	2.6
$5,000 to $20,000	14	66	12.9	178,013	7.8	116,213	15.6
$20,000 to $100,000	9	131	25.5	415,569	18.2	183,497	24.6
$100,000 to $1,000,000	8	308	60.0	1,661,497	72.7	426,287	57.2
SAN ANGELO	30	161	100.0	499,148	100.0	232,111	100.0
Less than $5,000	8	4	2.5	17,694	3.5	11,944	5.1
$5,000 to $20,000	13	43	26.7	142,283	28.5	71,009	30.6
$20,000 and over [1]	9	114	70.8	339,171	67.9	149,158	64.3
SAN ANTONIO	239	4,083	100.0	17,849,240	100.0	7,759,626	100.0
Less than $5,000	52	70	1.7	138,739	0.8	96,213	1.2
$5,000 to $20,000	92	390	9.6	943,523	5.3	602,621	7.8
$20,000 to $100,000	68	1,018	24.9	3,172,217	17.8	1,430,485	18.4
$100,000 to $1,000,000	24	2,187	53.6	8,138,384	45.6	2,954,339	38.1
$1,000,000 and over	3	418	10.2	5,456,377	30.6	2,675,968	34.5
SHERMAN	36	389	100.0	7,027,747	100.0	1,163,713	100.0
Less than $5,000	9	13	3.3	23,641	0.3	13,008	1.1
$5,000 to $20,000	8	30	7.7	72,704	1.0	49,547	4.3
$20,000 to $100,000	12	158	40.6	477,160	6.8	276,007	23.7
$100,000 and over [4]	7	188	48.3	6,454,182	91.8	825,151	70.9
TEMPLE	37	342	100.0	1,451,925	100.0	493,642	100.0
Less than $5,000	12	14	4.1	41,018	2.8	25,069	5.1
$5,000 to $20,000	12	42	12.3	106,751	7.4	59,819	12.1
$20,000 to $100,000	10	112	32.7	470,610	32.4	230,737	46.7
$100,000 to $1,000,000	3	174	50.9	833,546	57.4	178,017	36.1
TEXARKANA	29	955	100.0	1,994,009	100.0	879,478	100.0
Less than $5,000	4	12	1.3	12,155	0.6	6,029	0.7
$5,000 to $20,000	12	85	8.9	143,618	7.2	81,412	9.3
$20,000 to $100,000	6	160	16.8	265,571	13.3	177,712	20.2
$100,000 to $1,000,000	7	698	73.1	1,572,665	78.9	614,325	69.9
TYLER	20	506	100.0	896,549	100.0	447,901	100.0
Less than $5,000	6	9	1.8	16,622	1.9	11,431	2.6
$5,000 to $20,000	7	29	5.7	74,767	8.3	39,711	8.9
$20,000 and over [1]	7	468	92.5	805,160	89.8	396,759	88.6
WACO	125	1,125	100.0	5,611,737	100.0	2,028,547	100.0
Less than $5,000	39	33	2.9	75,468	1.3	51,523	2.5
$5,000 to $20,000	38	146	13.0	396,208	7.1	211,458	10.4
$20,000 to $100,000	32	440	39.1	1,348,412	24.0	665,970	32.8
$100,000 to $1,000,000	16	506	45.0	3,791,649	67.6	1,099,596	54.2
WICHITA FALLS	31	377	100.0	2,572,785	100.0	657,687	100.0
Less than $20,000 [5]	18	56	14.9	186,340	7.2	97,716	14.9
$20,000 and over [3]	13	321	85.1	2,386,445	92.8	559,971	85.1

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

In most of the cities the same general condition prevails as in the state as a whole, namely, the preponderance as to the 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 of this class, 91.8, 84.5, 83.9, and 81.8 per cent, appear for Sherman, Marshall, Houston, and Denison, respectively; and the lowest, 56.3, for Austin, and 57.4, for Temple.

Table 18 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 24 of the more important industries, and for each of the 24 cities having more than 10,000 inhabitants.

Table 19 presents, for 1914, percentages based on the figures in Table 18, together with similar percentages for 1909 for the industries.

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	5,084	74,853	668	2,872	6,685	978	10,817	312	9,789	112	8,141	96	15,604	27	8,502	15	10,322	4	4,993
Bread and other bakery products	530	1,949	110	358	747	55	571	5	137			1	142	1	352				
Brick, tile, pottery, and other clay products	81	1,811	1	21	67	27	341	25	757	5	350	2	296						
Cars and general shop construction and repairs by steam-railroad companies	63	10,915		2	7	9	127	13	400	11	823	14	2,244	8	2,480	5	3,494	1	1,340
Cars and general shop construction and repairs by electric-railroad companies	19	583		8	23	4	42	3	113	3	239	1	166						
Cement	4	583								1	92	3	491						
Clothing, men's	18	1,062		1	3			10	363	4	289	3	407						
Confectionery	46	773	5	20	56	11	121	5	189	4	306	1	101						
Copper, tin, and sheet-iron work	247	728	23	193	414	30	291	1	23										
Cotton goods	12	1,875								3	250	8	1,334	1	291				
Flour-mill and gristmill products	191	1,300	26	108	225	41	465	13	429	3	181								
Foundry and machine-shop products	177	3,036	11	91	234	42	432	16	437	10	719	6	937	1	277				
Furniture and refrigerators	30	595	4	10	26	8	87	4	176	4	306								
Gas, illuminating and heating	27	613		13	41	10	111			2	124	2	337						
Ice, manufactured	255	1,926	1	162	471	72	801	19	579	1	75								
Leather goods	87	640	11	63	145	6	75	2	54	5	366								
Liquors, malt	13	958		3	11	2	24	1	50	3	196	3	423	1	254				
Lumber and timber products	587	19,956	14	292	839	170	1,810	34	1,116	23	1,672	34	6,097	13	4,094	7	4,328		
Marble and stone work	135	464	13	98	226	22	187	2	51										
Oil, cottonseed, and cake	233	4,471		18	61	144	1,893	62	1,850	8	539	1	128						
Printing and publishing	1,188	4,690	299	724	1,548	121	1,184	33	996	8	574	3	388						
Rice, cleaning and polishing	16	345				9	140	7	205										
Slaughtering and meat packing	21	3,491		7	16	7	113	1	22	2	138	1	201	1	354			2	2,647
Turpentine and rosin	6	809						3	123			2	286	1	400				
Wood preserving	6	350				1	10	4	148			1	192						
All other industries	1,092	10,930	150	680	1,525	187	1,992	49	1,571	12	902	10	1,434			3	2,500	1	1,006
Total for cities	2,071	31,789	232	1,029	2,735	509	5,585	185	5,802	64	4,639	40	5,929	7	2,266	5	3,494	1	1,339
Abilene	18	107	3	11	37	2	22	2	48										
Amarillo	36	311	1	27	67	7	69					1	175						
Austin	114	891	20	65	138	16	169	11	349	1	69	1	166						
Beaumont	67	1,073	5	24	65	22	269	13	396	2	168	1	175						
Brownsville	14	76	1	10	25	2	26	1	25										
Cleburne	26	886	3	15	42	6	67	1	26							1	751		
Dallas	412	5,284	63	198	484	96	1,041	29	792	17	1,241	8	1,374	1	352				
Denison	30	954	2	18	36	7	74	2	64							1	780		
El Paso	117	2,347	8	56	179	35	414	11	378	3	214	2	306	1	276	1	580		
Fort Worth	180	2,308	19	91	243	51	553	10	364	3	231	5	611	1	306				
Galveston	116	1,410	12	57	165	31	315	8	258	8	553	1	119						
Houston	276	5,607	33	128	352	67	734	25	759	14	1,043	7	1,026	1	354			1	1,339
Laredo	28	270	2	12	30	10	92	3	84	1	64								
Marshall	28	1,166	3	13	32	7	80	3	94			1	108			1	852		
Palestine	20	648	1	8	14	10	103									1	531		
Paris	42	513	3	21	50	10	108	7	247			1	108						
San Angelo	30	161	4	18	34	6	59	2	68										
San Antonio	239	4,083	19	115	333	62	646	24	750	11	794	6	926	2	634				
Sherman	36	389	3	16	48	11	131	6	210										
Temple	37	342	2	26	67	4	52	4	109			1	114						
Texarkana	29	955		13	45	5	51	6	200	1	57	4	602						
Tyler	20	506	2	11	34	4	64	2	64					1	344				
Waco	125	1,125	23	57	157	30	350	12	413	3	205								
Wichita Falls	31	377		19	58	8	96	3	104			1	119						

Considering the total for all industries, there were 668 establishments in operation during 1914 in which no wage earners were employed. These are small establishments in which the work is done by the proprietors or firm members. In some cases they employ a few wage earners for short periods, but the number is so small and the period so short that, in computing the average number as described in the "Explanation of terms," no wage earners could be shown for the establishment. Printing and publishing and bread and bakery products are the industries in which the largest number of these small establishments were reported.

The comparatively small establishments still predominate in the majority of the industries of the state. Of the 5,084 establishments reported for all industries, 4,518, or 88.9 per cent, employed on the average 20 or less wage earners during the year. On the other hand, while the small establishments predominate in number, they gave employment to only 17,502 wage earners, or 23.4 per cent of the total in all establishments. There were only 142 establishments in the state that reported the employment of more than 100 wage earners each, but these establishments gave employment to 39,421, or 52.7 per cent of the total average number of wage earners reported. These large establishments are shown especially for steam-railroad repair shops, lumber and timber mills, petroleum refining, and slaughtering and meat packing.

The total for the 24 cities for all industries combined shows the same conditions generally as shown in the state as a whole—85.4 per cent of the establishments employed not more than 20 wage earners, and these wage earners constituted but 26.2 per cent of the total number. Cleburne, Marshall, Palestine, and Denison reported the largest percentage, more than 80 per cent, of the wage earners in establishments employing more than 100, but these are practically all employees in railroad-repair shops in these towns. The largest cities, with the percentage showing the proportion of wage earners in establishments employing more than 50 wage earners, are as follows: San Antonio, 57.6 per cent; Dallas, 56.2 per cent; Houston, 67.1 per cent; and Fort Worth, 49.8 per cent.

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	8.9	14.5	13.1	10.9	20.8	11.4	13.8	6.7
	1909	8.3	17.1	13.9	12.2	23.9	11.7	7.0	5.9
Bread and other bakery products.	1914	38.3	29.3	7.0	.....	7.3	18.1	.....	.....
	1909	37.6	25.2	7.6	.....	7.5	22.1	.....	.....
Brick, tile, pottery, and other clay products.	1914	3.7	18.8	41.8	19.3	16.3	.....	.....	.....
	1909	3.0	21.9	48.9	9.1	17.1	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	0.1	1.2	3.7	7.5	20.6	22.7	32.0	12.3
	1909	0.1	1.4	2.3	8.9	24.3	25.9	26.4	10.7
Cars and general shop construction and repairs by electric-railroad companies.	1914	3.9	7.2	19.4	41.0	28.5	.....	.....	.....
	1909	7.0	42.2	50.9	.....	.....	.....	.....	.....
Cement	1914	.....	.....	.....	15.8	84.2	.....	.....	.....
	1909	.....	.....	10.5	25.1	64.4	.....	.....	.....
Clothing, men's	1914	0.3	.....	34.2	27.2	38.3	.....	.....	.....
	1909	0.3	9.0	48.0	28.2	14.5	.....	.....	.....
Confectionery	1914	7.2	15.7	24.5	39.6	13.1	.....	.....	.....
	1909	8.6	17.2	16.5	25.8	31.9	.....	.....	.....
Copper, tin, and sheet-iron work	1914	56.9	40.0	3.2	.....	.....	.....	.....	.....
	1909	34.1	58.8	7.1	.....	.....	.....	.....	.....
Cotton goods	1914	.....	.....	.....	13.3	71.2	15.5	.....	.....
	1909	.....	1.3	.....	31.9	66.9	.....	.....	.....
Flour-mill and gristmill products.	1914	17.3	35.8	33.0	13.9	.....	.....	.....	.....
	1909	25.4	34.6	34.6	5.3	.....	.....	.....	.....
Foundry and machine-shop products.	1914	7.7	14.2	14.4	23.7	30.9	9.1	.....	.....
	1909	5.6	15.3	17.2	15.6	27.1	19.1	.....	.....
Furniture and refrigerators	1914	4.4	14.6	29.6	51.4	.....	.....	.....	.....
	1909	3.4	7.8	12.7	45.4	30.7	.....	.....	.....
Gas, illuminating and heating	1914	6.7	18.1	.....	20.2	55.0	.....	.....	.....
	1909	5.6	11.7	20.0	35.8	27.0	.....	.....	.....
Ice, manufactured	1914	24.4	41.6	30.1	3.9	.....	.....	.....	.....
	1909	21.9	45.4	32.8	.....	.....	.....	.....	.....
Leather goods	1914	22.7	11.7	8.4	57.2	.....	.....	.....	.....
	1909	17.6	15.4	25.0	42.0	.....	.....	.....	.....
Liquors, malt	1914	1.1	2.5	5.2	20.5	44.2	26.5	.....	.....
	1909	1.3	2.1	3.1	41.0	52.4	.....	.....	.....
Lumber and timber products	1914	4.2	9.1	5.6	8.4	30.6	20.5	21.7	.....
	1909	3.9	14.7	10.7	10.8	34.8	15.4	9.8	.....
Marble and stone work	1914	48.7	40.3	11.0	.....	.....	.....	.....	.....
	1909	33.2	51.6	15.2	.....	.....	.....	.....	.....
Oil, cottonseed, and cake	1914	1.4	42.3	41.4	12.1	2.9	.....	.....	.....
	1909	2.7	51.2	32.3	10.4	3.4	.....	.....	.....
Printing and publishing	1914	33.0	25.2	21.2	12.2	8.3	.....	.....	.....
	1909	36.1	25.1	14.5	11.2	13.0	.....	.....	.....
Rice, cleaning and polishing	1914	.....	40.6	59.4	.....	.....	.....	.....	.....
	1909	0.7	30.2	55.8	13.3	.....	.....	.....	.....
Slaughtering and meat packing.	1914	0.5	3.2	0.6	4.0	5.8	10.1	.....	75.8
	1909	0.1	0.7	2.6	2.1	9.8	.....	.....	84.6
Turpentine and rosin	1914	.....	.....	15.2	.....	35.4	49.4	.....	.....
	1909	.....	5.9	.....	45.7	48.4	.....	.....	.....
Wood preserving	1914	.....	2.9	42.3	.....	54.9	.....	.....	.....
	1909	.....	12.2	9.4	21.3	57.1	.....	.....	.....
All other industries	1914	14.0	18.2	14.4	8.3	13.1	.....	22.9	9.2
	1909	15.4	24.4	14.4	14.8	15.3	15.7	.....	.....
Total for cities	1914	8.6	17.6	18.3	14.6	18.7	7.1	11.0	4.2
Abilene	1914	34.6	20.6	44.9	.....	.....	.....	.....	.....
Amarillo	1914	21.5	22.2	.....	.....	56.3	.....	.....	.....
Austin	1914	15.5	19.0	39.2	7.7	18.6	.....	.....	.....
Beaumont	1914	6.1	25.1	36.9	15.7	16.3	.....	.....	.....
Brownsville	1914	.....	.....	.....	.....	.....	.....	.....	.....
Cleburne	1914	4.7	7.6	2.9	.....	.....	.....	84.8	.....
Dallas	1914	9.2	19.7	15.0	23.5	26.0	6.7	.....	.....
Denison	1914	3.8	7.8	6.7	.....	.....	.....	81.8	.....
El Paso	1914	7.6	17.6	16.1	9.1	13.0	11.8	24.7	.....
Fort Worth	1914	10.5	24.0	15.8	10.0	26.5	13.3	.....	.....
Galveston	1914	11.7	22.3	18.3	39.2	8.4	.....	.....	.....
Houston	1914	6.3	13.1	13.5	18.6	18.3	6.3	.....	23.9
Laredo	1914	11.1	34.1	31.1	23.7	.....	.....	.....	.....
Marshall	1914	2.7	6.9	8.1	.....	9.3	.....	73.1	.....
Palestine	1914	2.2	15.9	.....	.....	.....	.....	81.9	.....
Paris	1914	9.7	21.1	48.1	.....	21.1	.....	.....	.....
San Angelo	1914	21.1	36.6	42.2	.....	.....	.....	.....	.....
San Antonio	1914	8.2	15.8	18.4	19.4	22.7	15.5	.....	.....
Sherman	1914	12.3	33.7	54.0	.....	.....	.....	.....	.....
Temple	1914	19.6	15.2	31.8	.....	33.3	.....	.....	.....
Texarkana	1914	4.7	5.3	20.9	6.0	63.0	.....	.....	.....
Tyler	1914	6.7	12.6	12.6	.....	.....	68.0	.....	.....
Waco	1914	14.0	31.1	36.7	18.2	.....	.....	.....	.....
Wichita Falls	1914	15.4	25.5	27.6	.....	31.6	.....	.....	.....

Engines and power.—Table 20 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.

This table shows, for the decade 1904–1914, an increase in primary power of 104 per cent; steam power, 68.1 per cent; internal-combustion engines, 1,408.5 per cent; rented electric power, 872.9 per cent; and electric power generated by establishments reporting, 464 per cent. The proportion which steam power formed of the total primary power has steadily

decreased, from 94.7 per cent in 1904 to 88.3 per cent in 1909 and 78.1 per cent in 1914. Rented electric power (which now represents practically all the rented power) constituted only 2.7 per cent of the total primary power in 1904, but in 1914 its proportion of the total had increased to 12.8 per cent.

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	8,947	6,232	2,408	335,791	282,471	164,637	100.0	100.0	100.0
Owned	3,672	3,789	2,408	292,553	267,167	160,164	87.1	94.6	97.3
Steam engines and turbines[1]	2,541	2,955	1,973	262,200	249,535	156,011	78.1	88.3	94.7
Internal-combustion engines	1,101	802	403	28,300	15,745	1,876	8.4	5.6	1.1
Water wheels, turbines, and motors	30	32	32	2,053	1,887	2,277	0.6	0.7	1.4
Rented	5,275	2,443	(2)	43,238	15,304	4,473	12.9	5.4	2.7
Electric	5,275	2,443	(2)	42,943	14,868	4,414	12.8	5.3	2.7
Other	.....	.....	.....	295	436	59	0.1	0.2	(3)
Electric	7,313	3,454	.....	76,133	36,450	10,299	100.0	100.0	100.0
Rented	5,275	2,443	(2)	42,943	14,868	4,414	56.4	40.8	42.9
Generated by establishments reporting	2,038	1,011	410	33,190	21,582	5,885	43.6	59.2	57.1

[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.

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.		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	8,890	1,286,179	83,632	5,599,905	6,040,046
Bread and other bakery products	168	2,637	1,297	11,327	624,665
Brick, tile, pottery, and other clay products	.....	57,358	100	356,072	158,328
Cars and general shop construction and repairs by steam-railroad companies	135	66,052	321	425,956	193,775
Cement	.....	71,785	.....	414,006	357,000
Cotton goods	.....	37,426	.....	14,674	70
Flour-mill and gristmill products	.....	62,944	748	47,992	158,993
Foundry and machine-shop products	194	10,186	7,561	25,621	72,679
Gas, illuminating and heating	2,021	15,983	21,136	142,051	170,912
Ice, manufactured	1,660	240,747	2,022	412,171	2,608,566
Liquors, malt	.....	24,525	.....	204,189	986
Lumber and timber products	880	27,562	480	35,390	5,866
Oil, cottonseed, and cake	870	310,173	.....	139,079	729,628
Petroleum, refining	.....	11,632	10,701	2,437,135	.....
Printing and publishing	244	2,964	30	3,374	75,875
Rice, cleaning and polishing	.....	.....	.....	28,020	.....
Slaughtering and meat packing	.....	62,715	.....	400,703	77,667
Wood preserving	.....	1,895	.....	40,890	64,910
All other industries	2,718	279,595	39,236	461,255	740,126

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.).			
Total for cities	5,143	346,684	33,795	1,141,401	4,631,460
ABILENE	.....	1,813	.....	1,546	20,188
AMARILLO	.....	11,621	600	10,521	968
AUSTIN	66	39,243	2,038	14,223	7,949
BEAUMONT	38	675	1,775	43,633	2,475
BROWNSVILLE	.....	4	.....	10,021	.....
CLEBURNE	.....	8,716	426	66,913	120
DALLAS	486	36,830	2,360	85,897	1,642,428
DENISON	30	7,892	26	90	76,759
EL PASO	5	28,414	1,304	66,380	5,508
FORT WORTH	1,595	14,766	1,565	156,372	446,580
GALVESTON	1,905	881	351	114,516	4,790
HOUSTON	205	40,470	9,488	270,115	6,682
LAREDO	.....	3,770	2,382	26	10,912
MARSHALL	6	2,352	1,803	3,184	776,397
PALESTINE	3	4,269	266	50,305	1,629
PARIS	.....	14,335	494	1,594	2,729
SAN ANGELO	.....	2,288	110	15,182	325
SAN ANTONIO	448	56,211	5,726	152,683	18,960
SHERMAN	6	15,337	595	7,539	54,174
TEMPLE	.....	11,012	547	35,723	444
TEXARKANA	59	1,563	46	27,396	491,245
TYLER	.....	9,975	.....	38	72
WACO	291	34,235	1,651	7,349	660
WICHITA FALLS	.....	12	242	155	1,059,466

SPECIAL STATISTICS.

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantity 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 six important industries in Texas are here presented, and also the statistics for power laundries.

Slaughtering and meat packing.—This industry, which is one of the youngest in the state, shows remarkable development during the decade 1904–1914. As late as the census of 1889 there were no wholesale slaughtering and meat-packing establishments reported for the state. Texas has long been a great stock-raising state.

The following table gives the quantity and cost of the principal materials used and the quantity and value of the various products for 1914, 1909, and 1904.

Table 22	1914	1909	1904 [1]
MATERIALS.			
Total cost	$44,424,417	$37,409,785	$13,593,181
Animals slaughtered:			
Beeves—			
Number	554,479	527,469	285,295
Cost	$24,219,588	$15,089,886	$6,051,742
Calves—			
Number	145,391	234,172	94,093
Cost	$2,151,433	$2,074,188	$603,625
Sheep and lambs—			
Number	284,050	77,805	49,831
Cost	$1,196,295	$315,696	$165,281
Hogs—			
Number	570,182	939,674	347,040
Cost	$8,812,534	$10,933,088	$3,218,450
Dressed meat purchased for curing, cost	[2] $553,740	$1,110,042	$660,107
All other materials, cost	$7,490,827	$7,886,885	$2,893,976
PRODUCTS.			
Total value	$52,945,022	$42,529,746	$15,620,931
Fresh meat:			
Beef—			
Pounds	206,657,923	208,086,588	105,988,268
Value	$19,558,106	$12,408,125	$4,954,013
Veal—			
Pounds	19,089,516	29,308,686	9,674,766
Value	$1,969,967	$2,023,883	$598,938
Mutton and lamb—			
Pounds	11,179,234	2,846,112	1,670,045
Value	$1,089,533	$260,574	$127,578
Pork—			
Pounds	23,767,781	32,054,404	9,596,282
Value	$2,817,212	$3,195,006	$713,549
Edible offal and other fresh meat—			
Pounds	7,571,175	2,052,042	9,523,500
Value	$552,737	$254,877	$380,941
Cured meat:			
Beef, pickled and other cured—			
Pounds	2,279,190	1,483,166	2,020,874
Value	$324,185	$115,819	$144,727
Pork, pickled and other cured—			
Pounds	39,477,022	71,219,957	26,259,612
Value	$6,186,663	$7,648,463	$2,406,940
Sausage:			
Pounds	8,847,610	12,916,425	8,497,917
Value	$979,923	$1,064,242	$436,890
Canned goods:			
Pounds	3,745,697	(3)	(4)
Value	$601,189	(3)	$58,518
Lard:			
Pounds	16,157,440	60,862,980	38,977,525
Value	$1,790,814	$5,644,149	$2,748,909
Lard compounds and substitutes:			
Pounds	72,345,830	(5)	(5)
Value	$6,296,084	(5)	(5)
Tallow, oleo stock, and stearin:			
Pounds	[6] 6,079,735	2,251,373	(5)
Value	[6] $363,572	$179,701	(5)
Sausage casings:			
Pounds	4,064,966	(5)	(5)
Value	$386,911	(5)	(5)
Fertilizers and fertilizer materials:			
Tons	13,037	15,303	5,565
Value	$324,236	$435,004	$141,268
Hides and pelts:			
Cattle—			
Number	554,479		
Pounds	27,412,468		
Value	$4,632,686	608,452	304,896
Calf—		27,478,391	17,766,494
Number	110,110	$3,750,416	$1,565,481
Pounds	2,044,810		
Value	$366,994		
Sheep—			
Number	283,471	77,861	49,831
Value	$169,759	$54,629	$31,315
All other products, value	$4,534,451	$5,494,858	$1,321,864

[1] Excludes data for one establishment, to avoid disclosing the operations of individual establishments.
[2] Includes cost of "all other animals," to avoid disclosing the operations of individual establishments.
[3] Figures not shown, to avoid disclosing the operations of individual establishments.
[4] Not reported separately, except for canned beef, which was 298,180 pounds, valued at $12,490.
[5] Not reported separately.
[6] No stearin manufactured in 1914.

There were 269,184, or 94.4 per cent, more beeves slaughtered in 1914 than in 1904; 51,298, or 54.5 per cent, more calves; 234,219, or 470 per cent, more sheep and lambs; and 223,142, or 64.3 per cent, more hogs. In each case, however, the increase in cost was relatively much greater than the increase in number. Large increases are shown from 1904 to 1914 in both quantity and value of all classes of products except edible offal and lard. Edible offal shows a decrease of 20.5 per cent in quantity but an increase of 45.1 per cent in value. Lard shows a decrease of 22,820,085 pounds, or 58.5 per cent, due largely to the increased manufacture of lard compounds and substitutes. The growth of the industry from 1909 to 1914 is much less marked than from 1904 to 1909.

Oil, cottonseed, and cake.—Texas, which ranks first among the states in the growing of cotton, also ranks first in the manufacture of cottonseed products. The following table gives the quantity of cotton seed used for oil extraction and the quantities of the several crude products obtained for the census years 1914, 1909, 1904, and 1899:

Table 23 — Material and product.	Quantity.			
	1914	1909	1904	1899
Cotton seed crushed ..... tons	1,191,508	916,374	864,767	692,604
Crude products manufactured:				
Oil, gallons	41,349,603	33,497,933	32,239,649	24,354,695
Meal and cake, tons (2,000 lbs.)	538,752	395,791	340,709	252,983
Hulls, tons (2,000 lbs.)	367,090	340,528	337,233	328,119
Linters, pounds	92,970,687	46,994,462	33,307,490	15,544,379

The 1914 statistics for this industry relate to the crushing season of 1913–14, that is, to the handling of seed from the crop of 1913. The data above cover the operations of all establishments which crushed cotton seed during the season, regardless of the extent to which they were engaged in other branches of industry. Furthermore, the crude products reported represent the total production derived from crushing cotton seed, whether sold as such or used as intermediate products in further processes of manufacture, such as the refining of oil and the mixing of fertilizer and feed.

Texas produced 27.9 per cent of the American cotton crop of 1913, reported 24.6 per cent of the total quantity of cotton seed used in the manufacture of cottonseed products, and contributed 21.4 per cent of the total production of oil. While the percentage of the oil production is considerably lower than the percentage of the seed furnished, it is due to the fact that the oil content of the seed grown in Texas is considerably lower than that of seed grown in Georgia and the Carolinas. This lower proportion of oil production is also affected to some extent by the installation of cold-process machinery, which expresses the oil without hulling the seed, thus lowering the recovery of the oil content of the seed.

The total quantity of cotton seed crushed increased from 692,604 tons in 1899 to 1,191,508 tons in 1914, or 72.2 per cent. The quantities of the various products obtained in 1914 per ton of seed, as received at the mill, were as follows: Crude oil, 34.7 gallons; cake and meal, 904 pounds; hulls, 616 pounds; and linters, 78 pounds.

Flour-mill and gristmill products.—The following table shows the quantity and value of the different classes of products for 1914, 1909, and 1904.

Table 24	1914	1909	1904
Products, total value	$35,110,301	$32,484,612	$22,083,136
Wheat flour:			
Barrels	4,089,378	3,342,035	3,228,290
Value	$21,805,623	$19,124,834	$16,491,820
Rye flour:			
Barrels	813	1,551	540
Value	$4,117	$9,069	$2,660
Corn meal and corn flour:			
Barrels	1,042,654	877,314	599,375
Value	$3,729,947	$2,875,994	$1,477,014
Hominy and grits:			
Pounds	2,000	198,000	128,000
Value	$40	$3,520	$1,920
Bran and middlings:			
Tons	167,091	(1)	(1)
Value	$4,203,561	.....	.....
Feed and offal:			
Tons	171,510	400,290	200,873
Value	$5,225,761	$10,429,925	$4,076,708
All other cereal products, value	$745	$14,872	.....
All other products, value	$140,507	$26,398	$33,014

[1] Included in "feed and offal."

From 1909 to 1914 the output of wheat flour increased by 747,343 barrels, or 22.4 per cent, and 14 per cent in value. Corn meal and corn flour increased 165,340 barrels, or 18.8 per cent, and 29.7 per cent in value. Decreases are shown for rye flour, hominy and grits, and feed and offal. In 1914 wheat flour represented 62.1 per cent of the total value of products; corn meal and corn flour, 10.6 per cent; bran and middlings, 12 per cent; and feed and offal, 14.9 per cent.

Of the 90 establishments that ground wheat in 1914, 11 reported an annual production of over 100,000 barrels of wheat flour each; 32 from 20,000 to 100,000 barrels each; 16 from 5,000 to 20,000 barrels each; 21 from 1,000 to 5,000 barrels each; and 10 less than 1,000 barrels each.

The equipment reported in 1914 consisted of 1,015 stands of rolls, 103 runs of stone, and 80 attrition mills. Nine establishments manufactured barrels and 10 manufactured sacks.

Printing and publishing.—The number and aggregate circulation per issue of the various publications in Texas, as reported at the censuses of 1914, 1909, and 1904, are shown in Table 25.

Table 25 — Period of issue	Number of publications			Aggregate circulation per issue		
	1914	1909	1904	1914	1909	1904
Total	1,005	962	817	2,833,082	2,180,922	1,762,692
Daily	107	99	87	610,445	330,562	245,370
Sunday	32	30	20	461,948	302,189	223,150
Semiweekly	29	[1] 28	18	221,852	265,816	227,909
Weekly	762	728	629	1,125,376	964,524	834,434
Monthly	65	64	54	375,035	256,700	211,929
All other classes	10	13	9	38,426	61,131	19,900

[1] Includes one triweekly publication.

The increases during the 10-year period 1904–1914 both in total number and aggregate circulation of publications are notable—188, or 23 per cent, in number, and 1,070,390, or 60.7 per cent, in circulation. The increases for the five-year period 1909–1914 were 43 in number and 652,160, or 29.9 per cent, in circulation.

From 1909 to 1914 the circulation of the daily newspapers increased 279,883, or 84.7 per cent. Of these dailies, 72 were evening editions, with a circulation of 344,146. The increase in the circulation of the Sunday newspapers for this later semidecade was 159,759, or 52.9 per cent; of the weeklies, 160,852, or 16.7 per cent; and of the monthly publications, 118,335, or 46.1 per cent. The circulation of the semiweeklies decreased 43,964, or 16.5 per cent, during the same period. Of the 10 publications in "all other classes" in 1914, 7 were issued monthly and 1 each bimonthly, quarterly, and semiannually.

Most of the publications were printed in English, but there were 25 German, including 1 German and English; 20 Spanish; 9 Bohemian, including 2 Bohemian and English; 3 Italian; and 1 Swedish. Of these foreign or foreign and English publications, 8 were dailies, with an average circulation of 29,200; 40 were weeklies, with an average circulation of 93,195; and 5 were semiweeklies with an average circulation of 12,118.

Rice, cleaning and polishing.—Rice mills, as a rule, depend on the local supply, and are usually located in the immediate vicinity in which the rice is grown. As a result of the introduction of rice culture in this state there was a rapid increase in the number of rice mills. In 1899 there was only 1 mill in the state engaged in the milling of rice; in 1904, 17; in 1909, 19; and in 1914, 16 active establishments. There has been a tendency at some points to have one mill perform the work formerly done by several mills, thus accounting for the decrease in the number of active mills. The following statement shows the quantity of rough rice treated and the quantity of products, by kind, for the census years 1914, 1909, and 1904:

Table 26 — Material and product	Quantity (pounds)		
	1914	1909	1904
Rough rice treated	315,169,065	371,816,370	316,170,405
Products manufactured:			
Clean rice	206,724,899	236,117,295	197,433,320
Polish	9,856,739	10,402,638	9,500,830
Bran	29,251,625	29,505,946	40,772,421

The statistics in this table for 1914 in most instances relate to the milling season of 1913–14—that is, to the handling of rice from the crop of 1913—and cover the operations of all establishments engaged primarily in the milling of rice. Some establishments are employed in the milling of rice on a custom basis, the quantities so treated being included in the table.

The total quantity of rough rice milled—that is, rice as it leaves the thrasher—was 315,169,065 pounds in 1914. The quantity is slightly less than in 1904 and a considerable reduction from the quantity milled

in 1909. The quantity of clean rice obtained was 206,724,899 pounds in 1914, exceeding the quantity obtained in 1904 by 9,291,579 pounds, thus showing a greater proportion of clean rice obtained in the later year. For the season 1913–14, 203,332,545 pounds of rough rice were of the Honduras type, 111,656,520 pounds of the Japan type, and 180,000 pounds of other types. The change in the variety of rice grown and improvements in method of treatment account, at least in part, for the increased proportion of clean rice obtained and also of whole rice as compared with broken rice.

Ice, manufactured.—The quantity and value of the products of this industry, for 1914, 1909, and 1904, are given in the following table:

Table 27	1914	1909	1904
Number of establishments	[1] 255	[1] 182	125
MATERIALS.			
Ammonia, total cost	$122,733	$96,310	$53,311
Anhydrous—			
Pounds	390,297	307,399	170,316
Cost	$116,552	$93,017	$51,056
Aqua—			
Pounds	105,356	58,898	35,047
Cost	$6,181	$3,293	$2,255
PRODUCTS.			
Total value	$5,328,302	$3,844,120	$2,083,880
Total ice:			
Tons (2,000 lbs.)	1,149,074	766,166	426,755
Value	$4,981,332	$3,601,968	$2,014,702
Can—			
Tons (2,000 lbs.)	1,147,490	763,911	425,195
Value	$4,968,488	$3,589,488	$2,009,305
Plate—			
Tons (2,000 lbs.)	1,584	2,255	1,560
Value	$12,844	$12,480	$5,397
All other products, value	$346,970	$242,152	$69,178

[1] In addition, in 1914, 36 establishments engaged in the manufacture of products other than ice made 239,790 tons of ice, valued at $824,401, and in 1909, 20 similar establishments made 163,313 tons, valued at $541,467.

Texas ranked first among the states in the manufacture of ice, $5,328,302 being the value of the products of this industry. Of this amount, $4,481,332 represents the value of 1,149,074 tons of ice, and $346,970 the value of other products. In addition, 239,790 tons of ice, valued at $824,401, were manufactured in establishments engaged primarily in some other industry. Can ice was practically the entire product and shows increases in quantity and value for each census period. The five-year period from 1904 to 1909 shows an increase of 78.6 per cent in the value of this kind of ice, and the later period, 24.5 per cent.

As shown by the table, of the total cost of ammonia used, that of anhydrous represented nearly 95 per cent, being used in 253 of the 255 establishments reporting. The compressor system was the most common, 245 of the establishments using this method of manufacture, two of which also used the absorption system. There were 345 ice machines reported, with an ice-making capacity of 8,304 tons per day of 24 hours. The storage space reported for ice was 3,098,865 cubic feet, and for general cold storage, 4,617,083 cubic feet.

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for all manufacturing industries. Table 28, however, summarizes these statistics for Texas for 1914 and 1909.

Table 28	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase, 1909–1914.
	1914	1909	
Number of establishments	185	127	45.7
Persons engaged	5,254	3,514	49.5
Proprietors and firm members	221	150	47.3
Salaried employees	428	291	47.1
Wage earners (average number)	4,605	3,073	49.9
Primary horsepower	6,063	3,195	89.8
Capital	$3,443,394	$2,005,200	71.7
Salaries and wages	2,603,511	1,554,999	67.4
Salaries	485,562	261,198	85.9
Wages	2,117,949	1,293,801	63.7
Paid for contract work	21,576	6,035	257.5
Rent and taxes	134,847	59,512	126.6
Cost of materials	1,071,622	471,421	127.3
Amount received for work done	5,521,841	3,220,315	71.5

In 1914 Texas ranked eighth among the states in amount received for work done and ninth in number of persons engaged in steam laundries; in 1909 it ranked tenth in value of work done and ninth in number of persons engaged. Establishments owned by individuals reported 23.8 per cent of the amount received for work done; those owned by corporations 58.1 per cent; and those under other forms of ownership, 18.1 per cent.

Table 29 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 reported for any month of the same year.

Table 29	WAGE EARNERS.			
MONTH.	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January	4,352	2,791	85.8	85.0
February	4,319	2,847	85.2	86.7
March	4,360	2,891	86.0	88.0
April	4,509	2,976	88.9	90.6
May	4,684	3,048	92.4	92.8
June	4,894	3,160	96.5	96.2
July	5,072	3,232	100.0	98.4
August	5,019	3,284	99.0	100.0
September	4,844	3,277	95.5	99.8
October	4,555	3,172	89.8	96.6
November	4,378	3,112	86.3	94.8
December	4,279	3,090	84.4	94.1

Table 30 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 30				
KIND.	Unit.	QUANTITY.		Per cent of increase, 1909–1914.
		1914	1909	
Anthracite coal	Tons (2,240 lbs.)	1,146	4	(1)
Bituminous coal	Tons (2,000 lbs.)	56,464	41,990	34.5
Coke	Tons (2,000 lbs.)	.....	53	(1)
Oil, including gasoline	Barrels	51,189	17,410	194.0
Gas	1,000 cubic feet	468,096	67,086	597.8
Wood	Cords	(2)	4,275	.....

[1] Per cent not shown where base is less than 100.
[2] Not called for at the census of 1914.

Table 31 gives statistics as to the kinds and amounts of power used in the laundries of the state in 1914 and 1909, together with percentages of increase for the five-year period.

Table 31

KIND.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase, 1909–1914.[1]
	1914	1909	1914	1909	
Primary power, total	442	235	6,063	3,195	89.8
Owned	222	123	5,312	2,922	81.8
Steam engines and turbines	162	120	5,109	2,865	78.3
Internal-combustion engines	11	3	101	57	.....
Water wheels, turbines, and motors	49	.....	102	.....	.....
Primary power—Continued.					
Rented	220	112	751	273	175.1
Electric	220	112	751	263	185.6
Other	.....	.....	.....	10	.....
Electric—Generated in establishments reporting	278	38	644	124	419.4

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

GENERAL TABLES.

Table 32 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 33 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 individual operations, and for the cities having from 10,000 to 50,000 inhabitants, for all industries combined.

TABLE 32.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
All industries	1914	5,084	74,853	335,791	$44,821	$253,144	$361,279
	1909	4,588	70,230	282,471	37,907	178,179	272,896
	1904	3,158	49,066	164,637	24,469	91,604	150,528
Bread and other bakery products.	1914	530	1,949	2,325	1,095	4,142	7,503
	1909	385	1,391	1,281	671	3,062	5,311
	1904	244	851	473	395	1,752	3,049
Brick, tile, pottery, and other clay products.	1914	81	1,811	8,866	801	934	2,378
	1909	106	2,355	8,411	980	961	3,142
	1904	114	1,526	3,897	561	436	1,632
Brooms	1914	31	177	149	95	264	460
	1909	32	184	119	80	210	394
	1904	28	138	45	62	142	258
Butter	1914	51	174	1,360	115	1,752	2,281
	1909	36	84	477	40	530	660
	1904	10	5	62	4	49	63
Canning and preserving[1]	1914	22	213	423	79	630	1,211
	1909	19	158	243	45	201	498
	1904	20	119	227	23	208	332
Carriages and wagons and materials.	1914	32	205	446	140	156	489
	1909	50	412	374	2.7	319	830
	1904	[2] 34	211	118	124	130	308
Cars and general shop construction and repairs by electric-railroad companies.	1914	19	583	2,354	410	268	735
	1909	14	230	529	130	120	278
Cars and general shop construction and repairs by steam-railroad companies.	1914	63	10,915	13,205	7,826	5,978	15,276
	1909	62	9,782	7,335	6,715	5,546	13,359
	1904	47	8,593	3,735	5.370	4,476	10,473
Cement	1914	4	583	18,150	371	1,264	2,331
	1909	3	362	7,700	261	403	855
Clothing, men's	1914	18	1,062	260	394	1,285	2,086
	1909	25	992	359	312	1,007	1,759
	1904	[2] 16	690	73	179	672	1,205
Coffee, roasting and grinding.	1914	36	145	619	$83	$2,553	$3,326
	1909	24	135	429	66	1,740	2,226
	1904	4	20	59	9	202	244
Confectionery	1914	46	773	790	282	1,452	2,565
	1909	49	717	607	218	1,459	2,451
	1904	23	489	338	147	668	1,155
Cooperage	1914	6	218	511	93	595	769
	1909	11	243	346	98	488	719
	1904	20	235	540	127	495	741
Copper, tin, and sheet-iron work.	1914	247	728	287	561	1,017	2,238
	1909	168	733	211	532	1,081	2,214
	1904	[3] 75	465	49	309	565	1,195
Cotton goods	1914	12	1,875	5,948	675	2,643	3,755
	1909	13	1,590	4,835	501	1,793	2,815
	1904	13	993	3,452	270	1,018	1,587
Fertilizers	1914	8	101	522	63	366	638
	1909	3	9	53	3	49	57
Flour-mill and gristmill products.	1914	191	1,300	19,968	798	29,573	35,110
	1909	238	1,216	20,765	669	28,657	32,485
	1904	154	986	16,249	528	18,963	22,083
Food preparations	1914	26	317	1,258	136	3,332	4,052
	1909	23	284	1,322	108	4,580	5,229
	1904	11	153	135	51	209	375
Foundry and machine-shop products.[4]	1914	177	3,036	7,810	2,108	4,021	8,782
	1909	143	2,925	5,287	1,925	3,859	8,068
	1904	[2] 111	2,080	2,781	1,268	2,302	5,179
Furniture and refrigerators.	1914	30	595	1,883	367	516	1,278
	1909	25	701	1,879	331	765	1,512
	1904	15	294	429	147	203	491
Gas, illuminating and heating.	1914	27	613	1,759	354	768	2,185
	1909	27	575	1,090	288	545	1,644
	1904	19	164	325	103	197	719

[1] Includes "canning and preserving, fruits and vegetables" and "pickles, preserves, and sauces."
[2] Excludes statistics for two establishments, to avoid disclosing operations of individual establishments.
[3] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[4] Includes "automobile repairing," "hardware, saddlery;" and "structural ironwork, not made in steel works or rolling mills."

TABLE 32.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

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

INDUSTRY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
Ice, manufactured	1914	255	1,926	42,271	$1,138	$1,660	$5,328
	1909	182	1,437	29,905	839	1,092	3,844
	1904	125	869	18,458	451	573	2,084
Leather goods [1]	1914	87	640	377	429	2,482	3,567
	1909	67	721	601	463	2,839	4,347
	1904	[2] 60	748	297	474	2,054	3,365
Liquors, malt	1914	13	958	9,068	806	2,929	8,471
	1909	12	765	7,817	566	1,695	6,464
	1904	10	626	4,753	412	1,095	4,154
Lumber and timber products.[3]	1914	587	19,956	73,752	10,904	11,640	28,741
	1909	799	23,518	88,031	11,602	11,004	32,201
	1904	391	14,623	43,622	6,500	4,955	18,880
Marble and stone work	1914	135	464	1,531	358	523	1,367
	1909	107	605	1,016	425	502	1,443
	1904	53	346	586	223	300	778
Mattresses and spring beds	1914	59	283	909	152	602	1,060
	1909	50	233	587	118	362	658
	1904	27	311	488	124	400	697
Mineral and soda waters	1914	262	545	1,190	277	902	1,913
	1909	212	400	538	185	473	1,284
	1904	177	321	367	135	337	984
Oil, cottonseed, and cake	1914	233	4,471	60,772	2,087	36,177	41,945
	1909	194	3,073	45,185	1,296	23,439	29,916
	1904	157	2,739	33,960	1,020	15,805	18,699
Patent medicines and compounds and druggists' preparations.[4]	1914	61	116	97	52	288	740
	1909	59	145	51	62	411	1,014
	1904	[2] 38	103	17	35	241	700
Printing and publishing [5]	1914	1,188	4,690	6,111	$3,557	$3,997	$15,051
	1909	1,067	4,408	4,392	2,785	2,807	11,587
	1904	[2] 850	3,444	2,756	2,071	1,763	7,830
Rice, cleaning and polishing.	1914	16	345	5,365	199	6,366	7,216
	1909	19	430	6,274	189	7,122	8,142
	1904	17	432	4,509	212	3,508	4,640
Salt	1914	3	140	809	75	227	425
	1909	6	162	447	82	216	407
	1904	7	172	497	74	195	351
Shipbuilding, wooden, including boat building.	1914	14	168	316	123	279	474
	1909	6	36	21	30	34	76
	1904	8	30	7	23	16	51
Slaughtering and meat packing.[6]	1914	21	3,491	12,313	2,073	44,457	52,990
	1909	14	3,639	11,330	1,902	37,410	42,530
	1904	[7] 9	2,019	2,086	866	13,593	15,621
Tobacco, cigars and cigarettes.	1914	66	344	3	159	240	602
	1909	67	339	7	141	182	509
	1904	86	347	7	159	211	550
Turpentine and rosin	1914	6	809	21	207	98	608
	1909	3	219	10	80	42	218
Wood preserving	1914	6	350	2,950	227	2,641	3,096
	1909	6	417	1,595	215	3,315	3,859
	1904	5	304	615	117	1,239	1,503
All other industries	1914	415	7,784	18,670	5,146	74,127	88,237
	1909	262	4,005	21,012	2,687	27,859	37,891
	1904	180	3,620	19,344	1,896	12,632	18,492

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

INDUSTRY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
DALLAS—All industries.	1914	412	5,284	15,517	$3,464	$19,570	$31,065
	1909	305	4,882	13,808	2,604	16,966	26,959
	1904	247	3,445	.....	1,759	9,207	15,628
Bread and other bakery products.	1914	35	513	917	257	987	1,939
	1909	21	384	483	116	894	1,496
	1904	17	170	.....	78	451	693
Clothing, men's	1914	5	370	107	147	429	727
	1909	3	200	38	55	230	377
	1904	3	174	.....	44	241	458
Confectionery	1914	7	185	187	68	362	616
	1909	5	152	273	52	289	570
	1904	5	136	.....	43	213	377
Copper, tin, and sheet-iron work.	1914	20	101	98	81	229	443
	1909	14	130	82	102	279	483
	1904	12	99	.....	65	163	298
Foundry and machine-shop products.[8]	1914	24	756	1,179	560	1,041	2,499
	1909	14	691	1,054	420	1,033	2,130
	1904	16	505	.....	309	692	1,602
Ice, manufactured	1914	8	130	2,755	76	144	426
	1909	7	106	2,771	66	77	276
	1904	4	40	.....	26	41	149
Leather goods [9]	1914	6	293	170	191	1,499	2,019
	1909	6	297	329	173	1,518	2,262
	1904	10	328	.....	204	960	1,516
Lumber, planing-mill products, not including planing mills connected with sawmills.[10]	1914	18	190	335	145	419	690
	1909	11	213	405	153	437	720
	1904	10	215	.....	107	237	475
Marble and stone work	1914	7	57	275	46	116	224
	1909	8	73	208	52	58	160
	1904	[7] 4	24	.....	17	28	62
Printing and publishing [11]	1914	122	708	1,018	660	1,145	3,339
	1909	88	731	760	461	802	2,927
	1904	[7] 74	474	.....	336	412	1,817
Tobacco manufactures	1914	7	22	7	11	20	40
	1909	5	31	7	13	18	50
	1904	[2] 7	37	.....	16	27	62
All other industries	1914	152	1,959	8,469	1,222	13,179	18,101
	1909	123	1,874	7,398	941	11,331	15,508
	1904	85	1,243	.....	514	5,742	8,119
EL PASO	1914	117	2,347	6,778	$1,603	$2,873	$6,135
	1909	88	1,752	3,396	1,093	1,496	3,638
	1904	54	1,158	.....	710	1,131	2,378
FORT WORTH—All industries.	1914	180	2,308	7,815	1,542	5,832	9,974
	1909	147	2,059	6,614	1,285	5,266	8,661
	1904	102	1,423	.....	843	3,189	5,668
Bread and other bakery products.	1914	13	85	73	55	202	318
	1909	17	99	101	62	181	314
	1904	8	125	.....	45	211	458
Copper, tin, and sheet-iron products.	1914	12	43	8	47	81	175
	1909	7	44	8	35	71	150
	1904	6	38	.....	27	52	108
Foundry and machine-shop products.	1914	11	64	224	57	67	180
	1909	9	58	155	40	75	175
	1904	6	76	.....	44	55	143
Furniture	1914	5	114	231	68	107	270
	1909	4	110	220	55	80	215
	1904	3	75	.....	37	49	138
Ice, manufactured	1914	9	106	2,543	91	112	292
	1909	6	75	1,615	60	98	269
	1904	4	51	.....	33	28	108
Lumber, planing-mill products, not including planing mills connected with sawmills.	1914	8	47	163	48	129	265
	1909	6	102	267	70	134	253
	1904	7	35	.....	23	34	78
Printing and publishing	1914	27	315	576	251	391	1,209
	1909	24	213	346	175	178	722
	1904	19	198	.....	138	106	398
Tobacco, cigars	1914	6	24	.....	12	12	36
	1909	4	16	.....	7	10	26
	1904	6	13	.....	8	9	27
All other industries	1914	89	1,510	3,997	913	4,731	7,229
	1909	70	1,342	3,902	781	4,439	6,537
	1904	43	812	.....	488	2,645	4,210

[1] Includes "saddlery and harness," and "trunks and valises," but excludes "leather goods, not elsewhere specified."
[2] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[3] Includes "boxes, wooden packing;" "lumber, planing-mill products"; and "window and door screens and weather strips."
[4] Includes "perfumery and cosmetics."
[5] Includes "bookbinding and blank-book making"; "engraving, steel and copper plate," but excludes "printing and publishing, music."
[6] Includes "sausage, not made in slaughtering and meat-packing establishments."
[7] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[8] Includes "automobile repairing" and "structural ironwork, not made in steel works and rolling mills."
[9] Includes "saddlery and harness" and "trunks and valises."
[60] Includes "window and door screens and weather strips."
[11] Includes "bookbinding and blank-book making" and "engraving, steel and copper plate, including plate printing."

TABLE 32.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.—Continued.

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

INDUSTRY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.		
HOUSTON—All industries.	1914	276	5,607	18,004	$3,590	$16,124	$25,868
	1909	249	5,338	14,866	3,260	14,321	23,016
	1904	209	5,056	.....	2,892	7,617	13,564
Bread and other bakery products.	1914	22	291	405	161	631	1,113
	1909	23	221	92	114	412	724
	1904	20	148	.....	67	228	447
Carriages and wagons and repairs.	1914	5	21	150	13	14	37
	1909	11	99	68	68	69	201
	1904	[1] 8	80	.....	44	50	141
Copper, tin, and sheet-iron work.	1914	22	105	14	79	121	277
	1909	21	138	15	98	118	305
	1904	12	112	.....	72	77	215
Foundry and machine-shop products.[2]	1914	24	443	1,726	264	509	1,281
	1909	21	488	1,074	298	782	1,444
	1904	[3] 13	290	.....	189	429	878
Lumber and timber products.[4]	1914	13	220	601	114	234	450
	1909	12	369	809	211	575	1,081
	1904	11	419	.....	179	235	622
Oil, cottonseed, and cake.	1914	4	276	3,030	138	2,784	3,185
	1909	4	269	3,801	109	2,859	3,555
	[5] 1904	.....	.....	.....	.....	.....	.....
Patent medicines and compounds.	1914	7	7	2	4	17	117
	1909	5	12	5	7	8	38
	1904	3	2	.....	1	5	15
Printing and publishing.	1914	56	552	963	473	528	2,068
	1909	44	443	713	383	365	1,449
	1904	[1] 33	405	.....	306	192	881
Saddlery and harness.	1914	4	27	22	22	90	174
	1909	6	59	41	39	68	174
	1904	[3] 5	20	.....	12	35	72
All other industries.	1914	119	3,665	11,091	2,322	11,196	17,166
	1909	102	3,240	8,248	1,933	9,065	14,045
	1904	104	3,580	.....	2,022	6,366	10,293
SAN ANTONIO—All industries.	1914	239	4,083	8,859	$2,412	$10,090	$17,849
	1909	194	3,105	6,908	1,760	6,952	13,435
	1904	141	2,457	.....	1,362	3,741	7,402
Bread and other bakery products.	1914	31	205	114	105	360	610
	1909	32	135	102	76	307	565
	1904	19	81	.....	41	179	273
Cars and general shop construction and repairs by steam-railroad companies.	1914	3	615	139	395	412	840
	1909	3	557	243	416	253	736
	1904	3	818	.....	544	261	827
Clothing, men's, including shirts.	1914	5	207	30	60	181	303
	1909	5	132	26	38	96	185
	1904	3	35	.....	6	37	45
Confectionery.	1914	5	208	106	68	334	578
	1909	7	208	86	60	476	740
	1904	3	131	.....	36	178	313
Copper, tin, and sheet-iron work.	1914	11	79	15	54	72	175
	1909	7	53	15	39	41	108
	1904	5	34	.....	20	35	76
Foundry and machine-shop products.[1]	1914	[3] 15	348	461	231	581	1,059
	1909	7	230	217	139	160	399
	1904	[3] 5	159	.....	88	75	281
Ice, manufactured.	1914	6	124	913	63	92	271
	1909	4	54	227	33	53	168
	1904	3	28	.....	14	24	77
Lumber, planing-mill products, not including planing mills connected with sawmills.	1914	8	165	484	105	351	549
	1909	7	138	360	89	104	237
	1904	3	33	.....	21	20	53
Marble and stone work.	1914	6	63	125	40	43	124
	1909	5	64	65	45	20	98
	1904	3	34	.....	26	32	74
Printing and publishing.	1914	48	391	398	305	336	1,433
	1909	39	383	328	219	217	982
	1904	[1] 35	344	.....	185	169	766
Tobacco, cigars and cigarettes.	1914	9	129	.....	32	75	157
	1909	5	90	.....	21	43	102
	1904	12	61	.....	15	48	92
All other industries.	1914	92	1,549	6,074	954	7,253	11,750
	1909	73	1,061	5,239	585	5,182	9,115
	1904	47	699	.....	366	2,683	4,525

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

AUSTIN.	1914	114	891	4,824	$611	$1,714	$3,371
	1909	108	754	2,211	415	1,627	2,846
	1904	62	641	.....	349	771	1,569
BEAUMONT.	1914	67	1,073	5,580	674	3,442	5,191
	1909	56	863	4,596	645	3,444	4,831
	1904	40	732	.....	425	1,512	2,610
BROWNSVILLE.	1914	14	76	486	25	74	167
	1909	9	51	414	19	46	121
CLEBURNE.	1914	26	886	1,541	654	1,359	2,246
	1909	24	825	1,499	533	859	1,577
DENISON.	1914	30	954	3,652	609	1,175	2,069
	1909	29	833	2,306	516	593	1,314
	1904	25	725	.....	455	591	1,235
GALVESTON.	1914	116	1,410	8,939	955	5,716	8,692
	1909	81	1,094	3,633	707	4,267	6,308
	1904	67	761	.....	470	1,599	2,997
LAREDO.	1914	28	270	530	105	144	345
	1909	23	213	353	87	74	221
	1904	18	515	.....	181	196	454
MARSHALL.	1914	28	1,166	1,963	691	1,066	2,099
	1909	22	977	1,326	653	803	1,787
PALESTINE.	1914	20	648	1,302	$504	$584	$1,222
	1909	20	745	1,209	481	622	1,313
	1904	17	544	.....	310	305	753
PARIS.	1914	42	513	2,220	272	1,538	2,284
	1909	45	541	2,489	247	862	1,430
	1904	29	210	.....	105	528	855
SAN ANGELO.	1914	30	161	937	104	267	499
	1909	26	115	608	71	133	318
SHERMAN.	1914	36	389	2,366	221	5,864	7,028
	1909	36	273	2,150	136	4,047	4,676
	1904	39	307	.....	153	2,149	2,641
TEMPLE.	1914	37	342	1,566	237	958	1,452
	1909	37	366	1,616	215	834	1,346
TYLER.	1914	20	506	1,332	313	449	897
	1909	23	484	769	288	536	996
	1904	21	368	.....	192	311	629
WACO.	1914	125	1,125	5,452	699	3,583	5,612
	1909	92	1,033	3,669	588	2,965	4,769
	1904	76	947	.....	440	1,779	2,980

[1] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[2] Includes "automobile repairing" and "structural ironwork, not made in steel works or rolling mills."
[3] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[4] Includes "boxes, wooden packing," and "window and door screens and weather strips."
[5] Figures can not be shown without disclosing individual operations.

TABLE 33.—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	5,084	91,114	4,787	3,753	6,794	927	74,853	Ja 76,993	My 72,219	(3)	(3)	(3)	(3)	(3)	$283,543,820
2	Artificial limbs	4	13	2	3	.....	1	7	Mh [4] 8	Au [4] 6	7	7	.....	.....	.....	9,519
3	Artificial stone products	25	146	27	12	5	2	100	Au 123	De 65	113	113	.....	.....	.....	116,779
4	Automobile bodies and parts	9	52	14	3	.....	.....	35	Je 38	Se 32	35	34	1	.....	.....	32,966
5	Automobile repairing	22	122	27	4	2	1	88	.....	.....	86	84	2	.....	.....	99,469
6	Repair work	19	115	23	4	2	1	85	Mh 96	Je 80	83	81	2	.....	.....	94,269
7	Vulcanizing tires	3	7	4	.....	.....	.....	3	(5) 3	(5) 3	3	3	.....	.....	.....	5,200
8	Awnings, tents, and sails	16	159	19	10	17	5	108	Jy 140	Oc 90	104	44	60	.....	.....	233,542
9	Babbitt and white metal	3	10	3	.....	2	.....	5	(5) 5	(5) 5	5	5	.....	.....	.....	14,850
10	Bookbinding and blank-book making	5	23	4	.....	1	.....	18	Mh 23	No 13	19	12	6	1	.....	16,683
11	Boot and shoe findings	3	11	2	.....	.....	.....	9	(5) 9	(5) 9	9	9	.....	.....	.....	9,871
12	Boots and shoes	7	72	13	3	1	1	54	De [4] 57	Au [4] 50	57	55	2	.....	.....	81,667
13	Boxes, wooden packing	26	857	23	37	25	7	765	Ap 995	No 603	779	712	63	4	.....	1,970,617
14	Brass and bronze products	7	113	6	9	7	.....	91	Mh 105	De [4] 80	85	85	.....	.....	.....	319,036
15	Bread and other bakery products	530	2,815	601	53	159	53	1,949	Au 2,054	Ja 1,883	1,991	1,607	339	28	17	4,178,559
16	Brick and tile, terra-cotta, and fire-clay products.	70	1,971	37	103	58	8	1,765	.....	.....	1,976	1,956	.....	20	.....	4,242,256
17	Building brick	60	1,458	31	84	33	3	1,307	Jy 1,498	De 980	1,523	1,503	.....	20	.....	3,066,648
18	Tile, sewer pipe, fire brick and terra cotta.	10	513	6	19	25	5	458	Ap 518	De 363	453	453	.....	.....	.....	1,175,608
19	Brooms, from broom corn	31	240	33	14	13	3	177	My 184	Ja 171	184	176	6	2	.....	275,665
20	Butter	51	271	22	30	34	11	174	Jy 193	Ja 160	170	159	11	.....	.....	1,219,348
21	Canning and preserving, fruits and vegetables.	12	169	5	14	49	2	99	.....	.....	339	178	158	3	.....	411,469
22	Canned vegetables	3	80	.....	4	13	1	62	Oc 72	My [4] 48	78	49	29	.....	.....	197,454
23	Canned fruits	9	89	5	10	36	1	37	Au 190	My [6] 0	261	129	129	3	.....	214,015
24	Carriage and wagon materials	3	38	4	5	4	1	24	Jy [4] 29	Ja 17	22	22	.....	.....	.....	62,927
25	Carriages, wagons, and repairs	29	241	37	15	7	1	181	.....	.....	187	187	.....	.....	.....	506,475
26	Carriages and wagons	22	206	26	11	6	1	162	Au [4] 185	Ja 133	168	168	.....	.....	.....	446,743
27	Repair work only	7	35	11	4	1	.....	19	Oc [4] 21	Ja 17	19	19	.....	.....	.....	59,732
28	Cars and general shop construction and repairs by electric-railroad companies.	19	622	.....	23	14	2	583	Je 648	De 532	584	584	.....	.....	.....	977,183
29	Cars and general shop construction and repairs by steam-railroad companies.	63	11,750	.....	299	496	40	10,915	Au 11,190	My 10,410	11,068	11,063	4	1	.....	28,465,388
30	Cement	4	666	.....	21	54	8	583	Je 720	Fe 436	606	606	.....	.....	.....	7,793,941
31	Cleansing preparations	4	19	3	4	.....	2	10	Je 13	De [4] 8	14	13	1	.....	.....	124,831
32	Clothing, men's	18	1,160	12	33	37	16	1,062	Ap [4] 1,155	No 903	1,089	76	1,013	.....	.....	1,083,804
33	Clothing, women's	4	81	3	2	7	2	67	Jy 81	De 42	59	29	30	.....	.....	67,880
34	Coffee, roasting and grinding	36	288	26	35	68	14	145	Se 152	Mh 141	150	111	37	2	.....	970,231
35	Confectionery and ice cream	124	1,367	128	69	157	33	980	.....	.....	1,078	684	388	3	3	2,291,926
36	Confectionery and chewing gum	46	1,031	43	44	148	23	773	No 809	Jy 730	836	452	380	1	3	1,632,730
37	Ice cream	78	336	85	25	9	10	207	Jy 287	Ja 131	242	232	8	2	.....	659,196
38	Cooperage	6	237	3	5	11	.....	218	Au 267	Jy 178	218	217	.....	1	.....	656,220
39	Copper, tin, and sheet-iron work	247	1,070	265	37	30	10	728	Je 765	No 691	752	740	.....	12	.....	1,133,713
40	Cotton goods	12	1,933	.....	34	18	6	1,875	De 1,960	Fe 1,811	1,981	1,274	641	37	29	5,252,899
41	Druggists' preparations	5	44	.....	4	9	1	30	Ap [4] 31	Se [4] 29	29	18	10	1	.....	144,103
42	Engraving, steel and copper plate, including plate printing.	3	46	7	1	.....	1	37	My 43	Au [4] 32	39	27	10	.....	2	19,000
43	Fertilizers	8	116	3	7	5	.....	101	My 156	De 37	178	178	.....	.....	.....	412,355
44	Flour-mill and gristmill products	191	1,992	173	146	349	24	1,300	Au 1,379	Ap 1,246	1,313	1,312	1	.....	.....	17,523,988
45	Food preparations, not elsewhere specified.	26	431	29	27	52	6	317	Oc 362	Jy 213	340	268	71	1	.....	1,460,975
46	Foundry and machine-shop products.	142	3,232	121	140	256	34	2,681	.....	.....	2,728	2,710	7	11	.....	11,023,590
47	Boiler shops	6	70	5	1	1	2	61	My 81	Oc 44	61	61	.....	.....	.....	136,304
48	Foundries	13	247	9	20	8	1	209	Mh 230	No 177	210	210	.....	.....	.....	676,359
49	Machine shops	123	2,915	107	119	247	31	2,411	My 2,678	De 2,055	2,457	2,439	7	11	.....	10,210,927
50	Furniture	25	684	18	35	48	6	577	.....	.....	591	575	14	2	.....	2,037,469
51	Wood, other than rattan and willow.	15	465	13	20	33	5	394	Mh 520	No 233	406	391	13	2	.....	1,687,239
52	Store and office fixtures	10	219	5	15	15	1	183	Fe 224	No 145	185	184	1	.....	.....	350,230
53	Gas, illuminating and heating	27	849	1	60	146	29	613	De 791	Fe 516	791	788	2	1	.....	12,396,727
54	Glass, cutting, staining, and ornamenting.	6	40	6	4	2	2	26	My [4] 30	No [4] 22	23	22	1	.....	.....	40,359
55	Hand stamps	5	16	5	1	.....	.....	10	(5) 10	(5) 10	10	9	1	.....	.....	22,725
56	Hardware, saddlery	3	15	5	.....	.....	.....	10	(5) 10	(5) 10	10	10	.....	.....	.....	22,046
57	Hats, fur-felt	3	24	7	4	.....	.....	13	My 17	Ja 5	12	6	5	1	.....	22,024
58	Ice, manufactured	255	2,553	139	281	190	17	1,926	Jy 2,810	De 1,193	2,070	2,035	.....	35	.....	12,698,125
59	Jewelry	26	113	25	3	3	2	80	De 88	Au 74	86	83	2	1	.....	69,636
60	Lime	8	291	4	13	10	2	262	Au 333	De 75	284	284	.....	.....	.....	358,559
61	Liquors, malt	13	1,145	16	41	124	6	958	Jy 1,094	Ja 859	971	971	.....	.....	.....	8,706,819
62	Lumber and timber products	401	19,279	455	322	682	37	17,783	Jy 19,242	No 15,708	19,762	19,717	.....	45	.....	36,265,940
63	Lumber, planing mill products, not including planing mills connected with sawmills.	149	1,751	160	97	125	11	1,358	Jy 1,495	De 1,100	1,354	1,351	.....	3	.....	3,672,562

[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.								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.																
$6,687,975	$7,669,992	$44,821,377	$1,342,170	$1,188,502	$2,750,682	$242,405,876	$10,738,385	$361,279,303	$108,135,042	335,791	262,200	28,595	2,053	42,943	33,190	1
4,425	600	7,113	20	1,550	35	6,416	142	21,377	14,819	8	.....	.....	.....	8	.....	2
16,525	3,778	61,940	416	2,846	742	60,715	750	185,728	124,263	67	.....	47	.....	20	.....	3
1,650	.....	33,059	.....	6,510	210	38,163	1,168	105,022	65,691	34	.....	.....	.....	34	.....	4
6,600	1,572	58,900	.....	9,487	575	50,657	2,987	164,766	111,122	133	.....	36	.....	97	.....	5
6,600	1,572	57,300	.....	8,887	528	48,367	2,383	154,666	103,916	125	.....	36	.....	89	.....	6
.....	.....	1,600	.....	600	47	2,290	604	10,100	7,206	8	.....	.....	.....	8	.....	7
15,370	18,105	49,039	1,000	4,355	1,699	286,132	2,088	428,823	140,603	88	.....	23	.....	65	.....	8
.....	1,680	3,489	.....	600	270	14,150	210	22,800	8,440	4	.....	.....	.....	4	.....	9
.....	90	11,780	.....	992	72	4,646	270	24,249	19,333	14	.....	.....	.....	14	.....	10
.....	.....	4,580	.....	420	105	16,547	44	32,032	15,441	2	.....	.....	.....	2	.....	11
5,360	1,113	28,392	.....	2,100	879	54,464	1,366	121,743	65,913	32	.....	.....	.....	32	.....	12
78,385	27,061	343,556	5,601	6,380	14,385	642,281	7,240	1,195,747	546,226	3,950	3,725	4	.....	221	418	13
19,007	7,624	63,059	6,558	6,399	2,533	339,123	12,003	494,763	143,637	189	.....	.....	.....	189	.....	14
74,082	161,306	1,095,427	2,474	129,384	37,357	3,978,476	163,361	7,503,298	3,361,461	2,325	754	425	.....	1,146	473	15
150,150	52,557	778,477	3,689	1,303	26,202	256,191	659,515	2,316,403	1,400,697	8,738	7,955	298	.....	485	304	16
117,212	26,172	566,576	1,592	1,303	21,547	162,810	483,308	1,582,972	936,854	7,014	6,345	254	.....	415	257	17
32,938	26,385	211,901	2,097	.....	4,655	93,381	176,207	733,431	463,843	1,724	1,610	44	.....	70	47	18
14,278	16,261	95,007	.....	1,919	1,847	260,770	3,602	459,550	195,178	149	.....	114	.....	35	.....	19
33,357	20,638	115,183	17,094	18,031	4,373	1,710,672	41,328	2,280,779	528,779	1,360	759	274	.....	327	13	20
14,100	25,727	37,271	400	2,905	1,235	224,271	7,457	517,901	286,173	285	230	13	.....	42	23	21
8,500	18,195	24,093	400	2,825	747	153,498	5,672	392,278	233,108	198	150	8	.....	40	16	22
5,600	7,532	13,178	.....	80	488	70,773	1,785	125,623	53,065	87	80	5	.....	2	7	23
5,950	3,755	19,935	.....	2,240	397	20,147	932	70,178	49,099	28	.....	1	.....	27	.....	24
11,622	4,932	119,715	820	9,147	4,422	128,087	7,146	418,563	283,330	418	50	51	.....	317	.....	25
8,122	4,432	109,129	620	5,740	4,324	120,437	6,442	366,906	240,027	397	50	51	.....	296	.....	26
3,500	500	10,586	200	3,407	98	7,650	704	51,657	43,303	21	.....	.....	.....	21	.....	27
32,450	11,207	415,767	.....	65	21,502	244,345	23,455	734,566	466,766	2,354	1,900	3	.....	451	5	28
478,141	514,902	7,825,559	19	.....	52,716	5,394,275	584,153	15,276,387	9,297,959	13,205	7,698	781	.....	4,726	3,554	29
60,751	80,370	370,563	17,215	.....	20,515	548,558	715,326	2,331,094	1,067,210	18,150	1,675	10,920	.....	5,555	8,806	30
7,152	800	5,034	163	1,000	148	11,406	179	37,707	26,122	32	.....	15	.....	17	.....	31
63,998	64,127	394,339	.....	18,305	5,924	1,272,920	11,683	2,086,136	801,533	260	.....	12	.....	248	.....	32
3,200	4,850	31,189	.....	2,210	193	87,490	853	154,848	66,505	20	.....	2	.....	18	.....	33
59,290	113,862	82,585	729	12,411	8,132	2,530,771	21,987	3,325,861	773,103	619	.....	74	.....	545	.....	34
109,449	192,787	412,593	10,705	65,430	17,734	1,984,978	68,897	3,594,357	1,540,482	1,921	931	267	.....	723	174	35
68,561	181,874	282,006	8,050	49,367	12,280	1,413,999	38,107	2,565,310	1,113,204	790	497	23	.....	270	164	36
40,888	10,913	130,587	2,655	16,063	5,454	570,979	30,790	1,029,047	427,278	1,131	434	244	.....	453	10	37
7,020	18,893	93,026	.....	1,152	2,417	592,516	2,151	769,101	174,434	511	475	6	.....	30	.....	38
54,761	27,527	560,599	1,685	48,358	9,578	1,006,564	10,116	2,238,381	1,221,701	287	.....	69	.....	218	.....	39
65,816	20,562	674,724	2,000	.....	29,844	2,515,336	127,852	3,754,785	1,111,597	5,948	5,445	.....	.....	503	30	40
4,890	23,399	15,253	.....	400	1,854	101,919	503	183,837	81,415	9	.....	.....	.....	9	.....	41
1,820	624	20,860	.....	2,460	170	12,850	352	52,400	39,198	8	.....	.....	.....	8	.....	42
12,150	3,906	63,169	.....	9,949	984	337,178	29,271	638,277	271,828	522	140	92	.....	290	.....	43
313,947	420,104	797,932	5,440	9,956	94,454	29,262,957	310,230	35,110,301	5,537,114	19,968	12,777	3,296	1,325	2,570	386	44
42,857	64,811	136,276	700	7,266	8,094	3,282,067	49,464	4,051,956	720,425	1,258	1,006	59	.....	193	12	45
315,466	361,410	1,867,390	33,813	25,906	67,493	3,283,591	169,969	7,622,573	4,169,013	7,093	2,864	770	.....	3,459	680	46
1,320	1,714	42,204	.....	1,200	843	70,519	1,993	134,257	61,745	149	25	29	.....	95	.....	47
45,009	10,905	137,255	5,560	2,088	4,439	326,974	19,320	613,993	267,699	760	.....	35	.....	725	.....	48
269,137	348,791	1,687,931	28,253	22,618	62,211	2,886,098	148,656	6,874,323	3,839,569	6,184	2,839	706	.....	2,639	680	49
66,663	57,493	355,189	291	8,732	17,226	480,707	21,476	1,236,790	734,607	1,848	815	64	.....	969	65	50
29,598	39,839	228,774	.....	1,864	14,218	315,424	15,258	790,926	460,244	1,613	740	14	.....	859	60	51
37,065	17,654	126,415	291	6,868	3,008	165,283	6,218	445,864	274,363	235	75	50	.....	110	5	52
95,165	112,206	353,922	.....	5,697	128,120	273,964	494,493	2,185,114	1,416,657	1,759	1,694	.....	.....	65	53	53
5,840	4,336	19,910	2,593	5,000	259	28,804	1,341	72,315	42,170	54	.....	13	.....	41	.....	54
2,120	.....	8,464	.....	3,715	115	11,287	163	36,534	25,084	4	.....	.....	.....	4	.....	55
.....	.....	9,152	.....	252	190	4,945	619	24,416	18,852	31	.....	12	.....	19	.....	56
5,300	.....	11,532	.....	780	91	7,513	418	30,226	22,295	10	3	.....	.....	7	.....	57
350,723	149,976	1,138,192	19,465	10,677	132,686	545,171	1,114,359	5,328,302	3,668,772	42,271	39,248	2,036	358	629	1,470	58
6,170	3,688	95,060	2,237	12,815	656	75,907	1,688	254,184	176,589	41	.....	.....	.....	41	.....	59
28,408	9,871	105,333	500	1,620	1,930	54,781	60,621	347,446	232,044	439	425	9	.....	5	.....	60
202,200	216,352	805,734	2,650	2,640	944,306	2,640,761	287,927	8,470,630	5,541,942	9,068	8,625	225	.....	218	1,962	61
649,066	737,276	9,605,360	614,670	29,238	284,823	8,322,566	259,392	23,144,926	14,562,968	62,824	62,270	477	2	75	1,005	62
163,923	126,313	924,135	41,410	31,186	25,870	2,304,733	44,293	4,266,953	1,917,927	6,860	4,292	448	.....	2,120	48	63

[4] Same number reported for one or more other months. [5] Same number reported throughout year. [6] None reported for one or more other months.

TABLE 33.—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.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNINGS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male	Under 16. Female	Capital.
1	Marble and stone work	135	705	165	30	38	8	464	My 492	De 415	470	470	.....	.....	.....	$1,023,430
2	Mattresses and spring beds	59	386	51	24	23	5	283	Ja 326	Au 251	299	241	56	2	.....	726,032
3	Mineral and soda waters	262	968	315	55	45	8	545	Jy 840	Ja 340	609	566	8	34	1	1,602,010
4	Mirrors, framed and unframed	3	17	2	1	2	.....	12	Au [3] 13	Fe [3] 11	12	12	.....	.....	.....	19,164
5	Models and patterns, not including paper patterns.	4	6	4	.....	.....	.....	2	Ap 4	Fe [3] 1	2	2	.....	.....	.....	7,915
6	Oil, cottonseed, and cake	233	5,649	95	588	483	12	4,471	No 7,958	Je 1,297	8,149	8,136	12	.....	1	27,974,397
7	Optical goods	8	51	2	6	8	6	29	([4]) 29	([4]) 29	29	28	1	.....	.....	117,271
8	Paints	8	69	9	6	14	5	35	Ap 47	De 25	38	35	3	.....	.....	278,430
9	Patent medicines and compounds	49	185	38	32	29	12	74	Jy [2] 80	De 67	80	52	26	.....	2	486,578
10	Paving materials	18	439	10	20	10	2	397	Jy 484	Fe 328	463	463	.....	.....	.....	689,516
11	Peanuts, grading, roasting, cleaning, and shelling.	5	80	1	6	7	.....	66	Ja 117	Au 12	119	21	98	.....	.....	107,448
12	Perfumery and cosmetics	7	22	5	3	.....	2	12	([4]) 12	([4]) 12	12	6	6	.....	.....	36,963
13	Photo-engraving	6	80	3	6	16	1	54	Ja 64	De 45	50	49	.....	1	.....	96,445
14	Pickles, preserves, and sauces	10	169	5	15	30	5	114	Au 167	De 86	151	90	56	2	3	416,740
15	Pottery, earthen and stone ware	11	61	12	3	.....	.....	46	Ap 65	De 27	53	49	.....	4	.....	93,500
16	Printing and publishing, book and job.	288	2,626	300	148	305	68	1,805	.....	.....	1,800	1,450	310	35	5	3,929,939
17	Job printing	267	2,474	287	134	278	60	1,715	Ja 1,808	Se 1,658	1,716	1,374	302	35	5	3,580,811
18	Book publishing and printing	10	84	3	10	25	8	38	No [3] 51	My 30	37	30	7	.....	.....	220,088
19	Linotype work and typesetting	11	68	10	4	2	.....	52	Je 55	Au [3] 47	47	46	1	.....	.....	129,040
20	Printing and publishing, newspapers and periodicals.	892	5,338	931	297	1,039	241	2,830	.....	.....	2,882	2,530	222	129	1	8,794,483
21	Printing and publishing	60	2,107	37	111	760	140	1,059	De 1,098	Fe 1,003	1,077	1,008	44	25	.....	4,709,197
22	Printing, publishing, and job printing.	724	3,038	809	151	231	76	1,771	Mh [3] 1,779	Au 1,752	1,805	1,522	178	104	1	3,959,025
23	Publishing without printing	108	193	85	35	48	25	.....	.....	.....	.....	.....	.....	.....	.....	126,261
24	Refrigerators	5	24	5	.....	1	.....	18	Jy [3] 31	De [3] 10	15	15	.....	.....	.....	28,956
25	Rice, cleaning and polishing	16	487	.....	46	92	4	345	Fe 502	Jy 131	522	511	7	4	.....	3,395,447
26	Saddlery and harness	75	825	95	30	118	15	567	De 758	Oc 416	662	644	16	2	.....	2,920,233
27	Salt	3	161	5	9	6	1	140	De 153	Ja 130	153	141	10	2	.....	378,253
28	Sausage	3	7	2	.....	.....	.....	5	([4]) 5	([4]) 5	5	3	.....	2	.....	12,949
29	Shipbuilding, wooden, including boat building.	14	189	13	7	1	.....	168	Se 241	Fe 105	170	168	.....	2	.....	103,854
30	Show cases	7	98	10	3	2	.....	83	Mh 97	Oc 54	84	84	.....	.....	.....	184,382
31	Signs and advertising novelties	4	30	2	3	2	.....	23	Fe 28	Je 20	22	17	3	2	.....	32,173
32	Slaughtering and meat packing	18	4,054	5	37	488	38	3,486	Mh 3,862	Au 2,940	3,718	3,416	293	9	.....	14,405,135
33	Structural ironwork, not made in steel works or rolling mills.	10	325	8	25	28	7	257	Au 318	De 196	258	257	.....	1	.....	909,133
34	Sugar, cane	4	16	6	.....	.....	.....	10	No 48	Jy [5] 0	76	74	1	1	.....	53,000
35	Tobacco, cigars, and cigarettes	66	444	76	3	17	4	344	Mh 384	Oc [3] 307	324	183	139	2	.....	327,739
36	Trunks and valises	12	103	12	8	7	3	73	Jy 79	No [3] 64	72	71	1	.....	.....	152,446
37	Turpentine and rosin	6	880	5	31	35	.....	809	Au [3] 862	No 731	821	795	.....	26	.....	557,411
38	Vinegar	6	69	3	4	32	2	28	Au [3] 29	De [3] 27	27	22	5	.....	.....	203,140
39	Wall plaster	3	246	.....	18	23	5	200	Ja 224	De 168	200	195	5	.....	.....	1,048,289
40	Window and door screens and weather strips.	11	74	16	6	.....	2	50	My 66	De 30	54	54	.....	.....	.....	46,556
41	Wirework	5	54	2	6	5	.....	41	Au 54	Ja 30	41	41	.....	.....	.....	75,547
42	Wood preserving	6	446	3	19	74	.....	350	Ap 433	Se 271	365	365	.....	.....	.....	3,732,228
43	All other industries *	126	6,594	78	195	537	64	5,720	.....	.....	.....	.....	.....	.....	.....	39,059,372

[1] Owned power only. [2] Includes rented power, other than electric. [3] Same number reported for one or more other months.

* All other industries embrace—

Agricultural implements	4	Carpets, rag	2	Electrical machinery, apparatus, and supplies	1	Flavoring extracts	4
Automobiles	2	Cars, steam-railroad, not including operations of railroad companies	1	Electroplating	2	Furs, dressed	1
Bags, other than paper	3	Chemicals	3	Engines, steam, gas, and water	1	Gas and electric fixtures	1
Bags, paper, not including bags made in paper mills	1	Clocks	1	Engraving and diesinking	1	Glass	2
Baking powders	1	Coffins, burial cases, and undertakers' goods	3	Envelopes	1	Grease, soap stock	1
Belting, leather	1	Cordials and flavoring sirups	4	Explosives	1	Hardware, builders'	1
Bluing	2	Dairymen's and apiarists' supplies	3	Fancy articles, celluloid	1	House-furnishing goods, not elsewhere specified	1
Boxes, cigar	1	Dental goods	2	Felt goods	1	Iron and steel, steel works and rolling mills	1
Boxes and cartons, paper	3			Flags and banners	1		

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).		
$36,003	$45,461	$357,912	$23,302	$11,060	$7,938	$498,291	$24,839	$1,366,901	$843,771	1,531	231	545	.....	755	.....	1
30,155	21,005	151,987	.....	10,644	5,164	589,694	11,977	1,059,587	457,916	909	82	82	.....	745	.....	2
66,924	32,053	277,244	2,110	36,253	13,040	880,854	21,634	1,913,375	1,010,887	1,190	393	342	2	453	5	3
750	1,680	9,436	.....	526	111	20,240	994	52,700	31,466	32	.....	.....	.....	32	.....	4
.....	.....	1,436	.....	210	180	1,900	249	9,526	7,377	30	.....	.....	.....	30	.....	5
893,036	426,624	2,086,540	3,247	7,852	239,440	35,179,801	996,775	41,944,689	5,768,113	60,772	54,697	1,227	320	4,528	1,602	6
14,180	11,360	25,716	.....	9,927	1,231	86,655	1,202	205,680	117,823	30	.....	.....	.....	30	.....	7
12,240	19,572	21,320	.....	5,834	2,986	157,224	1,989	284,490	125,277	165	50	15	.....	100	.....	8
41,480	37,951	31,183	2,625	12,446	2,291	152,816	946	489,518	335,756	87	.....	18	.....	69	.....	9
26,620	9,058	191,276	.....	4,863	1,970	179,741	118,790	618,216	319,685	2,173	1,648	135	.....	390	.....	10
9,640	2,737	17,798	.....	4,050	694	186,155	12,052	247,879	49,672	290	118	115	.....	57	10	11
4,080	1,020	5,646	.....	3,156	215	31,595	108	66,536	34,833	1	.....	.....	.....	1	.....	12
14,222	12,770	51,614	.....	6,152	360	21,179	3,291	136,647	112,177	140	.....	.....	.....	140	.....	13
21,738	46,338	41,534	688	648	2,617	395,200	3,411	693,068	294,457	138	85	.....	.....	53	.....	14
3,036	.....	22,219	50	.....	399	12,347	5,730	62,016	43,939	128	89	39	.....	.....	.....	15
276,109	348,215	1,290,793	97,041	161,525	43,008	1,270,287	50,056	4,711,163	3,390,820	1,755	4	34	.....	1,717	4	16
251,060	320,353	1,200,188	34,210	150,109	39,479	1,205,710	47,346	4,269,593	3,016,537	1,692	4	34	.....	1,654	4	17
19,489	25,626	29,678	62,631	8,332	2,773	61,540	679	333,633	271,414	43	.....	.....	.....	43	.....	18
5,560	2,236	60,927	200	3,084	756	3,037	2,031	107,937	102,869	20	.....	.....	.....	20	.....	19
573,718	1,130,131	2,234,052	319,652	196,412	67,582	2,533,908	124,899	10,263,457	7,604,650	4,334	517	1,137	4	2,676	529	20
338,387	840,254	1,117,479	89,341	58,778	38,653	1,604,444	64,304	5,568,972	3,900,224	2,198	510	142	.....	1,546	526	21
198,252	238,570	1,116,573	16,033	128,651	28,778	912,662	60,410	4,202,786	3,229,714	2,131	7	995	4	1,125	3	22
37,079	51,307	.....	214,278	8,983	151	16,802	185	491,699	474,712	5	.....	.....	.....	5	.....	23
.....	1,200	11,702	.....	684	340	13,577	690	41,238	26,971	35	.....	20	.....	15	.....	24
86,615	106,850	199,311	.....	5,162	24,957	6,336,739	29,448	7,216,359	850,172	5,365	5,082	42	.....	241	350	25
75,378	147,914	390,564	726	56,650	27,036	2,424,006	8,899	3,382,244	949,339	336	.....	22	.....	314	.....	26
14,990	6,388	74,538	100	3,073	2,205	140,369	86,479	424,869	198,021	809	809	.....	.....	.....	10	27
.....	.....	3,850	.....	840	26	31,475	1,228	44,978	12,275	37	.....	.....	.....	37	.....	28
11,410	1,250	123,256	.....	1,291	270	277,827	823	473,524	194,874	316	222	94	.....	.....	1	29
3,800	2,172	58,708	.....	942	1,515	57,294	1,582	161,184	102,308	232	80	5	.....	147	.....	30
5,400	1,855	18,617	103	2,900	164	21,115	34	63,995	42,846	3	.....	.....	.....	3	.....	31
99,417	612,594	2,068,667	1,494	7,230	65,073	43,885,454	538,963	52,945,022	8,520,605	12,276	12,141	31	.....	104	5,405	32
55,269	38,193	172,075	14,709	3,570	3,554	495,285	13,031	970,726	462,410	553	120	23	.....	410	.....	33
.....	.....	2,083	.....	30	134	9,379	1,320	17,803	7,104	80	80	.....	.....	.....	.....	34
11,500	32,815	158,514	175	6,077	48,945	239,954	330	601,973	361,689	3	.....	.....	.....	3	.....	35
17,850	9,145	38,548	.....	6,060	1,435	48,443	974	185,127	135,710	41	.....	.....	.....	41	.....	36
40,453	28,333	207,279	649	.....	2,823	96,110	2,166	608,374	510,098	21	21	.....	.....	.....	.....	37
8,700	37,528	16,840	.....	3,300	1,893	224,002	4,250	455,402	227,150	69	55	.....	.....	14	.....	38
22,329	34,814	113,621	.....	.....	5,050	105,793	64,204	487,617	317,620	1,102	300	502	.....	300	527	39
6,456	1,200	30,726	2,024	1,974	494	57,803	1,422	132,988	73,763	118	.....	23	.....	95	.....	40
10,420	4,500	32,014	.....	3,000	317	72,301	1,318	147,434	73,815	28	.....	10	.....	18	.....	41
57,339	83,161	227,353	103	1,800	12,137	2,581,027	60,165	3,095,503	454,311	2,950	2,825	125	.....	.....	185	42
477,121	685,654	3,930,642	79,015	88,573	187,726	67,777,268	3,217,277	81,973,370	10,978,825	22,514	16,795	3,073	42	2,604	5,081	43

[1] Same number reported throughout the year.

[5] None reported for one or more other months.

Lapidary work	1	Paper and wood pulp	2	Sand-lime brick	2
Leather goods, not elsewhere specified	1	Petroleum refining	9	Shirts	2
Leather, tanned, curried, and finished	1	Poultry, killing and dressing	2	Smelting, copper	1
Millinery and lace goods	2	Printing and publishing, music	2	Soap	3
Minerals and earth, ground	2	Printing materials	3	Soda-water apparatus	1
Mucilage and paste	2	Pumps, not including power pumps	1	Statuary and art goods	1
Musical instruments and materials, violins	1	Roofing materials	2	Stencils and brands	2
		Rubber goods, not elsewhere specified	1	Stereotyping and electrotyping	2
		Safes	1	Sugar, refining	1

Surgical appliances	1
Tobacco, smoking	3
Tools, not elsewhere specified	3
Upholstering materials, excelsior	1
Washing machines and clothes wringers	2
Waste	2
Whips	2
Wood, turned and carved	5

TABLE 33.—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 EARNINGS DEC. 51, 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	**DALLAS**—All industries	412	7,258	372	357	1,041	204	5,284	Mh 5,570	No 4,786	5,527	4,447	1,026	24	30	$23,488,754
2	Automobile bodies and parts	3	21	5	.....	.....	.....	16	Je 22	Oc.[3] 12	14	13	1	.....	.....	4,038
3	Awnings, tents, and sales	3	25	2	3	1	1	18	Je 27	No[3] 12	17	8	9	.....	.....	22,879
4	Babbitt and white metal	3	10	3	.....	2	.....	5	(4) 5	(4) 5	5	5	.....	.....	.....	14,850
5	Bread and other bakery products	35	675	40	15	89	18	513	Au 587	My 469	524	316	188	3	17	1,143,492
6	Carriages, wagons, and repairs	3	20	3	1	.....	.....	16	Je[3] 17	Ja 14	16	16	.....	.....	.....	9,325
7	Clothing, men's	5	401	6	10	8	7	370	Au 389	No[3] 345	380	37	343	.....	.....	270,305
8	Confectionery and ice cream	15	303	16	20	40	4	223	.....	.....	241	167	74	.....	.....	617,249
9	Confectionery	7	246	8	13	37	3	185	Mh 202	Ja 151	190	118	72	.....	.....	343,342
10	Ice cream	8	57	8	7	3	1	38	Jy 56	Fe 21	51	49	2	.....	.....	273,007
11	Copper, tin, and sheet-iron work	20	140	19	9	7	4	101	Au[3] 113	No 84	101	100	.....	1	.....	236,419
12	Foundry and machine-shop products	21	817	21	19	106	9	662	My 851	No 433	698	691	6	1	.....	4,843,505
13	Ice, manufactured	8	159	.....	14	14	1	130	Jy 150	De 111	133	133	.....	.....	.....	895,652
14	Jewelry	10	50	10	1	2	2	35	No 37	De 33	33	31	2	.....	.....	34,668
15	Leather goods	6	405	.....	21	78	13	293	De 414	Se 222	333	331	2	.....	.....	2,009,629
16	Lumber, planing-mill products, not including planing mills connected with sawmills.	13	205	20	8	16	.....	161	Jy 184	De 103	165	165	.....	.....	.....	419,019
17	Marble and stonework	7	73	7	5	2	2	57	Se[3] 80	De 33	47	47	.....	.....	.....	189,722
18	Mineral and soda waters	8	70	5	4	13	1	47	Jy 75	Ja 26	40	40	.....	.....	.....	74,839
19	Optical goods	3	28	.....	3	5	4	16	(4) 16	(4) 16	16	16	.....	.....	.....	74,889
20	Patent medicines and compounds	14	56	8	8	11	5	24	Jy[3] 25	Ja[3] 23	24	18	6	.....	.....	113,481
21	Printing and publishing, book and job	67	578	76	34	59	18	391	.....	.....	386	312	66	7	1	779,943
22	Job printing	60	524	72	28	50	14	360	Ja 403	Se 336	357	284	65	7	1	627,274
23	Book publishing and printing and linotype work.	7	54	4	6	9	4	31	Je 34	Au 28	29	28	1	.....	.....	152,669
24	Printing and publishing, newspapers and periodicals.	51	729	42	48	291	65	283	.....	.....	292	279	12	1	.....	1,210,880
25	Printing and publishing	7	600	.....	31	262	51	256	Jy 277	Fe 223	263	256	7	.....	.....	1,102,708
26	Printing, publishing, and job printing.	8	55	8	7	9	4	27	Mh[3] 29	Se[3] 24	29	23	5	1	.....	52,621
27	Publishing without printing	36	74	34	10	20	10	.....	.....	.....	.....	.....	.....	.....	.....	55,551
28	Tobacco manufactures	7	31	8	.....	1	.....	22	Se 26	Oc[3] 20	23	20	3	.....	.....	34,654
29	Window and door screens and weather strips.	5	38	5	3	.....	1	29	Jy 41	De 17	34	34	.....	.....	.....	15,673
30	All other industries *	105	2,424	76	131	296	49	1,872	.....	.....	2,005	1,668	314	11	12	10,473,463

*All other industries embrace—

Artificial limbs	1	Boxes and cartons, paper	1	Cars and general shop construction and repairs by steam-railroad companies	1	Cordials and flavoring sirups	1
Artificial stone products	2	Boxes, wooden packing	2	Chemicals	3	Cotton goods	1
Automobile repairing	2	Brass and bronze products	1	Cleansing preparations	1	Druggists' preparations	3
Bags, other than paper	2	Brooms, from broom corn	2	Clothing, women's	1	Engraving and diesinking	1
Belting, leather	1	Canning, vegetables	1	Coffee, roasting and grinding	1	Engraving, steel and copper plate, including plate printing	1
Bluing	1	Carpets, rag	1	Coffins, burial cases, and undertakers' goods	1	Envelopes	1
Bookbinding and blank-book making	3	Carriage and wagon materials	2	Cooperage, barrels	1	Flags and banners	1
Boot and shoe findings	2	Cars and general shop construction and repairs by electric-railroad companies	2			Flavoring extracts	1
Boots and shoes	1					Flour-mill and gristmill products	3
Boxes, cigar	1						

1	**EL PASO**—All industries	117	2,815	94	115	211	48	2,347	My 2,465	No 2,249	2,403	2,309	85	9	.....	8,666,074
2	Bread and other bakery products	15	141	20	2	9	7	103	De 106	Se[3] 100	107	97	7	3	.....	122,335
3	Cars and general shop construction and repairs by steam-railroad companies.	4	885	.....	21	28	.....	836	Jy 867	Mh 796	854	854	.....	.....	.....	1,906,073
4	Copper, tin, and sheet-iron work	4	41	3	2	4	1	31	Se[3] 35	Fe 24	29	29	.....	.....	.....	49,560
5	Foundry and machine-shop products	6	203	4	6	12	3	178	My 200	Oc 145	172	171	.....	1	.....	691,407
6	Ice, manufactured	3	89	.....	6	8	1	74	Je 96	De 55	77	77	.....	.....	.....	738,273
7	Jewelry	6	30	8	2	1	.....	19	De 22	Au[3] 17	22	22	.....	.....	.....	11,950
8	Lumber, planing-mill products, not including planing mills connected with sawmills.	3	91	2	5	6	.....	78	Oc 100	Fe 58	95	95	.....	.....	.....	207,653
9	Marble and stone work	3	12	2	2	.....	.....	8	Se[3] 9	De[3] 7	7	7	.....	.....	.....	10,614
10	Mineral and soda waters	4	25	2	5	.....	.....	18	Jy[3] 27	Ja[3] 9	21	21	.....	.....	.....	52,164
11	Printing and publishing, job work only	11	129	7	11	7	4	100	No 118	Jy 91	121	103	17	1	.....	150,854
12	Printing and publishing, newspapers and periodicals.	11	207	8	10	61	20	108	De 114	Au 103	114	114	.....	.....	.....	295,914
13	Saddlery and harness	4	16	2	.....	1	.....	13	(4) 13	(4) 13	13	13	.....	.....	.....	29,518
14	All other industries *	43	946	36	43	74	12	781	.....	.....	771	706	61	4	.....	4,399,759

*All other industries embrace—

Automobile bodies and parts	2	Brick	2	Confectionery and ice cream	4	Gas, illuminating and heating	3		
Awnings, tents, and sails	1	Cars and general shop construction and repairs by electric-railroad companies	1	Flour-mill and gristmill products	1	Glass, cutting, staining, and ornamenting	1		
Boots and shoes	1	Coffee, roasting and grinding	2	Food preparations, macaroni, vermicelli, noodles, etc	1	Lapidary work	1		
Boxes, wooden packing	1			Gas and electric fixtures	1				
Brass and bronze products	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.																
$801,756	$1,330,010	$3,464,228	$213,095	$226,067	$259,298	$19,144,217	$426,140	$31,065,073	$11,494,716	15,517	10,438	1,204	.....	3,875	2,181	1
.....	.....	15,978	.....	3,900	52	16,885	115	44,850	27,850	3	.....	.....	.....	3	.....	2
4,360	1,265	7,495	.....	1,380	197	44,300	261	65,741	21,176	6	.....	.....	.....	6	.....	3
.....	1,680	3,489	.....	600	270	14,150	210	22,800	8,440	4	.....	.....	.....	4	.....	4
27,480	83,387	257,054	.....	18,711	8,138	957,421	29,193	1,939,010	952,396	917	430	295	.....	192	344	5
1,500	.....	14,625	.....	2,220	89	6,436	554	27,277	20,287	15	.....	.....	.....	15	.....	6
23,900	12,120	147,455	.....	7,840	806	425,278	3,257	726,816	298,281	107	.....	.....	.....	107	.....	7
35,183	48,417	102,628	2,050	18,956	4,183	455,282	19,693	832,562	357,587	582	480	2	.....	100	89	8
19,763	44,397	68,272	300	16,700	1,861	354,377	7,678	615,662	253,607	187	135	2	.....	50	89	9
15,420	4,020	34,356	1,750	2,256	2,322	100,905	12,015	216,900	103,980	395	345	.....	.....	50	.....	10
13,603	7,525	81,067	.....	6,802	2,480	228,043	1,422	442,960	213,495	98	.....	.....	.....	98	.....	11
69,233	174,493	501,736	6,060	6,035	27,752	839,166	21,714	2,115,550	1,254,670	1,096	763	.....	.....	333	340	12
25,530	13,630	76,179	.....	.....	14,823	49,008	94,856	426,360	282,496	2,755	2,730	25	.....	.....	34	13
2,400	2,708	45,383	1,600	7,590	436	24,669	647	111,496	86,180	22	.....	.....	.....	22	.....	14
55,550	116,118	191,351	.....	24,720	17,816	1,493,990	4,998	2,019,246	520,258	170	.....	.....	.....	170	.....	15
19,389	20,028	126,492	.....	6,475	2,313	377,829	2,984	607,678	226,865	302	145	35	.....	122	.....	16
6,820	4,392	45,911	13,344	1,020	856	113,569	2,287	224,215	108,359	275	146	80	.....	49	.....	17
8,075	10,415	27,487	.....	4,710	562	123,899	795	219,065	94,371	31	.....	.....	.....	31	.....	18
8,680	6,240	14,230	.....	3,147	965	59,711	624	129,964	69,629	14	.....	.....	.....	14	.....	19
10,700	12,925	11,755	200	5,215	639	36,339	361	108,004	71,304	28	.....	1	.....	27	.....	20
62,693	87,959	312,881	55,866	34,284	19,635	301,705	10,750	1,207,442	894,987	377	.....	.....	.....	377	.....	21
52,793	76,227	271,608	12,724	32,484	17,731	266,644	10,158	985,126	708,324	369	.....	.....	.....	369	.....	22
9,900	11,732	41,273	43,142	1,800	1,904	35,061	592	222,316	186,663	8	.....	.....	.....	8	.....	23
116,769	341,010	324,810	113,319	14,309	10,237	807,985	13,318	2,083,149	1,261,846	626	410	7	.....	209	391	24
94,249	306,112	302,201	32,095	6,985	9,958	772,100	12,653	1,799,591	1,014,838	598	410	7	.....	181	391	25
8,100	11,242	22,609	1,800	3,980	228	25,670	665	94,876	68,541	28	.....	.....	.....	28	.....	26
14,420	23,656	.....	79,424	3,344	51	10,215	.....	188,682	178,467	.....	.....	.....	.....	.....	.....	27
.....	225	11,412	.....	480	3,581	19,479	24	39,843	20,340	7	.....	.....	.....	7	.....	28
3,336	600	18,140	1,840	954	116	37,058	770	82,681	44,853	33	.....	.....	.....	33	.....	29
306,555	384,873	1,126,670	18,816	56,719	143,352	12,712,015	217,307	17,588,364	4,659,046	8,049	5,334	759	.....	1,956	983	30

Food preparations, ice-cream cones	2	Lime	1	Paper and wood pulp	1	Slaughtering and meat packing	2
Furniture, wood, and store and office fixtures	4	Liquors, malt	1	Perfumery and cosmetics	4	Soda-water apparatus	1
Gas, illuminating and heating	2	Mattresses and spring beds	3	Photo-engraving	2	Stereotyping and electrotyping	1
Glass, cutting, staining, and ornamenting	1	Millinery and lace goods	2	Pickles and sauces	1	Structural ironwork, not made in steel works or rolling mills	1
Grease, soap stock	1	Mirrors, framed and unframed	1	Printing and publishing, music	1	Vinegar	1
Hand stamps	1	Mucilage and paste	2	Printing materials	2	Washing machines and clothes wringers	1
House-furnishing goods, not elsewhere specified	1	Musical instruments and materials, violins	1	Refrigerators	1	Waste	1
		Oil, cottonseed, and cake	2	Sausage	1	Wirework	1
		Paints	2	Show cases	3		
				Signs and advertising novelties	3		

$257,054	$252,866	$1,663,117	$23,665	$75,040	$56,060	$2,640,871	$232,000	$6,135,214	$3,262,343	6,778	5,807	66	.....	905	1,985	1
6,200	9,480	60,237	.....	6,307	1,349	231,623	9,337	393,840	152,880	46	.....	.....	.....	46	.....	2
45,431	38,003	642,150	.....	.....	73	412,402	40,463	1,320,705	867,840	920	920	.....	.....	.....	1,245	3
2,950	1,136	32,755	.....	1,580	319	63,258	592	116,758	52,908	24	.....	.....	.....	24	.....	4
13,780	18,055	131,498	.....	1,596	2,720	173,222	16,960	420,639	230,457	537	450	62	.....	25	315	5
8,640	6,148	45,548	.....	.....	5,177	6,352	58,068	235,601	171,181	1,565	1,560	.....	.....	5	30	6
3,770	980	25,191	.....	2,423	77	15,360	437	59,756	43,959	8	.....	.....	.....	8	.....	7
10,200	8,440	65,781	.....	5,100	644	97,293	2,403	211,300	111,604	210	160	.....	.....	50	.....	8
1,300	.....	6,280	.....	780	63	10,350	48	20,080	9,682	5	.....	.....	.....	5	.....	9
9,600	.....	10,778	.....	2,551	402	25,764	860	80,968	54,344	16	.....	4	.....	12	.....	10
19,432	9,349	62,374	50	12,915	1,409	51,073	3,101	202,596	148,422	65	.....	.....	.....	65	.....	11
33,909	88,103	110,437	23,223	12,955	1,564	90,611	6,829	506,633	409,193	134	.....	.....	.....	134	.....	12
.....	420	12,456	.....	2,130	138	31,676	142	52,734	20,916	9	.....	.....	.....	9	.....	13
101,842	72,752	457,632	392	26,703	42,125	1,431,887	92,760	2,513,604	988,957	3,239	2,717	.....	.....	522	395	14

Lime	1	Patent medicines and compounds	1	Sand-lime brick	1	Tobacco, cigars	4
Mattresses and spring beds	2	Paving materials	2	Sausage	1	Trunks and valises	1
Optical goods	2	Photo-engraving	1	Structural ironwork, not made in steel works or rolling mills	1	Wirework	1
Paints	1	Roofing materials, other than metal	1				

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

[4] Same number reported throughout the year.

TABLE 33.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

CITIES OF 50,000 INHABITANTS OR MORE—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.	Wage earners. Number, 15th day of— Maximum month.	Wage earners. Number, 15th day of— Minimum month.	WAGE EARNINGS DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Capital.
1	**FORT WORTH**—All industries	180	3,044	157	184	317	78	2,308	Au 2,401	No 2,158	2,315	1,951	350	11	3	$8,595,168
2	Artificial stone products	4	20	3	3	.....	2	12	Au 26	Ja [3] 1	17	17	.....	.....	.....	13,670
3	Bread and other bakery products	13	117	19	7	1	5	85	De [3] 86	No [3] 83	83	81	1	1	.....	91,517
4	Carriages, wagons, and repairs	4	33	7	4	3	.....	19	Mh 21	De [3] 16	19	19	.....	.....	.....	83,107
5	Cars and general shop construction and repairs by steam-railroad companies.	4	614	.....	10	16	2	586	Au 605	My 565	598	597	1	.....	.....	2,058,699
6	Coffee, roasting and grinding	3	30	6	5	4	2	13	(4) 13	(4) 13	13	12	1	.....	.....	58,146
7	Copper, tin, and sheet-iron work	12	66	11	8	2	2	43	Je 51	Se [3] 40	51	50	.....	1	.....	53,664
8	Foundry and machine-shop products	11	90	9	11	5	1	64	Jy 76	No 50	58	58	.....	.....	.....	215,599
9	Furniture	5	133	2	5	12	.....	114	Ja 124	De 98	99	97	2	.....	.....	269,528
10	Ice, manufactured	9	134	1	17	10	.....	106	Au 136	Ja 75	123	123	.....	.....	.....	745,590
11	Lumber, planing-mill products, not including planing mills connected with sawmills.	8	72	12	8	4	1	47	Jy 61	De [3] 35	42	42	.....	.....	.....	159,322
12	Marble and stone work	6	37	7	3	.....	.....	27	Jy [3] 31	Ja 19	27	27	.....	.....	.....	43,868
13	Mineral and soda waters	4	26	3	3	1	.....	19	Jy [3] 24	Ja [3] 14	18	18	.....	.....	.....	49,760
14	Patent medicines and compounds	6	11	5	3	.....	.....	3	(4) 3	(4) 3	3	3	.....	.....	.....	16,725
15	Printing and publishing, job work only	17	268	20	12	36	8	192	Ja 39	Se [3] 166	170	134	36	.....	.....	494,727
16	Printing and publishing, newspapers and periodicals.	10	260	7	13	90	27	123	.....	.....	140	132	3	5	.....	462,268
17	Printing and publishing and job printing.	6	254	5	11	90	25	123	De 138	Jy [3] 118	140	132	3	5	.....	459,363
18	Publishing without printing	4	6	2	2	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	2,905
19	Saddlery and harness	4	20	3	4	1	1	11	Ja [3] 14	No [3] 8	13	13	.....	.....	.....	49,347
20	Tobacco, cigars	6	32	8	.....	.....	.....	24	No [3] 30	Mh 16	25	17	7	1	.....	13,421
21	All other industries*	54	1,081	34	68	132	27	820	.....	.....	816	511	299	3	3	3,716,210

*All other industries embrace—

Artificial limbs	1
Awnings, tents, and sails	2
Brass products	2
Brick	1
Brooms, from broom corn	1
Butter	2
Canning vegetables	1
Cars and general shop construction and repairs by electric-railroad companies	1
Cars, steam-railroad, not including operations of railroad companies	1
Clocks	1
Clothing, men's	2
Clothing, women's	1
Confectionery and ice cream	2
Cordials and flavoring sirups	1
Electrical machinery, apparatus, and supplies (telephone equipment)	1
Electroplating	1
Engraving, steel and copper plate, including plate printing	1
Flavoring extracts	1
Flour-mill and gristmill products	3
Food preparations, not elsewhere specified	4

1	**HOUSTON**—All industries	276	7,036	245	342	741	101	5,607	Ja 6,037	No 5,318	5,729	5,280	427	22	.....	$25,442,620
2	Automobiles, bodies, and parts	3	15	4	2	.....	.....	9	(4) 9	(4) 9	9	9	.....	.....	.....	12,062
3	Bread and other bakery products	22	375	22	15	38	9	291	Se 314	Ja [3] 284	292	215	75	2	.....	1,198,374
4	Carriages wagons, and repairs	5	30	5	3	1	.....	21	Se [3] 22	Ja [3] 20	22	22	.....	.....	.....	63,507
5	Coffee, roasting and grinding	6	88	3	11	28	3	43	Au [3] 44	De [3] 42	43	25	18	.....	.....	222,231
6	Confectionery and ice cream	9	71	6	4	7	3	51	.....	.....	55	47	8	.....	.....	112,794
7	Confectionery	4	32	3	2	5	2	20	Mh 27	Oc [3] 15	24	17	7	.....	.....	28,345
8	Ice cream	5	39	3	2	2	1	31	Je [3] 45	No 12	31	30	1	.....	.....	84,449
9	Copper, tin, and sheet-iron work	22	137	22	5	5	.....	105	Jy 122	No 95	102	99	.....	3	.....	140,458
10	Flour-mill and gristmill products	4	47	5	8	8	2	24	(4) 24	(4) 24	24	24	.....	.....	.....	134,213
11	Food preparations, not elsewhere specified.	6	75	8	3	6	1	57	Ja [3] 61	Au 50	61	58	3	.....	.....	189,411
12	Foundry and machine-shop products	21	505	13	34	37	2	419	Ap 461	Oc 362	446	445	.....	1	.....	1,578,748
13	Furniture, wood, including store and office fixtures.	4	234	5	14	18	4	193	Fe 244	No 135	162	160	2	.....	.....	684,383
14	Ice, manufactured	4	104	3	10	6	1	84	Au 102	Fe 63	68	68	.....	.....	.....	498,325
15	Jewelry	3	12	2	.....	.....	.....	10	De 14	Jy [3] 9	13	13	.....	.....	.....	4,155
16	Lumber, planing-mill products, not including planing mills connected with sawmills.	10	247	11	10	19	.....	207	My 245	De 133	206	206	.....	.....	.....	629,926
17	Mattresses and spring beds	6	41	4	1	1	.....	35	Je 40	De [3] 32	32	26	6	.....	.....	96,197
18	Mineral and soda waters	9	60	7	2	3	2	46	Jy 60	De 29	37	37	.....	.....	.....	137,728
19	Marble and stone work	3	18	3	1	.....	.....	14	Jy 17	De 11	11	11	.....	.....	.....	22,145
20	Oil, cottonseed, and cake	4	336	.....	14	45	1	276	De 537	Ap 59	462	462	.....	.....	.....	1,623,062
21	Patent medicines and compounds	7	28	6	3	9	3	7	(4) 7	(4) 7	7	4	3	.....	.....	129,403
22	Printing and publishing, book and job.	30	420	27	24	47	7	315	Jy 327	No 301	312	260	48	4	.....	591,757
23	Printing and publishing, newspapers and periodicals.	26	488	18	33	166	34	237	.....	.....	231	208	13	10	.....	1,971,149
24	Printing and publishing	4	361	2	26	128	23	182	My 190	De 175	175	159	8	8	.....	1,821,869
25	Printing, publishing, and job printing.	7	96	4	4	27	6	55	Se 62	Au 49	56	49	5	2	.....	123,583
26	Publishing without printing	15	31	12	3	11	5	.....	.....	.....	.....	.....	.....	.....	.....	25,697
27	Rice, cleaning and polishing	5	162	.....	18	33	.....	111	De 167	Je 41	162	161	1	.....	.....	1,113,290
28	Saddlery and harness	4	49	13	3	5	1	27	De 53	Oc 21	54	53	1	.....	.....	110,015
29	Tobacco, cigars	3	7	4	.....	.....	.....	3	Ja [3] 5	De [3] 2	3	2	1	.....	.....	3,335
30	All other industries*	60	3,487	54	124	259	28	3,022	.....	.....	2,915	2,665	248	2	.....	14,175,952

* All other industries embrace—

Artificial limbs	1
Artificial stone products	2
Automobile repairing	1
Awnings, tents, and sails	2
Bags, other than paper	1
Bookbinding and blank-book making	1
Boots and shoes	1
Boxes and cartons, paper	1
Boxes, wooden packing	1
Brass and bronze products	2
Brick	2
Brooms, from broom corn	2
Butter	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
Cleansing and polishing preparations	1
Clothing, men's	2
Cooperage	1
Cordials and flavoring sirups	1
Druggists' preparations	1
Fancy articles, celluloid	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.																
$322,862	$411,265	$1,541,619	$23,560	$88,681	$105,873	$5,592,658	$239,569	$9,973,882	$4,141,655	7,815	5,234	103	.....	2,478	363	1
4,200	1,320	7,194	.....	60	10	10,632	25	40,569	29,912	5	.....	5	.....	.....	.....	2
7,660	3,420	54,876	310	5,502	917	194,170	8,256	317,520	115,094	73	.....	.....	.....	73	.....	3
3,500	2,300	11,371	.....	2,365	161	15,933	703	62,357	45,721	22	.....	.....	.....	22	.....	4
18,720	15,732	340,936	.....	.....	659	158,790	22,397	557,234	376,047	225	225	.....	.....	.....	25	5
8,000	5,008	6,624	.....	2,820	644	98,415	668	138,817	39,734	22	.....	.....	.....	22	.....	6
10,880	2,340	46,573	100	3,516	506	80,622	272	174,500	93,606	8	.....	.....	.....	8	.....	7
11,860	11,601	56,764	75	3,300	1,695	59,936	7,545	180,085	112,604	224	.....	.....	.....	224	.....	8
9,261	14,073	68,364	.....	3,228	1,862	104,068	2,962	269,534	162,504	231	120	.....	.....	111	.....	9
26,100	10,698	91,493	.....	.....	6,528	37,100	74,806	292,441	180,535	2,543	2,522	.....	.....	21	127	10
11,760	3,800	48,393	.....	2,085	574	126,528	2,922	265,305	135,855	163	40	10	.....	113	.....	11
4,080	.....	18,895	.....	910	408	26,097	1,624	75,445	47,724	140	.....	4	.....	136	.....	12
4,600	900	11,740	150	1,680	525	30,693	389	84,271	53,189	18	.....	.....	.....	18	.....	13
1,650	.....	1,860	.....	750	150	6,993	157	17,643	10,493	12	.....	10	.....	2	.....	14
23,466	66,965	146,700	266	15,721	3,465	142,805	5,007	530,275	382,463	244	.....	.....	.....	244	.....	15
43,052	90,846	104,700	12,461	8,880	3,503	235,598	7,620	678,708	435,490	332	.....	.....	.....	332	.....	16
40,272	90,480	104,700	.....	8,620	3,503	235,598	7,620	654,957	411,739	332	.....	.....	.....	332	.....	17
2,780	366	.....	12,461	260	.....	.....	.....	23,751	23,751	.....	.....	.....	.....	.....	.....	18
4,345	1,354	7,531	.....	4,800	447	42,996	141	74,836	31,699	12	.....	10	.....	2	.....	19
.....	.....	12,255	.....	936	3,068	12,187	.....	35,781	23,594	.....	.....	.....	.....	.....	.....	20
129,728	180,908	505,350	10,198	32,128	80,751	4,209,095	104,075	6,178,561	1,865,391	3,541	2,327	64	.....	1,150	211	21

Gas, illuminating and heating..... 1
Glass, cutting, staining, and ornamenting..... 2
Jewelry..... 1
Lime..... 1
Liquors, malt..... 1
Mattresses..... 2
Models and patterns..... 3
Oil, cottonseed and cake..... 1
Perfumery and cosmetics..... 1
Photo-engraving not done in printing establishments..... 1
Pickles and sauces..... 1
Printing and publishing, music..... 1
Slaughtering..... 1
Structural ironwork, not made in steel works or rolling mills..... 1
Surgical appliances, trusses..... 1
Trunks..... 2
Upholstering materials, excelsior..... 1
Vinegar..... 1
Window and door screens and weather strips..... 1

$705,539	$868,979	$3,589,911	$68,912	$135,012	$468,516	$15,547,216	$576,754	$25,868,010	$9,744,040	18,004	11,998	701	.....	5,305	1,989	1
450	.....	8,498	.....	750	70	12,358	171	34,805	22,276	5	.....	.....	.....	5	.....	2
21,182	48,283	161,286	.....	8,602	10,633	606,038	24,572	1,112,990	482,380	405	310	.....	.....	95	129	3
900	364	13,464	.....	1,420	352	13,688	644	37,351	23,019	150	.....	.....	.....	150	.....	4
24,080	64,504	22,916	300	1,370	1,573	786,769	6,395	1,051,951	258,787	175	.....	.....	.....	175	.....	5
5,850	7,380	24,956	.....	3,265	912	127,511	4,293	197,321	65,517	149	.....	75	.....	74	.....	6
2,100	5,114	7,318	.....	2,820	186	21,634	442	41,978	19,852	20	.....	.....	.....	20	.....	7
3,750	2,266	17,638	.....	445	726	105,827	3,851	155,343	45,665	129	.....	75	.....	54	.....	8
7,920	4,736	79,172	200	5,611	1,242	120,169	952	276,827	155,706	14	.....	4	.....	10	.....	9
10,000	8,100	12,894	.....	3,300	746	570,311	5,561	624,406	48,534	190	.....	.....	.....	190	.....	10
2,936	3,660	20,716	700	2,630	624	176,758	3,865	237,151	56,528	141	12	16	.....	113	.....	11
85,489	43,992	243,921	.....	8,860	10,077	446,001	25,389	1,201,861	730,471	1,675	180	109	.....	1,386	10	12
32,732	26,099	117,537	291	400	4,947	115,916	10,720	377,268	250,632	525	160	.....	.....	365	.....	13
18,390	6,270	66,725	.....	1,900	4,925	25,541	54,830	300,315	219,944	1,651	1,416	235	.....	.....	19	14
.....	.....	10,898	238	1,080	42	22,542	114	39,850	17,194	2	.....	.....	.....	2	.....	15
24,145	15,247	100,407	.....	1,453	5,974	216,514	3,374	418,043	198,155	587	505	27	.....	55	5	16
1,500	1,500	22,718	.....	500	479	60,294	1,553	106,874	45,027	165	3	.....	.....	162	.....	17
3,165	2,635	25,626	.....	2,240	1,189	54,844	1,647	109,325	52,834	91	60	.....	.....	31	.....	18
1,800	.....	12,030	.....	720	159	8,722	3,036	41,635	29,877	47	.....	.....	.....	47	.....	19
33,752	42,066	137,925	200	.....	19,243	2,735,058	49,381	3,185,103	400,664	3,030	3,030	.....	.....	.....	30	20
8,500	12,977	3,658	.....	3,256	207	16,656	14	117,491	100,821	2	.....	.....	.....	2	.....	21
48,429	46,063	250,070	15,477	36,690	3,280	208,201	7,094	803,854	588,559	245	.....	.....	.....	245	.....	22
92,158	197,521	222,514	42,053	22,176	13,497	296,875	16,037	1,264,402	951,490	718	100	6	.....	612	.....	23
79,383	155,310	179,652	2,500	13,819	13,049	251,017	14,203	997,135	731,915	636	100	.....	.....	536	.....	24
7,375	28,824	42,862	3,237	5,722	438	44,998	1,759	168,168	121,411	77	.....	6	.....	71	.....	25
5,400	13,387	.....	36,316	2,635	10	860	75	99,099	98,164	5	.....	.....	.....	5	.....	26
37,850	41,426	63,744	.....	162	5,803	2,098,936	10,543	2,397,004	287,525	1,756	1,635	.....	.....	121	40	27
10,800	3,640	22,052	.....	3,900	318	89,770	613	173,792	83,409	22	.....	.....	.....	22	.....	28
.....	.....	2,564	.....	256	830	5,028	.....	9,476	4,448	.....	.....	.....	.....	.....	.....	29
233,511	292,516	1,943,620	9,453	24,471	381,394	6,732,716	345,956	11,748,915	4,670,243	6,259	4,587	229	.....	1,443	1,756	30

Glass, cutting, staining, and ornamenting..... 2
Hand stamps..... 2
Hats, fur-felt..... 2
Liquors, malt..... 2
Lumber and timber products..... 1
Mirrors, framed and unframed..... 2
Models and patterns, not including paper patterns..... 1
Optical goods..... 1
Paints..... 2
Paving materials..... 1
Photo-engraving..... 1
Pickles, preserves, and sauces..... 1
Printing materials..... 1
Pumps, not including power pumps..... 1
Refrigerators..... 1
Shipbuilding, wooden, including boat building..... 1
Slaughtering and meat packing..... 1
Soap..... 1
Stereotyping and electrotyping..... 1
Structural ironwork, not made in steel works or rolling mills..... 2
Trunks and valises..... 1
Vinegar..... 1
Window and door screens..... 1
Wood, turned and carved..... 1

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

[4] Same number reported throughout the year.

TABLE 33.—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 EARNINGS 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.															
1	**SAN ANTONIO**—All industries	239	5,058	201	184	513	77	4,083	Au 4,226	My 3,946	4,322	3,734	573	14	1	$11,448,953
2	Automobile repairing	7	62	7	1	1	1	52	Fe[3] 56	Oc. 49	51	49	2	.....	.....	25,047
3	Bread and other bakery products	31	243	36	.....	1	1	205	Jy 209	Se 201	202	175	26	1	.....	257,969
4	Cars and general shop construction and repairs by steam-railroad companies.	3	628	.....	3	8	2	615	Se 655	Je 570	636	636	.....	.....	.....	512,151
5	Clothing, men's, including shirts	5	219	3	2	7	.....	207	Au 242	De 126	217	9	208	.....	.....	106,680
6	Coffee, roasting and grinding	5	30	4	2	2	1	21	(4) 21	(4) 21	21	18	3	.....	.....	73,337
7	Confectionery and ice cream	8	295	5	9	33	11	237	.....	.....	243	134	109	.....	.....	476,999
8	Confectionery	5	259	3	7	33	8	208	Oc 228	De 186	208	101	107	.....	.....	435,749
9	Ice cream	3	36	2	2	.....	3	29	Au[3] 35	Ja[3] 21	35	33	2	.....	.....	41,250
10	Copper, tin, and sheet-iron work	11	93	13	.....	1	.....	79	Se[3] 86	Fe 73	86	85	.....	1	.....	84,581
11	Foundry and machine-shop products	8	353	6	9	30	12	296	Oc 304	Fe 286	301	300	1	.....	.....	737,171
12	Ice, manufactured	6	147	3	8	11	1	124	Jy 165	De 81	107	107	.....	.....	.....	670,402
13	Jewelry	3	15	2	.....	.....	.....	13	De[3] 15	Au[3] 10	15	14	.....	1	.....	11,448
14	Lumber, planing-mill products, not including planing mills connected with sawmills.	8	199	7	12	13	2	165	Jy 195	De 137	139	139	.....	.....	.....	431,423
15	Marble and stone work	6	73	5	3	2	.....	63	My[3] 66	Ja 58	65	65	.....	.....	...	89,000
16	Mattresses and spring beds	7	32	8	.....	.....	.....	24	Ja[3] 26	Jy[3] 22	26	23	2	1	.....	69,085
17	Mineral and soda water	5	36	3	6	3	1	23	Jy[3] 29	Ja[3] 17	24	24	.....	.....	.....	105,319
18	Oil, cottonseed, and cake	4	176	.....	16	13	1	146	Oc 213	My 59	195	190	5	.....	.....	646,692
19	Patent medicines and compounds	3	13	5	2	3	.....	3	(4) 3	(4) 3	3	3	.....	.....	.....	8,599
20	Pickles and sauces	4	108	1	7	26	3	71	Ja 96	No[3] 54	82	61	21	.....	.....	178,892
21	Printing and publishing, book and job	24	314	17	21	56	5	215	No 227	Au[3] 206	215	176	34	5	.....	538,533
22	Printing and publishing, newspapers and periodicals.	24	373	21	12	149	15	176	.....	.....	184	166	16	1	1	425,655
23	Printing and publishing	9	301	5	8	137	11	140	Fe 149	Ap 129	141	126	15	.....	.....	377,768
24	Printing, publishing, and job printing.	7	57	8	3	9	1	36	De[3] 44	Ap[3] 32	43	40	1	1	1	43,887
25	Publishing without printing	8	15	8	1	3	3	.....	.....	.....	.....	.....	.....	.....	.....	4,000
26	Tobacco, cigars, and cigarettes	9	153	11	.....	9	4	129	Mh 162	Se 93	110	7	103	.....	.....	60,402
27	Trunks and valises	3	16	4	.....	.....	.....	12	Jy[3] 13	No[3] 10	13	13	.....	.....	.....	8,205
28	All other industries *	55	1,480	40	71	145	17	1,207	.....	.....	1,387	1,340	43	4	.....	5,930,763

*All other industries embrace—

Artificial stone products	1	Brooms, from broom corn	2	Dairymen's, poultrymen's, and apiarists' supplies	1	Flour-mill and gristmill products	3
Awnings, tents, and sails	2	Cars and general shop construction and repairs by electric-railroad companies	1	Dental goods	2	Food preparations, not elsewhere specified	5
Boot and shoe findings	1	Cooperage	2	Electroplating	1	Furniture	3
Boxes and cartons, paper	1			Engraving, steel and copper plate	1	Furs, dressed	1
Boxes, wooden packing	1						

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

1	ABILINE	18	139	14	12	5	1	107	De 129	Jy 90	140	123	17	.....	.....	$567,341
2	AMARILLO	36	429	43	26	41	8	311	Au[3] 323	Je 278	322	308	14	.....	.....	1,094,143
3	AUSTIN	114	1,182	119	63	93	16	891	Mh 952	Au 853	952	887	61	4	.....	2,956,609
4	BEAUMONT	67	1,335	45	78	128	11	1,073	Fe 1,195	My[3] 991	1,098	1,078	12	8	.....	4,940,050
5	BROWNSVILLE	14	102	12	7	7	.....	76	Au 89	Fe 63	86	80	1	5	.....	256,664
6	CLEBURNE	26	1,037	22	40	78	11	886	De 936	Au 827	966	932	33	1	.....	1,463,075
7	DENISON	30	1,109	31	15	98	11	954	Se 1,154	My 773	1,096	1,043	41	12	.....	1,052,106
8	GALVESTON	116	1,847	111	67	211	48	1,410	Se 1,487	Ap 1,345	1,427	1,279	135	13	.....	7,210,345
9	LAREDO	28	326	32	7	16	1	270	My 300	De 245	284	284	.....	.....	.....	333,275
10	MARSHALL	28	1,296	18	66	41	5	1,166	No 1,211	Je 1,104	1,253	1,246	6	1	.....	2,039,945
11	PALESTINE	20	704	19	10	22	5	648	Oc 800	My 386	777	762	7	8	.....	905,838
12	PARIS	42	643	38	39	45	8	513	Fe 594	Je 462	540	466	72	2	.....	1,687,150
13	SAN ANGELO	30	225	33	16	8	7	161	Je 179	Fe 142	178	169	7	2	.....	380,338
14	SHERMAN	36	542	27	44	68	14	389	Jy 453	Oc 327	419	353	59	5	2	2,968,280
15	TEMPLE	37	454	37	29	37	9	342	Se 415	Mh 288	395	367	28	.....	.....	1,701,536
16	TEXARKANA	29	1,073	18	44	46	10	955	My 1,079	Oc 818	1,061	1,023	22	16	.....	1,951,684
17	TYLER	20	592	18	36	30	2	506	Ap 526	Ja 472	537	461	66	8	2	685,764
18	WACO	125	1,503	108	86	171	13	1,125	Ja 1,219	My 1,063	1,214	1,054	149	11	.....	3,964,126
19	WICHITA FALLS	31	506	25	39	61	4	377	Ju 436	My 333	451	432	3	16	.....	2,356,789

[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.										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 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES—Continued.																
$453,229	$612,761	$2,411,750	$58,405	$88,808	$516,914	$9,639,056	$450,558	$17,849,240	$7,759,626	8,859	7,122	415	80	1,242	470	1
2,100	1,272	36,347	.....	5,160	232	26,250	875	82,918	55,793	38	.....	10	.....	28	.....	2
.....	1,800	105,222	1,225	4,760	3,539	345,564	14,158	610,224	250,502	114	.....	.....	.....	114	.....	3
7,016	12,412	394,543	.....	.....	640	362,677	49,722	840,129	427,730	139	139	.....	.....	.....	.....	4
5,500	7,892	59,692	.....	2,744	727	178,806	2,098	302,767	121,863	30	.....	.....	.....	30	.....	5
3,000	3,005	12,944	.....	2,651	802	158,442	1,892	206,570	46,236	46	.....	.....	.....	46	.....	6
18,120	45,693	88,051	.....	10,920	4,982	397,868	7,786	693,530	287,876	140	66	8	.....	66	.....	7
14,120	44,262	67,515	.....	8,700	4,523	328,018	6,111	578,260	244,131	106	66	8	.....	32	.....	8
4,000	1,431	20,536	.....	2,220	459	69,850	1,675	115,270	43,745	34	.....	.....	.....	34	.....	9
.....	1,000	53,633	715	4,550	586	71,143	619	175,340	103,578	15	.....	.....	.....	15	.....	10
25,300	42,116	194,734	11,708	1,135	5,511	543,463	10,208	976,045	422,374	423	193	160	.....	70	.....	11
17,133	11,043	63,096	4,755	1,240	6,391	19,775	72,417	271,020	178,828	913	910	3	.....	.....	.....	12
.....	.....	10,000	.....	1,314	75	10,500	334	32,425	21,591	6	.....	.....	.....	6	.....	13
23,996	17,816	104,763	.....	955	2,667	347,006	4,470	549,383	197,907	484	435	34	.....	15	.....	14
3,795	3,600	39,533	3,715	590	1,055	40,562	2,161	123,662	80,939	125	.....	109	.....	16	.....	15
.....	.....	12,800	.....	740	617	40,153	485	66,166	25,528	45	.....	.....	.....	45	.....	16
4,820	1,175	12,409	.....	1,152	630	61,251	454	121,579	59,874	17	4	.....	.....	13	.....	17
36,114	15,522	60,667	.....	1,000	6,203	1,034,438	25,383	1,265,073	205,252	910	910	.....	.....	.....	.....	18
1,200	1,303	1,165	1,800	525	26	7,980	60	26,848	18,808	5	.....	.....	.....	5	.....	19
9,030	42,544	23,109	388	540	1,694	258,839	2,147	495,810	234,824	71	20	.....	.....	51	.....	20
44,783	55,095	131,325	1,131	19,229	4,335	143,605	6,810	481,949	331,534	182	.....	.....	.....	182	.....	21
36,346	132,027	173,285	14,499	9,903	5,518	176,382	8,776	951,430	766,272	216	.....	4	.....	212	.....	22
31,756	122,467	151,459	3,047	7,350	5,393	163,090	7,749	850,146	679,307	183	.....	4	.....	179	.....	23
3,390	3,280	21,826	320	2,085	113	11,492	1,017	59,240	46,731	33	.....	.....	.....	33	.....	24
1,200	6,280	.....	11,132	468	12	1,800	10	42,044	40,234	.....	.....	.....	.....	.....	.....	25
.....	21,760	32,281	.....	1,278	15,461	74,834	.....	156,996	82,162	.....	.....	.....	.....	.....	.....	26
.....	.....	7,311	.....	1,290	237	6,128	42	13,337	7,167	2	.....	.....	.....	2	.....	27
214,976	195,686	794,840	18,469	17,132	454,986	5,333,390	239,661	9,406,039	3,832,988	4,938	4,445	87	80	326	470	28

Gas, illuminating and heating	3	Photo-engraving	1	Slaughtering and meat packing	3	Structural ironwork, not made in steel works or rolling mills	2
Hand stamps	1	Refrigerators	2	Soap	1	Vinegar	1
Liquors, malt	5	Saddlery and harness	1	Statuary and art goods	1	Wirework	1
Paints	2	Sand-lime brick	1	Stencils and brands	1		
Petroleum, refining	1						

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

$12,279	$3,376	$68,849	$2,500	$1,434	$2,903	$151,386	$14,030	$311,346	$145,930	502	215	35	.....	252	.....	1
29,227	40,496	254,881	526	12,805	6,876	467,645	41,803	986,087	476,639	1,791	1,034	65	.....	692	79	2
102,482	95,104	611,452	81,308	36,417	29,868	1,577,727	136,138	3,370,974	1,657,109	4,824	3,365	583	.....	876	216	3
133,162	148,119	673,830	8,950	20,804	46,177	3,357,156	85,105	5,191,055	1,748,794	5,580	4,834	81	.....	665	266	4
11,260	5,240	25,472	3,475	2,704	2,180	59,540	14,539	167,136	93,057	486	450	.....	.....	36	10	5
58,573	79,274	654,008	.....	4,654	13,152	1,257,941	101,140	2,246,263	887,182	1,541	429	6	.....	1,106	3	6
28,752	105,523	608,582	814	7,888	13,499	1,100,879	73,773	2,068,788	894,136	3,652	1,395	172	.....	2,085	50	7
196,779	238,525	954,654	21,199	44,201	114,074	5,514,261	201,590	8,691,969	2,976,118	8,939	5,894	372	.....	2,673	205	8
12,190	9,247	104,605	200	3,180	5,959	118,673	25,072	344,811	201,066	530	191	140	.....	199	.....	9
93,631	40,126	691,227	770	6,184	5,951	1,007,877	57,847	2,099,355	1,033,631	1,963	1,320	515	.....	128	703	10
15,796	21,939	504,265	5,648	2,345	8,222	522,703	61,393	1,222,160	638,064	1,302	1,228	.....	.....	74	90	11
54,885	46,352	271,892	741	11,157	15,039	1,491,656	46,762	2,283,875	745,457	2,220	1,914	73	.....	233	5	12
22,673	6,722	104,386	1,475	5,730	2,436	235,951	31,086	499,148	232,111	937	710	23	.....	204	18	13
78,455	91,068	220,780	9,816	7,887	27,086	5,800,330	63,704	7,027,747	1,163,713	2,366	1,862	167	.....	337	169	14
44,215	40,598	236,681	1,921	7,458	15,369	893,011	65,272	1,451,925	493,642	1,566	1,247	.....	.....	319	105	15
60,035	49,937	513,687	455	5,233	12,808	1,023,892	90,639	1,994,009	879,478	2,669	2,120	238	.....	311	18	16
50,222	27,580	313,371	50	5,297	12,012	418,075	30,573	896,549	447,901	1,332	1,232	10	.....	90	494	17
138,243	140,351	698,585	11,459	50,987	38,913	3,445,854	137,336	5,611,737	2,028,547	5,452	3,805	295	.....	1,352	357	18
66,644	72,491	254,337	44,500	5,770	9,663	1,886,426	28,672	2,572,785	657,687	2,085	1,800	198	.....	87	.....	19

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

[4] Same number reported throughout the year.

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES 1914

UTAH

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

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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.

UTAH.

By William S. Waudby.

GENERAL STATISTICS.

General character of the state.—Utah was admitted to the Union as a state in 1896. With a gross area of 84,990 square miles, of which 82,184 represent land surface, it ranks tenth in size among the states. In 1914 there were in Utah 52,745 square miles of unappropriated and unreserved public lands of the United States, 12,444 square miles in national forests, and 280 square miles in Indian reservations. At the census of 1900 the population was 276,749; at the census of 1910, 373,351; and the estimated population in 1914 was 415,000. In total population Utah ranked forty-first among the states in 1910; and in density of population it ranked forty-second, with 4.5 inhabitants per square mile, the corresponding figure for 1900 being 3.4.

The urban population in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 172,934, or 46.3 per cent of the total, as against 38.1 per cent in 1900. There were in the state in 1914 three cities each of which had a population estimated at more than 10,000: Ogden, Provo, and Salt Lake City. These cities, whose aggregate population in that year formed 35.9 per cent of the estimated total population of Utah, reported 27 per cent of the state's manufactured products.

The steam-railway mileage in 1914, as reported by the Interstate Commerce Commission, was 2,098, and the electric-railway mileage in 1912 (the latest year for which figures are available) was 190.

Utah is largely a mining and agricultural state, although its manufacturing interests have a rapidly increasing share in its wealth. According to the report of the United States Geological Survey the total mineral output of the state for 1914 was valued at $45,624,698, the principal products being copper $20,220,522, lead $6,681,602, silver $6,168,669, and coal $4,935,454. The total value of farm crops in 1909 was $18,484,615, of which $6,043,294, or about one-third, represented the value of wheat, oats, corn, and barley. The state is without navigable rivers or lakes, but the great flow of water from the various mountain streams is utilized in the generation of electric power and in mining and irrigation. Among the industries dependent upon agriculture and horticulture are flour milling, the canning of fruits and vegetables, and the manufacture of beet sugar, and of butter, cheese, and condensed milk. Those deriving their raw materials from the mines are lead and copper smelting and the production of coke and salt.

Importance and growth of manufactures.—The manufacturing industries of Utah in 1914 turned out products valued at $87,112,360 and gave employment to 13,894 wage earners. Measured by the former standard, Utah ranked fortieth among the states in 1904, thirty-ninth in 1909, and thirty-fifth in 1914; and measured by the latter its rank was fortieth in each year. The state's proportion of the total value of manufactures in the United States at each census was three-tenths of 1 per cent.

Table 1 summarizes the more important data relative to all classes of manufactures combined in the state of Utah, 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.		
	1914	1909	1904	1899	1909–1914	1904–1909	1899–1904
Number of establishments	1,109	749	606	575	48.1	23.6	5.4
Persons engaged	17,126	14,133	9,650	(1)	21.2	46.5	.....
Proprietors and firm members	999	688	619	(1)	45.2	11.1	.....
Salaried employees	2,233	1,660	979	599	34.5	69.6	63.4
Wage earners (average number)	13,894	11,785	8,052	5,413	17.9	46.4	48.8
Primary horsepower	59,536	42,947	19,397	12,674	38.6	121.4	53.0
Capital	$71,843,168	$52,626,640	$26,004,011	$13,219,039	36.5	102.4	96.7
Salaries and wages	13,695,957	10,366,053	6,195,753	3,263,134	32.1	67.3	89.9
Salaries	2,843,625	1,966,419	1,038,353	500,612	44.6	89.4	107.4
Wages	10,852,332	8,399,634	5,157,400	2,762,522	29.2	62.9	86.7
Paid for contract work	277,662	104,176	70,186	(1)	166.5	48.4	.....
Rent and taxes (including internal revenue)	986,464	684,230	[2] 232,397	(1)	44.2	.....	.....
Cost of materials	62,233,180	41,265,661	24,939,827	11,440,250	50.8	65.5	118.0
Value of products	87,112,360	61,989,277	38,926,464	17,981,648	40.5	59.2	116.5
Value added by manufacture (value of products less cost of materials)	24,879,180	20,723,616	13,986,637	6,541,398	20.1	48.2	113.8

[1] Figures not available.

[2] Exclusive of internal revenue.

The manufacturing activities of the state show substantial increases from census to census in all items covered by the table, but the relative gain has been less at each successive five-year period. The progress of manufactures is best measured by the number of persons employed and the value of the products. The average number of wage earners increased 17.9 per cent from 1909 to 1914, as compared with 46.4 per cent

and 48.8 per cent, respectively, for the two preceding five-year periods. In value of products the rate of increase was 40.5 per cent for the period from 1909 to 1914, 59.2 per cent from 1904 to 1909, and 116.5 per cent from 1899 to 1904. The percentages of increase shown for Utah are considerably in excess of the corresponding percentages for the United States as a whole.

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.

Table 2

	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	1,109	13,894	100.0	$87,112,360	100.0	$24,879,180	100.0	17.9	46.4	48.8	40.5	59.2	116.5	20.1	48.2	113.8
Smelting, lead	3	1,882	13.5	21,752,102	25.0	3,685,872	14.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	8	2,193	15.8	3,574,891	4.1	2,069,387	8.3	26.7	38.7	37.4	30.5	45.2	44.4	36.6	42.9	51.0
Flour-mill and gristmill products	70	198	1.4	3,155,513	3.6	518,196	2.1	7.6	22.7	0.7	0.8	29.1	46.2	−16.3	61.9	4.1
Slaughtering and meat packing	14	138	1.0	3,010,678	3.5	338,712	1.4	.....	.....	.....	78.2	158.8	44.2	−6.6	161.2	104.4
Printing and publishing	166	872	6.3	2,780,009	3.2	1,899,791	7.6	−9.8	77.4	−3.2	15.6	57.9	91.6	13.0	40.4	103.4
Canning and preserving	37	677	4.9	2,429,804	2.8	760,493	3.1	71.0	.....	.....	129.5	.....	.....	121.9	.....	.....
Butter, cheese, and condensed milk	37	264	1.9	2,298,153	2.6	407,084	1.6	23.4	.....	.....	16.6	.....	.....	13.7	.....	.....
Confectionery	31	617	4.4	2,125,088	2.4	861,899	3.5	5.3	74.9	119.0	8.9	94.2	149.4	30.4	108.5	62.6
Lumber and timber products	130	748	5.4	1,504,082	1.7	942,234	3.8	73.5	136.8	−49.0	53.9	192.5	−23.9	73.8	177.9	−28.6
Foundry and machine-shop products	48	530	3.8	1,501,691	1.7	683,434	2.7	42.1	.....	.....	62.9	.....	.....	32.8	.....	.....
Bread and other bakery products	86	306	2.2	1,370,225	1.6	571,066	2.3	8.5	47.6	78.5	12.9	124.0	86.3	22.3	78.9	75.2
Liquors, malt	5	204	1.5	1,345,771	1.5	996,673	4.0	14.6	32.8	.....	−0.8	113.0	47.1	−6.6	131.5	47.8
Cement	3	267	1.9	1,233,321	1.4	762,116	3.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marble and stone work	23	349	2.5	858,951	1.0	734,219	3.0	188.4	.....	.....	218.1	164.7	50.0	310.1	171.2	73.7
Brick and tile	27	438	3.2	625,186	0.7	502,569	2.0	−28.2	87.7	30.5	−28.8	107.6	96.7	−26.7	110.1	85.2
Gas, illuminating and heating	4	208	1.5	616,848	0.7	337,482	1.4	24.6	.....	.....	68.6	128.8	.....	70.7	54.7	.....
Hosiery and knit goods	11	183	1.3	528,325	0.6	245,651	1.0	5.2	1.8	.....	26.0	28.5	393.9	92.9	−20.1	278.6
Leather goods	53	134	1.0	508,808	0.6	189,540	0.8	16.5	.....	.....	19.5	91.9	.....	13.8	45.2	.....
Confectionery (ice cream)	28	145	1.0	490,084	0.6	204,295	0.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Copper, tin, and sheet-iron work	[2] 56	123	0.9	384,833	0.4	231,657	0.9	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salt	7	92	0.7	287,932	0.3	208,114	0.8	.....	.....	.....	56.5	−22.4	70.5	58.8	−29.6	73.8
All other industries	262	3,326	23.9	34,730,065	39.9	7,728,696	31.1	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 28; a minus sign (−) denotes decrease; percentages are omitted where base is less than 100, or when comparable figures can not be given.
[2] Excludes statistics for one establishment, to avoid disclosure of individual operations.

Separate statistics are presented for 21 industries, or industry groups, for each of which products valued at more than $280,000 were reported for 1914. These industries include 4 with products exceeding $3,000,000 in value, 4 with products between $2,000,000 and $3,000,000, 5 with products between $1,000,000 and $2,000,000, and 8 with products valued at less than $1,000,000. Among those 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 some which had products exceeding in value those of certain industries for which figures are shown in the table. These industries comprise the production of coke, the smelting of copper, and the manufacture of beet sugar. Copper smelting and the manufacture of beet sugar in Utah not only are important industries in the state but contribute a considerable part of the total production of these two industries in the United States.

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 if based on the average number of wage earners or value added by manufacture. The smelting of lead, which ranked first in value of products and value added by manufacture, was second in number of wage earners. The steam-railroad repair shops, second in value of products and value added by manufacture, ranked first in average number of wage earners. The flour-mill and gristmill industry, although third in value of products, held only fifteenth place in average number of wage earners and twelfth in value added by manufacture. This industry consists largely of the simple process of grinding grain, requiring few employees, and the value added to the raw material by manufacture is relatively small. Similarly, slaughtering and meat packing, while fourth in value of products, occupied eighteenth place in number of wage earners and fifteenth in value added by manufacture. The manufacture of butter, cheese, and condensed milk, another industry which requires comparatively few employees and adds relatively little value by the manufacturing process, while seventh in value of products, was twelfth in average number of wage earners and fourteenth in value added by manufacture. On the other hand, printing and publishing, fifth in value of products, was third in number of wage earners and in value added by manufacture, and the malt-liquor industry, ranking twelfth in value of products and fourteenth in number of wage earners, was fourth in value added by manufacture. The

relatively high rank of this industry in value added by manufacture is due to the fact that this item (which represents the difference between value of products and cost of materials) includes the amount of internal-revenue taxes paid by the brewers, not included in the cost of materials, in addition to the value actually added by the manufacturing process.

In rank according to value of products the figures for 1914 show many changes as compared with those for 1909, due to the fact that statistics for the smelting of lead, one of the most important industries in the state, have not been presented separately for the years prior to 1914. Of the more important industries shown in the table, the railroad car shops continue to rank second; the flour-mill and gristmill industry dropped from first to third place; slaughtering and meat packing advanced to fourth place; and canning and preserving to sixth; while printing and publishing and the manufacture of butter, cheese, and condensed milk, industries ranking fifth and seventh, respectively, in 1914 were third and fourth, respectively, in 1909. For the remainder of the industries slight changes are noticeable from census to census.

Smelting lead.—In 1914 the lead smelted in Utah, according to the report of the Geological Survey, amounted to 88,976 tons, or one-sixth of the total for the United States, the state ranking third in output of this mineral. The importance of lead smelting in its connection with manufactures may be more fully appreciated when it is considered that in 1914 the industry gave employment to an average of 1,882 wage earners, or 13.5 per cent of the average number for all industries combined in the state, and that the value of its products, amounting to $21,752,102, was 25 per cent of the total. It should be understood, however, that the value of the products shown for the industry includes the value of the precious metals extracted in connection with the smelting of the lead ore.

Cars and general shop construction and repairs by steam-railroad companies.—This industry represents the work done in car shops of steam-railroad companies, which is practically limited to repairs to the rolling stock and equipment of the companies reporting. During the five-year period 1909–1914 the average number of wage earners increased by 26.7 per cent and the value of products by 30.5 per cent.

Flour-mill and gristmill products.—This industry is exclusive of custom mills grinding for toll or local consumption. During the five-year period 1909–1914 there was an increase of 7.6 per cent in the average number of wage earners, but the value of products increased by only eight-tenths of 1 per cent.

Slaughtering and meat packing.—This classification includes wholesale slaughtering and meat-packing establishments only. During the five-year period 1909–1914 there was an increase of 78.2 per cent in value of products but a decrease of 6.6 per cent in value added by manufacture. The latter item, which has always been relatively small for this industry, represented only 11.2 per cent of the total value of products in 1914.

Printing and publishing.—Included in this industry are the establishments engaged in bookbinding and blank-book making; engraving, steel and copper plate, including plate printing; lithographing; printing and publishing, book and job; and the printing and publishing of newspapers and periodicals. During the five-year period 1909–1914 the value of products increased by 15.6 per cent but the average number of wage earners decreased by 9.8 per cent.

Canning and preserving.—This industry in Utah in 1914 included 31 establishments engaged in canning and preserving fruits and vegetables and 6 producing pickles, preserves, and sauces. The value of products for that year shows an increase of 129.5 per cent over the value reported for 1909, and during the same period the average number of wage earners increased by 71 per cent.

Butter, cheese, and condensed milk.—This industry does not include products made on farms. From 1909 to 1914 the value of products increased by 16.6 per cent and the average number of wage earners by 23.4 per cent.

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	17,126	15,143	1,983	88.4	11.6
	1909	14,133	12,680	1,453	89.7	10.3
Proprietors and officials	1914	1,738	1,686	52	97.0	3.0
	1909	1,221	1,195	26	97.9	2.1
Proprietors and firm members	1914	999	968	31	96.9	3.1
	1909	688	673	15	97.8	2.2
Salaried officers of corporations	1914	192	184	8	95.8	4.2
	1909	135	132	3	97.8	2.2
Superintendents and managers	1914	547	534	13	97.6	2.4
	1909	398	390	8	98.0	2.0
Clerks and other subordinate salaried employees.	1914	1,494	1,298	196	86.9	13.1
	1909	1,127	923	204	81.9	18.1
Wage earners (average number)	1914	13,894	12,159	1,735	87.5	12.5
	1909	11,785	10,562	1,223	89.6	10.4
16 years of age and over	1914	13,687	12,031	1,656	87.9	12.1
	1909	11,675	10,470	1,205	89.7	10.3
Under 16 years of age	1914	207	128	79	61.8	38.2
	1909	110	92	18	83.6	16.4

The manufacturing industries of Utah gave employment in 1914 to 17,126 persons, of whom 13,894, or more than four-fifths, were wage earners, 1,738 were proprietors and officials, and 1,494 were clerks and other subordinate salaried employees. Of the wage earners 16 years of age and over, 12,031, or about seven-eighths, were males and 1,656, or about one-eighth, were females. Figures for the sex and age distribution of wage earners for individual industries will be found in Table 29.

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.			Per cent distribution.					
				Total.		Male.		Female.	
	Total.	Male.	Female.	1914	1909	1914	1909	1914	1909
All classes	21.2	19.4	36.5	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	42.3	41.1	.....	10.1	8.6	11.1	9.4	2.6	1.8
Proprietors and firm members	45.2	43.8	.....	5.8	4.9	6.4	5.3	1.6	1.0
Salaried officers of corporations	42.2	39.4	.....	1.1	0.9	1.2	1.0	0.4	0.2
Superintendents and managers	37.4	36.9	.....	3.2	2.8	3.5	3.1	0.6	0.6
Clerks and other subordinate salaried employees	32.6	40.6	−3.9	8.7	8.0	8.6	7.3	9.9	14.0
Wage earners (average number)	17.9	15.1	41.9	81.1	83.4	80.3	83.3	87.5	84.2
16 years of age and over	17.2	14.9	37.4	79.9	82.6	79.4	82.6	83.5	82.9
Under 16 years of age	88.2	.....	.....	1.2	0.8	0.9	0.7	4.0	1.3

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

During the five-year period 1909–1914 there was an increase in each of the several classes of employees. In 1914 wage earners formed a somewhat smaller proportion of the total number of persons engaged in manufactures than in 1909. Of the 13,894 wage earners, 1.4 per cent were under 16 years of age in 1914, as against nine-tenths of 1 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 at 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.			Per cent distribution.			Per cent of increase.	
	1914	1909	1904	1914	1909	1904	1909–1914	1904–1909
Total	17,126	14,133	9,650	100.0	100.0	100.0	21.2	46.5
Proprietors and firm members	999	688	619	5.8	4.9	6.4	45.2	11.1
Salaried employees	2,233	1,660	979	13.0	11.7	10.1	34.5	69.6
Wage earners (average)	13,894	11,785	8,052	81.1	83.4	83.4	17.9	46.4

Each of the three classes for which figures are given in this table shows increases for both five-year periods. The increase for the decade for all persons engaged in manufacturing amounted to 77.5 per cent.

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, 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.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS.			
		Average number.[1]	Per cent of total.		
			16 years of age and over.		Under 16 years of age.
			Male.	Female.	
All industries	1914	13,894	86.6	12.0	1.4
	1909	11,785	88.8	10.2	0.9
	1904	8,052	84.9	12.6	2.4
Bread and other bakery products	1914	306	81.7	17.3	1.0
	1909	282	81.9	17.4	0.7
Brick and tile	1914	438	96.8	.....	3.2
	1909	610	95.2	.....	4.8
Butter, cheese, and condensed milk	1914	264	83.3	16.7	.....
	1909	214	84.6	15.4	.....
Canning and preserving	1914	677	35.6	53.2	11.2
	1909	396	39.1	55.3	5.6
Cars and general shop construction and repairs by steam-railroad companies.	1914	2,193	99.9	0.1	.....
	1909	1,731	100.0	.....	.....
Confectionery	1914	617	27.3	69.4	3.4
	1909	586	30.2	69.1	0.7
Flour-mill and gristmill products	1914	198	99.0	.....	1.0
	1909	184	100.0	.....	.....
Foundry and machine-shop products	1914	530	99.2	.....	0.8
	1909	373	100.0	.....	.....
Lumber and timber products	1914	748	97.2	2.5	0.3
	1909	431	98.6	0.9	0.5
Printing and publishing	1914	872	80.9	14.7	4.4
	1909	967	84.4	13.3	2.3
Smelting, lead	1914	1,882	99.9	.....	0.1
	1909	.....	.....	.....	.....
All other industries	1914	5,169	87.1	12.0	0.9
	1909	6,011	93.4	6.1	0.5

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

Between 1904 and 1909 the percentage of male wage earners 16 years of age and over increased materially, while the proportions of both women and children decreased. During the succeeding five-

year period a change in the opposite direction, although less pronounced, took place, with the result that the percentage of men in 1914 was greater than in 1904 but less than in 1909, while the proportions of women and children in 1914 were smaller than in 1904 but greater than in 1909.

Male wage earners predominate in each of the industries shown in Table 6, except in canning and preserving and in the manufacture of confectionery, for which the proportions of female wage earners in 1914 were 53.2 per cent and 69.4 per cent, respectively—nearly the same as in 1909. These two industries also show comparatively large proportions of wage earners under 16 years of age, that for canning and preserving being by far the largest—11.2 per cent. Relatively large proportions of this class also appear for the brick and tile industry and for printing and publishing.

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the three 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—		
		Ogden.	Provo.	Salt Lake City.
Total	1914	1,894	330	4,931
	1909	1,323	.....	4,287
	1904	1,013	.....	2,776
16 years of age and over:				
Male	1914	1,458	198	4,029
	1909	1,057	.....	3,566
	1904	841	.....	2,289
Female	1914	388	127	820
	1909	262	.....	677
	1904	136	.....	443
Under 16 years of age	1914	48	5	82
	1909	4	.....	44
	1904	36	.....	44
Per cent of total:				
16 years of age and over—				
Male	1914	77.0	60.0	81.7
	1909	79.9	.....	83.2
	1904	83.0	.....	82.5
Female	1914	20.5	38.5	16.6
	1909	19.8	.....	15.8
	1904	13.4	.....	16.0
Under 16 years of age	1914	2.5	1.5	1.7
	1909	0.3	.....	1.0
	1904	3.6	.....	1.5

The proportion of female wage earners in each of the three cities in 1914 was considerably greater than for the state as a whole, the largest percentage, 38.5, being shown for Provo, in which city over seven-eighths of the female wage earners were reported by three industries—canning and preserving, the manufacture of confectionery, and printing and publishing. From 1909 to 1914 there were increases in each of the three classes of wage earners in Ogden and Salt Lake City, but in the case of Provo figures for earlier years are not available.

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	13,035	11,412	6,261	82.5	86.0	62.1
February	12,382	10,449	6,112	78.4	78.7	60.6
March	12,578	10,594	6,533	79.6	79.8	64.8
April	13,101	10,830	7,533	82.9	81.6	74.7
May	13,386	10,749	7,882	84.8	81.0	78.1
June	14,262	11,868	8,358	90.3	89.4	82.9
July	15,401	12,436	8,660	97.5	93.7	85.9
August	14,993	12,234	8,972	94.9	92.1	89.0
September	15,794	13,277	10,086	100.0	100.0	100.0
October	15,525	13,070	9,842	98.3	98.4	97.6
November	13,334	12,445	8,494	84.4	93.7	84.2
December	12,937	12,053	7,891	81.9	90.8	78.2

[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.

At each of the three censuses shown in the table, the period of greatest activity in manufacturing was the late summer and autumn, the maximum being reported each year for September. The year 1909 shows the least fluctuation from month to month in the number of wage earners employed, but in 1914 the variation was only a trifle greater. The greatest difference between the maximum and the minimum months in any one of the three years was 3,974 in 1904.

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 three cities having more than 10,000 inhabitants.

The 13 industries shown separately in the table vary considerably as to the maximum and the minimum months of employment. The figures reported reflect a fair stability of employment in all industries except those which are seasonal in character. The canning season lasts only about four months—from July to October—reaching its maximum in September. The number of wage earners employed in January and February, the minimum months, represent only 4.2 per cent of the number employed in the maximum month. Brick and tile and the lumber industry show wide variations between their periods of greatest and least activity, the percentages which the minimum forms of the maximum being 43.5 and 54.6, respectively. The manufacture of beet sugar is another seasonal industry, in which (although separate statistics for this industry can not be given without disclosing the operations of individual establishments) the maximum and the minimum months of employment were October and March, respectively.

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	13,894	13,035	*12,382*	12,578	13,101	13,386	14,262	15,401	14,993	**15,794**	15,525	13,334	12,937	78.4
Bread and other bakery products	306	301	298	*296*	303	**318**	312	305	310	313	303	306	307	93.1
Brick and tile	438	276	*275*	343	471	546	**633**	569	533	515	422	368	305	43.4
Butter, cheese, and condensed milk	264	242	244	*241*	267	284	**291**	264	266	265	271	278	255	82.8
Canning and preserving	677	*97*	*97*	127	148	176	582	1,556	1,277	**2,286**	1,433	233	112	4.2
Cars and general shop construction and repairs by steam-railroad companies	2,193	**2,282**	2,183	2,257	2,161	*2,095*	2,128	2,234	2,208	2,193	2,279	2,155	2,141	91.8
Confectionery	617	565	549	548	557	*542*	589	638	623	692	**773**	670	658	70.1
Flour-mill and gristmill products	198	202	201	190	185	181	191	*178*	197	214	**217**	210	210	82.0
Foundry and machine-shop products	530	563	545	494	526	555	545	574	**582**	542	497	482	*455*	78.2
Liquors, malt	204	179	187	199	207	212	238	**244**	230	218	187	*166*	181	68.0
Lumber and timber products	748	*548*	573	567	594	588	827	787	844	879	**1,003**	881	885	54.6
Marble and stone work	349	*226*	298	366	351	363	360	390	380	373	375	**391**	315	57.8
Printing and publishing	872	869	868	873	874	882	879	852	*848*	862	876	886	**895**	94.7
Smelting, lead	1,882	**2,123**	2,000	1,934	2,070	2,034	1,970	1,927	2,000	1,708	1,678	*1,482*	1,658	69.8
All other industries	4,616	4,562	*4,064*	4,143	4,387	4,610	4,717	4,883	4,695	4,734	**5,211**	4,826	4,560	78.0
Total for cities	7,155	6,666	*6,574*	6,702	6,906	7,017	7,323	**7,856**	7,429	7,633	7,714	7,165	6,875	83.7
OGDEN	1,894	1,698	1,770	1,784	1,820	1,793	1,932	**2,331**	1,974	2,235	2,101	1,724	*1,566*	67.2
PROVO	330	317	*308*	312	329	328	334	336	331	367	346	326	326	83.9
SALT LAKE CITY	4,931	4,651	*4,496*	4,606	4,757	4,896	5,057	5,189	5,124	5,031	**5,267**	5,115	4,983	85.4

Prevailing hours of labor.—In Table 10 the average numbers of wage earners reported, for 1914 and 1909, 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

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	13,894	3,977	1,011	2,158	3,331	1,826	1,226	18	347
	1909	11,785	2,093	874	2,072	3,545	1,182	1,216	406	397
Bread and other bakery products	1914	306	24	2	109	2	157	8	3	1
	1909	282	2	.....	9	61	178	28	2	2
Brick and tile	1914	438	195	.....	60	4	83	96	.....	.....
	1909	610	253	23	91	10	161	72	.....	.....
Butter, cheese, and condensed milk	1914	264	44	7	86	9	76	39	3	.....
	1909	214	79	.....	6	7	13	109	.....	.....
Canning and preserving	1914	677	72	21	156	35	393	.....	.....	.....
	1909	396	85	.....	77	33	192	.....	9	.....
Cars and general shop construction and repairs by steam-railroad companies	1914	2,193	790	.....	364	804	102	133	.....	.....
	1909	1,731	.....	.....	1,027	.....	.....	704	.....	.....
Confectionery	1914	617	12	199	381	2	2	20	1	.....
	1909	586	67	70	123	37	285	3	.....	1
Flour-mill and gristmill products	1914	198	9	.....	38	15	86	40	10	.....
	1909	184	12	.....	8	5	101	39	18	1
Foundry and machine-shop products	1914	530	98	140	287	4	1	.....	.....	.....
	1909	373	46	21	265	33	4	4	.....	.....
Liquors, malt	1914	204	176	.....	28	.....	.....	.....	.....	.....
	1909	178	141	37	.....	.....	.....	.....	.....	.....
Lumber and timber products	1914	748	573	70	44	.....	53	8	.....	.....
	1909	431	165	85	97	.....	75	9	.....	.....
Marble and stone work	1914	349	339	4	6	.....	.....	.....	.....	.....
	1909	121	59	5	36	21	.....	.....	.....	.....
Printing and publishing	1914	872	812	22	31	2	5	.....	.....	.....
	1909	967	438	253	69	198	7	2	.....	.....
Smelting, lead	1914	1,882	.....	.....	.....	1,417	.....	465	.....	.....
	1909	.....	.....	.....	.....	.....	.....	.....	.....	.....
All other industries	1914	4,616	833	546	568	1,037	868	417	1	346
	1909	5,712	746	380	264	3,140	166	246	377	393
Total for cities	1914	7,155	2,805	1,060	1,532	759	695	256	8	40
OGDEN	1914	1,894	1,180	112	209	73	261	34	.....	25
PROVO	1914	330	47	6	115	.....	154	3	5	.....
SALT LAKE CITY	1914	4,931	1,578	942	1,208	686	280	219	3	15

The figures in this table, for all industries combined and for many of the selected industries, indicate a tendency toward the shortening of the working day. Almost the entire increase of 2,109 in the number of wage earners occurred in establishments operating 54 hours or less per week. Three of the five groups of establishments where the longer working day prevailed show a decrease in the number of wage earners employed. In 1909, 57.2 per cent of the wage earners in all manufactures combined were employed in establishments operating more than 54 hours per week, but the percentage for this class was reduced to 48.6 in 1914. The large number of wage earners shown for the group working between 54 and 60 hours per week in 1914 is accounted for in considerable part by the fact that these are the prevailing hours in the copper and lead smelting industries. (The figures for copper smelting, as previously explained, are not shown separately.)

Among the separate industries, the bakery and the canning and preserving industries were largely on the 60-hour basis, but these two industries also reported a considerable number of wage earners in the 54-hour group in 1914. In the steam-railroad repair shops, the confectionery industry, and in the foundries and machine shops a majority of the wage earners were in establishments in which the prevailing hours were 54 or less per week. In the malt-liquor, lumber, marble and stone, and printing and publishing industries the majority of the wage earners were employed 48 hours and under.

Of the 7,155 wage earners in the three cities in 1914, 6,156, or 86 per cent, were in establishments where the prevailing hours were under 60 per week, while only 999, or 14 per cent, were in establishments where the hours were 60 or more per week. In Ogden and Salt Lake City establishments operating 48 hours and under reported more wage earners than any other group, but in Provo the 60-hour basis of work prevailed.

Location of establishments.—Table 11 shows, for 1914, 1909, and 1899, the extent to which manufactures in Utah were centralized in the 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	.....	3	.....	1	.....	1	.....	1	.....	.....	.....
	1910	.....	2	.....	.....	.....	2	.....	.....	.....	.....	.....
	1900	.....	2	.....	1	.....	1	.....	.....	.....	.....	.....
Population[1]	1914	414,518	149,355	36.0	10,091	2.4	29,528	7.1	109,736	26.5	265,163	64.0
	1910	373,351	118,357	31.7	.....	.....	118,357	31.7	.....	.....	254,994	68.3
	1900	276,749	69,844	25.2	16,313	5.9	53,531	19.3	.....	.....	206,905	74.8
Number of establishments	1914	1,109	509	45.9	33	3.0	110	9.9	366	33.0	600	54.1
	1909	749	313	41.7	.....	.....	313	41.8	.....	.....	436	58.2
	1899	575	205	35.7	51	8.9	154	26.8	.....	.....	370	64.3
Average number of wage earners	1914	13,894	7,155	51.5	330	2.4	1,894	13.6	4,931	35.5	6,739	48.5
	1909	11,785	5,610	47.6	.....	.....	5,610	47.6	.....	.....	6,175	52.4
	1899	5,413	2,832	52.3	678	12.5	2,154	39.8	.....	.....	2,581	47.7
Value of products	1914	$87,112,360	$23,521,020	27.0	$843,722	1.0	$6,014,358	6.9	$16,662,940	19.1	$63,591,340	73.0
	1909	61,989,277	17,064,504	27.5	.....	.....	17,064,504	27.5	.....	.....	44,924,773	72.5
	1899	17,981,648	5,521,140	30.7	1,242,214	6.9	4,278,926	23.8	.....	.....	12,460,508	69.3
Value added by manufacture	1914	24,879,180	10,908,621	43.8	332,349	1.3	2,446,707	9.8	8,129,565	32.7	13,970,559	56.2
	1909	20,723,616	8,384,056	40.5	.....	.....	8,384,056	40.5	.....	.....	12,339,560	59.5
	1899	6,541,398	2,865,094	43.8	562,767	8.6	2,302,327	35.2	.....	.....	3,676,304	56.2

[1] Census estimate of population for 1914.

In 1909 and in 1899 Ogden and Salt Lake City were the only cities in Utah having more than 10,000 inhabitants, and neither of these cities had a population of more than 100,000; but in 1914 Salt Lake City had advanced to the 100,000-and-over class and Provo to the 10,000-to-25,000 class. Comparisons of the 1914 figures with those for earlier years can not properly be made for the three cities taken as a group and for the districts outside, since the statistics for Provo were included with those for the outside districts for 1909 and 1904.

Table 11 shows that the increase in the manufactures of the state was general and extended to both urban and rural communities. In 1914 the three cities which constituted 35.9 per cent of the total population of the state reported 27 per cent of the total value of products and 51.5 per cent of the total average number of wage earners, while the outside districts reported 73 per cent of the total value of products and 48.5 per cent of the total average number of wage earners. These unusually small proportions for the cities are accounted for largely by the fact that three of the most important industries of the state—the manufacture of sugar, the smelting of copper, and the smelting of lead—are conducted in establishments outside of the corporate limits of the cities.

The relative importance in manufactures of each of the three cities having a population of more than 10,000, 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.

No comparative figures for 1909 and 1904 are given for Provo, since that city 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
Salt Lake City	4,931	4,287	2,776	$16,662,940	$13,351,547	$7,543,983
Ogden	1,894	1,323	1,013	6,014,358	3,712,957	2,507,057
Provo	330	.....	.....	843,722	.....	.....

Of the total value of products for the three cities in 1914, Salt Lake City reported 70.8 per cent, Ogden 25.6 per cent, and Provo 3.6 per cent, and their proportions of the total average number of wage earners were 68.9 per cent, 26.5 per cent, and 4.6 per cent, respectively.

The manufactures of Salt Lake City and Ogden each show marked increases in both average number of wage earners and value of products for the two five-year periods 1904–1909 and 1909–1914.

The leading industries in Salt Lake City were printing and publishing, slaughtering and meat packing, and the bakery, confectionery and ice cream, foundry and machine-shop, and malt-liquor industries; in Ogden, the railroad repair shops, printing and publishing, slaughtering and meat packing, canning and preserving, and the manufacture of confectionery and of malt liquors; and in Provo, printing and publishing and the manufacture of confectionery, of foundry and machine-shop products, of lumber and timber products, and of woolen goods.

Character of ownership.—Table 13 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 the operations of individual establishments, it is necessary to omit several important industries from this table.

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	472	390	247	13,894	895	12,233	766	6.4	88.0	5.5	$87,112,360	$3,423,648	$81,027,569	$2,661,143	3.9	93.0	3.1
	1909	298	294	157	11,785	986	9,998	801	8.4	84.8	6.8	61,989,277	3,194,702	56,234,329	2,560,246	5.2	90.7	4.1
	1904	257	203	146	8,052	764	6,544	744	9.5	81.3	9.2	38,926,464	2,002,858	34,765,530	2,158,076	5.1	89.3	5.5
Bread and other bakery products.	1914	57	10	19	306	79	169	58	25.8	55.2	19.0	1,370,225	387,708	628,233	354,284	28.3	45.8	25.9
	1909	39	6	8	282	79	143	60	28.0	50.7	21.3	1,214,185	405,857	551,310	257,018	33.4	45.4	21.2
Butter, cheese, and condensed milk.	1914	7	21	9	264	7	239	18	2.7	90.5	6.8	2,298,153	122,278	2,056,092	119,783	5.3	89.5	5.2
	1909	9	15	13	214	8	148	58	3.7	69.2	27.1	1,971,031	90,973	1,333,903	546,155	4.6	67.7	27.7
Flour-mill and gristmill products.	1914	15	50	5	198	21	170	7	10.6	85.9	3.5	3,155,513	431,887	2,595,553	128,073	13.7	82.2	4.1
	1909	8	40	12	184	15	151	18	8.2	82.1	9.8	3,130,895	244,681	2,615,989	270,225	7.8	83.6	8.6
Foundry and machine-shop products.	1914	15	19	14	530	36	429	65	6.8	80.9	12.3	1,501,691	68,611	1,265,161	167,919	4.6	84.2	11.2
	1909	13	11	3	373	101	242	30	27.1	64.9	8.0	922,125	263,746	586,725	71,654	28.6	63.6	7.8
Lumber and timber products.	1914	59	30	41	748	99	593	56	13.2	79.3	7.5	1,504,082	175,682	1,232,471	95,929	11.7	81.9	6.4
	1909	41	28	35	431	105	253	73	24.4	58.7	16.9	976,589	208,999	655,006	112,584	21.4	67.1	11.5
Printing and publishing	1914	75	47	44	872	178	426	268	20.4	48.9	30.7	2,780,009	386,749	1,787,225	606,035	13.9	64.3	21.8
	1909	52	45	25	967	171	520	276	17.7	53.8	28.5	2,404,602	364,586	1,520,835	519,181	15.2	63.2	21.6
Total for cities	1914	200	197	112	7,155	588	6,004	563	8.2	83.9	7.9	23,521,020	2,157,374	19,401,871	1,961,775	9.2	82.5	8.3
Ogden	1914	44	45	21	1,894	159	1,641	94	8.4	86.6	5.0	6,014,358	598,031	5,123,239	293,088	9.9	85.2	4.9
Provo	1914	17	12	4	330	29	293	8	8.8	88.8	2.4	843,722	77,659	682,842	83,221	9.2	80.9	9.9
Salt Lake City	1914	139	140	87	4,931	400	4,070	461	8.1	82.5	9.4	16,662,940	1,481,684	13,595,790	1,585,466	8.9	81.6	9.5

Although individual ownership predominates in number of establishments, the figures in the preceding table indicate a marked trend toward corporate control of manufactures in Utah. While corporations represented but 35.2 per cent of the total number of plants engaged in manufacturing in 1914, they reported 93 per cent of the total value of products and 88 per cent of the total average number of wage earners. The proportions reported by establishments in this class have been greater at each successive census for both wage earners and value of products.

For both 1914 and 1909 the largest proportions of the total value of products and total average number of wage earners for each of the six industries for which separate statistics are given are shown for corporate ownership. The same condition prevails in each of the three cities where more than 80 per cent of the total value of products and total average number of wage earners in 1914 were reported for this class.

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.

Of the 1,109 establishments in the state in 1914, only 100, or 9 per cent, reported products exceeding $100,000 in value, but this class contributed 73.5 per cent of the total average number of wage earners, 86 per cent of the total value of products, and 77.6 per cent of the total value added by manufacture. The output of these large establishments has formed an

increasingly large proportion of the total value of products at each successive census, from 78.8 per cent in 1904 to 82.8 per cent in 1909 and to 86 per cent in 1914. Similar increases appear also in the proportions of average number of wage earners and value added by manufacture for these establishments. The increases in value of products and average number of wage earners for the single group of establishments with products valued at more than $1,000,000 are still more pronounced. The small establishments—those having products less than $5,000 in value—although representing 48.1 per cent of the total number of establishments in 1914, reported only 1.3 per cent of the total value of products and 3.6 per cent of the total average number of wage earners.

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	1,109	749	606	13,894	11,785	8,052	$87,112,360	$61,989,277	$38,926,464	$24,879,180	$20,723,616	$13,986,637
Less than $5,000	533	282	231	502	399	302	1,137,653	704,998	485,115	740,203	479,371	314,809
$5,000 to $20,000	297	220	201	1,007	870	935	2,944,461	2,270,058	2,213,115	1,636,553	1,219,958	1,188,471
$20,000 to $100,000	179	176	129	2,164	2,244	1,664	8,137,146	7,716,935	5,562,721	3,194,026	3,251,752	2,351,559
$100,000 to $1,000,000	89	64	40	5,143	5,081	3,163	20,441,745	18,197,110	9,687,447	9,172,395	8,197,586	4,261,505
$1,000,000 and over	11	7	5	5,078	3,191	1,988	54,451,355	33,100,176	20,978,066	10,136,003	7,574,949	5,870,293
	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	48.1	37.7	38.1	3.6	3.4	3.8	1.3	1.1	1.2	3.0	2.3	2.3
$5,000 to $20,000	26.8	29.4	33.2	7.2	7.4	11.6	3.4	3.7	5.7	6.6	5.9	8.5
$20,000 to $100,000	16.1	23.5	21.3	15.6	19.0	20.7	9.3	12.4	14.3	12.8	15.7	16.8
$100,000 to $1,000,000	8.0	8.5	6.6	37.0	43.1	39.3	23.5	29.4	24.9	36.9	39.6	30.5
$1,000,000 and over	1.0	0.9	0.8	36.5	27.1	24.7	62.5	53.4	53.9	40.7	36.6	42.0

Table 15 gives, for 1914 and 1909, for six 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 14 for all industries combined. It is impossible, without disclosing individual operations, to give statistics for industries embracing establishments with products valued at more than $1,000,000.

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	1909	Per cent distribution.		1914	1909	Per cent distribution.		1914	1909	Per cent distribution.	
			1914	1909			1914	1909			1914	1909			1914	1909
BREAD AND OTHER BAKERY PRODUCTS	86	53	100.0	100.0	306	282	100.0	100.0	$1,370,225	$1,214,185	100.0	100.0	$571,066	$466,944	100.0	100.0
Less than $5,000	39	21	45.3	39.6	18	7	5.9	2.5	97,570	54,833	7.1	4.5	46,978	23,651	8.2	5.1
$5,000 to $20,000	32	18	37.2	34.0	64	42	20.9	14.9	292,357	180,467	21.3	14.9	125,725	70,995	22.0	15.2
$20,000 to $100,000	11	11	12.8	20.8	102	101	33.3	35.8	409,439	436,822	29.9	36.0	147,431	152,783	25.8	32.7
$100,000 to $1,000,000	4	3	4.7	5.7	122	132	39.9	46.8	570,859	542,063	41.7	44.6	250,932	219,515	43.9	47.0
BUTTER, CHEESE, AND CONDENSED MILK	37	37	100.0	100.0	264	214	100.0	100.0	2,298,153	1,971,031	100.0	100.0	407,084	358,079	100.0	100.0
Less than $5,000	7	4	18.9	10.8	7	3	2.7	1.4	24,227	12,539	1.1	0.6	4,843	3,348	1.2	0.9
$5,000 to $20,000	13	17	35.1	45.9	21	23	8.0	10.7	124,902	194,605	5.4	9.9	27,779	37,011	6.8	10.3
$20,000 to $100,000	12	12	32.4	32.4	57	43	21.6	20.1	430,884	461,205	18.7	23.4	64,411	83,783	15.8	23.4
$100,000 to $1,000,000	5	4	13.5	10.8	179	145	67.8	67.8	1,718,140	1,302,682	74.8	66.1	310,051	233,937	76.2	65.3
FLOUR-MILL AND GRISTMILL PRODUCTS	70	60	100.0	100.0	198	184	100.0	100.0	3,155,513	3,130,895	100.0	100.0	518,196	620,265	100.0	100.0
Less than $5,000	4	3	5.7	5.0	1	1	0.5	0.5	11,661	9,224	0.4	0.3	2,720	3,774	0.5	0.6
$5,000 to $20,000	24	12	34.3	20.0	24	12	12.1	6.5	278,905	173,816	8.8	5.6	58,245	24,567	11.2	4.0
$20,000 to $100,000	33	38	47.1	63.3	107	113	54.0	61.4	1,571,685	1,793,751	49.8	57.3	260,664	385,092	50.3	62.1
$100,000 to $1,000,000	9	7	12.9	11.7	66	58	33.3	31.5	1,293,262	1,154,104	41.0	36.9	196,567	206,832	37.9	33.3
FOUNDRY AND MACHINE-SHOP PRODUCTS	48	27	100.0	100.0	530	373	100.0	100.0	1,501,691	922,125	100.0	100.0	683,434	515,370	100.0	100.0
Less than $5,000	17	5	35.4	18.5	21	10	4.0	2.7	40,980	15,501	2.7	1.7	29,437	11,928	4.3	2.3
$5,000 to $20,000	20	10	41.7	37.0	78	53	14.7	14.2	164,523	107,460	11.0	11.7	121,881	57,134	17.8	11.1
$20,000 to $100,000	7	8	14.6	29.6	173	137	32.6	36.7	403,361	325,595	26.9	35.3	216,659	227,983	31.7	44.2
$100,000 to $1,000,000	4	4	8.3	14.8	258	173	48.7	46.4	892,827	473,569	59.5	51.4	315,457	218,325	46.2	42.4
LUMBER AND TIMBER PRODUCTS	130	104	100.0	100.0	748	431	100.0	100.0	1,504,082	976,589	100.0	100.0	942,234	541,682	100.0	100.0
Less than $5,000	97	70	74.6	67.3	112	112	15.0	26.0	174,207	146,666	11.6	15.0	127,392	111,433	13.5	20.6
$5,000 to $20,000	21	20	16.2	19.2	80	93	10.7	21.6	183,126	181,359	12.2	18.6	106,086	121,155	11.2	22.4
$20,000 and over [1]	12	14	9.2	13.5	556	226	74.3	52.4	1,146,749	648,564	76.2	66.4	708,756	309,094	75.2	57.1
PRINTING AND PUBLISHING	166	122	100.0	100.0	872	967	100.0	100.0	2,780,009	2,404,602	100.0	100.0	1,899,791	1,681,341	100.0	100.0
Less than $5,000	95	62	57.2	50.8	99	95	11.4	9.8	223,927	150,828	8.1	6.3	181,394	120,244	9.5	7.2
$5,000 to $20,000	54	42	32.5	34.4	241	192	27.6	19.9	551,545	451,247	19.8	18.8	435,193	344,980	22.9	20.5
$20,000 to $100,000	11	13	6.6	10.7	147	253	16.9	26.2	501,951	680,006	18.1	28.3	328,828	484,016	17.3	28.8
$100,000 to $1,000,000	6	5	3.6	4.1	385	427	44.2	44.2	1,502,586	1,122,521	54.0	46.7	954,376	732,101	50.2	43.5

[1] Includes the group "$100,000 to $1,000,000."

The industries given in the above table show a general increase from 1909 to 1914 in the number of small establishments—those with products valued at less than $5,000—and also an advance in the number of persons employed and in the value of the output of such plants. While establishments of this size constituted a large proportion of the total reported for each industry, except in the flour-mill and gristmill and dairy industries, the value of their products in only one case amounted to more than 10 per cent of the total.

The bulk of manufactures was reported by establishments having products valued at $100,000 to $1,000,000, but the number of enterprises engaged in business of this magnitude ranged only from 3.6 per cent to 13.5 per cent.

Table 16 presents, for 1914, for all industries combined in each of the three 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 that exists 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. Each of the three cities shows a large proportion of small establishments, but their combined value of products was relatively small. Of the total number of establishments reporting products valued at less than $20,000, those in Ogden represented 61.8 per cent; those in Provo, 81.8 per cent; and those in Salt Lake City, 68.6 per cent; whereas the value of their products formed only 7.8 per cent, 20.7 per cent, and 9.1 per cent of the respective totals.

Table 16

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.
Ogden	110	1,894	100.0	$6,014,358	100.0	$2,446,707	100.0
Less than $5,000	28	32	1.7	67,870	1.1	45,331	1.8
$5,000 to $20,000	40	156	8.2	404,406	6.7	243,185	9.9
$20,000 to $100,000	29	362	19.1	1,217,331	20.2	550,822	22.5
$100,000 and over[1]	13	1,344	71.0	4,324,751	71.9	1,607,369	65.7
Provo	33	330	100.0	843,722	100.0	332,349	100.0
Less than $5,000	14	11	3.3	27,763	3.3	17,064	5.1
$5,000 to $20,000	13	51	15.5	146,765	17.4	71,385	21.5
$20,000 to $100,000	3	27	8.2	131,377	15.6	35,235	10.6
$100,000 to $1,000,000	3	241	73.0	537,817	63.7	208,665	62.8
Salt Lake City	366	4,931	100.0	16,662,940	100.0	8,129,565	100.0
Less than $5,000	138	96	1.9	302,871	1.8	206,283	2.5
$5,000 to $20,000	113	458	9.3	1,215,647	7.3	785,929	9.7
$20,000 to $100,000	71	995	20.2	3,244,110	19.5	1,531,390	18.8
$100,000 and over[1]	44	3,382	68.6	11,900,312	71.4	5,605,963	69.0

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

Table 17 shows the size of establishments in 1914, as measured by the average number of wage earners employed, for all industries combined, and for 13 of the more important industries, and for each of the three cities having more than 10,000 inhabitants.

Table 17

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.	
	Establishments.	Wage earners (average number).	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries	1,109	13,894	221	621	1,278	159	1,706	55	1,656	29	2,111	17	2,560	2	829	5	3,754
Bread and other bakery products	86	306	31	41	82	11	116	3	108								
Brick and tile	27	438		15	35	7	89	3	103	1	95	1	116				
Butter, cheese, and condensed milk	37	264	4	25	54	4	38	2	46	2	126						
Canning and preserving	37	677	1	7	16	17	245	9	239	3	177						
Cars and general shop construction and repairs by steam-railroad companies	8	2,193		1	2					2	169	2	235	1	364	2	1,423
Confectionery	31	617	3	16	33	7	87	1	22	2	131	2	344				
Flour-mill and gristmill products	70	198	8	55	135	7	63										
Foundry and machine-shop products	48	530	4	29	66	8	90	4	143	2	114	1	117				
Liquors, malt	5	204				1	9	2	69	2	126						
Lumber and timber products	130	748	16	98	167	11	112	3	85			2	384				
Marble and stone work	23	349	6	13	35			2	56			2	258				
Printing and publishing	166	872	43	89	193	26	231	5	149	2	140	1	159				
Smelting, lead	3	1,882												1	465	2	1,417
All other industries	438	4,616	105	232	460	60	626	21	636	13	1,033	6	947			1	914
Total for cities	509	7,155	86	241	604	122	1,301	31	948	17	1,195	9	1,320	1	364	2	1,423
Ogden	110	1,894	5	62	148	30	356	7	190	4	289	1	121			1	790
Provo	33	330	5	20	48	5	42	1	26	1	65	1	149				
Salt Lake City	366	4,931	76	159	408	87	903	23	732	12	841	7	1,050	1	364	1	633

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.

Of the total number of establishments for all industries combined, 221, or 19.9 per cent, employed no wage earners in 1914. 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. Some of them employed one or two wage earners for short periods, but the numbers were so small and the periods so short that the average (computed as described in the "Explanation of terms") amounted to less than one, and therefore no wage earners could be shown. The very small establishments greatly predominate in number, those employing from 1 to 5 wage earners, representing 56 per cent of the total number of establishments but reporting only 9.2 per cent of the total number of wage earners. On the other hand, the establishments having more than 250 wage earners, although representing only six-tenths of 1 per cent of the total number of establishments, gave employment to 33 per cent of the average number of wage earners. The groups of establishments having more than 50 wage earners represented only 4.8 per cent of the total number of establishments in the state, but reported 66.6 per cent of the total average number of wage earners. As an indication of the nature of the industries embracing the smaller establishments, it will be noticed that in the brick and tile, dairy-products, confectionery, flour-mill and gristmill, foundry and machine-shop, lumber and timber, marble and stone work, and printing and publishing industries the majority of the establishments employed from 1 to 5 wage earners. In three of these industries, however—confectionery, lumber and timber, and marble and stone work—as well as in the steam-railroad repair shops and in the malt-liquor and lead-smelting industries, the majority of the wage earners were in establishments reporting more than 100 wage earners. In Ogden, 48.1 per cent of the wage earners were in establishments employing more than 100 wage earners; in Provo, 45.2 per cent, and in Salt Lake City, 41.5 per cent.

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	9.2	12.3	11.9	15.2	18.4	6.0	27.0	.....
	1909	8.5	12.5	16.5	7.5	19.6	5.6	20.4	9.4
Bread and other bakery products.	1914	26.8	37.9	35.3	.....	.....	.....	.....	.....
	1909	18.4	27.0	33.0	21.6	.....	.....	.....	.....
Brick and tile	1914	8.0	20.3	23.5	21.7	26.5	.....	.....	.....
	1909	9.3	6.6	15.4	31.8	36.9	.....	.....	.....
Butter, cheese, and condensed milk.	1914	20.5	14.4	17.4	47.7	.....	.....	.....	.....
	1909	27.1	7.5	39.7	25.7	.....	.....	.....	.....
Canning and preserving	1914	2.4	36.2	35.3	26.1	.....	.....	.....	.....
	1909	4.5	36.4	59.1	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	0.1	.....	.....	7.7	10.7	16.6	64.9	.....
	1909	0.3	1.0	.....	4.5	6.4	16.6	71.1	.....
Confectionery	1914	5.3	14.1	3.6	21.2	55.8	.....	.....	.....
	1909	2.7	6.5	16.4	28.3	46.1	.....	.....	.....
Flour-mill and gristmill products.	1914	68.2	31.8	.....	.....	.....	.....	.....	.....
	1909	67.9	32.1	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.	1914	12.5	17.0	27.0	21.5	22.1	.....	.....	.....
	1909	12.6	17.7	54.7	15.0	.....	.....	.....	.....
Liquors, malt	1914	.....	4.4	33.8	61.8	.....	.....	.....	.....
	1909	2.2	.....	64.6	33.1	.....	.....	.....	.....
Lumber and timber products	1914	22.3	15.0	11.4	.....	51.3	.....	.....	.....
	1909	33.9	47.6	18.6	.....	.....	.....	.....	.....
Marble and stone work	1914	10.0	.....	16.0	.....	73.9	.....	.....	.....
	1909	33.9	47.9	18.2	.....	.....	.....	.....	.....
Printing and publishing	1914	22.1	26.5	17.1	16.1	18.2	.....	.....	.....
	1909	17.0	22.4	22.5	7.0	31.0	.....	.....	.....
Smelting, lead	1914	.....	.....	.....	.....	.....	24.7	75.3	.....
	1909	.....	.....	.....	.....	.....	.....	.....	.....
All other industries	1914	10.0	13.6	13.8	22.4	20.5	.....	19.8	.....
	1909	4.7	9.2	12.4	3.8	24.2	6.4	20.3	19.0
Total for cities	1914	8.4	18.2	13.2	16.7	18.4	5.1	19.9	.....
Ogden	1914	7.8	18.8	10.0	15.3	6.4	.....	41.7	.....
Provo	1914	14.5	12.7	7.9	19.7	45.2	.....	.....	.....
Salt Lake City	1914	8.3	18.3	14.8	17.1	21.3	7.4	12.8	.....

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 primary 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 19

Power.	Number of engines or motors.			Horsepower.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	2,335	1,351	365	59,536	42,947	19,397	100.0	100.0	100.0
Owned	514	462	365	37,984	32,307	16,456	63.8	75.2	84.8
Steam engines and turbines[1]	366	352	259	34,020	29,084	13,145	57.1	67.7	67.8
Internal-combustion engines	50	27	11	470	226	59	0.8	0.5	0.3
Water wheels, turbines, and motors	98	83	95	3,494	2,997	3,252	5.9	7.0	16.8
Rented	1,821	889	(2)	21,552	10,640	2,941	36.2	24.8	15.2
Electric	1,821	889	(2)	21,552	10,592	2,941	36.2	24.7	15.2
Other	.....	.....	.....	.....	48	.....	.....	0.1	.....
Electric	2,338	1,192	.....	34,018	15,402	4,272	100.0	100.0	100.0
Rented	1,821	889	(2)	21,552	10,592	2,941	63.4	68.8	68.8
Generated by establishments reporting	517	303	60	12,466	4,810	1,331	36.6	31.2	31.2

[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 16,589 horsepower, or 38.6 per cent, from 1909 to 1914, due largely to the increase in rented electric power. The use of this form of power has greatly increased since 1904, when it represented 15.2 per cent of the total primary power, as against 24.7 per cent in 1909 and 36.2 per cent in 1914. Electric motors run by current generated within the same establishments show a still greater proportional increase, but this class of power represented only a little more than one-third of the total electric power in 1914. The amount of steam power used, which constituted more than two-thirds of the total primary power in 1904 and 1909 and considerably more than one-half in 1914, more than doubled between 1904 and 1909, and increased by about one-sixth during the following five-year period. The power developed by internal-combustion engines, although it formed less than 1 per cent of the total primary power in 1914, increased rapidly during the decade.

The power derived from water wheels, turbines, and motors has shown a decreasing proportion of the total from census to census, although the amount of this power in use increased by about one-sixth between 1909 and 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 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.		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	1,585	1,150,745	204,867	391,357	20,376
Bread and other bakery products	184	3,053	1,197	2	821
Brick and tile	.....	25,461	.....	4	.....
Cars and general shop construction and repairs by steam-railroad companies	856	36,782	806	28,504	.....
Cement	.....	92,185	9	.....	669
Coke	.....	673,752	.....	.....	.....
Confectionery	.....	2,906	322	6	10,152
Foundry and machine-shop products	21	4,498	1,427	90	301
Gas, illuminating and heating	.....	35,792	.....	6,664	.....
Ice, manufactured	.....	13,641	.....	14	.....
Liquors, malt	34	11,038	220	.....	.....
Smelting, lead	.....	102,063	147,186	45,176	.....
All other industries	490	149,574	53,700	310,897	8,433
Total for cities	1,538	138,123	6,842	9,809	20,376
Ogden	236	25,119	710	6,248	4,912
Provo	1	4,224	140	4	763
Salt Lake City	1,301	108,780	5,992	3,557	14,701

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 four important industries in Utah are here presented.

Butter, cheese, and condensed milk.—The quantities and values of the several products of the butter, cheese, and condensed-milk industry are shown, for 1914, 1909, and 1904, in Table 21.

Table 21

	1914	1909	1904[1]
Total value	$2,298,153	$1,971,031	$963,811
Butter:			
Packed solid—			
Pounds	1,415,751	650,707	281,276
Value	$412,040	$193,311	$33,100
Prints or rolls—			
Pounds	2,123,606	3,072,077	3,421,911
Value	$639,103	$944,077	$748,589
Cream sold:			
Pounds	487,931	1,114,836	55,046
Value	$53,083	$128,528	$4,470
Cheese, full cream:			
Pounds	1,094,448	[2] 1,060,122	1,689,730
Value	$153,252	$157,058	$161,721
All other butter and cheese, factory products, value[3]	$5,597	$2,006	$8,639
All other products, value	$1,035,078	$546,051	$7,292

[1] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[2] Includes small quantity of part-cream cheese.
[3] Includes skimmed milk sold, whey, and casein.

The output of butter in the state decreased in quantity by 4.4 per cent but increased in value by 34.5 per cent during the decade 1904–1914. The decrease was confined to butter in prints or rolls, that packed solid showing a substantial increase. The manufacture of cheese also declined during the decade, the decrease in quantity amounting to 35.2 per cent and that in value to 5.2 per cent.

The manufacture of condensed milk forms an important part of the dairy-products industry in Utah, but statistics relating to it can not be shown separately without disclosing the operations of individual establishments.

Canning and preserving.—Canning and preserving as a factory industry has made rapid progress in Utah. Table 22 shows the quantity and value of products, by classes, for 1914, 1909, and 1904.

During the five-year period 1909–1914 there were increases in both quantities and values of all the products shown in the table, with the single exception of canned pumpkin, which is of relatively small importance. Canned vegetables were the chief products at each of the three censuses, representing 79.8 per cent of the total value of all products for the industry in 1914, as compared with 73.3 per cent in 1909 and 82.2 per cent in 1904. From 1909 to 1914 the total value of canned vegetables increased by 149.8 per cent. Canned tomatoes alone contributed 51.5 per cent of the aggregate value of products of the entire canning and preserving industry in 1914.

Table 22	1914	1909	1904[1]
Total value	[2] $2,429,804	$1,059,487	$801,958
Canned vegetables, value	$1,938,927	$776,136	$659,509
Beans—			
Cases, No. 2 cans	64,592	15,657	5,303
Value	$134,791	$33,084	$8,220
Peas—			
Cases, No. 2 cans	334,144	61,156	41,634
Value	$510,892	$100,712	$80,155
Pumpkin—			
Cases, No. 3 cans	3,625	2,860	1,160
Value	$5,500	$5,900	$2,276
Tomatoes—			
Cases, No. 3 cans	696,257	332,372	312,430
Value	$1,250,280	$603,898	$566,578
All other—			
Cases	14,995	8,102	635
Value	$37,464	$32,542	$2,280
Canned fruits, value	$219,209	$32,365	$91,686
Apples—			
Cases, No. 3 cans	12,591	4,191	2,346
Value	$21,562	$9,956	$4,687
Berries—			
Cases, No. 2 cans	2,206	1,609	1,012
Value	$4,787	$3,463	$2,684
Peaches—			
Cases, No. 3 cans	20,955	2,439	17,845
Value	$43,399	$5,806	$43,868
Pears—			
Cases, No. 3 cans	4,777	1,566	8,300
Value	$14,347	$7,108	$21,079
All other—			
Cases	66,355	2,980	9,826
Value	$135,114	$6,032	$19,368
All other products, value	$271,668	$250,986	$50,763

[1] In addition, vegetables, canned and preserved, valued at $12,550, were reported as by-products by establishments in other industries.
[2] Excludes statistics for two establishments, to avoid disclosure of individual operations.

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

Table 23	1914	1909	1904
Total value	$3,155,513	$3,130,895	$2,425,791
Wheat flour:			
Barrels	505,224	459,248	453,804
Value	$2,242,417	$2,355,109	$1,963,322
Rye flour:			
Barrels	223	365	546
Value	$1,088	$2,038	$2,232
Corn meal and corn flour:			
Barrels	154	259	1,657
Value	$886	$1,239	$5,316
Bran and middlings:			
Tons	21,450	(1)	(1)
Value	$474,493	(1)	(1)
Feed and offal:			
Tons	16,573	27,284	25,647
Value	$410,125	$588,511	$438,771
Breakfast foods:			
Pounds	686,910	.....	.....
Value	$20,835	.....	.....
All other cereal products, value	$5,669	$88,580	$300
All other products, value	.....	$95,418	$15,850

[1] Included in "feed and offal."

Wheat flour is the principal product, representing 71.1 per cent of the total value of products in 1914, as compared with 75.2 per cent in 1909 and 80.9 per cent in 1904. The decrease in the value of wheat flour from 1909 to 1914, notwithstanding an increase in quantity, was due to the low price of this product which prevailed during a portion of the year 1914. The remaining items shown in the table are unimportant in Utah, with the exception of bran and middlings and feed and offal, which in 1914 were valued at $474,493 and $410,125, respectively. Three establishments in the industry reported the manufacture of sacks. The equipment reported for 1914 consisted of 333 stands of rolls, 21 runs of stone, and 34 attrition mills.

Printing and publishing.—Table 24 shows, for 1914, 1909, and 1904, the number of publications and their aggregate circulation, by period of issue.

Table 24 — Period of issue	Number of publications			Aggregate circulation per issue		
	1914	1909	1904	1914	1909	1904
Total	121	94	88	376,962	261,937	228,126
Daily	8	8	10	82,171	57,498	42,282
Sunday	3	3	3	92,580	45,428	34,200
Semiweekly	6	[1] 8	[2] 7	26,642	35,863	40,252
Weekly	82	65	57	91,339	71,542	65,742
Monthly	19	[3] 10	7	79,950	51,606	30,000
All other classes	3	.....	4	4,280	.....	15,650

[1] Includes 3 triweeklies. [2] Includes 1 triweekly. [3] Includes 2 semimonthlies.

The total number of newspapers and periodicals in the state and the aggregate circulation per issue has increased from census to census. The increase in circulation was most pronounced for the daily, Sunday, and monthly publications, and for the last-named class there was also a considerable increase in number. The number of Sunday papers remained the same, but their circulation more than doubled between 1909 and 1914. The semiweeklies are the only class for which decreases in number and circulation are shown for the period 1909–1914.

There were 10 publications in foreign languages, 9 of which were weeklies, with a circulation of 10,400. Three were printed in the Swedish language, 2 in Greek, and 1 each in German, Italian, Danish, and Dutch. The 1 triweekly was in Japanese.

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for all manufacturing industries. Table 25, however, summarizes these statistics for Utah for 1914 and 1909.

Table 25 — Power laundries	Number or amount.		Per cent of increase, 1909–1914.
	1914	1909	
Number of establishments	36	22	63.6
Persons engaged	1,197	811	47.6
Proprietors and firm members	31	16	93.8
Salaried employees	96	57	68.4
Wage earners (average number)	1,070	738	45.0
Primary horsepower	1,926	969	98.8
Capital	$1,213,651	$500,276	142.6
Salaries and wages	689,040	415,309	65.9
Salaries	108,567	72,717	49.3
Wages	580,473	342,592	69.4
Paid for contract work	1,600	360	344.4
Rent and taxes (including internal revenue)	31,737	7,535	321.2
Cost of materials	321,923	143,041	125.1
Amount received for work done	1,367,433	794,091	72.2

In 1914 Utah ranked twenty-seventh among the states in amount received for work done and thirty-second in number of persons engaged in the industry. Increases are shown for the five-year period in all items given in the table, that in receipts for work done amounting to $1,367,433, or 72.2 per cent. Of the 36 establishments operating in 1914, 20 were under individual ownership but reported only 9.2 per cent of the total amount received for work done, while the 12 under corporate ownership reported 88.9 per cent of the total receipts. The 4 under other forms of ownership were credited with 1.9 per cent of amount received for work done. Sixteen establishments reported receipts of less than $5,000; 8, receipts of $5,000 or more but less than $20,000; and 12, receipts of $20,000 and over. In 1909, of the 22 establishments reported, 10 were under individual ownership, 9 under corporate, and 3 under other forms.

Table 26 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 represents of the greatest number employed in any month of the same year.

Table 27 gives statistics as to kinds and amounts of power used in the laundries of the state in 1914 and 1909, together with percentages of increase for the five-year period.

Table 26

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January	1,111	699	100.0	83.4
February	1,079	690	97.1	82.3
March	1,074	690	96.7	82.3
April	1,057	693	95.1	82.7
May	1,051	700	94.6	83.5
June	1,056	740	95.0	88.3
July	1,086	814	97.7	97.1
August	1,097	838	98.7	100.0
September	1,083	759	97.5	90.6
October	1,050	742	94.5	88.5
November	1,036	742	93.2	88.5
December	1,060	744	95.4	88.8

Table 27

POWER.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase, 1909–1914.
	1914	1909	1914	1909	
Primary power, total	58	30	1,926	969	98.8
Owned	35	20	1,832	927	97.6
Steam	31	20	1,762	927	90.1
Internal-combustion	3	.....	64	.....	.....
Water wheels and motors	1	.....	6	.....	.....
Rented—Electric	23	10	94	42	123.8
Electric	276	115	1,261	345	265.5
Rented	23	10	94	42	123.8
Generated by establishments reporting	253	105	1,167	303	285.1

GENERAL TABLES.

Table 28 gives, for 1914, 1909, and 1904, for selected industries in the state and in Salt Lake City, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products; and for Ogden, similar data for all industries combined.

Table 29 presents, for 1914, for the state as a whole and for Salt Lake City, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments; and for Ogden and Provo, similar data for all industries combined.

TABLE 28.—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	1,109	13,894	59,536	$10,852	$62,233	$87,112
	1909	749	11,785	42,947	8,400	41,266	61,989
	1904	606	8,052	19,397	5,157	24,940	38,926
Bread and other bakery products.	1914	86	306	249	198	799	1,370
	1909	53	282	115	165	747	1,214
	1904	28	191	77	90	281	542
Brick and tile	1914	27	438	2,646	280	123	625
	1909	37	610	1,823	388	193	878
	1904	45	325	912	193	97	423
Butter, cheese, and condensed milk.	1914	37	264	1,312	144	1,891	2,298
	1909	37	214	635	116	1,613	1,971
	1904	[1] 49	98	813	55	789	964
Canning and preserving	[2] 1914	37	677	1,930	297	1,669	2,430
	1909	24	396	847	123	716	1,059
	1904	[3] 18	369	500	99	506	802
Cars and general shop construction and repairs by steam-railroad companies.	1914	8	2,193	3,099	1,943	1,506	3,575
	1909	8	1,731	1,735	1,402	1,225	2,740
	1904	7	1,248	354	964	827	1,887
Confectionery	1914	31	617	902	251	1,263	2,125
	1909	17	586	532	204	1,291	1,952
	1904	12	335	222	103	688	1,005
Flour-mill and gristmill products.	1914	70	198	3,519	144	2,637	3,156
	1909	60	184	3,312	131	2,511	3,131
	1904	63	150	3,047	91	2,043	2,426
Foundry and machine-shop products.	[4] 1914	48	530	1,296	434	818	1,502
	1909	27	373	541	306	407	922
	1904	[3] 21	277	99	198	248	587
Gas, illuminating and heating.	1914	4	208	720	141	279	617
	1909	3	167	291	108	168	366
	1904	3	41	.....	22	32	160
Hosiery and knit goods	1914	11	183	47	$66	$283	$528
	1909	11	174	80	53	292	419
	1904	[1] 9	171	25	48	167	326
Leather goods	[5] 1914	53	134	31	91	319	509
	1909	19	115	24	75	259	426
	1904	[3] 15	80	3	46	107	222
Liquors, malt	1914	5	204	887	193	349	1,346
	1909	5	178	860	157	290	1,357
	1904	6	134	323	93	176	637
Lumber and timber products.	[6] 1914	130	748	3,837	582	562	1,504
	1909	104	431	2,922	306	435	977
	1904	53	182	1,380	105	139	334
Marble and stone work	1914	23	349	1,148	354	125	859
	1909	25	121	399	106	91	270
	1904	9	57	225	39	36	102
Printing and publishing	[7] 1914	166	872	1,246	741	880	2,780
	1909	122	967	1,357	685	723	2,405
	1904	104	545	262	369	325	1,523
Salt	1914	7	92	367	49	80	288
	1909	9	56	474	38	53	184
	1904	5	68	188	44	51	237
Slaughtering and meat packing.	1914	14	138	349	115	2,672	3,011
	1909	12	99	572	77	1,327	1,690
	1904	3	31	25	21	514	653
All other industries	1914	352	5,743	35,951	4,829	45,978	58,589
	1909	176	5,101	26,428	3,960	28,925	40,028
	1904	156	3,750	10,942	2,577	17,914	26,096
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.							
SALT LAKE CITY— All industries.	1914	366	4,931	12,755	$3,801	$8,533	$16,663
	1909	245	4,287	6,693	3,010	6,615	13,351
	1904	192	2,776	.....	1,704	3,515	7,544
Bread and other bakery products.	1914	25	189	164	123	522	848
	1909	24	220	80	122	569	918
	1904	15	143	.....	67	218	422
Confectionery	1914	18	437	583	162	859	1,397
	1909	9	390	360	135	955	1,409
	1904	9	234	.....	76	534	760
Copper, tin, and sheet-iron work.	1914	22	84	40	68	95	257
	1909	11	104	10	85	105	258
	1904	7	51	.....	39	43	113
Foundry and machine-shop products.	[4] 1914	24	393	1,046	$326	$633	$1,128
	1909	19	301	404	257	316	751
	1904	[3] 13	244	.....	177	223	524
Lumber and timber products.	[6] 1914	11	246	880	145	305	558
	1909	8	136	375	117	169	376
	1904	5	59	.....	38	50	132
Printing and publishing	[7] 1914	81	646	1,033	590	752	2,270
	1909	49	746	1,207	561	615	1,983
	1904	43	362	.....	273	257	1,236
All other industries	1914	185	2,936	9,009	2,387	5,367	10,205
	1909	125	2,390	4,257	1,733	3,886	7,656
	1904	100	1,683	.....	1,034	2,190	4,357
CITIES OF 10,000 to 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.							
OGDEN	1914	110	1,894	3,184	$1,262	$3,568	$6,014
	1909	68	1,323	2,506	873	2,066	3,713
OGDEN (continued)	1904	63	1,013	.....	$711	$1,398	$2,507

[1] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[2] Includes canning and preserving, fruits and vegetables; and pickles, preserves, and sauces.
[3] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[4] Includes automobile repairing and structural ironwork.
[5] Includes saddlery and harness and trunks and valises.
[6] Includes boxes, wooden packing; lumber, planing-mill products; and window and door screens.
[7] Includes bookbinding and blank-book making; engraving, steel and copper plate, including plate printing; lithographing; printing and publishing, book and job, and printing and publishing, newspapers and periodicals.
[8] Includes automobile repairing, hardware, and structural ironwork.

TABLE 29.—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	1,109	17,126	999	739	1,298	196	13,894	Se 15,794	Fe 12,382	(2)	(2)	(2)	(2)	(2)	$71,843,108
2	Artificial stone products	24	126	32	4	2	.....	88	Se 146	Ja 14	109	109	.....	.....	.....	153,668
3	Automobile repairing	7	43	5	3	2	2	31	Se [3] 33	De 27	28	28	.....	.....	.....	74,669
4	Awnings, tents, and sails	5	39	7	1	.....	1	30	Jy [3] 32	Fe [3] 28	30	19	11	.....	.....	84,390
5	Brass and bronze products	3	6	4	.....	.....	.....	2	Ja [3] 3	De [3] 1	2	2	.....	.....	.....	12,050
6	Bread and other bakery products	86	472	107	16	27	16	306	My 318	Mh 296	313	256	54	3	.....	1,049,717
7	Brick and tile	27	504	25	20	19	2	438	Je 633	Fe 275	601	582	.....	19	.....	1,993,964
8	Brooms, from broom corn	4	12	7	.....	.....	.....	5	[4] 5	[4] 5	6	6	.....	.....	.....	4,250
9	Butter	23	162	11	9	20	4	118	Je 129	Fe 109	126	106	20	.....	.....	614,061
10	Canning and preserving, fruits and vegetables.	31	716	2	46	28	6	634	Se 2,227	Fe 62	2,313	809	1,225	102	177	2,081,767
11	Carriages, wagons, and repairs	11	88	11	6	.....	.....	71	.....	.....	72	71	.....	1	.....	128,533
12	Carriages and wagons	7	79	5	6	.....	.....	68	My 71	Ja 63	69	68	.....	1	.....	124,433
13	Repair work only	4	9	6	.....	.....	.....	3	[4] 3	[4] 3	3	3	.....	.....	.....	4,100
14	Cars and general shop construction and repairs by electric-railroad companies.	4	174	.....	4	4	.....	166	Mh 203	No 141	147	147	.....	.....	.....	273,300
15	Cars and general shop construction and repairs by steam-railroad panies.	8	2,322	.....	48	75	6	2,193	Ja 2,282	My 2,095	2,075	2,073	2	.....	.....	2,557,684
16	Cement	3	306	.....	12	24	3	267	Se 306	Mh 222	270	268	2	.....	.....	3,741,447
17	Coffins, burial cases, and undertakers' goods.	4	21	2	3	1	.....	15	My 17	Au [3] 13	16	14	2	.....	.....	85,419
18	Confectionery and ice cream	59	966	52	43	93	16	762	.....	.....	947	309	607	10	21	1,481,037
19	Confectionery	31	773	25	30	86	15	617	Oc 773	My 542	783	214	543	6	20	1,349,339
20	Ice cream	28	193	27	13	7	1	145	Jy 180	Fe 118	164	95	64	4	1	131,698
21	Copper, tin, and sheet-iron work	56	202	66	8	4	1	123	Au 150	Fe 99	129	126	.....	3	.....	160,058
22	Engraving and diesinking	3	4	3	.....	.....	.....	1	[4] 1	[4] 1	1	1	.....	.....	.....	1,250
23	Engraving, steel and copper plate, including plate printing.	5	45	2	2	1	1	39	De 46	Au [3] 35	42	25	14	2	1	34,669
24	Flour-mill and gristmill products	70	281	26	36	20	1	198	Oc 217	Jy 178	210	208	.....	2	.....	2,090,288
25	Food preparations, not elsewhere specified.	10	76	19	4	7	2	44	Jy 60	Fe 31	47	36	10	1	.....	118,305
26	Foundry and machine-shop products.	36	567	33	39	24	2	469	.....	.....	457	453	.....	4	.....	1,535,741
27	Foundries	5	56	2	5	2	.....	47	Je 58	Ja 36	49	49	.....	.....	.....	87,967
28	Machine shops	31	511	31	34	22	2	422	Ja 470	De 348	408	404	.....	4	.....	1,447,774
29	Fur goods	3	9	5	.....	.....	.....	4	De 8	Jy [3] 2	9	2	7	.....	.....	14,950
30	Furniture, wood, including store and office fixtures.	5	61	4	3	1	1	52	Se [3] 75	No 36	43	42	.....	1	.....	48,493
31	Gas, illuminating and heating	4	280	.....	11	45	16	208	Jy 383	Fe 130	136	136	.....	.....	.....	5,676,953
32	Grease and tallow	3	4	3	.....	.....	.....	1	[4] 1	[4] 1	1	1	.....	.....	.....	1,100
33	Hair work	6	12	6	.....	.....	.....	6	[4] 6	[4] 6	6	.....	6	.....	.....	13,010
34	Hosiery and knit goods	11	250	7	20	29	11	183	Oc 233	Fe 110	192	22	166	1	3	375,841
35	Ice, manufactured	10	60	7	11	2	2	38	Jy [3] 52	Ja [3] 25	35	35	.....	.....	.....	919,443
36	Jewelry	7	34	5	2	2	1	24	[4] 24	[4] 24	24	22	1	1	.....	34,729
37	Lime	10	66	11	4	2	.....	49	Se 67	Fe 26	68	68	.....	.....	.....	80,703
38	Liquors, malt	5	260	7	20	28	1	204	Jy 244	No 166	189	189	.....	.....	.....	2,159,012
39	Lumber and timber products	83	531	148	7	12	.....	364	Au 525	My 277	678	664	13	1	.....	479,707
40	Lumber, planing-mill products, not including planing mills connected with sawmills.	42	422	27	22	15	2	356	Oc 560	Ja 238	560	557	1	2	.....	536,346
41	Marble and stone work	23	395	30	11	5	.....	349	No 391	Ja 226	367	366	.....	1	.....	635,397
42	Mattresses and spring beds	5	85	3	8	5	.....	69	No 75	Fe 62	75	60	15	.....	.....	200,484
43	Mineral and soda waters	25	108	21	7	10	2	68	Au [3] 97	De [3] 45	87	64	10	13	.....	191,972
44	Optical goods	8	32	4	4	1	1	22	[4] 22	[4] 22	22	18	1	3	.....	61,230
45	Patent medicines and compounds	11	36	6	3	7	1	19	Se [3] 27	Fe [3] 13	30	15	11	4	.....	110,981
46	Pickles, preserves, and sauces	6	65	4	4	14	.....	43	Se 59	De [3] 33	40	18	22	.....	.....	231,370
47	Printing and publishing, book and job.	48	371	48	27	27	8	261	.....	.....	264	219	34	11	.....	541,637
48	Job printing	40	344	40	26	19	6	253	Je [3] 258	Oc 246	255	211	34	10	.....	492,775
49	Book publishing without printing.	3	13	2	1	8	2	.....	.....	.....	.....	.....	.....	.....	.....	24,948
50	Linotype work and typesetting	5	14	6	.....	.....	.....	8	De 9	Se 7	9	8	.....	1	.....	23,914
51	Printing and publishing, newspapers and periodicals.	108	1,047	71	62	340	38	536	.....	.....	550	449	76	20	5	1,564,599
52	Printing and publishing	9	512	2	19	285	20	186	Oc 191	Au 181	188	177	7	4	.....	979,858
53	Printing, publishing, and job printing.	71	474	59	29	38	9	339	No 354	Au 327	348	263	65	15	5	491,933
54	Publishing without printing	28	61	10	14	17	9	11	Je [3] 13	Se 9	14	9	4	1	.....	92,808
55	Roofing materials, other than metal	4	20	.....	5	5	1	9	Oc [3] 12	My [3] 7	12	12	.....	.....	.....	115,319
56	Saddlery and harness	48	200	56	8	13	1	122	Je [3] 129	De 111	113	113	.....	.....	.....	497,826
57	Salt	7	116	9	9	5	1	92	Oc 137	De 66	72	62	8	2	.....	1,375,849
58	Signs and advertising novelties	3	20	1	2	1	.....	16	Se [3] 17	Mh [3] 14	17	13	4	.....	.....	37,630
59	Slaughtering and meat packing	14	197	10	15	29	5	138	De 168	Je [3] 131	168	159	9	.....	.....	841,331
60	Smelting, lead	3	2,074	.....	36	144	12	1,882	Ja 2,123	No 1,482	1,723	1,721	.....	2	.....	15,994,590

[1] Owned power only.

[2] 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.								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.	Water wheels and motors.[1]	Electric (rented).		
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$1,360,067	$1,483,558	$10,852,332	$277,662	$296,939	$689,525	$57,488,374	$4,744,806	$87,112,360	$24,879,180	59,536	34,020	470	3,494	21,552	12,466	1
6,292	1,690	66,226	.....	318	558	68,835	1,719	186,931	116,377	84	40	21	.....	23	58	2
2,350	1,306	22,974	.....	4,705	411	4,508	1,365	47,722	41,849	32	.....	.....	.....	32	.....	3
3,000	900	18,620	2,800	2,250	1,407	108,759	1,140	148,585	38,686	14	.....	.....	.....	14	.....	4
.....	.....	1,885	.....	.....	75	4,485	223	10,020	5,312	4	.....	4	.....	.....	.....	5
27,376	50,751	197,655	80	31,158	6,682	765,121	34,038	1,370,225	571,066	249	.....	3	.....	246	.....	6
35,645	20,299	280,374	8,000	60	7,336	49,258	73,359	625,186	502,569	2,646	537	5	60	2,044	.....	7
.....	.....	1,460	80	180	40	2,856	112	6,590	3,622	10	.....	.....	.....	10	.....	8
10,833	14,789	60,755	.....	3,432	3,527	920,633	8,895	1,074,843	145,315	347	174	9	14	150	.....	9
64,745	28,056	279,316	3,600	1,899	9,477	1,487,588	20,816	2,201,714	693,310	1,805	1,430	.....	.....	375	41	10
8,700	.....	51,588	.....	6,096	867	27,627	2,589	120,756	90,540	51	.....	4	.....	47	.....	11
8,700	.....	49,359	.....	4,596	823	23,877	2,194	107,806	81,735	42	.....	.....	.....	42	.....	12
.....	.....	2,229	.....	1,500	44	3,750	395	12,950	8,805	9	.....	4	.....	5	.....	13
5,850	3,240	116,271	.....	10	8,606	36,821	4,297	175,095	133,977	554	.....	.....	.....	554	.....	14
73,219	74,283	1,943,355	.....	.....	32,547	1,407,382	98,122	3,574,891	2,069,387	3,099	1,865	.....	40	1,194	867	15
32,850	29,628	276,769	.....	260	17,424	133,910	337,295	1,233,321	762,116	7,241	900	.....	.....	6,341	.....	16
4,260	1,000	10,217	.....	720	631	26,962	762	51,701	23,977	81	.....	3	.....	78	.....	17
75,030	139,606	327,990	500	54,086	9,728	1,521,570	27,408	2,615,172	1,066,194	1,040	505	13	.....	522	145	18
54,825	134,336	251,132	500	33,255	8,130	1,243,410	19,779	2,125,088	861,899	902	505	.....	.....	397	145	19
20,205	5,270	76,858	.....	20,831	1,598	278,160	7,629	490,084	204,295	138	.....	13	.....	125	.....	20
11,508	4,160	94,248	18,306	11,414	1,417	151,299	1,877	384,833	231,657	45	.....	.....	.....	45	.....	21
.....	.....	560	.....	890	4	248	25	7,300	7,027	1	.....	.....	.....	1	.....	22
1,198	1,000	25,830	100	4,966	433	16,269	740	73,688	56,679	23	.....	.....	.....	23	.....	23
33,920	18,927	143,942	.....	1,300	16,233	2,605,507	31,810	3,155,513	518,196	3,519	155	113	2,035	1,216	.....	24
4,355	6,108	22,562	.....	5,172	678	106,726	2,943	172,419	62,750	102	6	.....	.....	96	.....	25
65,127	30,289	389,748	2,050	16,712	11,508	753,428	35,217	1,392,830	604,185	1,228	148	21	15	1,044	.....	26
5,260	1,307	39,274	.....	1,920	378	38,803	5,255	106,141	62,083	76	.....	.....	.....	76	.....	27
59,867	28,982	350,474	2,050	14,792	11,130	714,625	29,962	1,286,689	542,102	1,152	148	21	15	968	.....	28
.....	.....	2,700	.....	2,700	136	3,900	25	19,220	15,295	1	.....	.....	.....	1	.....	29
4,620	1,420	48,518	12,328	4,260	293	41,984	1,090	121,217	78,143	100	.....	.....	.....	100	.....	30
22,679	38,400	140,766	.....	420	18,229	139,526	130,840	616,848	337,482	720	533	.....	.....	187	.....	31
.....	.....	600	.....	.....	20	2,635	320	7,060	4,105	.....	.....	.....	.....	.....	.....	32
.....	.....	2,775	.....	2,372	155	3,438	204	12,270	8,628	.....	.....	.....	.....	.....	.....	33
.....	.....	65,847	.....	1,780	2,789	279,429	3,245	528,325	245,651	47	.....	.....	.....	47	.....	34
21,402	36,253	40,991	.....	980	7,658	8,331	35,086	227,572	184,155	1,505	1,355	.....	40	110	240	35
17,830	1,030	24,601	100	2,245	415	16,355	398	58,793	42,040	20	.....	.....	.....	20	.....	36
2,220	1,044	36,762	400	3,714	934	8,073	10,584	70,558	51,901	10	.....	.....	.....	10	.....	37
1,125	2,291	192,980	.....	4,335	172,357	304,315	44,783	1,345,771	996,673	887	532	5	.....	350	120	38
71,624	49,007	329,230	13,004	587	4,171	77,687	468	582,229	504,074	2,031	1,786	28	165	52	.....	39
11,550	15,700	238,801	16,808	1,085	6,553	439,338	13,880	858,848	405,630	1,644	124	23	218	1,279	.....	40
19,926	4,340	354,252	57,786	2,566	2,775	104,808	19,924	858,951	734,219	1,148	242	6	60	840	.....	41
14,160	6,792	45,443	40	.....	1,500	142,500	3,361	233,419	87,558	211	40	.....	.....	171	15	42
9,639	8,020	33,663	55	2,978	1,738	120,173	1,923	220,290	98,194	68	13	2	.....	53	.....	43
7,560	2,237	11,858	.....	8,557	229	25,661	1,088	83,929	57,180	13	.....	.....	.....	13	.....	44
1,840	4,300	7,091	.....	2,670	460	55,221	230	99,849	44,398	9	.....	.....	.....	9	.....	45
6,920	15,120	17,648	.....	160	1,621	158,276	2,631	228,090	67,183	125	115	.....	.....	10	2	46
46,606	36,313	199,825	16,569	22,666	4,533	292,551	8,031	761,891	461,309	202	.....	2	.....	200	.....	47
44,422	26,771	188,405	8,733	20,872	4,026	290,890	7,275	712,134	413,969	197	.....	2	.....	195	.....	48
2,184	9,542	.....	7,836	720	354	591	.....	24,226	23,635	.....	.....	.....	.....	.....	.....	49
.....	.....	11,420	.....	1,074	153	1,070	756	25,531	23,705	5	.....	.....	.....	5	.....	50
98,755	252,284	486,476	96,394	47,895	11,538	488,090	22,654	1,817,421	1,306,677	985	675	48	1	261	133	51
40,435	198,660	221,346	6,660	17,309	7,717	357,852	13,378	988,063	616,833	781	670	2	.....	109	163	52
40,974	42,927	261,238	13,231	28,675	3,615	125,151	8,993	683,119	548,975	204	5	43	1	152	.....	53
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
17,346	10,697	3,892	76,503	1,911	206	5,087	283	146,239	140,869	121	105	.....	.....	16	.....	55
3,579	3,609	7,528	95	1,125	489	53,638	1,958	79,707	24,111	.....	.....	.....	.....	.....	.....	56
12,360	10,980	83,574	.....	6,047	6,458	306,564	2,408	482,868	173,896	27	.....	.....	.....	27	.....	57
19,400	7,380	49,262	2,527	1,026	2,687	62,004	17,814	287,932	208,114	367	.....	35	.....	332	.....	58
1,800	480	13,354	6,000	1,080	176	12,444	451	42,193	29,298	14	.....	.....	.....	14	.....	59
27,481	36,524	114,717	4,212	2,159	4,832	2,656,782	15,184	3,010,678	338,712	349	52	10	.....	287	.....	60
122,128	241,311	1,795,312	.....	.....	121,342	16,638,042	1,428,188	21,752,102	3,685,872	12,150	9,820	110	.....	2 220	6,252	

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

[4] Same number reported throughout the year.

TABLE 29.—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	Structural ironwork, not made in steel works or rolling mills.	5	37	4	1	1	1	30	Au	38	Ap	25	31	31	.....	.....	.....	$33,644
2	Tobacco, cigars	21	109	21	4	3	.....	81	Ja	101	Au	68	87	66	17	4	.....	91,266
3	Trunks and valises	5	8	7	1	.....	.....	12		[2] 12		[2] 12	12	11	.....	1	.....	32,779
4	Wall plaster	3	72	.....	6	3	1	62	Au	70	No	56	58	58	.....	.....	.....	374,157
5	All other industries*	94	3,013	60	122	198	27	2,594	.....		.....		.....	.....	.....	.....	.....	20,293,662
	CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																	
1	**SALT LAKE CITY**—All industries.	366	6,362	292	326	705	108	4,931	Oc	5,267	Fe	4,496	5,185	4,237	862	53	33	$19,246,605
2	Artificial stone products	4	48	2	4	1	.....	41	Se	67	Ja	10	59	59	.....	.....	.....	121,969
3	Bread and other bakery products	25	266	34	9	26	8	189	My	199	Oc	183	194	156	37	1	.....	880,005
4	Butter	3	43	1	3	5	3	31	Jy	35	Fe	27	32	16	16	.....	.....	428,140
5	Carriages and wagons and repairs	5	62	5	5	.....	.....	52	My [3]	54	Ja	48	53	52	.....	1	.....	84,252
6	Confectionery and ice cream	25	675	20	25	64	12	554	.....		.....		676	201	448	6	21	889,881
7	Confectionery	18	537	15	15	59	11	437	No	547	My	358	547	127	394	6	20	809,912
8	Ice cream	7	138	5	10	5	1	117	Jy	142	Fe	99	129	74	54	.....	1	79,969
9	Copper, tin, and sheet-iron work	22	122	32	3	3	.....	84	Se	106	Mh [3]	72	89	86	.....	3	.....	87,363
10	Engraving and diesinking	3	4	3	.....	.....	.....	1	Ja [2]	1	Jy [2]	1	1	1	.....	.....	.....	1,250
11	Engraving, steel and copper plate, including plate printing.	5	45	2	2	1	1	39	De	46	Au [3]	35	42	25	14	2	1	34,609
12	Food preparations not elsewhere specified.	7	59	11	2	7	1	38	Jy	51	Fe	27	41	31	9	1	.....	84,053
13	Foundry and machine-shop products	17	416	11	30	16	2	357	Ja	406	De	278	337	333	.....	4	.....	1,192,505
14	Fur goods	3	9	5	.....	.....	.....	4	De	8	Jy [3]	2	9	2	7	.....	.....	14,950
15	Furniture, wood, including store and office fixtures.	5	61	4	3	1	1	52	Se [3]	75	No	36	43	42	.....	1	.....	48,493
16	Hair work	6	12	6	.....	.....	.....	6	Ja [2]	6	Jy [2]	6	6	.....	6	.....	.....	13,010
17	Hosiery and knit goods	4	111	1	13	16	2	79	Je	89	Ja	55	76	11	65	.....	.....	153,145
18	Jewelry	3	16	2	1	.....	.....	13	Ja [2]	13	Jy [2]	13	13	11	1	1	.....	16,403
19	Lumber, planing-mill products, not including planing mills connected with sawmills.	8	247	1	10	6	.....	230	De	445	Mh	117	450	448	.....	2	.....	235,361
20	Marble and stone work	5	158	3	5	1	.....	149	No	172	Ja	114	152	151	.....	1	.....	311,598
21	Mattresses and spring beds	3	63	.....	8	4	.....	51	Ap [3]	55	De	42	53	47	6	.....	.....	162,260
22	Mineral and soda waters	6	48	3	4	9	2	30	Jy	40	De [3]	22	38	33	1	4	.....	82,509
23	Optical goods	5	27	1	4	1	1	20	Oc	23	De [3]	19	19	17	1	1	.....	51,406
24	Patent medicines and compounds	5	8	2	.....	.....	.....	6	De	7	Se	5	7	5	2	.....	.....	7,900
25	Printing and publishing, book and job.	31	303	30	24	27	6	216	.....		.....		218	187	25	6	.....	434,757
26	Job printing	25	277	23	23	19	4	208	Je	216	Oc	196	210	180	25	5	.....	391,895
27	Book publishing without printing	3	13	2	1	8	2	.....	.....		.....		.....	.....	.....	.....	.....	24,948
28	Linotype work and typesetting	3	13	5	.....	.....	.....	8	Ja [2]	8	Jy [2]	8	8	7	.....	1	.....	17,914
29	Printing and publishing, newspapers and periodicals.	41	757	16	41	313	31	356	.....		.....		363	295	46	17	5	1,265,988
30	Printing and publishing	6	477	.....	18	281	18	160	Oc	165	Jy	152	162	155	3	4	.....	971,558
31	Printing, publishing, and job printing.	11	229	7	12	16	7	187	Je	193	Au	178	189	133	39	12	5	210,282
32	Publishing without printing	24	51	9	11	16	6	9	Au [3]	11	Se	7	12	7	4	1	.....	84,148
33	Roofing materials, other than metal	4	20	.....	5	5	1	9	Oc [3]	12	My [3]	7	12	12	.....	.....	.....	115,319
34	Saddlery and harness	7	66	7	1	4	.....	54	Je	61	Oc [3]	49	54	54	.....	.....	.....	143,100
35	Slaughtering and meat packing	7	62	6	7	16	1	32	Au	35	Mh	28	35	35	.....	.....	.....	237,597
36	Tobacco, cigars	11	58	11	2	1	.....	44	Ja	51	Au	39	44	34	8	.....	2	43,395
37	All other industries *	96	2,596	73	115	178	36	2,194	.....		.....		2,069	1,893	170	2	4	12,105,327
	CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																	
1	OGDEN	110	2,230	88	87	138	23	1,894	Jy	2,331	De	1,566	2,048	1,577	419	24	28	$5,381,682
2	PROVO	33	410	26	25	24	5	330	Se	367	Fe	308	400	240	154	6	.....	960,032

[1] Owned power only. [2] Same number reported throughout the year. [3] Same number reported for one or more other months.

*All other industries embrace:

Artificial flowers	1
Artificial limbs	1
Automobile bodies and parts	1
Baking powders	1
Baskets, and rattan and willow ware	1
Bookbinding and blank-book making	4
Boots and shoes	1
Boxes, cigar	1
Boxes and cartons, paper	1
Boxes, wooden packing	4
Carriage and wagon materials	1
Cheese	12
Cleansing preparations	1
Clothing, men's	2
Clothing, women's	1
Coffee, roasting and grinding	1
Coke, not including gas-house coke	1
Condensed milk, and milk products, other than butter and cheese	2
Dairymen's and apiarists' supplies	1
Druggists' preparations	1
Envelopes	1
Fancy articles, not elsewhere specified	2
Fertilizers	2
Flavoring extracts	2
Furnishing goods, men's	1
Gas and electric fixtures	1
Glass, cutting, staining, and ornamenting	1
Hand stamps	2
Hardware	1
Lapidary work	1
Leather, tanned, curried, and finished	1
Lithographing	1
Mirrors, framed and unframed	1
Models and patterns, not including paper patterns	2
Oil, not elsewhere specified	1
Paints	2
Perfumery and cosmetics	1
Photo-engraving	1
Pottery, earthen and stone ware	1
Printing materials	1
Scales and balances	2
Shirts	1
Smelting, copper	1
Soap	2
Statuary and art goods	1
Stencils and brands	1
Sugar, beet	7
Surgical appliances	1
Tinware, not elsewhere specified	1
Umbrellas and canes	1
Upholstering materials, uncurled hair	1
Vinegar	2
Window and door screens	1
Wirework, including woven wire fencing	2
Wooden goods, not elsewhere specified	2
Wool pulling	1
Woolen goods	2

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.	Water wheels and motors.[1]	Electric (rented).		
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$1,820	$1,380	$21,746	$458	$2,655	$227	$22,628	$1,111	$61,139	$37,400	36	.....	.....	.....	36	.....	1
																2
5,958	2,400	60,705	.....	2,842	10,236	65,177	375	189,649	124,097	.....	.....	.....	.....	.....	.....	3
750	.....	7,326	.....	1,335	72	10,100	196	25,940	15,644	4	.....	.....	.....	4	.....	4
13,630	4,080	50,007	.....	.....	2,688	34,953	8,875	180,572	136,744	686	125	.....	561	.....	2	5
295,998	264,192	2,035,629	15,370	21,072	172,565	24,713,959	2,273,729	33,617,694	6,630,006	13,881	12,743	5	285	848	4,561	
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$590,560	$681,659	$3,800,561	$150,067	$214,497	$247,508	$8,005,107	$528,268	$16,662,940	$8,129,565	12,755	4,598	22	.....	8,135	780	1
6,292	1,450	33,782	.....	180	310	38,120	1,378	112,610	73,112	61	40	.....	.....	21	58	2
17,041	46,725	123,127	80	13,041	5,051	499,362	22,374	847,589	325,853	164	.....	.....	.....	164	.....	3
4,953	5,274	14,550	.....	2,436	2,202	450,381	1,819	505,429	53,229	53	.....	.....	.....	53	.....	4
7,500	.....	34,492	.....	5,496	721	18,977	1,296	81,734	61,461	25	.....	.....	.....	25	.....	5
53,105	76,176	223,825	.....	41,130	6,079	1,048,820	20,666	1,766,968	697,482	682	210	2	.....	470	125	6
37,555	71,686	161,745	.....	25,470	4,875	844,445	14,063	1,396,662	538,154	583	210	.....	.....	373	125	7
15,550	4,490	62,080	.....	15,660	1,204	204,375	6,603	370,306	159,328	99	.....	2	.....	97	.....	8
																9
6,108	3,010	67,712	17,691	8,489	562	93,723	1,168	256,545	161,654	40	.....	.....	.....	40	.....	10
.....	.....	560	.....	890	4	248	25	7,300	7,027	1	.....	.....	.....	1	.....	11
1,198	1,000	25,830	100	4,966	433	16,269	740	73,688	56,679	23	.....	.....	.....	23	.....	
																12
2,675	5,608	19,412	.....	4,272	552	94,205	2,384	144,743	48,154	67	6	.....	.....	61	.....	
																13
48,267	22,584	299,406	.....	13,944	8,628	582,534	25,023	1,056,701	449,144	1,002	110	.....	.....	892	.....	
																14
.....	.....	2,700	.....	2,700	136	3,900	25	19,220	15,295	1	.....	.....	.....	1	.....	15
4,620	1,420	48,518	12,328	4,260	293	41,984	1,090	121,217	78,143	100	.....	.....	.....	100	.....	
																16
.....	.....	2,775	.....	2,372	155	3,438	204	12,270	8,628	.....	.....	.....	.....	.....	.....	17
11,214	21,620	31,625	.....	480	998	103,430	1,791	201,776	96,555	36	.....	.....	.....	36	.....	18
1,500	.....	11,391	.....	1,560	62	11,953	304	33,542	21,285	16	.....	.....	.....	16	.....	
																19
20,700	6,990	135,599	.....	.....	3,379	276,994	7,277	523,514	239,243	748	70	.....	.....	678	.....	
																20
10,026	120	140,984	5,102	424	1,110	53,779	9,912	365,699	302,008	392	87	.....	.....	305	.....	21
14,160	6,267	34,356	.....	.....	1,313	112,503	3,048	183,476	67,925	146	.....	.....	.....	146	.....	22
6,429	7,720	14,671	.....	1,680	739	64,688	736	113,656	48,232	19	.....	.....	.....	19	.....	23
7,560	2,237	10,466	.....	6,241	192	17,836	951	62,076	43,289	10	.....	.....	.....	10	.....	
																24
.....	.....	2,605	.....	1,740	96	5,657	101	16,112	10,354	2	.....	.....	.....	2	.....	25
42,406	33,938	170,264	14,622	18,988	3,799	256,903	6,437	657,698	394,358	158	.....	.....	.....	158	.....	
																26
40,222	24,396	159,144	6,786	17,338	3,359	255,314	5,842	612,541	351,385	155	.....	.....	.....	155	.....	27
2,184	9,542	.....	7,836	720	354	591	.....	24,226	23,635	.....	.....	.....	.....	.....	.....	28
		11,120	.....	930	86	998	595	20,931	19,338	3	.....	.....	.....	3	.....	29
.....	.....	365,446	81,566	37,576	8,809	403,992	16,310	1,414,023	993,721	816	670	.....	.....	146	103	
75,220	224,319															30
39,535	193,660	205,574	6,660	15,714	7,136	332,923	12,970	923,842	577,949	748	670	.....	.....	78	103	31
20,339	22,262	156,221	2,428	20,011	1,624	65,982	3,115	358,885	289,788	68	.....	.....	.....	68	.....	
																32
15,346	8,397	3,651	72,478	1,851	49	5,087	225	131,296	125,984	.....	.....	.....	.....	.....	.....	
																33
3,579	3,609	7,528	95	1,125	489	53,638	1,958	79,707	24,111	121	105	.....	.....	16	.....	34
3,000	4,700	43,549	.....	2,325	2,466	158,473	852	232,576	73,251	4	.....	.....	.....	4	.....	35
9,827	16,240	30,530	4,212	159	791	1,027,614	4,117	1,139,966	108,235	130	40	10	.....	80	.....	36
2,838	900	34,423	.....	2,116	5,203	31,728	141	91,384	59,515	.....	.....	.....	.....	.....	.....	37
230,342	189,752	1,870,435	14,271	35,307	192,936	2,533,958	336,141	6,541,721	3,611,622	7,938	3,260	10	.....	4,668	434	
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
$139,658	$160,061	$1,262,037	$3,889	$37,807	$83,306	$3,468,592	$39,059	$6,014,358	$2,446,707	3,184	1,753	55	60	1,316	860	1
30,829	39,369	172,527	6,507	2,455	6,346	494,451	16,922	843,722	322,349	802	351	.....	272	179	5	2

*All other industries embrace:

Artificial flowers	1
Artificial limbs	1
Automobile bodies and parts	1
Automobile repairing	2
Awnings, tents, and sails	4
Baking powders	1
Bookbinding and blank-book making	3
Boots and shoes	1
Boxes, cigar	1
Boxes, fancy and paper	1
Boxes, wooden packing	2
Brass and bronze products	2
Brick and tile, sewer pipe	1
Brooms, from broom corn	1
Carriage and wagon materials	1
Cars and general shop construction and repairs by steam-railroad companies	2
Cars and general shop construction and repairs by electric-railroad companies	2
Cement	1
Cleansing preparations	1
Clothing, men's	1
Clothing, women's	1
Coffee, roasting and grinding	1
Coffins, burial cases, and undertaker's goods	2
Druggists' preparations	1
Envelopes	1
Fancy articles, not elsewhere specified	2
Fertilizers	2
Flavoring extracts	2
Flour-mill and gristmill products	2
Furnishing goods, men's	1
Gas and electric fixtures	1
Gas, illuminating and heating	1
Glass, cutting, staining, and ornamenting	1
Grease and tallow	2
Hardware	1
Ice, manufactured	2
Lapidary work	1
Lime	1
Liquors, malt	4
Lithographing	1
Mirrors, framed and unframed	1
Models and patterns, not including paper patterns	2
Oil, not elsewhere specified	1
Paints	2
Perfumery and cosmetics	1
Photo-engraving	1
Pickles and sauces	3
Printing materials	1
Scales and balances	2
Shirts	1
Signs and advertising novelties, other than electric	2
Soap	2
Statuary and art goods	1
Stencils and brands	1
Structural iron work, not made in steel works or rolling mills	4
Surgical appliances	1
Tinware, not elsewhere specified	1
Trunks and valises	4
Umbrellas and canes	1
Upholstering materials, curled hair	1
Vinegar	1
Window and door screens	1
Wirework	1

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES: 1914

VERMONT

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

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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 tables in which statistics for 1914 have been 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 of 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, 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 and city 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 employees 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 employees 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 employees 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, 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.

VERMONT.

By Gilman B. Howe.

GENERAL STATISTICS.

General character of the state.—Its gross area is 9,564 square miles, of which 9,124 represent land surface. The inhabitants of the state in 1900 numbered 343,641, and in 1910, 355,956, and its estimated population in 1914 was 361,205. In respect to both area and population Vermont ranked forty-second among the states in 1910. In point of density of population it ranked twenty-fifth in that year, with 39 inhabitants per square mile; the corresponding number in 1900 was 37.7.

The urban population in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 168,943, or 47.5 per cent of the total, as against 40.5 per cent in 1900. There were in Vermont in 1914 three cities estimated to have more than 10,000 inhabitants, namely, Barre, Burlington, and Rutland. The aggregate population of these three cities was 47,370 and formed 13.1 per cent of the estimated total population of Vermont in that year.

The steam-railway mileage in 1914 was 1,073, and the electric-railway mileage in 1912 was 97. In addition, Lake Champlain, which forms a part of the western boundary, affords excellent shipping facilities, and, together with its canal connections with the Hudson and St. Lawrence Rivers, forms an important factor in the transportation system of the state.

The value of farm crops in 1909 was $27,446,836, of which more than one-half—$16,335,530—represented hay and forage.

At the United States census of mines and quarries, in 1909, the total mineral output of Vermont was valued at $8,221,323, the principal products being marble, $3,277,651, and granite, $2,829,522.

According to the annual report of the United States Geological Survey, the total value of all minerals produced in the state in 1914 was $8,665,867, the leading items being marble, $3,490,971, and granite, $3,120,452. Vermont ranked first among the states in that year in the production of both these minerals, with 43 per cent and 15.6 per cent, respectively, of the total values reported for the entire United States.

Importance and growth of manufactures.—In 1914, measured by the value of products of its manufacturing industries—$76,991,000—Vermont ranked fortieth among the states and, with an average of 32,704 wage earners engaged in such industries, it ranked thirty-fourth in this respect. In 1909 the state ranked thirty-eighth in value of products and thirty-fourth in average number of wage earners. In 1914, as compared with the total value of products of manufactures for the United States, Vermont's proportion was three-tenths of 1 per cent. The corresponding proportions for 1909 and 1904 were three-tenths of 1 per cent and four-tenths of 1 per cent, respectively.

Table 1 gives the more important figures relative to all classes of manufactures combined in the state of Vermont, 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	1,772	1,958	1,699	1,938	−9.5	15.2	−12.3
Persons engaged	37,217	38,580	37,015	(2)	−3.5	4.2	.....
Proprietors and firm members	1,787	2,113	1,856	(2)	−15.4	13.8	.....
Salaried employees	2,726	2,679	2,053	1,695	1.8	30.5	21.1
Wage earners (average number)	32,704	33,788	33,106	28,179	−3.2	2.1	17.5
Primary horsepower	173,937	159,445	140,616	126,124	9.1	13.4	11.5
Capital	$79,846,775	$73,470,107	$62,658,741	$43,499,633	8.7	17.3	44.0
Salaries and wages	22,001,662	20,075,131	17,323,767	13,037,062	9.6	15.9	32.9
Salaries	3,384,587	2,803,429	2,102,708	1,610,514	20.7	33.3	30.6
Wages	18,617,075	17,271,702	15,221,059	11,426,548	7.8	13.5	33.2
Paid for contract work	1,162,281	591,481	700,763	(2)	96.5	−15.6	.....
Rent and taxes (including internal revenue)	832,917	509,084	[3] 450,721	(2)	63.6	12.9	.....
Cost of materials	42,705,720	34,822,728	32,429,852	26,384,812	22.6	7.4	22.9
Value of products	76,990,974	68,309,824	63,083,611	51,515,228	12.7	8.3	22.5
Value added by manufacture (value of products less cost of materials)	34,285,254	33,487,096	30,653,759	25,130,416	2.4	9.2	22.0

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

Although the value of products and cost of materials show greater increases from 1909 to 1914 than from 1904 to 1909, all the remaining items, except rent and taxes, show smaller percentages of increase, while several show actual decreases. The number of establishments reported at the census of 1914 repre-

sented a decrease of 186, or 9.5 per cent, as compared with the corresponding total for 1909, due chiefly to the decreases in the lumber and the marble and stone work industries. The largest percentage of decrease, 15.4 per cent, during this five-year period was in the number of proprietors and firm members. While most of this was due to the falling off in number of establishments in the two industries just referred to, which were chiefly of individual and partnership organization, no doubt it was in some degree affected by the changes in character of ownership as shown in Table 15. The small decrease, 3.2 per cent, in the average number of wage earners is more than accounted for by the loss shown in the two industries, lumber and marble and stone work. The value added by manufacture, although greater in amount at each of the successive censuses for which figures are given in the table, shows a smaller percentage of increase for each succeeding five-year period—22 per cent from 1899 to 1904, 9.2 per cent from 1904 to 1909, and 2.4 per cent from 1909 to 1914.

Table 2 shows the relative importance of the leading manufacturing industries in 1914, and the increases 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	1,772	32,704	100.0	$76,990,974	100.0	$34,285,254	100.0	-3.2	2.1	17.5	12.7	8.3	22.5	2.4	9.2	22.0
Marble and stone work	276	9,018	27.6	12,605,417	16.4	8,921,913	26.0	-13.4	28.6	73.5	1.7	29.5	50.0	-9.7	30.6	68.0
Lumber and timber products	[2] 516	4,108	12.6	8,768,453	11.4	4,787,759	14.0	.....	-14.7	-11.2	.....	-9.3	7.7	.....	-7.3	13.8
Butter, cheese, and condensed milk	173	471	1.4	8,695,915	11.3	719,625	2.1	-9.2	.....	.....	7.2	.....	.....	-31.8	.....	.....
Paper and wood pulp	23	1,264	3.9	4,776,387	6.2	1,772,022	5.2	22.7	-19.5	5.3	22.4	1.9	13.2	22.5	12.1	-24.1
Woolen and worsted goods	17	2,226	6.8	4,634,593	6.0	1,645,981	4.8	-3.0	2.6	.....	3.1	-4.3	.....	1.7	-15.0	.....
Flour-mill and gristmill products	125	179	0.5	4,142,854	5.4	483,804	1.4	14.7	-15.7	8.8	0.2	28.9	15.7	-20.0	81.1	-30.8
Food preparations	11	141	0.4	3,497,741	4.5	476,938	1.4	.....	.....	.....	611.0	.....	.....	275.6	.....	.....
Foundry and machine-shop products	40	1,873	5.7	3,428,162	4.5	2,366,340	6.9	0.7	2.3	27.2	-8.7	11.1	42.5	-2.2	-0.7	61.3
Hosiery and knit goods	7	963	2.9	2,164,897	2.8	760,935	2.2	1.8	3.3	-12.0	24.0	-12.2	8.4	15.8	-15.0	7.4
Furniture	15	1,035	3.2	1,642,789	2.1	889,054	2.6	.....	.....	.....	.....	.....	.....	.....	.....	.....
Clothing, men's, including shirts	10	988	3.0	1,441,943	1.9	705,536	2.1	-22.9	1.0	.....	13.2	5.6	.....	3.4	12.2	.....
Bread and other bakery products	85	357	1.1	1,402,663	1.8	589,941	1.7	47.5	29.4	26.4	41.1	99.2	19.7	59.5	66.7	5.2
Cars and general shop construction and repairs by steam-railroad companies	5	1,345	4.1	1,354,671	1.8	777,354	2.3	35.6	19.1	6.9	19.4	32.0	4.2	28.2	25.5	1.7
Printing and publishing	[3] 111	651	2.0	1,242,944	1.6	946,152	2.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Patent medicines and compounds	12	119	0.4	1,018,651	1.3	691,828	2.0	.....	.....	.....	.....	.....	.....	.....	.....	.....
Agricultural implements	9	311	1.0	696,294	0.9	386,127	1.1	-13.6	45.7	17.1	19.6	31.7	19.5	24.5	19.2	26.2
Clothing, women's	7	387	1.2	691,201	0.9	338,055	1.0	16.2	-39.0	170.3	37.4	-30.3	264.6	55.0	-26.8	259.0
Copper, tin, and sheet-iron products	17	113	0.3	477,739	0.6	196,836	0.6	-24.2	.....	.....	12.5	.....	.....	-10.5	.....	.....
Wood, turned and carved	33	361	1.1	413,764	0.5	248,258	0.7	-7.4	.....	.....	-10.6	.....	.....	-13.0	.....	.....
Canning and preserving (fruits and vegetables)	6	95	0.3	402,330	0.5	174,504	0.5	.....	107.0	-55.5	.....	168.3	-40.6	.....	93.3	-39.4
Confectionery	4	151	0.5	399,763	0.5	148,462	0.4	4.1	13.3	24.3	12.4	44.7	-0.8	4.2	29.1	-20.3
Gas, illuminating and heating	9	59	0.2	337,262	0.4	214,863	0.6	.....	.....	.....	21.2	115.5	81.7	20.8	95.6	78.4
Cooperage and wooden goods, not elsewhere specified	15	260	0.8	322,037	0.4	214,647	0.6	-59.1	34.8	259.5	-53.5	55.7	178.1	-52.5	53.6	183.7
All other industries	246	6,229	19.0	12,432,504	16.2	5,828,320	17.0	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 31; a minus sign (—) denotes decrease; percentages are omitted where base is less than 100 or where comparable figures can not be given.
[2] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[3] Excludes statistics for two establishments, to avoid disclosure of individual operations.

Separate statistics are presented for 23 industries, or industry groups, for each of which products valued at more than $300,000 were reported for 1914. These industries include 1 with products exceeding $10,000,000, 2 with products between $5,000,000 and $10,000,000 in value, 12 between $1,000,000 and $5,000,000, and 8 with products valued at less than $1,000,000. Among those 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 a number which have products exceeding in value some for which figures are shown in the table, as follows: Ammunition; brushes; dairymen's supplies; leather, tanned, curried, and finished; musical instruments, organs; musical instruments, piano and organ materials; scales and balances; and wool shoddy. Cotton goods, shown separately for 1914, in Table 32, is omitted from this table because statistics for 1909 could not be shown separately without disclosure of individual operations. The manufacture of scales and balances, in which Vermont occupies a leading position, is the most important of these industries.

Marble and stone work.—This is the most important industry in Vermont, not only as to value of products, but also in number of wage earners employed. In this connection it should be understood that reports for quarries were taken at the census of manufactures only for such of them as were engaged in dressing the stone. At the 1914 census of manufactures

the marble and stone work industry, which includes not only the operations of quarries where the stone is dressed, but also the dressing of marble and stone outside of quarries, reported 16.4 per cent of the total value of products for all manufactures in the state and 27.6 per cent of the average number of wage earners. The value of products reported for this industry at the census of 1914 was subdivided as follows: Marble and stone work of all kinds, chiefly granite and marble, but exclusive of slate, $11,066,400; roofing slate, $1,123,492; and all other slate products, $415,525. Monuments and tombstones and stone for building purposes were the chief products in this industry. The value of marble and stone work, exclusive of slate, by kinds of stone, was reported as follows: Granite, $7,122,252; marble, $3,474,728; marble and granite, not separable $454,093; and soapstone, $15,327. During the five-year period 1909–1914 there was a slight increase in the total value of products from $12,395,000 to $12,605,000, or 1.7 per cent. The number of establishments, however, decreased from 342 to 276, or 19.3 per cent; the average number of wage earners from 10,411 to 9,018, or 13.4 per cent; and the value added by manufacture from $9,878,000 to $8,922,000, or 9.7 per cent.

Lumber and timber products.—This industry, which in Table 2 embraces not only logging operations, sawmills, and planing mills, but also wooden box factories and the pulp-wood industry, was second in importance in 1914, although, as compared with 1909, showing an actual falling off in all items except wages and value of products. As the forests are depleted in the older states, a decrease naturally follows, and this is evident in the case of Vermont, when the statistics for the ten-year period 1904–1914 are considered. In 1904 the value of products was $9,477,000 and the average number of wage earners was 5,614; but in 1914, notwithstanding the advance in the value of lumber, the value of products was only $8,768,000 and the number of wage earners 4,108, the percentage of decrease for the decade being 7.5 and 26.8 per cent, respectively.

Butter, cheese, and condensed milk.—Third in importance in the state at the last three censuses, this industry, although showing a small actual decrease from 1909 to 1914 in number of establishments and average number of wage earners, showed increases in amount paid in wages, cost of materials, and value of products. The decrease in number of establishments has been noticeable since 1904, when 220 establishments were reported, and is probably due to a greater centralization of the industry, causing the abandonment of many small local creameries. For the five-year period 1909–1914 the average number of wage earners decreased 48, or 9.2 per cent, while the value of products increased $584,000, or 7.2 per cent.

Textiles.—In Vermont these manufactures, include woolen and worsted goods, hosiery and knit goods, and cotton goods, and for each there was an increase in the value of products from 1909 to 1914. Of the three branches of the textile industries, the manufacture of woolen and worsted goods is much the most important. During the five-year period 1909–1914 the value of products for this industry shows an increase of $138,000, or 3.1 per cent, and the value added by manufacture, $28,000 or 1.7 per cent. The average number of wage earners, however, decreased by 68, or 3 per cent, and the same number of establishments reported at both censuses. For hosiery and knit goods during the same five-year period there were much more pronounced increases in value of products and value added by manufacture, amounting to $419,000, or 24 per cent, and $104,000, of 15.8 per cent, respectively; but the increase in number of wage earners was slight, being only 17, or 1.8 per cent.

Paper and wood pulp.—This industry was fourth in importance, measured by value of products, in Vermont in 1914, having displaced woolen and worsted goods, which industry now ranks fifth. Although the number of establishments reporting in 1914 was smaller by 2 than the number in 1909, decided increases appeared in other respects, as follows: Average number of wage earners, 234, or 22.7 per cent; value of products, $874,000, or 22.4 per cent; and the value added by manufacture, $325,000, or 22.5 per cent. In horsepower reported, the mills in this industry, with a total of 42,066 horsepower, led all other industries in the state.

Flour-mill and gristmill products.—This industry, which excludes custom mills grinding for toll or local consumption, measured by value of products, ranked fifth in 1909, but dropped to sixth place in 1914. There were slight increases in value of products and average number of wage earners during the five-year period, together with a decrease in number of establishments. This decrease was in harmony with the conditions prevailing not only in many other states but in the industry as a whole in the United States, due largely to the abandonment of a large number of small mills.

The industries in this table are arranged in the order of their importance by value of products, but would vary considerably if based on average number of wage earners or value added by manufacture. Marble and stone work, lumber and timber products, and hosiery and knit goods are the only industries which ranked alike in all three respects. Butter, cheese, and condensed milk, third in value of products, was eleventh in number of wage earners and tenth in value added by manufacture. Woolen and worsted goods, fifth in value of products and value added by manufacture, was third in average number of wage earners. Flour-mill and gristmill products, sixth in value of products, was seventeenth in number of wage earners and fourteenth in value added by manufacture. The manufacture of flour-mill and gristmill products con-

sists largely in the simple process of grinding grain, requiring few employees, while the value added to the raw material by manufacture, as compared with the corresponding value for most other industries, is very small. The manufacture of food preparations is another industry which requires comparatively few employees and adds little value by the manufacturing process, ranking seventh in value of products, but nineteenth in average number of wage earners and fifteenth in value added by manufacture. On the other hand, the foundry and machine-shop industry, ranking eighth in value of products, was fourth in average number of wage earners and third in value added by manufacture.

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, marble and stone work, lumber and timber products, and butter, cheese, and condensed milk held the same rank in value of products at both censuses. Paper and wood pulp, woolen and worsted goods, and flour-mill and gristmill products, ranking fourth, fifth, and sixth in 1914, were sixth, fourth, and fifth, respectively, in 1909. Food preparations, holding seventh place in 1914, ranked nineteenth at the census of 1909. Clothing, men's, ranked eleventh at both censuses. For the remainder of these industries slight changes are noticeable from the earlier census to the later.

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" given at the beginning of this bulletin.

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES. Total.	Male.	Female.	Per cent of total. Male.	Female.
All classes	1914	37,217	32,591	4,626	87.6	12.4
	1909	38,580	33,305	5,275	86.3	13.7
Proprietors and officials	1914	2,756	2,696	60	97.8	2.2
	1909	3,088	3,013	75	97.6	2.4
Proprietors and firm members	1914	1,787	1,743	44	97.5	2.5
	1909	2,113	2,053	60	97.2	2.8
Salaried officers of corporations	1914	333	326	7	97.9	2.1
	1909	302	293	9	97.0	3.0
Superintendents and managers	1914	636	627	9	98.6	1.4
	1909	673	667	6	99.1	0.9
Clerks and other subordinate salaried employees.	1914	1,757	1,171	586	66.6	33.4
	1909	1,704	1,202	502	70.5	29.5
Wage earners (average number)	1914	32,704	28,724	3,980	87.8	12.2
	1909	33,788	29,090	4,698	86.1	13.9
16 years of age and over	1914	32,652	28,682	3,970	87.8	12.2
	1909	33,577	28,946	4,631	86.2	13.8
Under 16 years of age	1914	52	42	10	80.8	19.2
	1909	211	144	67	68.2	31.8

In 1914 the total number of persons engaged in manufactures was 37,217, of whom 32,704, or seven-eighths, were wage earners, 2,756 were proprietors and officials, and 1,757 were clerks. Of the wage earners, 16 years of age and over, 28,682, or seven-eighths, were males and 3,970, or one-eighth, were females. Corresponding figures for individual industries will be found in Table 32.

Table 4 shows, for 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	−3.5	−2.1	−12.3	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	−10.8	−10.5	.....	7.4	8.0	8.3	9.0	1.3	1.4
Proprietors and firm members	−15.4	−15.1	.....	4.8	5.5	5.3	6.2	1.0	1.1
Salaried officers of corporations	10.3	11.3	.....	0.9	0.8	1.0	0.9	0.2	0.2
Superintendents and managers	−5.5	−6.0	.....	1.7	1.7	1.9	2.0	0.2	0.1
Clerks and other subordinate salaried employees	3.1	−2.6	16.7	4.7	4.4	3.6	3.6	12.7	9.5
Wage earners (average number)	−3.2	−1.3	−15.3	87.9	87.6	88.1	87.3	86.0	89.1
16 years of age and over	−2.8	−0.9	−14.3	87.7	87.0	88.0	86.9	85.8	87.8
Under 16 years of age	−75.4	−70.8	.....	0.1	0.5	0.1	0.4	0.2	1.3

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

This table shows decreases for the five-year period in the total numbers of the several classes of employees with the exceptions of salaried officers of corporations and clerks and other subordinate salaried employees. The largest percentage of decrease for both sexes combined, 75.4, is shown for wage earners under 16 years of age, but the proportion which this class formed of the total number of wage earners was insignificant, being two-tenths of 1 per cent in 1914 and six-tenths of 1 per cent in 1909. Wage earners over 16 years of age formed by far the largest class, 87.7 per cent, of the total number of persons engaged in manufacturing industries in the state in 1914 and 87 per cent in 1909.

Table 5 shows, for the three main classes of persons engaged in manufactures, the number in each class and

the per cent distribution for 1914, 1909, and 1904, and the increase for the two five-year periods.

Table 5

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.							
	Number.			Per cent distribution.			Per cent of increase.[1]	
	1914	1909	1904	1914	1909	1904	1909–1914	1904–1909
Total	37,217	38,580	37,015	100.0	100.0	100.0	−3.5	4.2
Proprietors and firm members	1,787	2,113	1,856	4.8	5.5	5.0	−15.4	13.8
Salaried employees	2,726	2,679	2,053	7.3	6.9	5.5	1.8	30.5
Wage earners (av. number)	32,704	33,788	33,106	87.9	87.6	89.4	−3.2	2.1

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

Salaried employees show an increase at each successive census, although much the greater 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.

Table 6 shows, for 1914, 1909, and 1904, the average number of wage earners employed, for 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. The table also shows, for some of the important industries separately, a similar distribution of wage earners for 1914 and 1909.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS.			
		Average number.	Per cent of total.		
			16 years of age and over.		Under 16 years of age.
			Male.	Female.	
All industries	1914	32,704	87.7	12.1	0.2
	1909	33,788	85.7	13.7	0.6
	1904	33,106	85.5	13.8	0.7
Agricultural implements	1914	311	97.4	2.6	.....
	1909	360	97.2	1.1	1.7
Bread and other bakery products	1914	357	83.2	15.1	1.7
	1909	242	78.5	15.3	6.2
Butter, cheese, and condensed milk	1914	471	95.8	3.4	0.8
	1909	519	95.4	4.2	0.4
Cars and general shop construction and repairs by steam-railroad companies.	1914	1,345	100.0	.....	.....
	1909	992	100.0	.....	.....
Clothing, men's, including shirts	1914	988	14.4	85.2	0.4
	1909	1,281	11.0	89.0	.....
Clothing, women's	1914	387	8.5	91.5	.....
	1909	333	10.2	89.8	.....
Confectionery	1914	151	41.1	58.9	.....
	1909	145	41.4	58.6	.....
Cooperage and wooden goods, not elsewhere specified.	1914	260	91.9	8.1	.....
	1909	635	79.4	18.7	1.9
Flour-mill and gristmill products.	1914	179	99.4	.....	0.6
	1909	156	100.0	.....	.....
Foundry and machine-shop products	1914	1,873	98.0	2.0	.....
	1909	1,860	97.1	2.8	0.1
Furniture	1914	1,035	97.3	2.2	0.5
	1909	1,119	98.6	0.1	1.3
Hosiery and knit goods	1914	963	36.0	63.7	0.3
	1909	946	34.9	64.6	0.5
Lumber and timber products	1914	4,108	99.2	0.8	(1)
	1909	4,790	98.2	1.4	0.4
Marble and stone work	1914	9,018	99.9	(1)	0.1
	1909	10,411	99.8	(1)	0.2
Paper and wood pulp	1914	1,264	95.2	4.8	.....
	1909	1,030	93.0	7.0	.....
Printing and publishing	1914	651	77.1	22.7	0.2
	1909	666	70.9	28.8	0.3
Toys and games	1914	160	68.1	31.9	.....
	1909	103	78.6	12.6	8.7
Wood, turned and carved	1914	361	94.5	5.0	0.
	1909	390	89.0	9.7	1.3
Woolen and worsted goods	1914	2,226	71.5	28.5	(1)
	1909	2,294	60.9	37.6	1.4
All other industries	1914	6,596	85.1	14.6	0.3
	1909	5,516	80.2	17.6	2.2

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

For all industries combined, the proportion of male wage earners over 16 years of age has been greater at each successive census, while the proportions for both females over 16 years of age and children under 16 have decreased. The percentage for males 16 years of age and over increased from 85.7 in 1909 to 87.7 in 1914, and during the same period the proportions for females 16 years of age and over and for children under 16 decreased from 13.7 to 12.1 and from six-tenths of 1 per cent to two-tenths of 1 per cent, respectively.

In 1914, as compared with 1909, of the 19 industries for which separate figures are given in this table, 13 show an increased proportion of males and 5 an increased proportion of females, while but 1 shows an increase in the proportion of children under 16 years of age. Four 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 and women's clothing in 1914, about nine-tenths of the wage earners 16 years of age and over were women; and in the manufacture of confectionery and of hosiery and knit goods, although the proportion was smaller, the females also outnumbered the males. In the manufacture of toys and games, there was an increase in the proportion of female wage earners 16 years of age and over in 1914 as compared with 1909. In 1909 children under 16 years of age formed 8.7 per cent of the total average number of wage earners for the last-named industry, but in 1914 none of this class were reported.

Table 7 shows the average number of wage earners employed in each of the three cities having a population of more than 10,000, distributed according to age periods and in the case of those 16 years and over, according to sex, for 1914, 1909, and 1904.

Table 7

SEX AND AGE.	Census year.	AVERAGE NUMBER OF WAGE EARNERS IN— Barre.	Burlington.	Rutland.
Total	1914	2,366	2,132	1,771
	1909	2,340	2,371	1,636
	1904	2,198	2,300	1,803
16 years of age and over:				
Male	1914	2,355	1,452	1,531
	1909	2,325	1,601	1,245
	1904	2,195	1,619	1,350
Female	1914	9	678	231
	1909	3	740	390
	1904	2	652	452
Under 16 years of age	1914	2	2	9
	1909	12	30	1
	1904	1	29	1
Per cent of total:				
16 years of age and over—				
Male	1914	99.5	68.1	86.4
	1909	99.4	67.5	76.1
	1904	99.8	70.4	74.9
Female	1914	0.4	31.8	13.0
	1909	0.1	31.2	23.8
	1904	0.1	28.3	25.1
Under 16 years of age	1914	0.1	0.1	0.5
	1909	0.5	1.3	0.1
	1904	(1)	1.3	0.1

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

Barre shows an increase during each of the five-year periods in the numbers of both males and females 16 years of age and over, but for the number under 16 years there was a decrease during the five-year period 1909–1914. In this city, however, the number of female wage earners over 16 years of age and of children under 16 years was insignificant, the two classes combined forming but one-tenth of 1 per cent of the total in 1904, six-tenths of 1 per cent in 1909, and five-tenths of 1 per cent in 1914. The preponderance of males is due to the fact that marble and stone work, the principal industry in Barre, furnishing employment to more than nine-tenths of the average number of wage earners engaged in manufactures in the city, reported only three females.

Burlington shows a decrease of 239 in the total average number of wage earners from 1909 to 1914, each of the three classes taking part in this decrease. Several of the most important industries shared in this loss, while one industry engaged in the manufacture of photographic supplies in 1909, and employing a considerable number of wage earners, had left the city in 1914. Among the three cities, the proportion of male wage earners 16 years of age and over was the smallest, and of females over 16 years of age the largest, in Burlington. During the five-year period 1909–1914 the proportion of males 16 years of age and over increased from 67.5 per cent to 68.1 per cent, and that for females 16 years of age and over, from 31.2 per cent to 31.8 per cent, while the proportion of children under 16 years of age decreased from 1.3 per cent to one-tenth of 1 per cent.

Rutland shows an actual increase of 135 in the total average number of wage earners for the five-year period 1909–1914. There was a decided increase during this period in the proportion of male wage earners over 16 years of age and a corresponding decrease in the proportion of females. The number under 16 years of age, although greater in 1914 than in 1909, was so small that it scarcely had a perceptible effect on the percentages from census to census.

Table 8 shows, for Barre, Burlington, and Rutland, the percentages of increase in the average numbers of wage earners, for which totals are given in the preceding table for 1914, 1909, and 1904.

Table 8

CITY.	PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS.[1] Period.	Total.	16 years of age and over. Male.	Female.	Under 16 years of age.
Barre	1904–1914	7.6	7.3	.....	.....
	1909–1914	1.1	1.3	.....	.....
	1904–1909	6.5	5.9	.....	.....
Burlington	1904–1914	−7.3	−10.3	4.0	.....
	1909–1914	−10.1	−9.3	−8.4	.....
	1904–1909	3.1	−1.1	13.5	.....
Rutland	1904–1914	−1.8	13.4	−48.9	.....
	1909–1914	8.3	23.0	−40.8	.....
	1904–1909	−9.3	−7.8	−13.7	.....

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

In Barre, during the ten-year period 1904–1914, the total average number of wage earners increased by 7.6 per cent, and the average number of males 16 years of age and over, by 7.3 per cent. For the five-year period 1909–1914 the increase for all classes of wage earners amounted to 1.1 per cent, and for males 16 years and over, to 1.3 per cent.

Burlington shows, for the ten-year period 1904–1914, a decrease of 7.3 per cent, and for the five-year period 1909–1914, a decrease of 10.1 per cent, in the total average number of wage earners employed. During the ten-year period the average number of male wage earners 16 years of age and over decreased 10.3 per cent, and during the same period the average number of female wage earners 16 years of age and over increased 4 per cent, but decreased by 8.4 per cent during the five-year period 1909–1914.

For Rutland there is shown, for the ten-year period, a decrease of 1.8 per cent in the total average number of wage earners, but for the five-year period 1909–1914 there was a gain of 8.3 per cent. During the ten-year period the average number of male wage earners 16 years of age and over increased by 13.4 per cent, while the average number of female wage earners 16 years of age and over decreased by 48.9 per cent. For the five-year period 1909–1914 the corresponding totals

represent an increase of 23 per cent and a decrease of 40.8 per cent, respectively.

Wage earners employed, by months.—Table 9 gives, for all industries combined, a comparative statement of 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 for 1904 the average number employed during each month, together with 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	33,288	33,013	32,576	97.4	95.2	95.3
February	33,273	33,710	33,282	97.3	97.2	97.3
March	34,155	34,257	33,954	99.9	98.8	99.3
April	34,194	34,288	34,189	100.0	98.9	100.0
May	34,125	34,317	34,160	99.8	99.0	99.9
June	33,254	34,134	33,387	97.3	98.4	97.7
July	31,792	32,875	32,032	93.0	94.8	93.7
August	31,213	33,359	31,654	91.3	96.2	92.6
September	32,208	34,098	32,707	94.2	98.3	95.7
October	31,615	34,392	33,194	92.5	99.2	97.1
November	31,571	34,677	33,231	92.3	100.0	97.2
December	31,760	32,342	32,906	92.9	93.3	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 and 1904 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 August in both years. The year 1909 shows the least fluctuation in the number of wage earners employed; but shows a different season of activity, the maximum month being November, whereas in 1914 the employment of wage earners was comparatively small during the later months of the year. The greatest difference between the maximum and minimum months in any one of the three census years was 2,981 in 1914. The average monthly employment of wage earners in 1914 was 32,704 and in 1909, 33,788.

Table 10 gives for the state as a whole and for a number of selected industries, a comparative statement, for the years 1914 and 1909, showing the total average number of wage earners employed, the number by months of maximum and minimum employment, and the percentage which the minimum forms of the maximum.

In 1914 the average number of wage earners, for all industries combined, was 32,704, representing a decrease of 1,084 as compared with 33,788 in 1909; but a comparison of the selected industries covered by the table shows a wide diversity of increase and decrease during this period in the number of wage earners employed. Marble and stone work, by far the largest manufacturing industry in the state, shows a decrease of 1,393 in the average number of wage earners, but less fluctuation in monthly employment in the later year than in the earlier, the percentage which the minimum formed of the maximum in 1914 being 90.3 per cent, compared with 65.9 in 1909. On the other hand, the woolen and worsted goods industry, for which there appears a slight decrease in average number of wage earners during the five-year period 1909–1914, showed a much greater fluctuation in 1914 than in 1909, the percentages which the minimum formed of the maximum being 62.9 and 85.4 per cent, respectively. Bread and other bakery products, cars and general shop construction and repairs by steam railroad companies, foundry and machine-shop products, furniture and refrigerators, and the printing and publishing industries show the most steady employment of wage earners.

Table 10

INDUSTRY.	Census year.	WAGE EARNERS.					
		Average number.	Maximum.		Minimum.		
			Month.	Number.	Month.	Number.	Per cent of maximum.
All industries	1914	32,704	Apr.	34,194	Aug.	31,213	91.3
	1909	33,788	Nov.	34,677	Dec.	32,342	93.3
Agricultural implements	1914	311	Jan.	336	July	238	70.8
	1909	360	Apr.	393	Aug.	298	75.8
Bread and other bakery products.	1914	357	Aug.	378	Feb.	335	88.6
	1909	242	June	257	Jan.	227	88.3
Butter, cheese, and condensed milk.	1914	471	June	570	Feb.	381	66.8
	1909	519	July	620	Feb.	428	69.0
Cars and general shop construction and repairs by steam-railroad companies.	1914	1,345	Mar.	1,411	Sept.	1,253	88.8
	1909	992	Sept.	1,030	July	956	92.8
Clothing, men's, including shirts.	1914	988	Feb.	1,102	Oct.	731	66.3
	1909	1,281	Dec.	1,423	Sept.	1,107	77.8
Clothing, women's	1914	387	Apr.	448	Aug.	285	63.6
	1909	333	Dec.	407	June	290	71.3
Confectionery	1914	151	Oct.	172	June	132	76.7
	1909	145	Nov.	183	July	114	62.3
Cooperage and wooden goods, not elsewhere specified.	1914	260	Mar.	325	Dec.	160	49.2
	1909	635	Dec.	691	July	556	80.5
Flour-mill and gristmill products.	1914	179	Dec.	183	July	174	95.1
	1909	156	Mar.	166	Sept.	145	87.3
Foundry and machine-shop products.	1914	1,873	Apr.	2,039	Oct.	1,671	82.0
	1909	1,860	Dec.	2,122	May	1,691	79.7
Furniture	1914	1,035	Mar.	1,123	Dec.	945	84.1
	1909	1,119	Dec.	1,261	July	1,026	81.4
Hosiery and knit goods	1914	963	May	1,090	Sept.	795	72.9
	1909	946	Nov.	1,000	Aug.	863	86.3
Lumber and timber products	1914	4,108	May	4,713	Sept.	3,471	73.6
	1909	4,790	Dec.	5,460	Aug.	3,866	70.8
Marble and stone work	1914	9,018	Aug.	9,290	Dec.	8,391	90.3
	1909	10,411	Aug.	11,186	Dec.	7,372	65.9
Paper and wood pulp	1914	1,264	Sept.	1,429	Aug.	950	66.5
	1909	1,030	Mar.	1,133	Aug.	885	78.1
Printing and publishing	1914	651	May	667	Dec.	634	95.1
	1909	666	Dec.	699	Aug.	649	92.8
Toys and games	1914	160	Oct.	188	Aug.	135	71.8
	1909	103	Oct.	121	Jan.	83	68.6
Wood, turned and carved	1914	361	Feb.	417	July	324	77.7
	1909	390	Jan.	411	Sept.	354	86.1
Woolen and worsted goods	1914	2,226	Dec.	2,929	Feb.	1,843	62.9
	1909	2,294	Dec.	2,508	Aug.	2,143	85.4

Table 11 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 three cities having a population of more than 10,000.

Of the selected industries, cooperage and wooden goods, while comparatively a small industry in the state, shows the greatest degree of fluctuation, the number of wage earners in December being but 49.2 per cent of the number in March. The least fluctuation is shown for flour-mill and gristmill products and for printing and publishing, for which industries the proportion which the minimum formed of the maximum was 95.1 per cent. Of the three cities, Rutland shows much the greatest fluctuation, the proportion that the minimum formed of the maximum for this city being 81.9 percent.

Table 11

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	32,704	33,288	33,273	34,155	**34,194**	34,125	33,254	31,792	*31,213*	32,208	31,615	31,571	31,760	91.3
Agricultural implements	311	**336**	335	331	334	317	321	*233*	273	284	310	320	333	70.8
Bread and other bakery products	357	336	*335*	339	341	363	371	376	**378**	374	359	357	355	88.6
Butter, cheese, and condensed milk	471	407	*381*	404	484	543	**570**	547	528	495	492	406	395	66.8
Cars and general shop construction and repairs by steam-railroad companies	1,345	1,362	1,385	**1,411**	1,371	1,355	1,398	1,269	1,307	*1,253*	1,281	1,372	1,376	88.8
Clothing, men's, including shirts	988	1,086	**1,102**	1,064	1,025	1,007	981	984	946	839	*731*	1,039	1,052	66.3
Clothing, women's	387	438	436	447	**448**	430	419	328	*285*	357	353	359	344	63.6
Confectionery	151	141	149	156	153	136	*132*	137	145	154	**172**	168	169	76.7
Cooperage and wooden goods, not elsewhere specified	260	318	319	**325**	291	313	307	284	256	179	189	179	*160*	49.2
Flour-mill and gristmill products	179	183	181	183	179	176	174	*174*	175	176	181	183	**183**	95.1
Foundry and machine-shop products	1,873	2,012	2,014	2,023	**2,039**	1,944	1,953	1,896	1,747	1,745	*1,671*	1,687	1,745	82.0
Furniture	1,035	1,106	1,115	**1,123**	1,065	1,043	1,000	1,000	954	1,009	1,026	1,034	*945*	84.1
Hosiery and knit goods	963	1,036	1,051	1,055	1,080	**1,090**	1,087	1,027	894	*795*	812	818	811	72.9
Lumber and timber products	4,108	4,541	4,588	4,592	4,670	**4,713**	4,207	3,504	3,490	*3,471*	3,719	3,777	4,024	73.6
Marble and stone work	9,018	8,944	8,882	8,989	9,161	9,248	9,239	9,220	**9,290**	9,114	9,048	8,690	*8,391*	90.3
Paper and wood pulp	1,264	1,220	1,185	1,212	1,263	1,300	1,244	1,235	*950*	**1,429**	1,422	1,343	1,365	66.5
Printing and publishing	651	647	657	660	661	**667**	659	662	647	636	644	638	*634*	95.1
Toys and games	160	159	164	169	151	156	155	146	*135*	177	**188**	179	141	71.8
Wood, turned and carved	361	414	**417**	381	367	354	339	*324*	336	340	352	349	359	77.7
Woolen and worsted goods	2,226	1,887	*1,843*	2,389	2,400	2,356	2,121	1,956	1,874	2,469	2,123	2,365	**2,929**	62.9
Total for cities	6,269	6,236	6,322	**6,413**	6,376	6,376	6,343	6,190	6,105	6,293	6,317	6,246	*6,001*	93.6
BARRE	2,366	2,243	*2,243*	2,379	2,407	2,379	2,379	2,389	2,401	**2,425**	2,414	2,369	2,350	92.5
BURLINGTON	2,132	2,121	2,169	2,145	2,124	2,149	2,146	2,087	*2,025*	2,166	2,172	**2,188**	2,086	92.6
RUTLAND	1,771	1,872	**1,910**	1,889	1,845	1,848	1,818	1,714	1,679	1,702	1,731	1,689	*1,565*	81.9

Prevailing hours of labor.—In Table 12 the wage earners in the state and in a number of selected industries have been classified according to the number of hours of labor per week prevailing in the establishments in which they were employed in 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 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, 12,508, or more than one-third 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, while but 5,632, or only about one-sixth, were so employed in 1914. On the other hand, for all industries combined, the number of wage earners whose working hours were less than 60 hours per week increased from 21,280 in 1909 to 27,072 in 1914, forming 63 per cent and 82.8 per cent, respectively, of the total number in the state. For the state as a whole there was a marked increase during the five-year period in the proportion of wage earners in each of the three classes from 48 and under to 54 hours per week.

Among the separate industries, marble and stone work shows the most pronounced decrease in hours of labor. In 1909, 46.3 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 91.7 per cent.

In the foundry and machine-shop industry in 1909 there were no establishments reporting their prevailing hours of labor as fewer than 54 per week, but in 1914, 54.7 per cent of the wage earners in this industry were employed in establishments where such hours prevailed. Each of the two textile industries, hosiery and knit goods and woolen and worsted goods, show decreased hours of employment.

Of the combined total average number of wage earners, 6,269 for the three cities in 1914, 5,635, or practically nine-tenths, were in establishments where the prevailing hours were fewer than 60 per week, while only 49 were in establishments in which the

hours were more than 60 per week. In Barre, where marble and stone work is the predominant industry, 2,260, or 95.5 per cent, of its wage earners were reported in the class of 48 hours and under.

Table 12

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	32,704	5,579	4,727	6,452	10,314	5,077	345	182	28
	1909	33,788	4,898	1,080	4,000	11,302	11,879	466	98	65
Agricultural implements	1914	311	.....	.....	52	219	40	.....	.....	.....
	1909	360	.....	.....	100	199	61	.....	.....	.....
Bread and other bakery products	1914	357	44	.....	120	31	127	18	17	.....
	1909	242	12	.....	45	4	154	3	19	5
Butter, cheese, and condensed milk	1914	471	10	7	42	37	205	160	3	7
	1909	519	31	14	28	29	134	250	17	16
Cars and general shop construction and repairs by steam-railroad companies	1914	1,345	.....	261	341	743	.....	.....	.....	.....
	1909	992	.....	170	.....	804	10	8	.....	.....
Clothing, men's, including shirts	1914	988	174	38	526	250	.....	.....	.....	.....
	1909	1,281	278	.....	3	948	52	.....	.....	.....
Clothing, women's	1914	387	.....	.....	113	254	20	.....	.....	.....
	1909	333	.....	.....	.....	277	56	.....	.....	.....
Confectionery	1914	151	.....	.....	36	51	64	.....	.....	.....
	1909	145	1	.....	3	48	93	.....	.....	.....
Cooperage and wooden goods, not elsewhere specified	1914	260	30	20	17	54	139	.....	.....	.....
	1909	635	.....	23	.....	54	558	.....	.....	.....
Flour-mill and gristmill products	1914	179	.....	.....	5	32	142	.....	.....	.....
	1909	156	12	1	6	20	107	8	2	.....
Foundry and machine-shop products	1914	1,873	319	706	389	389	70	.....	.....	.....
	1909	1,860	.....	.....	881	719	260	.....	.....	.....
Furniture	1914	1,035	.....	.....	43	669	323	.....	.....	.....
	1909	1,119	.....	.....	127	428	564	.....	.....	.....
Hosiery and knit goods	1914	963	.....	.....	.....	702	261	.....	.....	.....
	1909	946	.....	.....	.....	.....	946	.....	.....	.....
Lumber and timber products	1914	4,108	32	16	888	1,137	2,034	.....	1	.....
	1909	4,790	35	5	285	1,024	3,384	57	.....	.....
Marble and stone work	1914	9,018	4,379	2,964	925	577	173	.....	.....	.....
	1909	10,411	3,973	213	638	5,246	341	.....	.....	.....
Paper and wood pulp	1914	1,264	211	626	123	136	40	99	29	.....
	1909	1,030	268	415	.....	35	203	51	58	.....
Printing and publishing	1914	651	173	31	397	31	19	.....	.....	.....
	1909	666	181	61	317	61	46	.....	.....	.....
Toys and games	1914	160	.....	.....	.....	160	.....	.....	.....	.....
	1909	103	.....	.....	.....	31	72	.....	.....	.....
Wood, turned and carved	1914	361	.....	.....	5	113	236	.....	7	.....
	1909	390	.....	.....	.....	143	247	.....	.....	.....
Woolen and worsted goods	1914	2,226	.....	.....	122	1,823	281	.....	.....	.....
	1909	2,294	.....	39	.....	26	2,229	.....	.....	.....
All other industries	1914	6,596	207	58	2,308	2,906	903	68	125	21
	1909	5,516	107	139	1,567	1,206	2,362	89	2	44
Total for cities	1914	6,269	2,446	101	1,846	1,242	585	20	9	20
BARRE	1914	2,366	2,260	39	66	.....	1	.....	.....	.....
BURLINGTON	1914	2,132	131	62	467	1,008	444	20	.....	.....
RUTLAND	1914	1,771	55	.....	1,313	234	140	.....	9	20

Location of establishments.—Table 13 shows, for 1914, 1909, and 1899, the extent to which the manufactures in Vermont are centralized in the three cities of more than 10,000 inhabitants.

A comparison of the totals for the three cities combined for 1914 with those for 1909 shows a decrease in number of establishments and average number of wage earners, but an increase in value of products and value added by manufacture, a condition similar to that which prevailed in the districts outside the three cities. Comparisons with 1899 for the cities or for the districts outside can not be made because the population of Barre at that date was less than 10,000, and the statistics for that city, therefore, were included with those for the outside districts.

The table shows that for 1914 the three cities, which contained 13.1 per cent of the estimated population of the state, reported 18.5 per cent of the total value of products and 19.2 per cent of the total average number of wage earners. The corresponding proportions for 1909 were slighlty less, with the exception of that for value of products, which was 19.5 per cent.

Table 13	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.			
			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	.....	3	.....	3	.....	.....	.....
	1910	.....	3	.....	3	.....	.....	.....
	1900	.....	2	.....	2	.....	.....	.....
Population [1]	1914	361,205	47,370	13.1	47,370	13.1	313,835	86.9
	1910	355,956	44,748	12.6	44,748	12.6	311,208	87.4
	1900	343,641	30,139	8.8	30,139	8.8	313,502	91.2
Number of establishments	1914	1,772	262	14.8	262	14.8	1,510	85.2
	1909	1,958	284	14.5	284	14.5	1,674	85.5
	1899	1,938	139	7.2	139	7.2	1,799	92.8
Average number of wage earners	1914	32,704	6,269	19.2	6,269	19.2	26,435	80.8
	1909	33,788	6,347	18.8	6,347	18.8	27,441	81.8
	1899	28,179	3,728	13.2	3,728	13.2	24,451	86.2
Value of products	1914	$76,990,974	$14,205,265	18.5	$14,205,265	18.5	$62,785,709	81.5
	1909	68,309,824	13,332,195	19.5	13,332,195	19.5	54,977,629	80.5
	1899	51,515,228	8,025,240	15.6	8,025,240	15.6	43,489,988	84.4
Value added by manufacture	1914	34,285,254	7,150,353	20.9	7,150,353	20.9	27,134,901	79.1
	1909	33,487,096	6,693,974	20.0	6,693,974	20.0	26,793,122	80.0
	1899	25,130,416	3,895,818	15.5	3,895,818	15.5	21,234,598	84.5

[1] Census estimate of population for 1914.

Table 14 shows the relative importance in manufactures of each of the three cities having more than 10,000 inhabitants, as measured by average number of wage earners and by the value of products in 1914, 1909, and 1904.

Table 14 City.	Average number of wage earners.			Value of products.		
	1914	1909	1904	1914	1909	1904
Burlington	2,132	2,371	2,300	$6,636,956	$6,800,490	$6,355,754
Barre	2,366	2,340	2,198	4,291,600	3,852,177	3,373,046
Rutland	1,771	1,636	1,803	3,276,709	2,679,528	2,522,856

The manufacturing industries of Barre and Rutland show an increase in value of products for each of the five-year periods 1904–1909 and 1909–1914, but for the city of Burlington there was a decrease during the five-year period 1909–1914.

For the five-year period 1904–1909 Rutland shows a decrease in average number of wage earners notwithstanding an increase in value of products, and for Burlington and Barre the increases in number of wage earners are not proportionate to the increases in value of products. This condition may be due to the increase in the prices of commodities during recent years referred to in the "Explanation of terms."

The principal industries in Burlington are lumber, planing-mill products, cotton goods, and patent medicines and compounds.

In Barre the marble and stone work industry, the output of which forms nine-tenths of the total value of products of the city, dwarfs the remainder of its manufactures.

In Rutland the principal industries are scales and balances, steam-railroad repair shops, foundry and machine-shop products, and marble and stone work.

Character of ownership.—Table 15 presents statistics in respect to character of ownership, or legal organization, of manufacturing enterprises. For all industries combined, comparative figures are given for 1914, 1909, and 1904, while for the selected industries, figures for 1914 and 1909 only are given. In order to avoid disclosing the operations of individual establishments, it is necessary to omit several important industries from this table.

For all industries combined, during the decade, this table shows an increase in the number of establishments under corporate ownership and decreases for the other two classes. Although, of the three classes of ownership, corporations show the smallest proportion of the establishments, in value of products and average number of wage earners they largely predominate. For 1914, with but 22 per cent of the total number of establishments in the state, they reported 68.7 per cent of the total value of products and 71.4 per cent of the total average number of wage earners. In 1909 and 1904 the corresponding proportions are only slightly less. The proportions of the total average number of wage earners and value of products reported by corporations have been greater at each successive census.

Individual ownership for all industries combined shows a greater number of establishments in 1914 and 1909 than for "corporations" and "all others" together, although slightly less in 1904. Their proportions of value of products and average number of wage earners, however, was less than that for "all others" in 1909 and 1904, although slightly greater in 1914. In 1914, with the exception of flour-mill and gristmill products, the largest proportions of the total products for the nine industries for which separate statistics are given are shown for corporate owner-

ship. This condition prevails also in each of the three cities, although it is much less pronounced in Barre than in Burlington and Rutland. In Barre, however, 88 of the 110 establishments in the city were engaged in marble and stone work, in which industry there were few corporations.

Table 15

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	931	390	451	32,704	5,043	23,335	4,326	15.4	71.4	13.2	$76,990,974	$12,202,958	$52,854,963	$11,933,053	15.8	68.7	15.5
	1909	1,029	372	557	33,788	5,066	22,857	5,865	15.0	67.6	17.4	68,309,824	12,175,721	42,641,046	13,493,057	17.8	62.4	19.8
	1904	833	309	557	33,106	5,882	20,544	6,680	17.8	62.1	20.2	63,083,611	12,027,326	36,373,592	14,682,693	19.1	57.7	23.3
Butter, cheese, and condensed milk.	1914	39	44	90	471	66	238	167	14.0	50.5	35.5	8,695,915	1,399,143	3,895,209	3,401,563	16.1	44.8	39.1
	1909	50	22	114	519	107	245	167	20.6	47.2	32.2	8,112,239	1,850,284	2,953,937	3,308,018	22.8	36.4	40.8
Flour-mill and gristmill products.	1914	86	7	32	179	105	20	54	58.7	11.2	30.2	4,142,854	2,034,174	680,663	1,428,017	49.1	16.4	34.5
	1909	92	8	33	156	91	26	39	58.3	16.7	25.0	4,133,337	1,946,353	848,425	1,338,559	47.1	20.5	32.4
Foundry and machine-shop products.	1914	12	23	5	1,873	202	1,635	36	10.8	87.3	1.9	3,428,162	277,809	3,080,615	69,738	8.1	89.9	2.0
	1909	20	25	11	1,860	184	1,535	141	9.9	82.5	7.6	3,754,801	350,850	3,162,057	241,894	9.3	84.2	6.4
Furniture	1914	4	10	1	1,035	.....	1,016	[1] 19	.....	98.2	1.8	1,642,789	.....	1,612,657	[1] 30,132	.....	98.2	1.8
	1909	2	14	3	1,119	.....	1,090	[1] 29	.....	97.4	2.6	1,617,759	.....	1,581,394	[1] 36,365	.....	97.8	2.2
Hosiery and knit goods	1914	1	4	2	963	.....	699	[1] 264	.....	72.6	27.4	2,164,897	.....	1,562,030	[1] 602,867	.....	72.2	27.8
	1909	1	5	2	946	.....	723	[1] 223	.....	76.4	23.6	1,745,670	.....	1,265,820	[1] 479,850	.....	72.5	27.5
Lumber and timber products.	1914	351	53	112	4,108	1,703	1,423	982	41.5	34.6	23.9	8,768,453	3,032,113	3,972,515	1,763,825	34.6	45.3	20.1
	1909	390	61	142	4,790	1,962	1,426	1,402	41.0	29.8	29.3	8,598,084	3,164,198	3,273,245	2,160,641	36.8	38.1	25.1
Marble and stone work	1914	118	52	106	9,018	1,163	5,694	2,161	12.9	63.1	24.0	12,605,417	1,706,912	7,849,191	3,049,314	13.5	62.3	24.2
	1909	136	54	152	10,411	1,030	6,388	2,993	9.9	61.4	28.7	12,395,379	1,520,143	7,178,038	3,697,198	12.3	57.9	29.8
Paper and wood pulp	1914	.....	16	7	1,264	.....	1,156	108	.....	91.5	8.5	4,776,387	.....	4,372,432	403,955	.....	91.5	8.5
	1909	1	16	8	1,030	.....	878	[1] 152	.....	85.2	14.8	3,901,634	.....	3,342,490	[1] 559,144	.....	85.7	14.3
Woolen and worsted goods.	1914	4	13	.....	2,226	243	1,983	.....	10.9	89.1	.....	4,634,593	390,179	4,244,414	.....	8.4	91.6	.....
	1909	4	13	.....	2,294	148	2,146	.....	6.5	93.5	.....	4,496,903	253,503	4,243,400	.....	5.6	94.4	.....
Total for cities	1914	99	81	82	6,269	739	4,200	1,330	11.8	67.0	21.2	14,205,265	1,765,144	9,841,444	2,598,677	12.4	69.3	18.3
Barre	1914	44	18	48	2,366	469	879	1,018	19.8	37.2	43.0	4,291,600	792,323	1,779,392	1,719,885	18.5	41.5	40.1
Burlington	1914	28	41	18	2,132	195	1,736	201	9.1	81.4	9.4	6,636,956	751,175	5,516,533	369,248	11.3	83.1	5.6
Rutland	1914	27	22	16	1,771	75	1,585	111	4.2	89.5	6.3	3,276,709	221,646	2,545,519	509,544	6.8	77.7	15.6

[1] Includes the group "individuals," to avoid disclosure of individual operations.

Size of establishments.—Table 16 shows, for all industries combined, for 1914, 1909, and 1904, the number of establishments, grouped according to the value of products, and, for each group, the average number of wage earners, value of products, value added by manufacture, and per cent distribution.

Table 16

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	1,772	1,958	1,699	32,704	33,788	33,106	$76,990,974	$68,309,824	$63,083,611	$34,285,254	$33,487,096	$30,653,759
Less than $5,000	527	690	426	730	1,100	752	1,287,368	1,693,585	1,190,017	827,200	1,089,581	743,470
$5,000 to $20,000	620	644	672	3,311	3,844	4,246	6,571,006	6,976,450	7,031,382	3,529,041	3,729,572	3,850,847
$20,000 to $100,000	472	493	483	7,924	9,491	10,011	20,238,946	20,340,258	19,927,286	8,741,378	9,653,436	9,145,201
$100,000 to $1,000,000	146	127	112	15,045	14,466	13,174	37,923,534	32,104,250	26,459,867	16,072,472	14,813,124	11,269,943
$1,000,000 and over	7	4	6	5,694	4,887	4,923	10,970,120	7,195,281	8,475,059	5,115,163	4,201,383	5,644,298
	Per cent distribution.											
All classes	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than $5,000	29.7	35.2	25.1	2.2	3.3	2.3	1.7	2.5	1.9	2.4	3.3	2.4
$5,000 to $20,000	35.0	32.9	39.6	10.1	11.4	12.8	8.5	10.2	11.1	10.3	11.1	12.6
$20,000 to $100,000	26.6	25.2	28.4	24.2	28.1	30.2	26.3	29.8	31.6	25.5	28.8	29.8
$100,000 to $1,000,000	8.2	6.5	6.6	46.0	42.8	39.8	49.3	47.0	41.9	46.9	44.2	36.8
$1,000,000 and over	0.4	0.2	0.4	17.4	14.5	14.9	14.2	10.5	13.4	14.9	12.5	18.4

For 1914, 153 establishments, or 8.6 per cent of the total number in the state, each reported products exceeding $100,000 in value, as compared with 131, or 6.7 per cent of the total, in 1909, and 118, or 7 per cent, in 1904. For 1914 these establishments reported an average of 20,739 wage earners, or 63.4 per cent of the total for the state, 63.5 per cent of the total value of products, and 61.8 per cent of the total value added by manufacture. In the same year the small establishments, those having products of less than $100,000 in value, represented 91.3 per cent of the total number of establishments but reported only 36.5 per cent of the total value of products. For the establishments having products valued at $100,000 and

over, the proportion of the total products shows an increase at each successive census, from 55.3 per cent in 1904 to 57.5 per cent in 1909 and 63.5 per cent in 1914.

Table 17 shows, for several of the more important industries, a similar grouping of establishments, according to value of products, for 1914 and 1909.

Table 17

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	173	186	100.0	100.0	471	519	100.0	100.0	$8,695,915	$8,112,239	100.0	100.0	$719,625	$1,056,425	100.0	100.0
Less than $5,000	6	15	3.5	8.1	3	9	0.6	1.7	23,159	50,363	0.3	0.6	1,650	9,030	0.2	0.9
$5,000 to $20,000	41	56	23.7	30.1	33	49	7.0	9.4	490,006	688,974	5.6	8.5	47,656	73,438	6.6	7.0
$20,000 to $100,000	109	103	63.0	55.4	226	202	48.0	38.9	4,889,427	4,146,968	56.2	51.1	416,046	416,307	57.8	39.4
$100,000 to $1,000,000	17	12	9.8	6.5	209	259	44.4	49.9	3,293,323	3,225,934	37.9	39.8	254,273	557,650	35.3	52.8
FLOUR-MILL AND GRISTMILL PRODUCTS	125	133	100.0	100.0	179	156	100.0	100.0	4,142,854	4,133,337	100.0	100.0	483,804	605,015	100.0	100.0
Less than $5,000	5	6	4.0	4.5	3	4	1.7	2.6	14,132	34,734	0.3	0.8	2,973	7,130	0.6	1.2
$5,000 to $20,000	64	74	51.2	55.6	56	50	31.3	32.1	776,566	931,558	18.7	22.5	129,636	147,696	26.8	24.4
$20,000 to $100,000	51	48	40.8	36.1	86	80	48.0	51.3	1,998,566	1,849,723	48.2	44.8	292,633	262,826	60.5	43.4
$100,000 to $1,000,000	5	5	4.0	3.8	34	22	19.0	14.1	1,353,590	1,317,322	32.7	31.9	58,562	187,363	12.1	31.0
FOUNDRY AND MACHINE-SHOP PRODUCTS	40	56	100.0	100.0	1,873	1,860	100.0	100.0	3,428,162	3,754,801	100.0	100.0	2,366,340	2,419,690	100.0	100.0
Less than $5,000	8	11	20.0	19.6	22	25	1.2	1.3	26,863	27,302	0.8	0.7	20,863	15,919	0.9	0.7
$5,000 to $20,000	12	14	30.0	25.0	114	83	6.1	4.5	169,449	155,775	4.9	4.1	110,326	91,954	4.7	3.8
$20,000 to $100,000	12	21	30.0	37.5	317	488	16.9	26.2	555,681	874,592	16.2	23.3	357,087	577,742	15.1	23.9
$100,000 to $1,000,000	8	10	20.0	17.9	1,420	1,264	75.8	68.0	2,676,169	2,697,132	78.1	71.8	1,878,064	1,734,075	79.4	71.7
LUMBER AND TIMBER PRODUCTS	516	593	100.0	100.0	4,108	4,790	100.0	100.0	8,768,453	8,598,084	100.0	100.0	4,787,759	4,467,342	100.0	100.0
Less than $5,000	221	304	42.8	51.3	350	578	8.5	12.1	537,071	749,081	6.1	8.7	356,970	502,946	7.5	11.3
$5,000 to $20,000	220	214	42.6	36.1	1,343	1,624	32.7	33.9	2,200,813	2,227,094	25.1	25.9	1,372,144	1,463,365	28.7	32.8
$20,000 to $100,000	63	66	12.2	11.1	1,514	1,652	36.9	34.5	2,457,504	2,663,711	28.0	31.0	1,559,213	1,693,905	32.6	37.9
$100,000 to $1,000,000	12	9	2.3	1.5	901	936	21.9	19.5	3,573,065	2,958,198	40.7	34.4	1,499,432	807,126	31.3	18.1
MARBLE AND STONE WORK	276	342	100.0	100.0	9,018	10,411	100.0	100.0	12,605,417	12,395,379	100.0	100.0	8,921,913	9,877,531	100.0	100.0
Less than $5,000	58	97	21.0	28.4	90	144	1.0	1.4	157,696	252,574	1.3	2.0	106,429	182,150	1.2	1.8
$5,000 to $20,000	97	111	35.1	32.5	775	986	8.6	9.5	1,113,332	1,209,630	8.8	9.8	788,350	903,126	8.8	9.1
$20,000 to $100,000	105	115	38.0	33.6	2,961	3,448	32.8	33.1	4,387,950	4,434,976	34.8	35.8	2,965,325	3,215,534	33.2	32.6
$100,000 and over	[1] 16	[1] 19	5.8	5.6	5,192	5,833	57.6	56.0	6,946,439	6,498,199	55.1	52.4	5,061,809	5,576,721	56.7	56.5

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

For 1914 as compared with 1909, as in the totals for all industries combined, this table shows that for each of the five industries there was a general decrease for the establishments having products under $100,000 in value. During the five-year period, for the establishments having products valued at $100,000 and over, two of the industries, flour-mill and gristmill products, and foundry and machine-shop products show an increase in the average number of wage earners and all except foundry and machine-shop products an increase in value of products.

Table 18 shows for all industries combined in each of the three cities having a population of 10,000 and over the number of establishments grouped according to value of products, of wage earners, value of products, and value added by manufacture, for 1914.

Table 18

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.
BARRE	110	2,366	100.0	$4,291,600	100.0	$2,955,148	100.0
Less than $5,000	20	18	0.8	50,626	1.2	37,530	1.3
$5,000 to $20,000	27	182	7.7	312,801	7.3	219,196	7.4
$20,000 to $100,000	56	1,320	55.8	2,310,708	53.8	1,500,920	50.8
$100,000 to $1,000,000	7	846	35.8	1,617,465	37.7	1,197,502	40.5
BURLINGTON	87	2,132	100.0	6,636,956	100.0	2,528,352	100.0
Less than $5,000	20	25	1.2	49,041	0.7	33,928	1.3
$5,000 to $20,000	24	128	6.0	264,494	4.0	144,596	5.7
$20,000 to $100,000	26	507	23.8	1,183,723	17.8	518,271	20.5
$100,000 to $1,000,000	17	1,472	69.0	5,139,698	77.4	1,831,557	72.4
RUTLAND	65	1,771	100.0	3,276,709	100.0	1,666,853	100.0
Less than $5,000	20	21	1.2	47,782	1.5	28,329	1.7
$5,000 to $20,000	17	73	4.1	176,826	5.4	87,297	5.2
$20,000 to $100,000	17	326	18.4	735,034	22.4	407,903	24.5
$100,000 to $1,000,000	11	1,351	76.3	2,317,067	70.7	1,143,324	68.6

In the totals for Burlington and Rutland the same general condition is found as prevail for all industries combined in the state, namely, a preponderance as to value of products for establishments in the group of

$100,000 and over, representing 77.4 per cent and 70.7 per cent of the totals for the two cities, respectively. For Barre, however, the greatest value of products, 53.8 per cent, appears for the group $20,000 to $100,000. Each of the three 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 each of these cities, those in Barre represented 42.7 per cent, in Burlington 50.6 per cent, and in Rutland 56.9 per cent, whereas the values of their products formed only 8.5 per cent, 4.7 per cent, and 6.9 per cent, respectively.

Table 19 shows, for 1914, for all industries in the state combined, for 19 of the more important industries individually, and for each of the three cities, the number of establishments and the number of wage earners grouped according to the average number of wage earners employed.

Table 19

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	1,772	32,704	138	971	2,131	372	4,181	171	5,400
Agricultural implements	9	311				4	48	4	153
Bread and other bakery products	85	357	8	59	136	15	125	3	96
Butter, cheese, and condensed milk	173	471	12	150	273	8	80	2	53
Cars and general shop construction and repairs by steam-railroad companies	5	1,345				1	9	1	28
Clothing, men's, including shirts	10	988	1			1	15	2	68
Clothing, women's	7	387		2	5	1	16		
Confectionery	4	151	1					1	36
Cooperage and wooden goods, not elsewhere specified	15	260	1	5	7	5	63	2	52
Flour-mill and gristmill products	125	179	17	106	153	2	26		
Foundry and machine-shop products	40	1,873		10	28	15	164	5	139
Furniture	15	1,035	1	3	12	1	7	5	198
Hosiery and knit goods	7	963		1	3			1	27
Lumber and timber products	516	4,108	19	334	792	119	1,352	34	1,059
Marble and stone work	276	9,018	19	81	212	86	1,091	70	2,209
Paper and wood pulp	23	1,264				9	128	5	122
Printing and publishing	111	651	23	54	146	25	207	8	238
Toys and games	4	160				2	21		
Wood, turned and carved	33	361		19	56	11	131	2	79
Woolen and worsted goods	17	2,226						3	68
All other industries	297	6,596	36	147	308	67	698	23	775
Total for cities	262	6,269	22	93	243	71	850	50	1,563
BARRE	110	2,366	10	25	74	37	479	31	948
BURLINGTON	87	2,132	8	33	87	23	244	11	405
RUTLAND	65	1,771	4	35	82	11	127	8	210

Table 19—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	58	4,140	41	6,090	14	4,604	6	3,819	1	2,339
Agricultural implements			1	110						
Bread and other bakery products										
Butter, cheese, and condensed milk	1	65								
Cars and general shop construction and repairs by steam-railroad companies					2	602	1	706		
Clothing, men's, including shirts	2	148	4	757						
Clothing, women's	2	150	2	216						
Confectionery	2	115								
Cooperage and wooden goods, not elsewhere specified	2	138								
Flour-mill and gristmill products										
Foundry and machine-shop products	4	264	4	504	2	774				
Furniture			4	563	1	255				
Hosiery and knit goods	2	141	2	305	1	487				
Lumber and timber products	7	499	3	406						
Marble and stone work	10	801	6	851	2	637	1	878	1	2,339
Paper and wood pulp	7	473	1	173	1	368				
Printing and publishing	1	60								
Toys and games	2	139								
Wood turned and carved	1	95								
Woolen and worsted goods	8	597	3	354	2	554	1	653		
All other industries	7	455	11	1,851	3	927	3	1,582		
Total for cities	15	1,113	7	873	3	1,103	1	524		
BARRE	5	388	1	106	1	371				
BURLINGTON	8	579	3	426	1	391				
RUTLAND	2	146	3	341	1	341	1	524		

Of the total number of establishments for all industries in the state combined, 138, or 7.8 per cent, employed no wage earners. The numbers in the several remaining groups are as follows: Employing from 1 to 5 wage earners, 971, or 54.8 per cent; from 6 to 50, 543, or 30.6 per cent; from 51 to 250, 99, or 5.6 per cent; and more than 250, 21, or 1.2 per cent. The percentages for average number of wage earners employed, however, differ greatly from those just given. The group of establishments employing from 1 to 5 wage earners, which represented 54.8 per cent of the total number of establishments, reported 2,131 wage earners, or but 6.5 per cent of the total. On the other hand, the group of establishments having more than 250 employees, while comprising but 1.2 per cent of the total number of establishments, employed 10,762, or 32.9 per cent, of the wage earners. The groups of establishments having more than 50 wage earners represented only 6.8 per cent of the total number of establishments in the state, but gave employment to 20,992 wage earners, or 64.2 per cent of the total. As an indication of the nature of the industries embracing the smaller establishments, it will be noticed that for bread and bakery products, dairy products, and flour-mill and gristmill products the majority of the establishments employ from 1 to 5 wage earners. A comparison of the industries shown in this table brings out the fact that, in the steam-railroad repair shops, in the foundries and machine shops, in the manufacture of men's clothing, furniture, hosiery and knit goods, and woolen and worsted goods, and in the marble and stone work industry, the majority of the wage earners were in establishments giving employment to more than 100 wage earners.

In Barre 20.2 per of the wage earners were in establishments employing more than 100 wage earners; in Burlington, 38.3 per cent; and in Rutland, 68.1 per cent.

Table 20 gives, for 1914, percentages based on the figures in the preceding table, together with similar percentages for 1909.

Table 20

Industry.	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	6.5	12.8	16.5	12.7	18.6	14.1	11.7	7.2
	1909	6.9	3.8	18.9	11.7	17.6	17.5	2.3	11.2
Agricultural implements	1914	.....	15.4	49.2	.....	35.4	.....	.....	.....
	1909	1.7	14.4	26.4	15.0	42.5	.....	.....	.....
Bread and other bakery products.	1914	38.1	35.0	26.9	.....	.....	.....	.....	.....
	1909	59.1	31.4	9.5	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk.	1914	58.0	17.0	11.3	13.8	.....	.....	.....	.....
	1909	47.4	10.0	28.9	13.7	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	.....	0.7	2.1	.....	.....	44.8	52.5	.....
	1909	.....	1.8	2.4	6.9	10.3	78.6	.....	.....
Clothing, men's, including shirts.	1914	.....	1.5	6.9	15.0	76.6	.....	.....	.....
	1909	0.2	1.1	5.6	8.2	40.8	44.0	.....	.....
Clothing, women's	1914	1.3	4.1	.....	38.8	55.8	.....	.....	.....
	1909	0.6	.....	16.8	48.6	33.9	.....	.....	.....
Confectionery	1914	.....	.....	23.8	76.2	.....	.....	.....	.....
	1909	7.6	8.3	84.1	.....	.....	.....	.....	.....
Cooperage and wooden goods, not elsewhere specified.	1914	2.7	24.2	20.0	53.1	.....	.....	.....	.....
	1909	2.7	18.3	18.3	8.5	52.3	.....	.....	.....
Flour-mill and gristmill products.	1914	85.5	14.5	.....	.....	.....	.....	.....	.....
	1909	88.5	11.5	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.	1914	1.5	8.8	7.4	14.1	26.9	41.3	.....	.....
	1909	2.4	7.4	18.1	18.1	38.1	15.9	.....	.....
Furniture	1914	1.2	0.7	19.1	.....	54.4	24.6	.....	.....
	1909	0.3	6.2	10.0	20.1	63.4	.....	.....	.....
Hosiery and knit goods	1914	0.3	.....	2.8	14.6	31.7	50.6	.....	.....
	1909	0.5	.....	8.4	22.5	16.0	52.6	.....	.....
Lumber and timber products.	1914	19.3	32.9	25.8	12.1	9.9	.....	.....	.....
	1909	19.0	34.4	26.1	5.7	14.7	.....	.....	.....
Marble and stone work	1914	2.4	12.1	24.5	8.9	9.4	7.1	9.7	25.9
	1909	2.9	12.8	22.3	9.0	13.5	15.6	.....	24.0
Paper and wood pulp	1914	.....	10.1	9.7	37.4	13.7	29.1	.....	.....
	1909	0.5	11.8	28.5	28.3	.....	30.8	.....	.....
Printing and publishing	1914	22.4	31.8	36.6	9.2	.....	.....	.....	.....
	1909	23.6	38.6	37.8	.....	.....	.....	.....	.....
Toys and games	1914	.....	13.1	.....	86.9	.....	.....	.....	.....
	1909	2.9	30.1	.....	67.0	.....	.....	.....	.....
Wood, turned and carved	1914	15.5	36.3	21.9	26.3	.....	.....	.....	.....
	1909	12.8	33.3	31.8	22.1	.....	.....	.....	.....
Woolen and worsted goods	1914	.....	.....	3.1	26.8	15.9	24.9	29.3	.....
	1909	.....	.....	8.4	21.1	15.0	.....	.....	55.5
All other industries	1914	4.7	10.6	11.7	6.9	28.1	14.1	24.0	.....
	1909	5.5	10.8	14.0	9.4	12.9	33.0	14.4	.....

Engines and power.—Table 21 shows, for 1914, 1909, and 1904, for all industries combined, the number and total horsepower of engines or motors, classified according to their character, 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 by the establishments reporting.

This table shows an increase in primary power amounting to 14,492 horsepower, or 9.1 per cent, from 1909 to 1914, due to the increase in rented power. The use of rented power, almost wholly electric, has greatly increased since 1904, when 5,871 horsepower of this character, representing 4.2 per cent of the total primary power, was reported. In 1909 the amount of such power had increased to 13,556 horsepower, or 8.5 per cent of the total, and in 1914, to 28,376 horsepower, or 16.3 per cent of the total. The increase in the use of electric motors run by current generated within the same establishments has kept pace with that in rented power.

The increase in rented power no doubt has some influence on owned power, the total for which decreased from 145,889 horsepower in 1909 to 145,561 in 1914. This decrease is due to the falling off in steam power, there having been a small increase during this period

in the power developed by water wheels, turbines, and motors, and internal-combustion engines. For steam and for water power there were decided increases in the average capacity of the engines and water wheels and motors, but the capacity of the internal-combustion engines remained practically the same.

Table 21

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	3,960	3,256	2,217	173,937	159,445	140,616	100.0	100.0	100.0
Owned	1,870	2,416	2,217	145,561	145,889	134,745	83.7	91.5	95.8
Steam engines and turbines[1]	864	1,167	996	62,860	64,667	57,025	36.1	40.6	40.5
Internal-combustion engines	160	161	101	2,301	2,160	1,483	1.3	1.4	1.1
Water wheels, turbines, and motors	846	1,088	1,120	80,400	79,062	76,237	46.2	49.6	54.2
				28,376	13,556	5,871	16.3	8.5	4.2
Rented	2,090	840	(2)						
Electric	2,090	840	(2)	27,477	12,917	4,550	15.8	8.1	3.2
Other	.....	.....	.....	899	639	1,321	0.5	0.4	0.9
Electric	3,030	1,512	110	47,161	21,233	7,238	100.0	100.0	100.0
Rented	2,090	840	(2)	27,477	12,917	4,550	58.3	60.8	62.9
Generated by establishments reporting	940	672	110	19,684	8,316	2,688	41.7	39.2	37.1

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

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

Table 22 shows the quantity of each kind of fue used, for which statistics were required, for all industries combined and for certain selected industries separately, for 1914.

Table 22

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	50,146	203,409	6,824	22,454	7,528
Agricultural implements	1,342	1,435	.....	3,322	.....
Bread and other bakery products	2,365	357	288	35	1,328
Butter, cheese, and condensed milk	1,188	11,965	65	138	.....
Cars and general shop construction and repairs by steam-railroad companies	638	13,322	261	159	14
Flour-mill and gristmill products	124	340	.....	533	.....
Foundry and machine-shop products	2,499	5,593	2,038	554	1,033
Gas, illuminating and heating	3,185	3,829	989	14,004	.....
Hosiery and knit goods	22	5,158	.....	.....	.....
Lumber and timber products	116	2,757	.....	647	.....
Marble and stone work	5,053	39,676	94	474	66
Paper and wood pulp	21,920	44,303	.....	.....	.....
Woolen and worsted goods	180	32,936	414	.....	.....
All other industries	11,514	41,738	2,675	2,588	5,087
Total for cities	9,782	26,187	2,887	8,965	5,095
BARRE	2,235	8,053	84	1,775	869
BURLINGTON	4,070	11,001	.....	6,962	2,163
RUTLAND	3,477	7,133	2,803	228	2,063

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 four important industries in Vermont are here presented.

Butter, cheese, and condensed milk.—Vermont is one of the leading dairy-product states, ranking fourteenth in value of products in 1914 and tenth in 1909. Table 23 gives the quantity and value of products for the industry for 1914, 1909, and 1904.

Table 23	1914	1909	1904[1]
Total value	$8,695,915	$8,112,239	$6,416,434
Butter:			
Packed solid—			
Pounds	9,999,182	12,589,015	16,210,831
Value	$2,991,678	$3,673,807	$3,409,092
Prints or rolls—			
Pounds	11,077,765	7,638,480	11,046,043
Value	$3,451,205	$2,348,259	$2,435,052
Cream sold:			
Pounds	10,130,732	4,502,709	571,402
Value	$517,729	$600,393	$65,522
Cheese:			
Full cream—			
Pounds	2,114,221	2,576,073	4,271,160
Value	$337,372	$378,057	$416,786
Other kinds—			
Pounds	408,716	186,583	72,000
Value	$41,581	$17,721	$10,800
Condensed and evaporated milk:			
Pounds	16,887,549	13,342,666	(2)
Value	$1,200,713	$975,663	(2)
All other butter, cheese, and condensed-milk factory products, value	$155,637	$118,339	$79,182

[1] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[2] Figures can not be shown without disclosing individual operations.

The number of establishments, as shown in Table 31, decreased at each successive census, being 220, 186, and 173 at the censuses of 1904, 1909, and 1914, respectively. This decrease is accounted for largely by the decrease in the manufacture of cheese in the state, and also, to some extent, by a tendency toward consolidation in the dairy industry as a whole.

The total value of products shows an increase of $1,695,805, or 26.4 per cent, from 1904 to 1909, and of $583,676, or 7.2 per cent, from 1909 to 1914. The fact should not be overlooked, however, that the total for 1904 is exclusive of the value of products for one establishment, as noted on the table.

For the decade 1904–1914 there was a decrease of 6,179,927 pounds, or 22.7 per cent, in the total quantity of butter manufactured, but an increase of $598,739, or 10.2 per cent, in its value. The decrease in quantity was confined to butter packed solid, there having been an increase during the decade of 31,722 pounds in prints or rolls. For the five-year period 1909–1914 both the quantity and value decreased for butter packed solid but increased for prints or rolls. There was a decrease in the quantity and value of full-cream cheese, 1904 to 1909, and 1909 to 1914. The "other kinds" which include "skimmed," "part cream," and "cottage cheese," although comparatively unimportant, increased at each succeeding census. The production of cottage cheese as a primary manufacture is not confined to the establishments shown in this table, since this kind of cheese is more frequently reported by them as a by-product.

The manufacture of condensed milk can not be shown separately for 1904 because of the liability of disclosing the operations of individual establishments, but for the five-year period 1909–1914 there was an increase of 3,544,883 pounds, or 26.6 per cent, in the quantity, and $225,050, or 23.1 per cent, in its value.

Paper and wood pulp.—Table 24 shows the quantities and cost of the principal materials used and the quantities and values of the various products of the paper and pulp mills of Vermont, as reported at the censuses of 1914, 1909, and 1904. The table also gives the number and daily capacity of the paper machines used and the yearly capacity of both pulp and paper mills.

Table 24	1914	1909	1904
MATERIALS.			
Total cost	$3,004,365	$2,455,355	$2,539,766
Pulp wood:			
Cords	65,813	(1)	75,139
Cost	$677,217	$708,618	$562,444
Wood pulp, purchased, total:			
Tons	27,000	24,304	22,968
Cost	$900,861	$790,412	$628,844
Ground, including mechanical screenings—			
Tons	8,910	11,556	11,426
Cost	$179,754	$253,778	$212,240
Sulphite fiber—			
Tons	13,018	11,577	11,220
Cost	$511,158	$484,328	$402,740
Other chemical fiber—			
Tons	5,072	1,171	322
Cost	$209,949	$52,306	$13,864
Old or waste paper:			
Tons	7,874	2,370	5,148
Cost	$121,834	$52,994	$118,287
All other materials, cost	$1,304,453	$903,331	$1,230,191
PRODUCTS.			
Total value	$4,776,387	$3,901,634	$3,831,448
News paper:			
Tons	31,223	16,455	34,396
Value	$1,353,012	$688,363	$1,397,204
Wrapping paper:			
Tons	11,948	16,323	17,633
Value	$689,131	$860,818	$891,106
Boards:			
Tons	7,244	3,685	4,599
Value	$246,135	$159,452	$183,704
Tissue paper:			
Tons	2,202	3,500	3,045
Value	$179,284	$331,013	$274,411
Ground wood pulp produced for sale or for use in establishments other than where manufactured:			
Tons	19,929	30,543	23,529
Value	$373,891	$542,348	$343,386
All other products, value	$1,934,934	$1,319,640	$741,577
MACHINERY.			
Paper machines:			
Fourdrinier—			
Number	16	12	19
Capacity in tons of paper, 24 hours	208	150	209
Cylinder—			
Number	21	20	21
Capacity in tons of paper, 24 hours	102	88	73
Yearly capacity of mills in pulp, tons	97,194	77,661	96,809
Yearly capacity of mills in paper, tons	85,605	71,719	84,742

[1] Not reported.

The total value of all products for the industry was $4,776,387 in 1914 and $3,831,448 in 1904, the increase during the decade being $944,939, or 24.7 per cent. The pulp wood used in the pulp mills in 1914 consisted principally of spruce, with small quantities of balsam fir, poplar, and hemlock. The number of cords of pulp wood consumed in 1914 showed a decrease as compared with the consumption in 1904, although there was a considerable increase in its cost.

Wood pulp purchased aggregated 27,000 tons in 1914, sulphite fiber representing 48.2 per cent of the total quantity and 56.7 per cent of the total cost. "Other chemical fiber" includes soda and sulphate fiber, the latter being the more important. The large amount reported under "all other materials" includes the cost of rags, manila stock, chemicals, sizing, fuel, rent of power, and freight.

News paper was the principal product in both 1914 and 1904. There was a decrease, however, during the decade, of 3,173 tons, or 9.2 per cent, in quantity, and $44,192, or 3.2 per cent, in value. For the five-year period, 1904–1909, this product showed a decrease of 17,941 tons, or 52.2 per cent, in quantity, and $708,841, or 50.7 per cent, in value. For the five-year period, 1909–1914, however, the quantity increased 14,768 tons, or 89.7 per cent, and the value $664,649, or 96.6 per cent. Wrapping paper and tissue paper each showed decreases both in quantity and value during the five-year period 1909–1914. Boards decreased in quantity and value from 1904 to 1909 but increased from 1909 to 1914, the increase for the decade being 57.5 per cent in quantity and 33.9 per cent in value. Ground wood pulp, for use in establishments other than those in which produced, increased in quantity and value from 1904 to 1909 and decreased in each respect from 1909 to 1914. For the decade 1904–1914, however, although there was a decrease in quantity of 3,600 tons, the value increased $30,505. The total quantity of wood pulp manufactured in the state in 1914, including that used in the mills where produced, aggregated 63,004 tons, of which ground wood pulp represented 86.3 per cent. The item "all other products" includes fine paper, hanging paper, coated book paper, cardboard, bristol board, sulphite fiber, screenings, and products other than paper and pulp manufactured by the paper and pulp mills of the state as subsidiary products. The capacity of both the pulp mills and the paper mills in 1914 shows a small increase as compared with 1904.

Flour-mill and gristmill products.—Table 25 gives the quantities and values of flour-mill and gristmill products for the last three census years.

Vermont was the only New England state not showing a decrease in the total value of products in this industry between 1909 and 1914. The increase, however, was small—$9,517, or only two-tenths of 1 per cent. As will be seen by the table, corn meal and feed formed the major part of the total products, both as to quantity and value. These two classes of products are so closely allied in their general uses, corn meal being used both for human and animal consumption, and are so reported by many establishments that they may with propriety be considered together; and when thus combined they represent 97.9 per cent of the total value of products in 1914 and 97.8 per cent in 1909. The other items shown in the table are unimportant in Vermont, both as to quantities and values. The equipment reported for 1914 consisted of 30 stands of rolls, 75 runs of stone, and 130 attrition mills. Comparable statistics for 1909 are not available.

Table 25	1914	1909	1904
Total value	$4,142,854	$4,133,337	$3,206,075
Wheat flour:			
Barrels	3,133	169	3,026
Value	$17,467	$1,014	$14,664
Rye flour:			
Barrels	144	404	365
Value	$580	$1,406	$1,594
Buckwheat flour:			
Pounds	456,333	363,550	196,350
Value	$13,844	$9,376	$5,825
Corn meal and corn flour:			
Barrels	458,617	853,051	909,760
Value	$1,453,199	$2,511,964	$2,109,276
Bran and middlings:			
Tons	710	12	168
Value	$20,230	$433	$3,380
Feed and offal:			
Tons	82,074	48,850	40,461
Value	$2,604,409	$1,528,928	$1,032,712
Barley meal, value	$6,041	$54,185	.....
Hominy and grits, value	$2,100	.....	.....
Oatmeal, value	$19,254	.....	.....
All other products, value	$5,730	$26,031	$38,624

Woolen and worsted goods.—Table 26 shows, in considerable detail, for 1914, 1909, and 1904, the quantities and cost of materials used in this industry and the quantities and values of the principal products.

Table 26	1914	1909	1904
MATERIALS USED.			
Total cost	$2,988,612	$2,879,001	$2,794,111
Wool (in condition purchased):			
Pounds	1,567,230	1,620,956	3,264,133
Cost	$676,918	$677,308	$973,988
Equivalent in scoured condition (pounds)	1,513,524	1,165,432	2,004,874
Rags, tailor's clippings, etc.:			
Pounds	1,975,280	1,823,286	2,120,824
Cost	$166,454	$140,386	$229,990
Recovered wool fiber:			
Pounds	777,810	824,259	991,608
Cost	$90,480	$120,774	$153,345
Cotton:			
Pounds	505,854	184,954	1,057,280
Cost	$69,781	$30,230	$135,705
Yarns, purchased:			
Pounds	979,106	1,895,180	1,316,052
Cost	$532,519	$1,083,028	$363,872
Chemicals and dyestuffs, cost	$161,674	$161,175	$172,971
Fuel and rent of power, cost	$137,986	$145,331	$115,337
All other materials, cost	$1,152,800	$520,769	$648,903
PRODUCTS.			
Total value	$4,634,593	$4,496,903	$4,698,405
All-wool woven goods:			
Square yards	4,711,090	4,744,694	4,836,185
Value	$2,772,917	$2,899,133	$2,738,140
Cotton-mixed woven goods:			
Square yards	2,281,201	2,273,010	2,727,203
Value	$756,990	$535,664	$819,784
Cotton-warp woven goods:			
Square yards	3,416,756	2,676,701	3,376,997
Value	$683,737	$996,382	$1,131,645
All other products, value	$420,949	$65,724	$8,836

As shown in Table 31, there were 17 establishments engaged in this industry in Vermont at each of the three censuses. Although a small increase in the cost of materials was shown at each successive census, the total value of products decreased slightly from 1904 to 1909 but increased from 1909 to 1914, so that the total decrease for the decade was $63,812, or 1.4 per cent.

In 1904 the cost of wool represented more than one-third of the total cost of materials, but in 1909 and 1914 this item formed less than one-fourth of the total "Yarns, purchased" increased in cost and quantity from 1904 to 1909 but decreased from 1909 to 1914, showing, however, an increase in cost for the decade. Of the total cost of all materials, purchased yarns formed 37.6 per cent in 1909, as compared with 13 per cent in 1904, and 17.8 per cent in 1914.

The value of all-wool woven goods formed more than one-half the total value of products at each of the three censuses, 59.8 per cent in 1914, 64.5 per cent in 1909, and 58.3 per cent in 1904.

There have been increases from census to census in the numbers of producing spindles and of looms in the state. The number of spindles increased from 50,738 in 1904 to 51,404 in 1909 and to 62,864 in 1914, and the number of looms from 965 in 1904 to 1,297 in 1909 and to 1,300 in 1914.

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for manufacturing industries. Table 27, however, summarizes these statistics for Vermont for 1914 and 1909:

Table 27

	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase, 1909-1914.[1]
	1914	1909	
Number of establishments	41	32	.....
Persons engaged	441	342	28.9
Proprietors and firm members	49	37	.....
Salaried employees	14	6	.....
Wage earners (average number)	378	299	26.4
Primary horsepower	518	349	48.4
Capital	$233,682	$144,393	61.8
Salaries and wages	153,642	104,769	46.6
Salaries	7,628	3,024	152.2
Wages	146,014	101,745	43.5
Paid for contract work	3,560	233	1,427.9
Rent and taxes (including internal revenue)	10,309	7,470	38.0
Cost of materials	63,214	32,217	96.2
Amount received for work done	362,041	243,753	48.5

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

In both 1914 and 1909 Vermont ranked forty-fifth among the states in amount received for work done and forty-fourth in number of persons engaged in the industry, the latter rank being the same as that of the state in estimated population in 1914. The foregoing summary shows increases for all items given, that for amount received for work done being $118,288, or 48.5 per cent. No laundries were reported as under corporate ownership at either census, most of them—34 in 1914 and 27 in 1909—being owned by individuals, and the remainder—7 and 5, respectfully—being reported as under "All other" forms of ownership. Establishments owned by individuals also reported the greater part of the amount received for work done, 80.5 per cent in 1914 and 69.5 per cent in 1909.

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 represents of the greatest number employed in any month of the same year. It will be noted, however, that in the monthly employment of wage earners there was a much greater variation in 1909 than in 1914.

Table 28

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January	364	274	90.8	81.3
February	363	269	90.5	79.8
March	366	270	91.3	80.1
April	369	285	92.0	84.6
May	374	296	93.3	87.8
June	384	315	95.8	93.5
July	400	337	99.8	100.0
August	401	331	100.0	98.2
September	393	313	98.0	92.9
October	386	309	96.3	91.7
November	377	290	94.0	86.1
December	369	295	92.0	87.5

Table 29 gives the kinds of power used in the laundries of the state in 1914 and 1909, together with the percentages of increase for the five-year period.

Table 29

POWER.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase, 1909-1914.[1]
	1914	1909	1914	1909	
Primary power, total	56	39	518	349	48.4
Owned	28	29	415	296	40.2
Steam	27	25	413	263	57.0
Internal combustion	1	2	2	11	.....
Water wheels and motors	.....	2	.....	22	.....
Rented	28	10	103	53	.....
Electric	28	10	103	43	.....
Other	.....	.....	.....	10	.....
Generated in establishments reporting electric	.....	.....	16	.....	.....

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

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

Table 30

KIND.	Unit.	QUANTITY.		Per cent of increase, 1909-1914.[1]
		1914	1909	
Anthracite coal	Tons, 2,240 lbs.	360	313	15.0
Bituminous coal	Tons, 2,000 lbs.	3,481	2,225	56.4
Coke	Tons, 2,000 lbs.	104	24	.....
Oil, including gasoline	Barrels	18	63	.....
Gas	1,000 cubic feet	1,056	1,070	−1.3
Wood [2]	Cords	.....	218	.....

[1] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100.
[2] Not called for at the census of 1914.

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 the disclosure of individual operations, and the statistics for all industries combined for each of the three cities in the state having more than 10,000 inhabitants.

TABLE 31.—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	1,772	32,704	173,937	$18,617	$42,706	$76,991
	1909	1,958	33,788	159,445	17,272	34,823	68,310
	1904	1,699	33,106	140,616	15,221	32,430	63,084
Agricultural implements	1914	9	311	1,245	182	310	696
	1909	11	360	1,194	185	272	582
	1904	10	247	666	114	182	442
Bread and other bakery products.	1914	85	357	264	204	813	1,403
	1909	75	242	136	121	624	994
	1904	57	187	63	84	277	499
Butter, cheese, and condensed milk.	1914	173	471	2,701	314	7,976	8,696
	1909	186	519	2,944	292	7,056	8,112
	1904	[1] 220	419	2,564	223	5,816	6,416
Canning and preserving, fruits and vegetables.	1914	6	95	296	33	228	402
	1909	8	118	240	46	214	330
	1904	7	57	124	17	63	123
Cars and general shop construction and repairs by steam-railroad companies.	1914	5	1,345	1,488	727	577	1,355
	1909	7	992	965	546	529	1,135
	1904	6	833	1,010	450	377	860
Clothing, men's, including shirts.	1914	10	988	297	420	736	1,442
	1909	11	1,281	323	404	591	1,274
	1904	11	1,268	432	337	597	1,206
Clothing, women's	1914	7	387	203	125	353	691
	1909	6	333	150	110	285	503
	1904	8	546	233	179	424	722
Confectionery	1914	4	151	172	59	251	400
	1909	10	145	112	45	214	356
	1904	4	128	110	40	136	246
Cooperage and wooden goods, not elsewhere specified.	1914	15	260	1,457	112	107	322
	1909	25	635	2,203	263	240	693
	1904	23	471	1,587	166	150	445
Copper, tin, and sheet-iron products.	[2] 1914	17	113	122	72	281	478
	1909	19	149	240	78	205	425
	1904	[3] 5	73	12	39	34	135
Flour-mill and gristmill products.	1914	125	179	7,355	105	3,659	4,143
	1909	133	156	8,714	76	3,528	4,133
	1904	109	185	7,043	91	2,872	3,206
Food preparations	1914	11	141	1,123	81	3,021	3,498
	1909	5	33	219	15	365	492
	[4] 1904	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.	[5] 1914	40	1,873	5,080	$1,088	$1,062	$3,428
	1909	56	1,860	4,519	1,085	1,335	3,755
	1904	60	1,818	2,879	992	943	3,379
Furniture	1914	15	1,035	3,241	514	754	1,643
	1909	19	1,119	2,767	498	703	1,618
	1904	[1] 23	1,112	3,298	424	708	1,533
Gas, illuminating and heating.	1914	9	59	1,543	32	122	337
	1909	9	70	153	43	100	278
	1904	6	29	187	13	38	129
Hosiery and knit goods	1914	7	963	870	484	1,404	2,146
	1909	8	946	962	411	1,089	1,789
	1904	11	916	1,351	366	1,216	1,965
Lumber and timber products.	[6] 1914	516	4,108	38,956	2,100	3,981	8,768
	1909	593	4,790	41,937	2,013	4,131	8,598
	1904	493	5,614	39,009	2,343	4,656	9,477
Marble and stone work	1914	276	9,018	34,012	6,004	3,684	12,605
	1909	342	10,411	29,107	6,404	2,518	12,395
	1904	229	8,097	14,832	4,455	2,010	9,570
Musical instruments, pianos and organs and materials.	1914	5	546	1,485	331	506	1,070
	1909	4	610	1,966	327	402	1,268
	[4] 1904	.....	.....	.....	.....	.....	.....
Paper and wood pulp	1914	23	1,264	42,066	811	3,004	4,776
	1909	25	1,030	38,191	594	2,455	3,902
	1904	28	1,280	42,952	617	2,540	3,831
Patent medicines and compounds.	1914	12	119	283	57	327	1,019
	1909	15	161	333	68	586	1,290
	1904	[1] 20	198	268	81	370	1,398
Printing and publishing	[7] 1914	111	651	784	409	297	1,243
	1909	115	666	625	326	250	1,039
	1904	[3] 104	604	420	271	236	932
Wood, turned and carved	1914	33	361	2,595	161	166	414
	1909	31	390	1,988	153	178	463
	[4] 1904	.....	.....	.....	.....	.....	.....
Woolen and worsted goods.	1914	17	2,226	8,841	1,167	2,989	4,635
	1909	17	2,294	7,213	1,043	2,879	4,497
	1904	17	2,235	7,120	923	2,794	4,698
All other industries	1914	241	5,683	17,458	3,025	6,098	11,362
	1909	228	4,478	12,244	2,126	4,074	8,482
	1904	248	6,789	14,456	2,996	5,991	11,848
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.							
BARRE	1914	110	2,366	5,975	$1,904	$1,336	$4,292
	1909	139	2,340	4,645	1,814	1,108	3,852
	1904	105	2,198	.....	1,515	909	3,373
BURLINGTON	1914	87	2,132	8,004	1,030	4,109	6,637
	1909	82	2,371	8,359	991	4,130	6,800
	1904	67	2,300	.....	836	3,804	6,356
RUTLAND	1914	65	1,771	3,159	1,055	1,610	3,277
	1909	63	1,636	1,862	763	1,207	2,680
	1904	51	1,803	.....	857	1,162	2,523

[1] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[2] Includes "tinware."
[3] Excludes statistics for two establishments, to avoid disclosure of individual operations.
[4] Figures not available.
[5] Includes "engines, steam, gas, and water," "hardware," "hardware, saddlery," and "steam fittings and steam and hot-water heating apparatus."
[6] Includes "boxes, wooden packing," "lumber, planing-mill products, not including planing mills connected with sawmills," and "pulp wood."
[7] Includes "printing and publishing, book and job," and "printing and publishing, newspapers and periodicals."

TABLE 32.—DETAILED 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 SELECTED INDUSTRIES.															
1	All industries	1,772	37,217	1,787	969	1,171	586	32,704	Ap 34,194	Au 31,213	(3)	(3)	(3)	(3)	(3)	$79,846,775
2	Agricultural implements	9	352	5	15	15	6	311	Ja 336	Jy 238	324	316	8	.....	.....	1,059,345
3	Awnings, tents, and sails	3	22	6	1	2	.....	13	Je 18	Ja 9	13	2	3	4	4	49,089
4	Baskets, and rattan and willow ware	5	59	8	1	.....	2	48	Mh [4] 55	De [4] 42	42	42	.....	.....	.....	48,600
5	Boxes and cartons, paper	3	51	1	2	1	1	46	De 51	Oc 38	45	19	26	.....	.....	24,616
6	Boxes, wooden packing	16	494	18	22	5	6	443	No 483	Ja 400	498	465	33	.....	.....	1,057,677
7	Bread and other bakery products	85	482	95	9	9	12	357	Au 378	Fe 335	355	295	54	4	2	479,832
8	Brick	4	52	2	2	.....	1	47	Je 118	Mh 8	118	118	.....	.....	.....	92,549
9	Butter	143	504	84	45	16	29	330	Jy 379	De 278	337	328	5	3	1	963,523
10	Canning and preserving, fruits and vegetables.	6	113	6	8	4	.....	95	Se 565	Ja 5	540	345	191	4	.....	297,806
11	Carriages, wagons, and repairs	31	94	34	.....	.....	.....	60	.....	.....	72	72	.....	.....	.....	157,133
12	Carriages and wagons	27	78	30	.....	.....	.....	48	No 53	Jy [4] 45	52	52	.....	.....	.....	126,410
13	Repair work only	4	16	4	.....	.....	.....	12	Oc 21	Mh 4	20	20	.....	.....	.....	30,723
14	Cars and general shop construction and repairs by electric-railroad companies.	8	22	.....	1	.....	.....	21	No 25	Au [4] 19	21	21	.....	.....	.....	59,418
15	Cars and general shop construction and repairs by steam-railroad companies.	5	1,399	.....	23	25	6	1,345	Mh 1,411	Se 1,253	1,380	1,380	.....	.....	.....	710,439
16	Cheese	27	38	12	.....	2	1	23	Oc 40	Fe [4] 10	28	27	1	.....	.....	75,932
17	Clothing, men's and youths'	6	499	3	11	16	7	462	Fe 486	Se 396	472	42	430	.....	.....	628,830
18	Clothing, women's	7	446	3	11	25	20	387	Ap 448	Au 285	438	37	401	.....	.....	408,377
19	Condensed milk and milk products, other than butter and cheese.	3	135	.....	5	10	2	118	Je 160	Fe 84	104	95	9	.....	.....	538,232
20	Confectionery and ice cream	10	216	9	8	21	13	165	.....	.....	182	82	100	.....	.....	310,559
21	Confectionery	4	193	2	7	21	12	151	Oc 172	Je 132	169	69	100	.....	.....	289,141
22	Ice cream	6	23	7	1	.....	1	14	Au 21	Mh [4] 10	13	13	.....	.....	.....	21,418
23	Cooperage, other than hogsheads and barrels.	7	219	7	7	3	3	199	Mh 263	De 99	210	209	1	.....	.....	303,002
24	Copper, tin, and sheet-iron work	14	148	19	6	33	7	83	Mh 115	Jy 52	110	110	.....	.....	.....	385,286
25	Cotton goods	4	1,025	.....	18	10	5	992	De 1,025	Ja 939	1,038	632	400	5	1	2,570,201
26	Flour-mill and gristmill products	125	351	154	4	9	5	179	De [4] 183	Jy [4] 174	179	178	.....	1	.....	1,600,167
27	Food preparations, not elsewhere specified.	11	202	3	15	30	13	141	.....	.....	143	128	15	.....	.....	821,746
28	Sirups and cereals	7	68	2	5	11	5	45	Je 60	De 32	52	40	12	.....	.....	214,759
29	For animals and fowls	4	134	1	10	19	8	96	Se [4] 105	Je 87	91	88	3	.....	.....	606,987
30	Foundry and machine-shop products	34	1,968	17	68	94	37	1,752	.....	.....	1,722	1,702	20	.....	.....	5,752,563
31	Machine shops	30	1,790	15	62	93	34	1,586	Ap 1,730	No 1,392	1,549	1,531	18	.....	.....	5,596,392
32	Foundries	4	178	2	6	1	3	166	De 238	Au 82	173	171	2	.....	.....	156,171
33	Furniture, wood, other than rattan and willow.	15	1,116	6	29	31	15	1,035	Mh 1,123	De 945	1,004	977	22	5	.....	2,005,300
34	Gas, illuminating and heating	9	99	.....	22	9	9	59	Se 63	De [4] 57	57	57	.....	.....	.....	2,443,740
35	Hosiery and knit goods	7	989	7	11	7	1	963	My 1,090	Se 795	814	293	518	2	1	1,394,600
36	Lime	8	149	8	6	3	.....	132	No 144	Fe 110	135	135	.....	.....	.....	307,554
37	Lumber and timber products	443	3,749	511	64	32	15	3,127	Ap 3,727	Au 2,440	4,521	4,518	1	2	.....	6,581,485
38	Lumber, planing-mill products, not including planing mills connected with sawmills.	50	655	61	20	34	12	528	Au 559	De 490	550	549	1	.....	.....	1,615,237
39	Marble and stone work	276	9,915	369	189	218	121	9,018	.....	.....	8,744	8,735	3	6	.....	12,976,011
40	Marble and stone work	221	7,966	300	143	190	106	7,227	Au 7,482	De 6,588	6,817	6,812	3	2	.....	11,699,348
41	Roofing slate	33	1,566	44	32	21	9	1,460	Se 1,539	Fe 1,334	1,576	1,572	.....	4	.....	693,752
42	Slate, other than roofing	22	383	25	14	7	6	331	Ja 365	De 294	351	351	.....	.....	.....	582,011
43	Mineral and soda waters	17	58	20	1	4	2	31	Jy 50	Ja 12	33	31	2	.....	.....	93,905
44	Minerals and earths, ground	7	256	4	12	9	1	230	Au 278	Fe 154	226	226	.....	.....	.....	852,408
45	Paper and wood pulp	23	1,393	15	50	49	15	1,264	.....	.....	1,366	1,300	66	.....	.....	9,724,145
46	Paper mills	13	424	12	28	18	4	362	Oc 393	Au 318	369	313	56	.....	.....	1,430,974
47	Pulp mills	4	110	3	6	2	.....	99	Ap 122	Au 75	98	98	.....	.....	.....	600,914
48	Paper and pulp mills	6	859	.....	16	29	11	803	Se 973	Mh 722	899	889	10	.....	.....	7,692,257
49	Patent medicines and compounds	12	203	11	11	40	22	119	Mh 126	Au 111	122	54	68	.....	.....	748,585
50	Paving materials	3	11	1	.....	.....	.....	10	My 18	De [5] 0	16	16	.....	.....	.....	35,100
51	Printing and publishing, book and job.	55	382	57	16	3	9	297	My 309	Au 288	292	229	62	1	.....	473,458
52	Printing and publishing, newspapers and periodicals.	56	506	45	33	36	38	354	.....	.....	353	268	85	.....	.....	797,339
53	Printing and publishing	8	149	4	9	20	6	110	My 307	Au 286	108	95	13	.....	.....	323,547
54	Printing, publishing and job printing.	42	340	41	20	14	21	244	Ja 2	Jy 2	245	173	72	.....	.....	463,317
55	Publishing without printing	6	17	.....	4	2	11	.....	.....	.....	.....	.....	.....	.....	.....	10,475
56	Pulp wood	7	21	11	.....	.....	.....	10	Jy [4] 27	Ja [5] 0	21	21	.....	.....	.....	71,796
57	Pumps, not including power pumps	3	9	3	.....	.....	.....	6	(6) 6	(6) 6	6	6	.....	.....	.....	19,456
58	Saddlery and harness	7	22	8	1	.....	.....	13	Fe 16	De [4] 11	12	12	.....	.....	.....	10,677
59	Shirts	4	539	.....	5	3	5	526	Ja 618	Oc 288	447	86	358	2	1	212,032
60	Tinware, not elsewhere specified	3	38	5	2	.....	1	30	Fe 47	Se 22	28	25	3	.....	.....	99,882

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

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

THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

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).		
$1,778,963	$1,605,624	$18,617,075	$1,162,281	$258,703	$574,214	$40,886,894	$1,818,826	$76,990,974	$34,285,254	173,937	62,860	3,200	80,400	27,477	19,684	1
31,504	14,445	182,488	12,293	209	6,115	278,547	31,620	696,294	386,127	1,245	285	25	410	525	.....	2
1,500	2,200	8,348	.....	120	285	19,381	425	38,097	18,291	9	.....	.....	.....	9	.....	3
486	1,216	21,310	.....	500	561	10,074	870	47,835	36,891	255	130	.....	115	10	.....	4
1,903	626	18,005	.....	2,400	361	22,271	822	51,175	28,082	20	15	.....	.....	5	.....	5
24,213	7,590	205,676	11,730	2,258	4,873	483,332	6,121	842,270	352,817	1,397	1,067	63	208	59	203	6
10,812	14,377	203,523	329	19,326	5,420	786,691	26,031	1,402,663	589,941	264	38	37	4	185	.....	7
2,400	400	25,504	.....	500	744	1,522	9,800	51,305	39,983	125	70	.....	.....	55	.....	8
35,556	15,108	220,856	31,705	5,666	8,545	6,395,371	46,433	6,917,182	475,378	2,338	1,570	131	372	265	15	9
9,095	4,627	32,877	1,197	1,120	1,351	224,797	3,029	402,330	174,504	296	227	4	.....	65	.....	10
.....	.....	36,034	.....	1,125	1,176	41,386	2,436	117,835	74,013	349	.....	102	172	75	.....	11
.....	.....	28,996	.....	1,075	991	34,463	2,159	100,235	63,613	318	.....	96	172	50	.....	12
.....	.....	7,038	.....	50	185	6,923	277	17,600	10,400	31	.....	6	.....	25	.....	13
811	.....	13,563	.....	.....	135	21,373	354	36,236	14,509	10	.....	.....	.....	10	.....	14
31,346	18,866	727,041	.....	.....	100	522,497	54,820	1,354,671	777,354	1,488	299	.....	.....	1,189	25	15
413	408	14,105	1,113	880	687	353,057	2,946	398,450	42,447	106	80	16	.....	10	.....	16
24,370	21,084	176,681	.....	2,960	4,455	574,333	3,566	952,413	374,514	89	.....	.....	.....	89	.....	17
26,215	41,049	125,227	.....	372	2,912	349,116	4,030	691,201	338,055	203	70	.....	80	53	70	18
8,408	11,305	78,602	.....	657	4,083	1,148,998	29,485	1,380,283	201,800	257	245	.....	.....	12	48	19
7,929	23,063	65,972	.....	2,340	6,304	301,411	5,398	498,302	191,493	191	140	.....	.....	51	27	20
7,429	22,543	59,106	.....	1,300	6,116	246,726	4,575	399,763	148,462	172	140	.....	.....	32	27	21
500	520	6,866	.....	1,040	188	54,685	823	98,539	43,031	19	.....	.....	.....	19	.....	22
4,200	3,541	86,124	22,400	.....	2,405	63,518	106	209,101	145,477	1,138	650	28	460	.....	.....	23
7,400	34,228	55,310	.....	1,004	3,103	158,194	1,460	329,821	170,167	43	.....	6	.....	37	.....	24
34,368	9,345	450,152	.....	.....	15,484	891,442	60,819	1,558,974	606,713	4,933	2,613	.....	1,350	970	3	25
2,248	5,203	105,051	500	6,187	14,826	3,646,025	13,025	4,142,854	483,804	7,355	278	494	5,742	841	242	26
69,330	52,377	81,116	90	6,600	6,691	3,007,256	13,547	3,497,741	476,938	1,123	175	109	.....	839	11	27
18,400	30,922	25,083	90	3,764	3,501	421,948	4,101	649,777	223,728	257	175	.....	.....	82	11	28
50,930	21,455	56,033	.....	2,836	3,190	2,585,308	9,446	2,847,964	253,210	866	.....	109	.....	757	.....	29
157,251	141,940	1,029,456	.....	7,488	48,869	904,016	73,558	3,209,975	2,232,401	4,864	2,203	109	1,169	1,383	2,028	30
147,276	139,184	920,689	.....	6,408	46,213	834,213	65,080	3,004,726	2,105,433	4,549	2,078	69	1,054	1,348	1,888	31
9,975	2,756	108,767	.....	1,080	2,656	69,803	8,478	205,249	126,968	315	125	40	115	35	140	32
67,850	44,405	514,422	328	1,362	12,874	730,489	23,246	1,642,789	889,054	3,241	2,498	.....	410	333	365	33
23,460	10,902	32,406	200	.....	10,832	25,984	96,415	337,262	214,863	1,543	1,480	.....	.....	63	.....	34
23,876	11,499	483,818	8,291	10,935	9,154	1,373,040	30,922	2,164,897	760,935	870	51	.....	234	121	150	35
6,120	2,000	63,946	290	.....	1,883	37,024	60,935	189,318	91,359	149	119	10	.....	20	.....	36
100,828	52,489	1,598,720	824,254	4,552	66,605	2,021,761	21,779	5,913,323	3,869,783	33,936	18,032	566	14,030	1,308	753	37
39,366	43,764	291,079	9,520	8,362	17,652	1,407,541	15,864	1,955,654	532,249	3,623	2,191	97	730	605	.....	38
293,564	293,803	6,004,024	102,267	70,565	90,904	3,261,209	422,295	12,605,417	8,921,913	34,012	9,219	151	12,322	12,320	10,835	39
242,490	259,379	5,065,001	97,937	52,953	84,744	3,028,958	352,271	11,066,400	7,685,171	27,981	5,958	133	11,959	9,931	10,830	40
35,164	28,901	752,262	4,121	14,813	3,639	96,189	52,910	1,123,492	974,393	4,621	2,881	8	.....	1,732	.....	41
15,910	5,523	186,761	209	2,799	2,521	136,062	17,114	415,525	262,349	1,410	380	10	363	657	5	42
780	3,452	19,576	.....	2,204	967	32,007	1,008	85,579	52,564	52	20	12	2	18	.....	43
23,698	11,812	143,310	3,578	80	1,920	49,057	46,090	422,661	327,514	1,427	545	100	80	702	35	44
133,016	61,054	811,124	500	35,887	56,895	2,676,802	327,563	4,776,387	1,772,022	42,066	5,321	500	35,595	650	2,319	45
75,046	19,005	204,654	500	18	13,461	1,051,913	87,496	1,613,028	473,619	4,562	1,390	500	2,110	562	30	46
8,023	2,924	56,284	.....	.....	3,101	149,596	2,523	240,472	88,353	7,225	325	.....	6,900	.....	455	47
49,947	39,125	550,186	.....	35,869	40,333	1,475,293	237,544	2,922,887	1,210,050	30,279	3,606	.....	26,585	88	1,834	48
41,575	115,669	57,343	.....	3,036	7,986	317,262	9,561	1,018,651	691,828	283	6	4	150	123	150	49
.....	.....	6,121	.....	.....	281	850	735	13,855	12,270	105	30	.....	.....	75	.....	50
23,610	10,607	189,080	5,609	14,950	3,721	135,754	7,499	508,559	365,306	313	.....	15	7	291	3	51
51,888	48,016	220,325	13,470	9,761	7,239	139,898	13,641	734,385	580,846	471	59	31	7	374	.....	52
16,147	20,340	90,464	.....	3,650	2,849	50,647	5,632	284,487	228,208	206	18	5	4	179	.....	53
30,041	21,104	129,861	906	5,627	4,309	89,251	8,009	411,831	314,571	265	41	26	3	195	.....	54
5,700	6,572	.....	12,564	484	81	.....	.....	38,067	38,067	.....	.....	.....	.....	.....	.....	55
.....	.....	4,697	14,858	.....	308	24,296	.....	57,206	32,910	.....	.....	.....	.....	.....	.....	56
.....	.....	4,903	.....	100	261	19,507	336	30,326	10,483	17	.....	.....	2	15	.....	57
.....	.....	7,662	.....	698	93	16,188	86	31,544	15,270	2	.....	.....	.....	2	.....	58
1,020	.....	243,469	33,129	1,721	1,125	154,075	4,433	489,530	331,022	208	70	.....	67	71	.....	59
11,510	6,651	16,299	.....	600	936	114,359	6,890	147,918	26,669	79	30	30	.....	19	.....	60
2,690	804															

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

[5] None reported for one or more other months.

[6] Same number reported throughout the year.

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

	INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents and managers.	Clerks, etc.		Wage earners.					Total.	16 and over.		Under 16.		
						Male.	Female.	Average number.	Number, 15th day of— Maximum month.		Number, 15th day of— Minimum month.			Male.	Female.	Male.	Female.	
	THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.																	
1	Tobacco, cigars	25	82	26	3	2	.....	51	Se	59	Ja	34	55	48	7	.....	.....	42,210
2	Tools, not elsewhere specified	5	244	1	10	10	8	215	Ja	244	Oc	190	191	173	18	.....	.....	379,115
3	Toys and games	4	175	5	6	2	2	160	Oc	188	Au	135	154	105	49	.....	.....	204,263
4	Vinegar and cider	16	32	16	1	1	.....	14	Oc	43	De [3]	5	39	35	.....	4	.....	77,024
5	Window shades and fixtures	3	142	1	7	3	2	129	Je [3]	134	Fe	119	128	118	10	.....	.....	300,108
6	Wood, turned and carved	33	415	41	9	3	1	361	Fe	417	Jy	324	405	383	20	2	.....	470,928
7	Wooden goods, not elsewhere specified	8	75	7	5	.....	2	61	My	63	Jy	58	62	42	20	.....	.....	97,518
8	Woolen and worsted goods	17	2,372	4	49	69	24	2,226	De	2,929	Fe	1,843	3,062	2,230	831	1	.....	6,258,205
9	All other industries *	90	4,679	58	125	273	105	4,118	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,159,112
	CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED: 1914.																	
1	BARRE	110	2,677	157	67	78	9	2,366	Se	2,425	Fe [3]	2,243	2,415	2,404	9	2	.....	$2,597,702
2	BURLINGTON	87	2,500	64	100	129	75	2,132	No	2,188	Au	2,025	2,243	1,528	713	2	.....	6,224,743
3	RUTLAND	65	2,035	59	71	98	36	1,771	Fe	1,910	De	1,565	1,843	1,593	240	4	6	3,978,211

[1] Owned power only.

[2] Includes rented power, other than electric.

*All other industries embrace—

Ammunition	1	Carpets, rag	1	Engines, steam, gas, and water	2
Artificial stone products	1	Cleansing and polishing preparations	1	Fancy articles, not elsewhere specified	2
Automobile bodies and parts	1	Coffee, roasting and grinding	1	Flavoring extracts	2
Bags, other than paper	1	Coffins, burial cases, and undertakers' goods	2	Fur goods	2
Bookbinding and blank-book making	2	Collars and cuffs, men's	1	Furnishing goods, men's	3
Boots and shoes	4	Cutlery and edge tools	2	Grease and tallow	1
Boxes, cigar	1	Dairymen's supplies	5	Hand stamps	1
Brass, bronze, and copper products	2	Electrical machinery, apparatus, and supplies	1	Hardware	2
Brushes	3	Electroplating	1	Hardware, saddlery	1

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).		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.																
$3,640	$1,560	$28,640	.....	$2,781	$9,277	$44,944	$327	$106,502	$61,231	1	.....	.....	.....	1	.....	1
22,582	10,885	107,641	.....	576	6,306	145,281	7,156	354,725	202,288	715	400	57	155	103	52	2
7,480	2,861	65,519	.....	1,238	1,528	49,075	2,654	160,271	108,542	330	250	.....	.....	80	4	3
600	1,780	6,226	.....	67	539	28,387	886	64,316	35,043	486	99	67	272	48	.....	4
8,720	3,640	54,169	.....	2,318	2,009	151,143	321	263,161	111,697	321	185	10	85	41	.....	5
13,250	2,138	161,257	$2,447	993	4,712	161,526	3,980	413,764	248,258	2,595	1,535	26	884	150	.....	6
7,244	708	25,975	1,500	1,780	630	42,244	1,522	112,936	69,170	319	100	52	125	42	.....	7
100,097	81,346	1,167,272	58,610	1,690	39,960	2,850,616	137,996	4,634,593	1,645,981	8,841	5,210	52	3,576	3	1,656	8
278,741	360,781	2,325,031	2,073	20,735	78,132	4,671,967	183,985	8,928,437	4,072,485	9,834	4,791	296	1,585	3,162	690	9
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED. 1914.																
$103,816	$120,761	$1,904,495	$20,718	$18,369	$21,315	$1,176,359	$160,093	$4,291,600	$2,955,148	5,975	872	157	186	4,760	183	1
188,430	226,268	1,029,636	9,606	30,410	58,846	4,001,337	107,267	6,636,956	2,528,352	8,004	6,267	150	615	972	21	2
134,291	110,328	1,054,776	1,090	43,842	27,338	1,532,263	77,593	3,276,709	1,666,853	3,159	1,770	.....	.....	1,389	387	3

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

*All other industries embrace—Continued.

Hones and whetstones..... 1
House-furnishing goods..... 1
Leather, tanned, curried, and finished..... 2
Mattresses and spring beds..... 1
Musical instruments, organs..... 2
Musical instruments, piano and organ materials..... 3
Paper goods, not elsewhere specified..... 2
Perfumery and cosmetics..... 1
Photographic apparatus..... 1
Pickles and preserves..... 2
Refrigerators..... 2
Scales and balances..... 3
Shipbuilding, wooden, including boat building..... 2
Slaughtering and meat packing..... 3
Soap..... 1
Sporting and athletic goods..... 2
Statuary and art goods..... 1
Steam fittings and steam and hot-water heating apparatus..... 1
Stoves and ranges..... 1
Stoves, gas and oil..... 1
Suspenders, garters, and elastic woven goods..... 1
Upholstering materials, not elsewhere specified..... 1
Wall plaster..... 2
Window and door screens..... 1
Wirework..... 2
Wood distillation..... 1
Wool shoddy..... 2

DEPARTMENT OF COMMERCE

BUREAU OF THE CENSUS

SAM. L. ROGERS, DIRECTOR

CENSUS OF MANUFACTURES 1914

VIRGINIA

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

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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.

VIRGINIA.

By W. G. Copley.

GENERAL STATISTICS.

General character of the state.—Virginia, with a gross area of 42,627 square miles, of which 40,262 represent land surface, ranks thirty-third in size among the states. It was one of the original thirteen states and at the first census (1790) ranked first in population, with 747,610. Its inhabitants in 1900 numbered 1,854,184 and in 1910, 2,061,612, and its estimated population in 1914 was 2,150,000. In total population Virginia ranked twentieth in 1910; and in density of population it ranked fourteenth, with 51.2 inhabitants per square mile, the corresponding figure for 1900 being 46.1.

The urban population of the state in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 476,529, or 23.1 per cent of the total, as against 18.3 per cent in 1900. There were in the state in 1914, 10 cities each having an estimated population of more than 10,000, Alexandria, Danville, Lynchburg, Newport News, Norfolk, Petersburg, Portsmouth, Richmond, Roanoke, and Staunton, but the statistics for Newport News are excluded from all tables in order to avoid a possible disclosure of individual operations in that city. The remaining 9 cities, whose aggregate population in 1914 formed 18.8 per cent of the estimated population of Virginia, reported 48.8 per cent of the value of the state's manufactured products.

The steam-railway mileage in 1914, as reported by the Interstate Commerce Commission, was 4,611, and the electric-railway mileage in 1912 (the latest year for which figures are available) was 528. Chesapeake Bay and the Potomac, Rappahannock, York, James, and Elizabeth Rivers together constitute a factor of great importance in the transportation system of the state.

Agriculture is an important industry in Virginia. The total value of all farm crops in 1909 was $100,531,157, the most important products being corn, $28,885,944, and tobacco, $12,169,086. The value of domestic animals sold or slaughtered on farms during the same year was $28,982,606.

The total value of the state's mineral products in 1914, according to the annual report of the United States Geological Survey, was $16,400,347, the leading item being bituminous coal, $8,032,448.

The fishing industry is also important. In 1908 Virginia ranked second among the states in total value of all fishery products and third in value of oysters taken.

The value of merchandise exported during the fiscal year 1914 from the four ports of the Virginia customs district was $25,625,255, and the value of merchandise imported through the same ports in that year was $7,177,904.

Importance and growth of manufactures.—The value of manufactured products of Virginia in 1914 was $264,039,041; the average number of wage earners employed in manufacturing industries, 102,820; and the value added by manufacture, $108,719,465. In 1914 the state ranked twentieth in value of products and seventeenth in the number of wage earners and eighteenth in value added by manufacture; while in 1909 it ranked twenty-second, sixteenth, and twentieth, respectively. The value of manufactured products in Virginia in 1914 and 1909 represented 1.1 per cent of the total for the United States; the corresponding proportion for 1904 was 1 per cent.

Table 1 summarizes the more important statistics relative to all classes of manufactures combined in the state of Virginia for the years 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	5,508	5,685	3,187	3,186	−3.1	78.4	(2)
Persons engaged	118,109	120,797	88,898	(3)	−2.2	35.9	.....
Proprietors and firm members	6,125	6,570	3,643	(3)	−6.8	80.3	.....
Salaried employees	9,164	8,551	4,970	3,828	7.2	72.1	29.8
Wage earners (average number)	102,820	105,676	80,285	66,223	−2.7	31.6	21.2
Primary horsepower	337,567	283,928	176,998	136,696	18.9	60.4	29.5
Capital	$261,501,288	$216,392,388	$147,989,182	$92,299,589	20.8	46.2	60.3
Salaries and wages	56,118,282	47,255,356	32,817,864	23,903,498	18.8	44.0	37.3
Salaries	11,244,847	9,100,790	4,874,806	3,629,609	23.6	86.7	34.3
Wages	44,873,435	38,154,566	27,943,058	20,273,889	17.6	36.5	37.8
Paid for contract work	1,893,922	1,713,523	711,771	(3)	10.5	140.7	.....
Rent and taxes (including internal revenue)	9,373,527	6,751,151	[4] 857,071	(3)	38.8	.....	.....
Cost of materials	155,319,576	125,582,687	83,649,149	59,359,484	23.7	50.1	40.9
Value of products	264,039,041	219,793,858	148,856,525	108,644,150	20.1	47.7	37.0
Value added by manufacture (value of products less cost of materials)	108,719,465	94,211,171	65,207,376	49,284,666	15.4	44.5	32.3

[1] A minus sign (−) denotes decrease. [2] Less than one-tenth of 1 per cent. [3] Figures not available. [4] Exclusive of internal revenue.

This table shows an increase from census to census in the value of manufactured products of the state, although the percentage of increase was smallest for the five-year period 1909 to 1914.

The number of establishments reported at the census of 1914 shows a decrease of 177, or 3.1 per cent, and the number of persons engaged in manufactures, 2,688, or 2.2 per cent. These decreases are due primarily to the fact that at the census of 1909 reports were secured from a large number of small lumber mills for which no returns were received in 1914. Mills engaged exclusively in custom sawing for local consumption should not be included in the census, but it is not always possible to conduct the enumeration in regard to these establishments on uniform lines at different censuses. The decrease, therefore, in the number of establishments is no indication of a decrease in the manufacturing activities of the state. The capital invested increased $45,108,900, or 20.8 per cent, from 1909 to 1914; the average number of wage earners decreased 2,856, or 2.7 per cent; while the amount paid in wages increased $6,718,869, or 17.6 per cent; the increase in value of products was $44,245,183, or 20.1 per cent; and the value added by manufacture increased $14,508,294, or 15.4 per cent.

The totals in this table do not include statistics for an establishment operated by the Federal Government, the United States navy yard at Portsmouth. In 1914 this plant employed an average of 2,386 wage earners, and the value of the work done was reported as $3,988,278.

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.

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	5,508	102,820	100.0	$264,039,041	100.0	$108,719,465	100.0	−2.7	31.6	21.2	20.2	47.7	37.0	15.4	44.5	32.3
Lumber and timber products	2,218	26,307	25.6	32,449,063	12.3	19,083,983	17.6	−21.0	119.9	4.5	−9.5	91.5	23.1	−13.1	85.6	41.5
Tobacco manufactures	76	6,308	6.1	30,095,813	11.4	17,993,876	16.6	−20.0	−0.6	−8.4	18.6	51.4	7.8	26.8	40.5	−1.7
Cars and general shop construction and repairs by steam-railroad companies	32	10,375	10.1	18,216,056	6.9	7,454,475	6.9	36.7	3.3	49.2	83.0	14.5	38.5	58.6	14.2	49.9
Flour-mill and gristmill products	533	1,082	1.1	18,084,413	6.9	2,694,903	2.5	6.7	6.0	56.1	2.8	27.2	54.7	10.7	46.5	13.9
Fertilizers	57	2,470	2.4	11,350,120	4.3	3,354,199	3.1	26.3	8.6	53.8	41.3	72.5	36.4	26.8	86.6	13.0
Peanuts, grading, roasting, cleaning, and shelling	25	1,505	1.5	10,981,159	4.2	1,463,083	1.3	−0.7	13.8	.....	38.4	12.4	.....	81.3	−10.9	.....
Cotton goods	9	6,310	6.1	10,216,185	3.9	4,158,884	3.8	24.8	46.3	17.9	36.4	67.0	68.9	49.0	65.9	35.3
Leather, tanned, curried, and finished	21	1,205	1.2	9,834,439	3.7	1,616,401	1.5	−24.2	50.7	18.7	19.0	41.8	23.6	−11.3	64.0	8.8
Printing and publishing	396	2,790	2.7	7,069,844	2.7	5,003,272	4.6	9.2	21.6	26.9	31.7	52.5	40.9	26.2	55.6	37.7
Foundry and machine-shop products	103	2,444	2.4	6,906,122	2.6	3,341,435	3.1	−12.7	33.6	.....	20.6	68.8	.....	29.5	29.7	.....
Paper and wood pulp	8	1,260	1.2	5,501,084	2.1	2,077,553	1.9	38.2	−8.2	228.8	50.4	20.5	256.9	37.7	21.2	183.6
Slaughtering and meat packing	21	396	0.4	4,362,272	1.7	636,798	0.6	15.8	116.5	.....	−5.2	130.5	.....	17.1	117.6	.....
Iron and steel, blast furnaces	8	689	0.7	3,772,382	1.4	490,386	0.4	−47.8	22.1	−32.2	−30.0	61.2	−48.6	−49.5	55.1	−70.6
Boots and shoes	8	1,555	1.5	3,708,558	1.4	1,147,244	1.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bread and other bakery products	140	1,033	1.0	3,697,279	1.4	1,509,690	1.4	18.7	52.9	34.5	33.7	72.2	74.2	44.5	91.7	21.4
Hosiery and knit goods	13	2,272	2.2	3,515,916	1.3	1,408,176	1.3	32.5	−6.9	−0.2	42.8	16.8	40.7	41.4	27.4	11.7
Leather goods	51	1,428	1.4	3,463,853	1.3	1,520,797	1.4	−4.0	9.1	77.7	−0.8	64.7	113.5	−4.4	63.7	96.8
Clothing, men's, including shirts	32	1,282	1.2	2,765,088	1.1	973,416	0.9	10.5	30.2	74.0	52.0	59.3	105.4	47.6	31.8	104.9
Carriages and wagons and materials	119	1,246	1.2	2,748,063	1.0	1,208,791	1.1	−6.2	−0.2	38.2	10.6	8.4	44.5	0.6	9.7	22.9
Canning and preserving	443	2,169	2.1	2,359,608	0.9	727,578	0.7	16.6	73.7	.....	27.3	52.2	.....	12.6	82.5	.....
Cooperage	110	1,390	1.4	2,230,630	0.8	821,878	0.8	76.4	31.1	.....	104.7	37.5	.....	92.1	25.1	.....
Gas, illuminating and heating	22	533	0.5	2,149,938	0.8	1,399,681	1.3	41.0	41.0	101.5	46.1	50.2	102.9	34.5	49.8	97.4
Furniture	38	1,221	1.2	2,085,442	0.8	1,005,784	0.9	23.3	38.8	271.4	45.0	79.1	277.0	40.9	69.6	234.1
Confectionery	32	480	0.5	1,952,156	0.7	551,443	0.5	40.8	50.9	50.7	28.0	121.7	55.3	30.6	97.2	58.5
Liquors, distilled	47	123	0.1	1,849,876	0.7	1,374,743	1.3	−2.4	10.5	72.7	17.7	264.7	67.7	12.5	285.9	73.5
Ice, manufactured	87	714	0.7	1,795,645	0.7	1,294,939	1.2	50.3	37.3	68.8	57.1	79.7	48.6	48.0	88.6	44.1
Silk goods, including throwsters	9	691	0.7	1,772,931	0.7	679,079	0.6	−15.6	.....	.....	14.8	.....	.....	27.4	.....	.....
Dyestuffs and extracts	13	429	0.4	1,676,879	0.6	539,003	0.5	24.0	−18.4	.....	39.8	62.8	.....	4.9	49.4	.....
Copper, tin, and sheet-iron products	37	528	0.5	1,631,983	0.6	630,183	0.6	−35.5	.....	.....	−20.3	.....	.....	−36.2	.....	.....
Coke, not including gas-house coke	11	852	0.8	1,606,809	0.6	536,503	0.5	−40.2	30.3	39.4	−33.5	28.2	75.7	−10.2	−14.8	77.2
Liquors, malt	6	310	0.3	1,544,757	0.6	1,012,199	0.9	−12.4	30.1	−9.3	−4.4	34.6	23.4	−16.0	32.6	20.1
Brick, tile, and other clay products	64	1,663	1.6	1,493,285	0.6	980,709	0.9	−20.4	6.4	38.5	−22.3	6.5	79.3	−30.5	2.7	69.5
Marble and stone work	76	1,260	1.2	1,404,086	0.5	1,015,942	0.9	−20.5	170.0	−12.5	7.5	119.5	6.1	6.4	123.7	0.2
Mineral and soda waters	88	290	0.3	1,196,734	0.4	616,224	0.6	30.6	111.4	45.8	92.4	219.0	75.7	77.5	158.9	100.0
Coffee and spice, roasting and grinding	9	75	0.1	1,137,189	0.4	218,866	0.2	.....	.....	.....	−5.7	390.2	.....	−22.1	353.2	.....
Paving materials	21	642	0.6	1,135,097	0.4	580,263	0.5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lime	34	694	0.7	995,361	0.4	524,356	0.5	−3.1	71.3	.....	16.2	72.0	.....	−5.8	112.2	.....
Woolen goods	12	431	0.4	789,623	0.3	369,788	0.3	−20.5	−16.5	79.3	−20.9	−20.1	99.0	−14.4	−11.8	108.1
Confectionery (ice cream)	34	137	0.1	760,689	0.3	329,759	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boxes and cartons, paper	14	499	0.5	726,430	0.3	437,011	0.4	−10.6	1.6	−41.7	75.8	27.5	−48.7	68.1	18.7	−32.0
Glass	4	606	0.6	690,420	0.3	432,317	0.4	15.6	11.0	.....	1.2	24.2	.....	0.2	13.4	.....
Grease and tallow, not including lubricating greases	5	213	0.2	670,609	0.2	202,086	0.2	59.0	.....	.....	205.0	61.8	.....	210.8	8.3	.....
Butter	13	90	0.1	607,640	0.2	131,749	0.1	.....	.....	.....	1,281.8	120.0	.....	1,366.6	125.0	.....
Stoves and ranges	5	324	0.3	528,447	0.2	341,661	0.3	−10.7	21.4	.....	−22.7	27.2	.....	−22.4	23.9	.....
All other industries	404	14,499	14.1	40,509,069	15.3	14,828,359	13.6	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Percentages are based on figures in Table 33; a minus sign (−) denotes decrease; percentages are omitted where base is less than 100, or where comparable figures can not be given.

Separate statistics are presented for 44 industries, or industry groups, for each of which products valued at more than $500,000 were reported in 1914. These industries include 7 with products exceeding $10,000,000 in value, 4 with products between $5,000,000 and $10,000,000, 25 with products between $1,000,000 and $5,000,000, and 8 with products valued at less than $1,000,000. Among those included under "all other industries," the statistics for which can not be shown separately without the possibility of disclosing the operations of individual establishments, are a number having products exceeding in value some for which figures are given in the table.[1]

The industries in this table are arranged in the order of their importance by value of products, but the arrangement would vary considerably if based on average number of wage earners or value added by manufacture. The lumber and timber industry, however, ranks first in all three items. Tobacco manufactures ranked second in value of products and value added by manufacture, but fourth in number of wage earners. Cars and general shop construction and repairs by steam-railroad companies ranked third in value of products and value added by manufacture but second in number of wage earners. The flour-mill and gristmill industry ranked fourth in value of products, twenty-first in number of wage earners, and eighth in value added by manufacture. Machinery is used largely in this industry and comparatively few employees are required, therefore the proportional value added to the raw material by manufacture is small in comparison with the corresponding proportions for most other industries. Fertilizers ranked fifth in value of products and sixth in number of wage earners and value added by manufacture.

In rank according to value of products, there were few changes in 1914 as compared with 1909. Lumber and timber and tobacco manufactures held the same rank at both censuses. Cars and general shop construction and repairs by steam-railroad companies, which ranked fourth in 1909, held third place in 1914, while flour-mill and gristmill products ranked third in 1909 and fourth in 1914. Leather, tanned, curried, and finished, dropped from fifth place in 1909 to eighth in 1914; whereas fertilizers; peanuts, grading, roasting, cleaning, and shelling; and cotton goods advanced from sixth, seventh, and eighth places in 1909 to fifth, sixth, and seventh places, respectively, in 1914.

Lumber and timber products.—Under this head are included statistics for logging and sawmill operations, planing mills, and factories manufacturing wooden packing boxes, and window and door screens. This industry was first in importance in the state in 1914, although as compared with 1909, it shows a decrease in all items. It gave employment during the year 1914 to an average of 26,307 wage earners, had products valued at $32,449,063, and the value added by manufacture amounted to $19,083,983. These figures represent 25.6 per cent, 12.3 per cent, and 17.6 per cent of the respective totals reported for all manufacturing industries of the state. The statistics in this table do not cover mills engaged exclusively in custom sawing for local consumption.

Tobacco manufactures.—The statistics presented for this industry include the manufacture of chewing and smoking tobacco, and cigars and cigarettes. The industry ranked second in importance in the state in 1914, its products forming 11.4 per cent of the total value of products for the state. Although showing decreases in number of establishments and average number of wage earners during the three census periods, increases are shown in the value of products. A decrease of 28 is shown in the number of establishments for the period 1909–1914; the average number of wage earners decreased 1,574, or 20 per cent; the value of products increased $4,710,499, or 18.6 per cent; and value added by manufacture, $3,797,835, or 26.8 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 $8,260,555, or 83 per cent. Employment was given to an average of 10,375 wage earners in 1914, the second largest number reported by any of the industries specified in the table. This number represents an increase of 2,787, or 36.7 per cent, as compared with 7,588, the number employed in 1909.

Flour-mill and gristmill products.—This industry, which excludes custom mills grinding exclusively for toll or local consumption, ranked third in the state in 1909 as measured by value of products, but dropped to fourth place in 1914. There was an increase of 75 in the number of establishments; the average number of wage earners increased 68, or 6.7 per cent; value of products, $486,368, or 2.8 per cent; and value added by manufacture, $261,126, or 10.7 per cent.

Fertilizers.—This industry, an important one in Virginia, ranked sixth in value of products in 1909 but was fifth in 1914. The increase in number of establishments from 1909 to 1914 was 12; in average number of wage earners, 514, or 26.3 per cent; in value of products, $3,315,577, or 41.3 per cent; in value added by manufacture, $708,766, or 26.8 per

[1] These industries are:
Bags, other than paper.
Baking powders and yeast.
Cement.
Chemicals.
Flavoring extracts.
Iron and steel, steel works and rolling mills.
Liquors, vinous.
Locomotives, not made by railroad companies.
Oil, cottonseed, and cake.
Patent medicines and compounds.
Shipbuilding, including boatbuilding.
Smelting and refining, copper.
Sulphuric, nitric, and mixed acids.
Wood preserving.
Wooden goods, not elsewhere specified.

cent. The statistics as presented in Table 2 do not fully represent the industry, since fertilizers, valued at $229,469, reported as subsidiary products by establishments engaged chiefly in the manufacture of other products, are not included. Complete statistics for the industry are presented in Table 28.

Peanuts, grading, roasting, cleaning, and shelling.—Although this industry ranked sixth in the state in 1914, Virginia reported 73.2 per cent of the total value of products for the industry in the United States for that year. The number of establishments remained the same as in 1909, the average number of wage earners showed a decrease of seven-tenths of 1 per cent, the value of products increased 38.4 per cent, while value added by manufacture increased 81.3 per cent.

Textiles.—This group of industries in Virginia includes the manufacture of cotton goods, hosiery and knit goods, silk goods, including throwsters, and woolen goods. The four allied industries as a whole show an increase of $3,799,051, or 30.4 per cent, in value of products for the five-year period 1909-1914. There was a decrease of one in the number of establishments reported; the average number of wage earners increased 1,571, or 19.3 per cent; and value added by manufacture, $1,864,468, or 39.2 per cent. Cotton goods, the most important industry of the group, shows a decrease of one establishment; an increase of 1,253, or 24.8 per cent, in wage earners; $2,726,532, or 36.4 per cent, in value of products; and $1,368,254, or 49 per cent, in value added by manufacture. In the hosiery and knit-goods industry increases are shown for all items. An increase of two is shown in number of establishments; 557, or 32.5 per cent, in number of wage earners; $1,053,129, or 42.8 per cent, in value of products; and $412,525, or 41.4 per cent, in value added by manufacture. In silk goods, including throwsters, there was an increase of two in the number of establishments; a decrease in average number of wage earners of 128, or 15.6 per cent; value of products increased $229,208, or 14.8 per cent; and value added by manufacture, $146,249, or 27.4 per cent. In the woolen-goods industry a decrease has been shown at the two last censuses, the larger decrease being shown for the later period.

Leather, tanned, curried, and finished.—The leather industry in Virginia ranked eighth in value of products among the manufacturing industries of the state in 1914, although, in 1909, when the total value of products was much less, it ranked fifth. The number of establishments decreased from 39 in the earlier year to 21 in the latter, many of the smaller establishments having gone out of business. The number of wage earners decreased from 1,590 in 1909 to 1,205 in 1914, or 24.2 per cent, and the total amount of wages paid decreased $63,695, or 10.8 per cent. While the total value of products increased $1,567,589, or 19 per cent, there was a decrease of $205,288, or 11.3 per cent, in value added by manufacture.

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	118,109	101,382	16,727	85.8	14.2
	1909	120,797	104,662	16,135	86.6	13.4
Proprietors and officials	1914	9,415	9,284	131	98.6	1.4
	1909	9,906	9,783	123	98.8	1.2
Proprietors and firm members	1914	6,125	6,026	99	98.4	1.6
	1909	6,570	6,469	101	98.5	1.5
Salaried officers of corporations	1914	1,174	1,149	25	97.9	2.1
	1909	1,139	1,128	11	99.0	1.0
Superintendents and managers	1914	2,116	2,109	7	99.7	0.3
	1909	2,197	2,186	11	99.5	0.5
Clerks and other subordinate salaried employees	1914	5,874	4,744	1,130	80.8	19.2
	1909	5,215	4,333	882	83.1	16.9
Wage earners (average number)	1914	102,820	87,354	15,466	85.0	15.0
	1909	105,676	90,546	15,130	85.7	14.3
16 years of age and over	1914	100,209	85,674	14,535	85.5	14.5
	1909	102,054	88,191	13,863	86.4	13.6
Under 16 years of age	1914	2,611	1,680	931	64.3	35.7
	1909	3,622	2,355	1,267	65.0	35.0

The total number of persons engaged in manufacturing industries for the year 1914 was 118,109, of whom 102,820, or 87.1 per cent, were wage earners, 9,415, or 8 per cent, were proprietors and officials, and 5,874, or 5 per cent, were clerks and other subordinate salaried employees. Of the wage earners 16 years of age and over, 85,674, or 85.5 per cent, were males, and 14,535, or 14.5 per cent, were females. Figures for individual industries will be found in Table 34.

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.

Clerks and other subordinate salaried employees increased 12.6 per cent in the period 1909–1914 and salaried officers of corporations 3.1 per cent. All other classes engaged in manufactures show a decrease. For wage earners 16 years of age and over, which represented 84.8 per cent of the total in 1914 and 84.5 per cent in 1909, a small decrease is shown, 1.8 per cent, during the five-year period. The largest decrease for both sexes is 27.9 per cent for wage earners under 16 years of age, but the proportion which this class formed of the total was only 2.2 per cent in 1914 and 3 per cent in 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	−2.2	−3.1	3.7	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials	−5.0	−5.1	6.5	8.0	8.2	9.2	9.3	0.8	0.8
Proprietors and firm members	−6.8	−6.8	−2.0	5.2	5.4	5.9	6.2	0.6	0.6
Salaried officers of corporations	3.1	1.9	.....	1.0	0.9	1.1	1.1	0.1	0.1
Superintendents and managers	−3.7	−3.5	.....	1.8	1.8	2.1	2.1	0.1	0.1
Clerks and other subordinate salaried employees	12.6	9.5	28.1	5.0	4.3	4.7	4.1	6.8	5.5
Wage earners (average number)	−2.7	−3.5	2.2	87.1	87.5	86.2	86.5	92.5	93.8
16 years of age and over	−1.8	−2.9	4.8	84.8	84.5	84.5	84.3	86.9	85.9
Under 16 years of age	−27.9	−28.7	−26.5	2.2	3.0	1.7	2.2	5.6	7.9

[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 at the census of 1904 it is necessary to use the classification employed at 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	118,109	120,797	88,898	100.0	100.0	100.0	−2.2	35.9
Proprietors and firm members	6,125	6,570	3,643	5.2	5.4	4.1	−6.8	80.3
Salaried employees	9,164	8,551	4,970	7.8	7.1	5.6	7.2	72.1
Wage earners (average)	102,820	105,676	80,285	87.0	87.5	90.3	−2.7	31.6

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

Each of the classes given in this table shows an increase for the decade 1904–1914, but only one, salaried employees, shows an increase in the five-year period 1909–1914. The decrease of 6.8 per cent in number of proprietors and firm members for the period 1909–1914 is due primarily to a decrease in the number of establishments engaged in the manufacture of lumber and timber products.

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 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 was greater for 1909, there being a slight decrease for 1914, the proportion of females decreased during the decade but increased somewhat during the five-year period 1909-1914. The actual number of females employed, however, has increased from census to census. The proportion of children under 16 years of age employed as wage earners shows a decrease at each census, although this class increased in actual number between 1904 and 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	102,820	83.3	14.1	2.5
	1909	105,676	83.5	13.1	3.4
	1904	80,285	81.0	14.9	4.0
Boots and shoes	1914	1,555	62.6	33.0	4.3
	1909	2,711	73.6	21.8	4.6
Bread and other bakery products	1914	1,033	86.4	12.1	1.5
	1909	870	84.6	11.4	4.0
Brick, tile, and other clay products	1914	1,663	97.7	.....	2.3
	1909	2,090	97.3	0.5	2.2
Canning and preserving	1914	2,169	34.6	50.7	14.7
	1909	1,860	29.1	49.2	21.7
Carriages and wagons and materials	1914	1,246	99.1	0.4	0.6
	1909	1,329	98.0	0.5	1.4
Cars and general shop construction and repairs by steam-railroad companies.	1914	10,375	99.9	0.1	.....
	1909	7,588	99.9	0.1	(2)
Clothing, men's, including shirts	1914	1,282	11.7	86.9	1.4
	1909	1,160	11.6	85.0	3.4
Coke, not including gas-house coke	1914	852	100.0	.....	.....
	1909	1,425	99.6	.....	0.4
Cooperage	1914	1,390	88.8	8.4	2.8
	1909	788	73.0	24.6	2.4
Copper, tin, and sheet-iron products	1914	528	83.0	13.2	3.8
	1909	818	80.0	13.2	6.8
Cotton goods	1914	6,310	65.0	30.6	4.4
	1909	5,057	57.1	29.5	13.4
Fertilizers	1914	2,470	99.9	.....	0.1
	1909	1,956	99.5	0.3	0.2
Flour-mill and gristmill products	1914	1,082	99.7	0.2	1.0
	1909	1,014	98.6	0.1	1.3
Foundry and machine-shop products	1914	2,444	99.8	0.1	0.1
	1909	2,798	99.0	(2)	1.0
Furniture	1914	1,221	93.1	0.3	6.6
	1909	990	90.9	0.5	8.6
Gas, illuminating and heating	1914	533	100.0	.....	.....
	1909	378	99.7	.....	0.3
Glass	1914	606	92.4	3.3	4.3
	1909	524	90.7	0.6	8.8
Hosiery and knit goods	1914	2,272	34.8	53.9	11.3
	1909	1,715	32.8	54.2	12.9
Ice, manufactured	1914	714	97.6	.....	2.4
	1909	475	97.1	.....	2.9

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

Table 6—Continued.

INDUSTRY.	Census year.	WAGE EARNERS. Average number.	Per cent of total. 16 years of age and over. Male.	Female.	Under 16 years of age.
Iron and steel, blast furnaces	1914	689	99.7	.....	0.3
	1909	1,320	99.1	.....	0.9
Leather goods	1914	1,428	88.3	4.1	7.6
	1909	1,487	90.9	6.7	2.4
Leather, tanned, curried, and finished	1914	1,205	96.8	3.1	0.2
	1909	1,590	97.6	1.9	0.4
Lime	1914	694	100.0	.....	.....
	1909	716	100.0	.....	.....
Lumber and timber products	1914	26,307	97.2	1.3	1.5
	1909	33,287	98.0	0.5	1.5
Marble and stone work	1914	1,260	95.6	.....	4.4
	1909	1,585	99.4	.....	0.6
Paper and wood pulp	1914	1,260	92.5	7.5	.....
	1909	912	89.6	10.1	0.3
Peanuts, grading, roasting, cleaning, and shelling.	1914	1,505	21.1	76.8	2.1
	1909	1,516	21.0	76.8	2.2
Printing and publishing	1914	2,790	72.1	24.7	3.2
	1909	2,555	72.6	22.7	4.7
Silk goods, including throwsters	1914	691	30.8	51.5	17.7
	1909	819	38.8	47.6	13.6
Tobacco manufactures	1914	6,308	34.2	61.1	4.7
	1909	7,882	39.4	54.5	6.1
All other industries	1914	18,938	90.5	7.5	2.0
	1909	16,461	86.9	10.4	2.7

Of the 30 industries for which separate statistics are given in this table, 20 show an increased proportion of males in 1914 as compared with 1909, and 13 an increased proportion of females, while but 5 show an increase in the proportion of children under 16 years of age. Four industries which in 1909 gave employment to children under 16 years of age reported no employees of this class for 1914.

In the manufacture of men's clothing in 1914, about seven-eighths of the wage earners 16 years of age and over were women; in the roasting, cleaning, shelling, and grading of peanuts; canning and preserving; tobacco; and the textile industries, although the proportion was smaller, the females also outnumbered the males. The industries reporting the greatest number of children in 1914 are leather goods, canning and preserving, hosiery and knit goods, and silk goods, including throwsters.

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the cities having more than 10,000 inhabitants, exclusive of Newport News, 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 8 gives percentages of increase from census to census, based on the figures in Table 7.

Table 7

SEX AND AGE.	Census year.	AVERAGE NUMBER OF WAGE EARNERS IN [1]— Alexandria.	Danville.	Lynchburg.	Norfolk.	Petersburg.	Portsmouth.	Richmond.	Roanoke.	Staunton.
Total	1914	1,504	2,691	3,474	5,900	3,903	767	17,282	5,496	346
	1909	1,470	3,076	4,026	4,749	3,887	842	14,849	3,544	339
	1904	1,291	3,018	2,534	2,935	3,288	551	12,444	3,089	.....
16 years of age and over:										
Male	1914	1,390	1,751	2,373	4,581	2,248	582	12,728	5,244	235
	1909	1,331	1,712	2,801	3,518	2,434	678	10,010	3,312	216
	1904	1,202	1,550	1,759	[2] 2,022	1,984	430	[2] 8,515	2,934	.....
Female	1914	82	840	995	1,258	1,438	156	4,171	246	93
	1909	69	1,086	968	1,073	1,271	130	4,538	201	113
	1904	53	1,091	651	[2] 746	1,053	73	3,704	110	.....
Under 16 years of age	1914	32	100	106	61	217	29	383	6	18
	1909	70	278	257	158	182	34	301	31	10
	1904	36	377	124	167	251	48	[2] 225	45	.....
Per cent of total:										
16 years of age and over—										
Male	1914	92.4	65.1	68.3	77.6	57.6	75.9	73.6	95.4	67.9
	1909	90.5	55.7	69.6	74.1	62.6	80.5	67.4	93.4	63.7
	1904	93.1	51.4	69.4	68.9	60.3	78.0	68.4	95.0	.....
Female	1914	5.5	31.2	28.7	21.3	36.8	20.3	24.1	4.5	26.9
	1909	4.7	35.3	24.0	22.6	32.7	15.4	30.6	5.7	33.3
	1904	4.1	36.1	25.7	25.4	32.0	13.2	29.8	3.6	.....
Under 16 years of age	1914	2.1	3.7	3.0	1.0	5.6	3.8	2.2	0.1	5.2
	1909	4.8	9.0	6.4	3.3	4.7	4.0	2.0	0.9	3.0
	1904	2.8	12.5	4.9	5.7	7.6	8.7	1.8	1.4	.....

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.
[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.

The proportion of male wage earners 16 years of age and over is greatly in excess of that for females in every city, the only city in 1914 in which the proportion of adult males fell below 65 per cent being Petersburg. The proportions for all cities combined were for males 75.3, females 22.4, and children 2.3. All of the cities for which figures are given for the decade show decreases in the number and proportions of children under 16 years of age, with the exception of Richmond, which shows an increase at each census. All, except Petersburg, Richmond, and Staunton, show decreases in number of children for the period 1909–1914.

Table 8	PER CENT OF INCREASE[2] IN AVERAGE NUMBER OF WAGE EARNERS.				
CITY.[1]	Period.	Total.	16 years of age and over.		Under 16 years of age.
			Male.	Female.	
Alexandria	1904–1914	16.5	15.6	.....	.....
	1909–1914	2.3	4.4	.....	.....
	1904–1909	13.9	10.7	.....	.....
Danville	1904–1914	−10.8	13.0	−23.0	−73.5
	1909–1914	−12.5	2.3	−22.7	−64.0
	1904–1909	1.9	10.5	−0.5	−26.3
Lynchburg	1904–1914	37.1	34.9	52.8	−14.5
	1909–1914	−13.7	−15.3	2.8	−58.8
	1904–1909	58.9	59.2	48.7	107.3
Norfolk	1904–1914	101.0	126.6	68.6	−63.5
	1909–1914	24.2	30.2	17.2	−61.4
	1904–1909	61.8	74.0	43.8	−5.4
Petersburg	1904–1914	18.7	13.3	36.6	−13.5
	1909–1914	0.4	−7.6	13.1	19.2
	1904–1909	18.2	22.7	20.7	−27.5
Portsmouth	1904–1914	39.2	35.3	.....	.....
	1909–1914	−8.9	−14.2	20.0	.....
	1904–1909	52.8	57.7	.....	.....
Richmond	1904–1914	38.9	49.5	12.6	70.2
	1909–1914	16.4	27.2	−8.1	27.2
	1904–1909	19.3	17.6	22.5	33.8
Roanoke	1904–1914	77.9	78.7	123.6	.....
	1909–1914	55.1	58.3	22.4	.....
	1904–1909	14.7	12.9	82.7	.....
Staunton	1909–1914	2.1	8.8	−17.7	.....

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.
[2] A minus sign (−) denotes decrease; percentages are omitted where base is less than 100.

The largest percentage of increase in the decade is shown for the males in Norfolk, 126.6 per cent, although the greatest actual increase was for males in Richmond. There is also a large increase, 68.6 per cent, in the number of females reported for Norfolk. Roanoke, in the same period, shows an increase of 78.7 per cent in males and 123.6 per cent in females. The increases for the period 1909–1914 are much smaller.

The wage earners in Richmond, the most important city in the state, increased 38.9 per cent during the period 1904–1914, the males, 49.5 per cent; females, 12.6 per cent; and children, 70.2 per cent. Nearly half of these children were employed in the manufacture of tobacco.

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.

For 1914 the greatest activity in the combined industries of the state is shown for the spring and fall months, the maximum number of wage earners appearing for September, as in 1909 and 1904, and the minimum for December. In the earlier years, however, the greatest activity is shown during the fall months. The greatest difference between the maximum and minimum months in any one of the three census years was 21,113 in 1909, the corresponding figures for 1914 and 1904 being 15,068 and 13,994, respectively. The variation in the number employed was slightly greater in 1909 than in 1914, amounting to 18.2 per cent in the earlier year, as against 13.9 per cent in the later. The corresponding percentage for 1904 was 16.1 per cent.

Table 9	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
MONTH.	Number.[1]			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January	100,795	94,885	72,754	92.8	81.8	83.9
February	101,063	97,714	73,751	93.1	84.2	85.0
March	103,802	101,750	77,565	95.6	87.7	89.4
April	106,175	104,393	80,108	97.8	90.0	92.3
May	105,902	104,865	81,834	97.5	90.4	94.3
June	104,916	105,036	82,658	96.6	90.5	95.3
July	102,697	104,231	81,019	94.6	89.9	93.4
August	103,418	110,659	84,232	95.2	95.4	97.1
September	108,590	115,998	86,748	100.0	100.0	100.0
October	106,016	112,276	84,620	97.6	96.8	97.5
November	96,944	109,216	80,771	89.3	94.2	93.1
December	93,522	107,092	77,360	86.1	92.3	89.2

[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 nine cities having more than 10,000 inhabitants. As previously stated, statistics of Newport News are not shown separately in any table.

Among the selected industries a wide fluctuation between the maximum and minimum number of wage earners is shown. Canning and preserving, being a seasonable industry, shows the greatest fluctuation, the number of wage earners in the minimum month, January, being but 2.4 per cent of the number in September, the maximum month. A great fluctuation also appears for the glass industry, the number of wage earners for August, the minimum month, being 10 per cent of the maximum month, April. The custom of closing down for repairs during the hot months of July and August explains the great fluctuation in this industry. The greatest stability of employment is shown for printing and publishing, in which industry the minimum formed 97.3 per cent of the maximum. Other industries showing but slight fluctuation are cars and general shop construction and repairs by steam-railroad companies, bread and other bakery products, and flour-mill and gristmill products, in which industries the minimum formed of the maximum 94.7, 93.3, and 92.7 per cent, respectively. Of the cities, Alexandria and Staunton show the greatest fluctuation, the proportions that the minimum formed of the maximum in these cities being 78.8 per cent and 72.2 per cent, respectively.

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.[1]
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries	102,820	100,795	101,063	103,802	106,175	105,902	104,916	102,697	103,418	**108,590**	106,016	96,944	*93,522*	86.1
Boots and shoes	1,555	**1,730**	1,627	1,577	1,482	1,567	1,656	1,610	1,705	1,583	1,506	1,477	*1,140*	65.9
Bread and other bakery products	1,033	1,001	*996*	1,008	1,038	1,053	**1,067**	1,052	1,049	1,050	1,034	1,021	1,027	93.3
Brick, tile, and other clay products	1,663	1,064	*901*	1,145	1,765	2,173	**2,294**	2,288	2,248	1,995	1,693	1,225	1,165	39.3
Canning and preserving	2,169	*219*	229	304	777	697	525	928	5,454	**9,062**	6,443	957	433	2.4
Carriages and wagons and materials	1,246	1,287	1,285	1,330	1,355	1,329	**1,437**	1,396	1,297	1,182	1,085	*974*	995	67.8
Cars and general shop construction and repairs by steam-railroad companies	10,375	10,501	10,492	**10,613**	10,321	10,418	10,102	10,531	*10,050*	10,438	10,610	10,287	10,137	94.7
Clothing, men's, including shirts	1,282	1,385	1,451	**1,555**	1,538	1,480	1,310	1,223	1,300	*977*	1,046	1,092	1,027	62.8
Coke, not including gas-house coke	852	957	**1,000**	986	967	904	853	862	752	699	*693*	759	792	69.3
Cooperage	1,390	1,235	1,287	1,441	1,544	1,783	**1,786**	1,421	*822*	1,277	1,462	1,307	1,315	46.0
Copper, tin, and sheet-iron products	528	*396*	424	465	519	579	591	541	576	**648**	599	489	509	61.1
Cotton goods	6,310	6,105	6,160	6,184	6,270	6,321	6,357	6,303	*5,857*	6,375	6,512	6,563	**6,713**	87.2
Fertilizers	2,470	1,620	1,971	2,259	**3,246**	2,498	2,874	2,913	2,877	2,954	2,772	2,429	*1,227*	37.8
Flour-mill and gristmill products	1,082	1,068	1,065	1,056	1,047	*1,036*	1,055	1,091	**1,118**	1,116	1,117	1,103	1,112	92.7
Foundry and machine-shop products	2,444	2,575	2,451	2,429	2,503	2,634	**2,654**	2,592	2,487	2,395	2,253	*2,157*	2,198	81.3
Furniture	1,221	1,208	1,269	1,300	1,291	1,250	1,191	1,190	1,234	1,225	1,185	1,164	*1,145*	88.1
Gas, illuminating and heating	533	489	482	490	546	638	**680**	620	521	502	*467*	472	489	68.7
Glass	606	784	770	783	**790**	675	665	241	*79*	504	670	652	659	10.0
Hosiery and knit goods	2,272	2,258	2,305	2,354	**2,361**	2,253	2,344	2,290	*2,150*	2,178	2,336	2,198	2,237	91.1
Ice, manufactured	714	*503*	504	548	632	798	918	**1,020**	949	893	723	555	526	49.2
Iron and steel, blast furnaces	689	824	825	**844**	821	842	829	769	772	596	395	*371*	380	44.0
Leather goods	1,428	1,464	1,487	1,464	1,481	**1,496**	1,483	1,459	1,438	1,422	1,370	1,316	*1,256*	84.0
Leather, tanned, curried, and finished	1,205	1,190	1,197	1,198	1,213	1,225	**1,317**	1,295	1,267	1,166	1,137	1,140	*1,115*	84.7
Lime	694	653	671	755	**827**	784	715	704	695	737	633	607	*547*	66.1
Lumber and timber products	26,307	25,688	26,011	27,888	**28,920**	28,739	27,768	26,305	24,632	25,341	26,029	24,863	*23,500*	81.3
Marble and stone work	1,260	1,138	*1,093*	1,150	1,198	1,295	1,323	1,334	**1,372**	1,357	1,317	1,290	1,253	79.7
Paper and wood pulp	1,260	**1,351**	1,327	1,224	1,227	*1,214*	1,228	1,233	1,272	1,297	1,261	1,245	1,241	89.8
Peanuts, grading, roasting, cleaning, and shelling	1,505	1,768	1,754	**1,812**	1,752	1,573	1,236	1,214	1,361	1,299	*1,119*	1,501	1,671	61.8
Printing and publishing	2,790	2,785	2,789	2,819	2,810	2,789	2,764	*2,752*	2,761	2,776	2,810	**2,828**	2,797	97.3
Silk goods, including throwsters	691	663	688	713	766	788	**805**	800	721	605	606	*565*	572	70.2
Tobacco manufactures	6,308	6,529	6,583	**6,669**	6,550	6,445	6,430	6,285	6,031	6,197	6,164	5,938	*5,875*	88.1
All other industries	18,938	**20,358**	19,969	19,439	18,618	18,626	18,659	18,435	18,571	18,744	18,969	*18,399*	18,469	90.4
Total for cities[1]	41,363	42,615	42,479	**42,714**	42,239	42,308	41,959	40,337	39,129	40,463	41,478	40,578	*40,057*	93.8
ALEXANDRIA	1,504	1,634	1,600	1,628	**1,644**	1,600	1,591	1,345	*1,296*	1,630	1,387	1,301	1,392	78.8
DANVILLE	2,691	*2,579*	2,581	2,604	2,688	2,709	2,751	**2,760**	2,753	2,733	2,712	2,722	2,700	93.4
LYNCHBURG	3,474	3,569	3,570	3,546	3,560	**3,635**	3,631	3,351	*3,155*	3,496	3,541	3,472	3,162	86.8
NORFOLK	5,900	5,722	5,817	6,096	6,210	**6,406**	6,246	5,742	*5,320*	5,635	5,996	5,900	5,710	83.0
PETERSBURG	3,903	3,921	4,114	**4,180**	4,141	4,009	4,023	3,845	3,672	3,764	3,790	3,744	*3,633*	86.9
PORTSMOUTH	767	*690*	710	758	818	859	825	**868**	760	720	739	730	727	79.5
RICHMOND	17,282	**18,596**	18,199	17,913	17,227	16,927	16,831	16,535	*16,372*	16,744	17,563	17,135	17,342	88.0
ROANOKE	5,496	5,566	5,547	5,655	5,586	**5,782**	5,698	5,531	5,451	5,364	5,403	5,253	*5,116*	88.5
STAUNTON	346	338	341	334	365	**381**	363	360	350	377	347	321	*275*	72.2

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

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 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, with the exception of Newport News. 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, emphasize the tendency toward a shorter working day for wage earners. In 1909 the proportion of wage earners employed in establishments where the prevailing hours of work were under 60 per week was 33.8 per cent of the total number of wage earners; the proportion of those in establishments having working hours of 60 and over per week was 66.2 per cent. The corresponding proportions for 1914 were 45.2 and 54.8 per cent, respectively. During the five-year period there was a marked increase in the proportion in each of the four classes working fewer than 60 hours per week.

Among the separate industries, boots and shoes shows the most pronounced decrease in hours of labor. In 1909, only 18.6 per cent of the wage earners in this industry were employed in establishments where the hours of labor were fewer than 60 per week, but in 1914 the proportion thus employed had increased to 97.5 per cent. Paper and wood pulp was the only industry among those presented in this table showing a large proportion of the employees in establishments where the hours of labor were 72 per week.

For the cities, taken as a group, 38,961, or 94.2 per cent, of the total average number of wage earners reported for 1914, were in establishments where the prevailing hours were 60 or fewer per week, while only 2,402 were in establishments in which the hours were more than 60 per week.

Table 11

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	102,820	7,205	10,558	8,495	20,172	45,181	8,070	1,746	1,393
	1909	105,676	5,415	4,752	6,607	18,934	55,820	9,473	1,208	3,467
Boots and shoes	1914	1,555				1,516	39			
	1909	2,711				503	2,208			
Bread and other bakery products	1914	1,033	82	8	105	181	587	46	23	1
	1909	870	108	31	107	6	495	57	49	17
Brick, tile, and other clay products	1914	1,663	159	82	205	184	1,016	17		
	1909	2,090	137	60	49	195	1,633	16		
Canning and preserving	1914	2,169	470	126	65	488	987	27	5	1
	1909	1,860	80	82	34	43	1,542	19	36	24
Carriages and wagons and materials	1914	1,246	33	209	206	283	515			
	1909	1,329	3	7	343	168	788	9	11	
Cars and general shop construction and repairs by steam-railroad companies.	1914	10,375	1,998	5,035	617	222	461	2,042		
	1909	7,588	1,719	823	848	2,198	308	311		1,381
Clothing, men's, including shirts	1914	1,282	437	278	176	254	137			
	1909	1,160	288	45	10	680	137			
Coke, not including gas-house coke	1914	852					528	8		316
	1909	1,425	4	306		33	766			316
Cooperage	1914	1,390	11	33	39	186	1,121			
	1909	788	30	74		67	613	1	3	
Copper, tin, and sheet-iron products	1914	528	56	11	65	337	59			
	1909	818	108	3	83	25	599			
Cotton goods	1914	6,310				60	6,250			
	1909	5,057					5,057			
Fertilizers	1914	2,470	33	2	88	124	1,527	359	337	
	1909	1,956	4	3	14	108	1,465	255	107	
Flour-mill and gristmill products	1914	1,082	53	3	5	63	730	34	188	6
	1909	1,014	83	12	18	13	510	71	300	7
Foundry and machine-shop products	1914	2,444	32	23	379	586	1,424			
	1909	2,798	3	35	581	583	1,595	1		
Furniture	1914	1,221	51	30	151	173	816			
	1909	990	7		73	90	820			
Gas, illuminating and heating	1914	533	2			33	69	132		297
	1909	378	2				3	39		334
Glass	1914	606	163	343	100					
	1909	524		465	59					
Hosiery and knit goods	1914	2,272			172	1,778	308	14		
	1909	1,715				1,241	474			
Ice, manufactured	1914	714	2			16	150	108	39	399
	1909	475			1	3	59	47	147	218
Iron and steel, blast furnaces	1914	689						470		219
	1909	1,320				73		145	50	1,052
Leather goods	1914	1,428	44		250	383	751			
	1909	1,487	188	5	218	50	1,026			
Leather, tanned, curried, and finished	1914	1,205	20			94	1,089		2	
	1909	1,590	1	49	1	31	1,506		2	
Lime	1914	694		14	114	5	501	48	12	
	1909	716			23	9	329	229	59	67
Lumber and timber products	1914	26,307	1,217	2,203	660	4,680	14,137	3,379	31	
	1909	33,287	888	1,222	969	3,396	20,349	6,295	145	23
Marble and stone work	1914	1,260	114	182	139	168	340	317		
	1909	1,585	107	142	144	273	464	454	1	
Paper and wood pulp	1914	1,260					286	45	929	
	1909	912				63	655		194	
Peanuts, grading, roasting, cleaning, and shelling	1914	1,505	5	193	1	442	864			
	1909	1,516		208	5	295	1,008			
Printing and publishing	1914	2,790	1,232	549	812	83	112	2		
	1909	2,555	726	341	1,105	178	197	6	2	
Silk goods, including throwsters	1914	691				396	295			
	1909	819				669	150			
Tobacco manufactures	1914	6,308	454	276	1,613	2,636	1,329			
	1909	7,882	498	240	403	5,518	1,222			1
All other industries	1914	18,938	537	958	2,533	4,801	8,753	1,022	180	154
	1909	16,461	431	599	1,519	2,423	9,842	1,518	102	27
Total for cities [1]	1914	41,363	3,371	6,116	6,201	12,210	11,063	1,805	33	564
ALEXANDRIA	1914	1,504	172	360	610	3	268	5		86
DANVILLE	1914	2,691	24	174	62	616	1,790	25		
LYNCHBURG	1914	3,474	215	150	127	1,674	1,187	90	6	25
NORFOLK	1914	5,900	310	417	936	1,583	2,248	154		252
PETERSBURG	1914	3,903	219	55	134	2,297	1,130	44		24
PORTSMOUTH	1914	767	56	21	29		548	27		86
RICHMOND	1914	17,282	2,083	1,795	4,081	5,650	3,501	84	14	74
ROANOKE	1914	5,496	273	3,079	159	319	271	1,376	13	6
STAUNTON	1914	346	19	65	63	68	120			11

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

Location of establishments.—Table 12 shows, for 1914, 1909, and 1899, the extent to which the manufactures in Virginia were centralized in cities having more than 10,000 inhabitants. Statistics for Newport News are omitted from the group of cities whose population was estimated to be from 10,000 to 25,000 in 1914, and included in the districts outside of the cities, to avoid a possible disclosure of individual operations.

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.[1]	
			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	.....	9	.....	3	.....	5	.....	1	.....	.....	.....
	1910	.....	9	.....	4	.....	4	.....	1	.....	.....	.....
	1900	.....	8	.....	6	.....	2	.....	.....	.....	.....	.....
Population [2]	1914	2,150,009	403,225	18.8	46,683	2.2	221,625	10.3	134,917	6.3	1,746,784	81.2
	1910	2,061,612	361,718	17.5	69,080	3.3	165,010	8.0	127,628	6.2	1,699,894	82.5
	1900	1,854,184	252,060	13.6	110,671	6.0	141,389	7.6	.....	.....	1,602,124	86.4
Number of establishments	1914	5,508	1,089	19.8	137	2.5	486	8.8	466	8.5	4,419	80.3
	1909	5,685	992	17.4	222	3.9	390	6.9	380	6.7	4,693	82.6
	1899	3,186	717	22.5	301	9.4	416	13.1	.....	.....	2,469	77.5
Average number of wage earners	1914	102,820	41,363	40.2	4,541	4.4	19,540	19.0	17,282	16.8	61,457	59.8
	1909	105,676	36,782	34.8	8,772	8.3	13,161	12.4	14,849	14.1	68,894	65.2
	1899	66,223	28,142	42.5	11,789	17.8	16,353	24.7	.....	.....	38,081	57.5
Value of products	1914	$264,039,041	$128,954,107	48.8	$10,666,938	4.0	$55,796,502	21.1	$62,490,667	23.7	$135,084,934	51.2
	1909	219,793,858	96,603,688	44.0	19,927,390	9.1	29,318,313	13.3	47,357,985	21.5	123,190,170	56.0
	1899	108,644,150	49,239,397	45.3	19,877,907	18.3	29,361,490	27.0	.....	.....	59,404,753	54.7
Value added by manufacture	1914	108,719,465	56,708,638	52.2	4,407,431	4.1	20,369,342	18.7	31,931,865	29.4	52,010,827	47.8
	1909	94,211,171	42,968,849	45.6	7,305,029	7.8	12,557,970	13.3	23,105,850	24.5	51,242,322	54.4
	1899	49,284,666	23,827,644	48.3	8,493,683	17.2	15,333,961	31.1	.....	.....	25,457,022	51.7

[1] Includes statistics for Newport News, to avoid disclosure of individual operations.

[2] Census estimate of population for 1914.

In accepting the statistics in this table, it will be noted that one of the cities—Staunton—that had a population of 10,000 and over at the census of 1910 and of 1914, was included with those for the outside districts in 1899. Nine cities having an estimated population of 10,000 or more in 1914 show 18.8 per cent of the total estimated population for the state, 19.8 per cent of the number of establishments, 40.2 per cent of the total average number of wage earners, and 48.8 per cent of the total value of products.

The relative importance in manufactures in each of the cities having more than 10,000 inhabitants (exclusive of Newport News), 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. Comparative figures are not shown for 1904 for Staunton, as its population that year was less than 10,000.

Table 13 City.[1]	Average number of wage earners.			Value of products.		
	1914	1909	1904	1914	1909	1904
Richmond	17,282	14,849	12,444	$62,490,667	$47,357,985	$27,744,929
Roanoke	5,496	3,544	3,089	16,581,988	7,260,859	5,544,907
Norfolk	5,900	4,749	2,935	14,955,135	10,341,321	5,738,906
Petersburg	3,903	3,887	3,288	12,609,943	8,895,552	5,890,574
Lynchburg	3,474	4,026	2,534	9,918,779	10,188,136	4,965,435
Danville	2,691	3,076	3,018	5,558,431	5,389,430	4,774,818
Alexandria	1,504	1,470	1,291	3,660,291	4,419,562	2,186,658
Portsmouth	767	842	551	1,730,657	1,527,997	945,439
Staunton	346	339	.....	1,448,216	1,222,846	.....

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

With the exception of Alexandria and Lynchburg, every city shows an increase in value of products from 1909 to 1914, while all for which comparative statistics are presented show increases from 1904 to 1909. In Alexandria and Lynchburg the decreases during the later period were quite general; a number of establishments for which reports were secured in 1909 were reported as idle or out of business in 1914. The greatest relative gain in value of products from 1904 to 1914, 199 per cent, was made by Roanoke; Norfolk, Richmond, and Petersburg following, with 160.6, 125.2, and 114.1 per cent, respectively.

Richmond, the most important city in the state, ranked in 1914, among the cities of the United States, fortieth in population, forty-fourth in value of products, and forty-sixth in average number of wage earners. On November 5, 1914, the corporate limits of the city were extended so as to include considerable additional territory. The map on the opposite page shows the territory thus included.

Table 14 gives the totals for the city of Richmond as reported for the census of 1914, the statistics for the establishments in the territory added to the city on November 5, 1914, and the aggregate.

In 1914 the principal industries in Richmond, as measured by value of products, were tobacco manufactures, printing and publishing, slaughtering and meat packing, locomotives, and steam-railroad repair shops; in Roanoke, steam-railroad repair shops, foundry and machine-shop products, and blast furnaces; in Norfolk, lumber and timber products, hosiery and knit

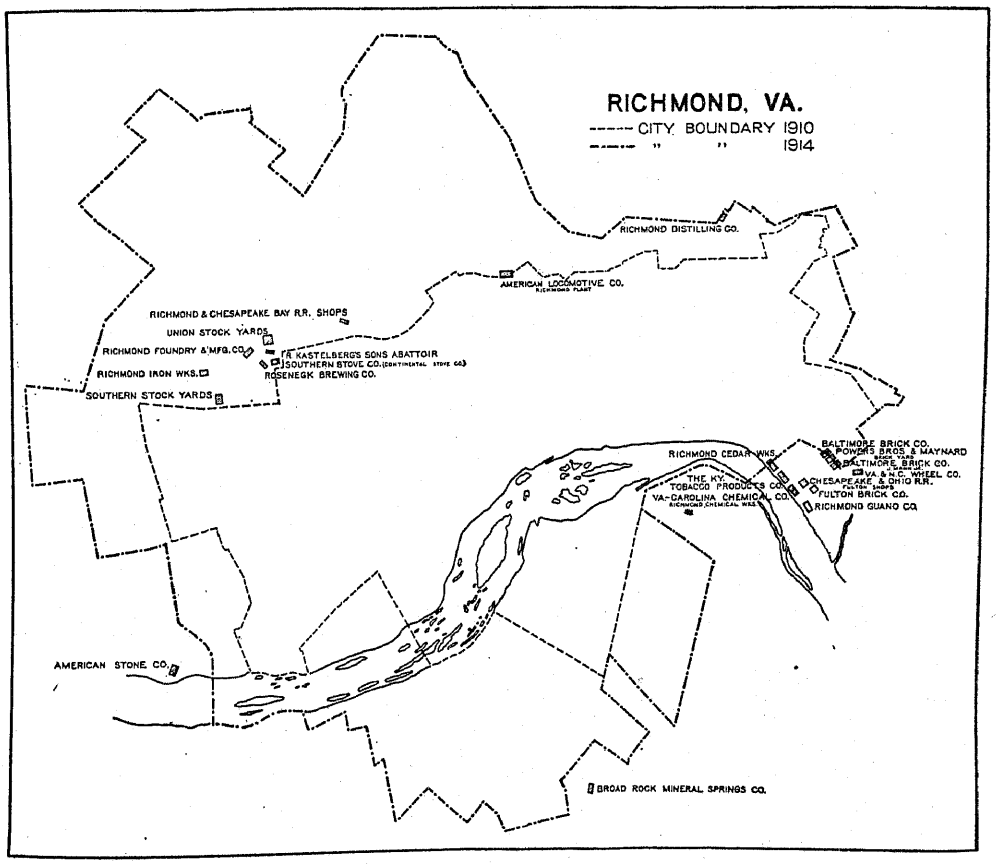
goods, the grading, roasting, cleaning, and shelling of peanuts, and vinous liquors; in Petersburg, tobacco manufactures, the grading, roasting, cleaning, and shelling of peanuts, and leather goods; in Danville, cotton goods, flour-mill and gristmill products, and hosiery and knit goods; in Portsmouth, hosiery and knit goods, fertilizers, and bags, other than paper; in Alexandria, fertilizers, and steam-railroad repair shops; in Lynchburg, boots and shoes, foundry and machine-shop products, and flour-mill and gristmill products; in Staunton, flour-mill and gristmill products.

Statistics for Newport News can not be shown separately because of the possibility of disclosing the operations of an important establishment. Shipbuilding was the leading industry.

Table 14

	MANUFACTURING INDUSTRIES OF RICHMOND.		
	Total.	Reported for census of 1914.	For territory annexed Nov. 5, 1914.
Number of establishments	472	466	6
Persons engaged	21,726	20,533	1,193
Proprietors and firm members	357	350	7
Salaried employees	3,090	2,901	189
Wage earners (average number)	18,279	17,282	997
Primary horsepower	38,043	33,940	4,103
Capital	$52,870,279	$48,667,108	$4,203,171
Salaries and wages	13,040,133	12,163,667	876,466
Salaries	3,975,837	3,724,065	251,772
Wages	9,064,296	8,439,602	624,694
Paid for contract work	530,970	530,970	.....
Rent and taxes (including internal revenue)	6,627,356	6,526,473	100,883
Cost of materials	32,600,671	30,558,802	2,041,869
Value of products	65,970,986	62,490,667	3,480,319
Value added by manufacture (value of products less cost of materials)	33,370,315	31,931,865	1,438,450

MAP SHOWING CORPORATE LIMITS OF RICHMOND, VA.: 1910 AND 1914.



The statistics for that part of Bristol which lies in Virginia are included with those for the outside districts in Table 12. Table 15 presents totals for the entire city and for the parts situated in Virginia and Tennessee, respectively.

In Bristol, Va., the leading industries in order of importance by value of products were paper and wood pulp; flour-mill and gristmill products; men's clothing; leather, tanned, curried, and finished; and lumber and timber products; while the principal industries in Bristol, Tenn., were flour-mill and gristmill products, men's clothing, and druggists' preparations.

Table 15

	TOTAL.			BRISTOL, VA.			BRISTOL, TENN.		
	1914	1909	Per cent of increase,[1] 1909–1914.	1914	1909	Per cent of increase,[1] 1909–1914.	1914	1909	Per cent of increase,[1] 1909–1914.
Population[2]	14,906	13,395	11.3	6,958	6,247	11.4	7,948	7,148	11.2
Number of establishments	57	51	.....	31	28	.....	26	23	.....
Persons engaged in manufactures	1,385	1,319	5.0	995	942	5.6	390	377	3.4
Proprietors and firm members	31	42	.....	19	20	.....	12	22	.....
Salaried employees	225	148	52.0	135	80	.....	90	68	.....
Wage earners (average number)	1,129	1,129	.....	841	842	−0.1	288	287	0.3
Primary horsepower	3,651	3,914	−6.7	2,985	2,625	13.7	666	1,289	−48.3
Capital	$2,940,791	$3,062,409	−4.0	$2,033,170	$1,716,738	18.4	$907,621	$1,345,671	−32.4
Salaries and wages	689,533	631,813	9.1	494,297	471,486	4.8	195,236	160,327	21.8
Salaries	239,862	142,741	68.0	141,737	89,126	59.0	98,125	53,615	83.0
Wages	449,671	489,072	−8.1	352,560	382,360	−7.8	97,111	106,712	−9.0
Cost of materials	2,087,120	1,828,296	14.2	1,645,788	1,234,322	33.3	441,332	593,974	−25.7
Value of products	3,397,426	2,848,777	19.3	2,542,851	1,970,668	29.0	854,575	878,109	−2.7
Value added by manufacture	1,310,306	1,020,481	28.4	897,063	736,346	21.8	413,243	284,135	45.4

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

[2] Census estimate of population for 1914.

Character of Ownership.—Table 16 presents statistics concerning 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, exclusive of Newport News, 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.

Table 16

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	3,065	1,162	1,281	102,820	16,598	77,015	9,207	16.1	74.9	8.9	$264,039,041	$28,657,424	$212,653,891	$22,727,726	10.8	80.5	8.6
	1909	3,061	1,099	1,525	105,676	19,132	72,865	13,679	18.1	69.0	12.9	219,793,858	29,961,088	163,892,508	25,940,262	13.6	74.6	11.8
	1904	1,596	702	889	80,285	10,323	59,735	10,227	12.9	74.4	12.7	148,856,525	17,767,725	109,546,390	21,542,410	11.9	73.6	14.5
Bread and other bakery products.	1914	101	18	21	1,033	362	578	93	35.0	56.0	9.0	3,697,279	1,162,252	2,209,138	325,889	31.4	59.8	8.8
	1909	93	14	28	870	298	415	157	34.3	47.7	18.0	2,766,283	919,806	1,398,544	447,933	33.3	50.6	16.2
Fertilizers	1914	4	51	2	2,470	.....	2,367	[1] 103	.....	95.8	4.2	11,350,120	.....	10,573,747	[1] 776,373	.....	93.2	6.8
	1909	6	37	2	1,956	.....	1,809	[1] 147	.....	92.5	7.5	8,034,543	.....	7,706,602	[1] 327,941	.....	95.9	4.1
Flour-mill and gristmill products.	1914	327	58	148	1,082	422	306	354	39.0	28.3	32.7	18,084,413	5,792,360	5,294,456	6,997,597	32.0	29.3	38.7
	1909	256	69	133	1,014	365	335	314	36.0	33.0	31.0	17,598,045	5,023,139	6,200,823	6,374,083	28.5	35.2	36.2
Foundry and machine-shop products.	1914	45	41	17	2,444	307	1,960	177	12.6	80.2	7.2	6,906,122	515,700	6,039,619	350,803	7.5	87.5	5.1
	1909	46	40	24	2,798	273	2,288	237	9.8	81.8	8.5	5,727,014	478,304	4,854,237	394,473	8.4	84.8	6.9
Leather goods	1914	26	14	11	1,428	58	1,318	52	4.1	92.3	3.6	3,463,853	187,133	3,149,863	126,857	5.4	90.9	3.7
	1909	11	10	10	1,487	84	1,319	84	5.6	88.7	5.6	3,492,051	202,190	3,043,970	245,891	5.8	87.2	7.0
Lumber and timber products.	1914	1,509	163	546	26,307	9,666	12,382	4,259	36.7	47.1	16.2	32,449,063	9,154,151	18,497,004	4,797,908	28.2	57.0	14.8
	1909	1,634	190	793	33,287	12,015	14,094	7,178	36.1	42.3	21.6	35,855,310	10,687,384	18,133,870	7,034,056	29.8	50.6	19.6
Printing and publishing	1914	219	102	75	2,790	880	1,355	555	31.5	48.6	19.9	7,069,847	1,626,788	4,321,149	1,121,910	23.0	61.1	15.9
	1909	186	94	89	2,555	734	1,342	479	28.7	52.5	18.7	5,369,738	1,188,764	3,317,349	863,625	22.1	61.8	16.1
Slaughtering and meat packing.	1914	6	9	6	396	91	263	42	23.0	66.4	10.6	4,362,272	670,060	3,168,804	523,408	15.4	72.6	12.0
	1909	11	8	5	342	124	185	33	36.3	54.1	9.6	4,600,630	2,444,213	1,729,615	426,802	53.1	37.6	9.3
Tobacco manufactures	1914	42	18	16	6,308	142	6,004	162	2.3	95.2	2.6	30,095,813	317,318	29,505,292	273,203	1.1	98.0	0.9
	1909	58	27	19	7,882	423	6,969	490	5.4	88.4	6.2	25,385,314	515,165	24,158,270	711,879	2.0	95.2	2.8
Total for cities[2]	1914	418	475	196	41,363	3,389	35,607	2,367	8.2	86.1	5.7	128,954,107	9,174,008	110,856,184	8,923,915	7.1	86.0	6.9
Alexandria	1914	18	20	11	1,504	56	1,335	113	3.7	88.8	7.5	3,660,291	233,326	3,149,661	277,304	6.4	86.0	7.6
Danville	1914	14	21	8	2,691	93	2,465	133	3.5	91.6	4.9	5,558,431	195,698	5,021,151	341,582	3.5	90.3	6.1
Lynchburg	1914	26	38	9	3,474	156	3,229	89	4.5	92.9	2.6	9,918,779	449,400	9,123,573	345,806	4.5	92.0	3.5
Norfolk	1914	73	96	42	5,900	1,069	4,414	417	18.1	74.8	7.1	14,955,135	2,191,634	11,669,380	1,094,121	14.7	78.0	7.3
Petersburg	1914	31	44	12	3,903	258	3,460	185	6.6	88.6	4.7	12,609,943	1,649,427	10,572,027	388,489	13.1	83.8	3.1
Portsmouth	1914	27	9	6	767	529	204	34	69.0	26.6	4.4	1,730,657	953,324	659,746	117,587	55.1	38.1	6.8
Richmond	1914	188	197	81	17,282	1,091	15,057	1,134	6.3	87.1	6.6	62,490,667	3,126,181	54,376,802	4,987,684	5.0	87.0	8.0
Roanoke	1914	20	39	14	5,496	49	5,366	81	0.9	97.6	1.5	16,581,988	156,608	16,112,240	313,140	0.9	97.2	1.9
Staunton	1914	21	11	13	346	88	77	181	25.4	22.3	52.3	1,448,216	218,410	171,604	1,058,202	15.1	11.8	73.1

[1] Includes the group "individuals."

[2] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

The most important distinction is that shown between corporate and "all other" forms of ownership. For all industries combined, the statistics for 1914 show that the establishments under corporate owner-

ship, while representing only 21.1 per cent of the total number of establishments, reported 74.9 per cent of the total average number of wage earners and 80.5 per cent of the total value of products. The corresponding percentages for 1909 were 19.3, 69, and 74.6, respectively; and for 1904, 22, 74.4, and 73.6, respectively.

The forms of ownership prevailing in the individual industries presented in the table vary. The bread and other bakery products, flour-mill and gristmill 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 flour-mill and gristmill industry, in which 475 out of a total of 533 establishments in 1914, 71.7 per cent of the total number of wage earners, and 70.7 per cent of the total value of products were "individual" or "all other" forms of ownership.

In Lynchburg, Petersburg, and Roanoke, more than half of the establishments were under corporate ownership. In average number of wage earners and value of products for all cities, except Portsmouth and Staunton, the percentage under corporate ownership was far in excess of the percentage reported for "individual" and "all other" forms combined. In Portsmouth and Staunton, however, the percentages reported by corporations were for wage earners 26.6 and 22.3, respectively; and for value of products, 38.1 and 11.8, respectively.

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments is indicated by the statistics given in Table 17.

Table 17

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	5,508	5,685	3,187	102,820	105,676	80,285	$264,039,041	$219,793,858	$148,856,525	$108,719,465	$94,211,171	$65,207,376
Less than $5,000	2,529	2,581	1,109	5,838	7,176	2,374	5,823,235	5,936,118	2,710,615	3,686,067	3,859,930	1,788,004
$5,000 to $20,000	1,763	1,917	1,192	12,694	15,254	8,996	17,850,020	19,134,920	12,578,958	9,809,703	11,171,420	6,917,700
$20,000 to $100,000	796	805	603	16,590	19,134	14,992	35,176,305	34,233,401	25,678,424	15,886,860	16,900,075	12,039,249
$100,000 to $1,000,000	383	356	268	39,113	41,497	36,224	110,115,952	101,364,437	73,817,089	41,903,961	38,289,549	28,505,680
$1,000,000 and over	37	26	15	28,585	22,615	17,699	95,073,529	59,124,982	34,071,439	37,432,874	23,990,197	15,906,743
	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	45.9	45.4	34.8	5.7	6.8	3.0	2.2	2.7	1.8	3.4	4.1	2.7
$5,000 to $20,000	32.0	33.7	37.4	12.3	14.4	11.2	6.8	8.7	8.5	9.0	11.9	10.6
$20,000 to $100,000	14.5	14.2	18.9	16.1	18.1	18.7	13.3	15.6	17.2	14.6	17.9	18.5
$100,000 to $1,000,000	7.0	6.3	8.4	38.0	39.3	45.1	41.7	46.1	49.6	38.5	40.6	43.7
$1,000,000 and over	0.6	0.4	0.5	27.8	21.4	22.0	36.0	26.9	22.9	34.4	25.5	24.4

It will be seen from this table that in 1914 only 37, or six-tenths of 1 per cent, of the 5,508 establishments in the state reported products valued at more than $1,000,000. These establishments, however, employed an average of 28,585 wage earners, or 27.8 per cent of the total for all establishments, and reported 36 per cent of the total value of products, and 34.4 per cent of the total value added by manufacture. On the other hand, the small establishments—those having products valued at less than $5,000, constituting 45.9 per cent of the total number of establishments—reported only 2.2 per cent of the total value of products. The greatest percentage of the value of products was reported by establishments having products valued at $100,000 or more.

This table shows that during the five-year period 1909–1914 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 $1,000,000 and over.

Table 18 gives, for 1914 and 1909, for nine 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 17 for all industries combined.

For 1914, as compared with 1909, this table shows increases in the number of establishments having products under $5,000 in value for only three of the industries presented—bread and other bakery products, flour-mill and gristmill products, and leather goods. For all industries, the establishments having products valued at $100,000 and over, except flour-mill and gristmill products, lumber and timber products, and slaughtering and meat packing, show increases in value of products; and for all except flour-mill and gristmill products, leather goods, and lumber and timber products, the establishments in this class show increases in value added by manufacture. In this class flour-mill and gristmill products, foundry and machine-shop products, leather goods, and lumber and timber products show decreases in average number of wage earners.

Table 18 — VALUE OF PRODUCT.	Number of establishments. 1914	1909	Per cent distribution. 1914	1909	Average number of wage earners. 1914	1909	Per cent distribution. 1914	1909	Value of products. 1914	1909	Per cent distribution. 1914	1909	Value added by manufacture. 1914	1909	Per cent distribution. 1914	1909
BREAD AND OTHER BAKERY PRODUCTS	140	135	100.0	100.0	1,033	870	100.0	100.0	$3,697,279	$2,766,283	100.0	100.0	$1,509,690	$1,045,591	100.0	100.0
Less than $5,000	51	48	36.4	35.6	45	58	4.4	6.7	125,656	135,069	3.4	4.9	53,668	55,055	3.6	5.3
$5,000 to $20,000	54	64	38.6	47.4	182	233	17.6	26.8	530,424	670,531	14.3	24.2	229,598	283,926	15.2	27.2
$20,000 to $100,000	25	18	17.9	13.3	297	284	28.7	32.6	1,089,998	942,381	29.5	34.1	389,728	364,828	25.8	34.9
$100,000 to $1,000,000	10	5	7.1	3.7	509	295	49.3	33.9	1,951,201	1,018,302	52.8	36.8	836,696	341,782	55.4	32.7
FERTILIZERS	57	45	100.0	100.0	2,470	1,956	100.0	100.0	11,350,120	8,034,543	100.0	100.0	3,354,199	2,645,433	100.0	100.0
Less than $5,000	3	5	5.3	11.1	2	6	0.1	0.3	8,603	13,187	0.1	0.2	3,514	4,496	0.1	0.2
$5,000 to $20,000	3	3	5.3	6.7	23	9	0.9	0.5	27,146	27,109	0.2	0.3	14,217	8,914	0.4	0.3
$20,000 to $100,000	24	20	42.1	44.4	531	532	21.5	27.2	1,332,866	1,308,874	11.7	16.3	416,469	585,467	12.4	22.1
$100,000 and over	[1] 27	17	47.4	37.8	1,914	1,409	77.5	72.0	9,981,505	6,685,373	87.9	83.2	2,919,999	2,046,556	87.1	77.4
FLOUR-MILL AND GRIST-MILL PRODUCTS	533	458	100.0	100.0	1,082	1,014	100.0	100.0	18,084,413	17,598,045	100.0	100.0	2,694,903	2,433,777	100.0	100.0
Less than $5,000	114	76	21.4	16.6	62	46	5.7	4.5	355,121	242,794	2.0	1.4	90,539	43,509	3.4	1.8
$5,000 to $20,000	254	217	47.7	47.4	273	235	25.2	23.2	2,867,616	2,514,095	15.9	14.3	600,656	446,149	22.3	18.3
$20,000 to $100,000	131	130	24.6	28.4	373	346	34.5	34.1	5,334,118	5,171,764	29.5	29.4	920,883	813,354	34.2	33.4
$100,000 and over [1]	34	35	6.4	7.6	374	387	34.6	38.2	9,527,558	9,669,392	52.7	54.9	1,082,825	1,130,765	40.2	46.5
FOUNDRY AND MACHINE-SHOP PRODUCTS	103	110	100.0	100.0	2,444	2,798	100.0	100.0	6,906,122	5,727,014	100.0	100.0	3,341,435	2,579,006	100.0	100.0
Less than $5,000	32	37	31.1	33.6	48	68	2.0	2.4	73,913	99,032	1.1	1.7	53,348	59,757	1.6	2.3
$5,000 to $20,000	27	32	26.2	29.1	176	243	7.2	8.7	297,694	369,875	4.3	6.5	195,762	248,245	5.9	9.6
$20,000 to $100,000	37	31	35.9	28.2	838	861	34.3	30.8	1,568,772	1,246,337	22.7	21.8	835,818	818,765	25.0	31.7
$100,000 and over [1]	7	10	6.8	9.1	1,382	1,626	56.5	58.1	4,965,743	4,011,770	71.9	70.0	2,256,507	1,452,239	67.5	56.3
LEATHER GOODS	51	31	100.0	100.0	1,428	1,487	100.0	100.0	3,493,853	3,492,051	100.0	100.0	1,520,797	1,590,907	100.0	100.0
Less than $5,000	20	.....	39.2	.....	21	.....	1.5	.....	46,727	.....	1.3	.....	23,399	.....	1.5	.....
$5,000 to $20,000	16	15	31.4	48.4	48	54	3.4	3.6	140,518	168,718	4.1	4.8	69,401	85,152	4.6	5.3
$20,000 to $100,000	8	11	15.7	35.5	174	212	12.2	14.3	428,943	507,455	12.4	14.5	202,049	195,027	13.3	12.3
$100,000 and over [1]	7	5	13.7	16.1	1,185	1,221	83.0	82.1	2,847,665	2,815,878	82.2	80.6	1,225,948	1,310,728	80.6	82.4
LUMBER AND TIMBER PRODUCTS	2,218	2,617	100.0	100.0	26,307	33,287	100.0	100.0	32,449,063	35,855,310	100.0	100.0	19,083,983	21,962,911	100.0	100.0
Less than $5,000	1,280	1,391	57.7	53.2	3,744	4,934	14.2	14.8	2,910,191	3,093,574	9.0	8.6	2,211,600	2,317,843	11.6	10.6
$5,000 to $20,000	712	941	32.1	36.0	7,486	10,308	28.5	31.0	6,862,865	8,755,981	21.1	24.4	4,752,502	6,397,874	24.9	29.1
$20,000 to $100,000	174	224	7.8	8.6	4,992	6,476	19.0	19.4	7,415,952	8,479,348	22.9	23.7	4,112,950	5,069,803	21.6	23.1
$100,000 and over [1]	52	61	2.3	2.3	10,085	11,569	38.3	34.8	15,260,055	15,526,407	47.0	43.3	8,006,931	8,177,391	42.0	37.2
PRINTING AND PUBLISHING	396	369	100.0	100.0	2,790	2,555	100.0	100.0	7,069,844	5,369,738	100.0	100.0	5,003,272	3,964,864	100.0	100.0
Less than $5,000	211	224	53.3	60.7	361	392	12.9	15.3	548,309	552,223	7.8	10.3	433,600	425,552	8.7	10.7
$5,000 to $20,000	132	95	33.3	25.7	612	580	21.9	22.7	1,125,831	918,171	15.9	17.1	828,444	685,578	16.6	17.3
$20,000 to $100,000	31	35	7.8	9.5	551	737	19.7	28.8	1,203,893	1,483,915	17.0	27.6	853,920	1,057,831	17.1	26.7
$100,000 to $1,000,000	22	15	5.6	4.1	1,266	846	45.4	33.1	4,191,811	2,415,429	59.3	45.0	2,887,308	1,795,903	57.7	45.3
SLAUGHTERING AND MEAT PACKING	21	24	100.0	100.0	396	342	100.0	100.0	4,362,272	4,600,630	100.0	100.0	636,798	543,477	100.0	100.0
$5,000 to $20,000	6	[2] 8	28.6	33.3	9	11	2.3	3.2	73,252	84,522	1.7	1.8	20,257	26,684	3.2	4.9
$20,000 to $100,000	8	10	38.1	41.7	32	51	8.1	14.9	372,747	364,600	8.5	7.9	76,724	79,405	12.0	14.6
$100,000 and over [1]	7	6	33.3	25.0	355	280	89.6	81.9	3,916,273	4,151,508	89.8	90.2	539,817	437,388	84.8	80.5
TOBACCO MANUFACTURES	76	104	100.0	100.0	6,308	7,882	100.0	100.0	30,095,813	25,385,314	100.0	100.0	17,993,876	14,196,041	100.0	100.0
Less than $5,000	29	45	38.2	43.3	25	60	0.4	0.8	58,057	102,825	0.2	0.4	36,334	66,040	0.2	0.5
$5,000 to $20,000	26	22	34.2	21.2	141	152	2.2	1.9	249,043	236,767	0.8	0.9	154,034	142,149	0.9	1.0
$20,000 to $100,000	6	18	7.9	17.3	162	890	2.6	11.3	417,206	989,801	1.4	3.9	271,314	548,197	1.5	3.9
$100,000 to $1,000,000	10	14	13.2	13.5	1,385	2,446	22.0	31.0	3,401,972	5,724,736	11.3	22.6	1,844,998	2,921,314	10.3	20.6
$1,000,000 and over	5	5	6.6	4.8	4,595	4,334	72.8	55.0	25,969,535	18,331,185	86.3	72.2	15,687,196	10,518,341	87.2	74.1

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

[2] Includes the group "less than $5,000."

Table 19 presents, for 1914, for all industries combined in each of the nine cities having more than 10,000 inhabitants, statistics similar to those given in Table 17 for the state as a whole. Statistics for Newport News are omitted, to avoid disclosure of individual operations. In the cities the same general condition is found as prevails for all industries combined in 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 percentage of total value of products reported by establishments in this class, 91.2, appears for Roanoke, and the lowest, 61.1, is shown for Portsmouth.

Table 19

City and value of product.[1]	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.
ALEXANDRIA	49	1,504	100.0	$3,660,291	100.0	$1,700,442	100.0
Less than $5,000	11	13	0.9	22,731	0.6	14,967	0.9
$5,000 to $20,000	18	133	8.8	204,634	5.6	110,600	6.5
$20,000 to $100,000	9	210	14.0	413,195	11.3	196,773	11.6
$100,000 to $1,000,000	11	1,148	76.3	3,019,731	82.5	1,378,102	81.0
DANVILLE	43	2,691	100.0	5,558,431	100.0	2,346,262	100.0
Less than $5,000	7	7	0.3	13,804	0.2	8,468	0.4
$5,000 to $20,000	15	97	3.6	199,183	3.6	103,612	4.4
$20,000 to $100,000	11	225	8.4	577,755	10.4	318,395	13.6
$100,000 and over[2]	10	2,362	87.8	4,767,689	85.8	1,915,787	81.7
LYNCHBURG	73	3,474	100.0	9,918,779	100.0	3,407,840	100.0
Less than $5,000	15	17	0.5	34,640	0.3	18,422	0.5
$5,000 to $20,000	14	71	2.1	178,230	1.8	103,332	3.0
$20,000 to $100,000	25	526	15.1	1,208,965	12.2	547,114	16.1
$100,000 and over[2]	19	2,860	82.3	8,496,944	85.7	2,738,972	80.4
NORFOLK	211	5,900	100.0	14,955,135	100.0	6,646,907	100.0
Less than $5,000	53	85	1.4	150,750	1.0	102,074	1.5
$5,000 to $20,000	61	269	4.6	642,078	4.3	378,799	5.7
$20,000 to $100,000	63	1,394	23.6	3,183,756	21.3	1,528,708	23.0
$100,000 and over[2]	34	4,152	70.4	10,978,551	73.4	4,637,326	69.8
PETERSBURG	87	3,903	100.0	12,609,943	100.0	4,216,723	100.0
Less than $5,000	16	23	0.6	43,435	0.3	21,202	0.5
$5,000 to $20,000	21	105	2.7	227,228	1.8	122,336	2.9
PETERSBURG—Con.							
$20,000 to $100,000	29	612	15.7	$1,279,949	10.2	$615,199	14.6
$100,000 and over[2]	21	3,163	81.0	11,059,331	87.7	3,457,986	82.0
PORTSMOUTH	42	767	100.0	1,730,657	100.0	713,458	100.0
Less than $5,000	12	18	2.3	29,715	1.7	16,028	2.2
$5,000 to $20,000	15	76	9.9	165,764	9.6	88,741	12.4
$20,000 to $100,000	11	252	32.9	473,952	27.6	248,519	34.8
$100,000 to $1,000,000	4	421	54.9	1,058,226	61.1	360,170	50.5
RICHMOND	466	17,282	100.0	62,490,667	100.0	31,931,865	100.0
Less than $5,000	123	150	0.9	270,573	0.4	174,456	0.5
$5,000 to $20,000	138	701	4.1	1,500,336	2.4	924,945	2.9
$20,000 to $100,000	112	1,746	10.1	4,698,247	7.5	2,358,299	7.4
$100,000 to $1,000,000	82	7,275	42.1	22,084,236	35.3	10,860,852	34.0
$1,000,000 and over	11	7,410	42.9	33,937,275	54.3	17,613,313	55.2
ROANOKE	73	5,496	100.0	16,581,988	100.0	5,384,414	100.0
Less than $5,000	16	23	0.4	46,617	0.3	26,480	0.5
$5,000 to $20,000	17	62	1.1	141,045	0.9	85,865	1.6
$20,000 to $100,000	26	353	6.4	1,273,838	7.7	502,558	9.3
$100,000 and over[2]	14	5,058	92.0	15,120,488	91.2	4,769,511	88.6
STAUNTON	45	346	100.0	1,448,216	100.0	360,727	100.0
Less than $5,000	13	15	4.3	35,119	2.4	20,227	5.6
$5,000 to $20,000	22	125	36.1	269,035	18.6	149,673	41.5
$20,000 to $1,000,000[3]	10	206	59.5	1,144,062	79.0	190,827	52.9

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.
[2] Includes the group "$1,000,000 and over."
[3] Includes the group "$100,000 to $1,000,000."

Table 20 shows the size of establishment in 1914 as measured by the number of wage earners employed, for all industries combined, for 30 of the more important industries, and for each of the cities having more than 10,000 inhabitants, with the exception of Newport News.

Table 20

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.	51 to 100 wage earners. Establishments.	51 to 100 wage earners. Wage earners.	101 to 250 wage earners. Establishments.	101 to 250 wage earners. Wage earners.	251 to 500 wage earners. Establishments.	251 to 500 wage earners. Wage earners.	501 to 1,000 wage earners. Establishments.	501 to 1,000 wage earners. Wage earners.	Over 1,000 wage earners. Establishments.	Over 1,000 wage earners. Wage earners.
All industries	5,508	102,820	324	3,120	7,402	1,380	15,071	334	10,528	180	13,187	113	16,719	35	11,994	11	7,555	11	20,364
Boots and shoes	8	1,555						2	67			3	468	3	1,020				
Bread and other bakery products	140	1,033	12	93	211	24	261	8	264	1	75	2	222						
Brick, tile, and other clay products	64	1,663	1	12	36	30	415	11	389	9	652	1	171						
Canning and preserving	443	2,169	7	345	842	77	790	12	392	2	145								
Carriages and wagons and materials	119	1,246	16	53	112	37	373	7	185	4	286	2	290						
Cars and general shop construction and repairs by steam-railroad companies	32	10,375		1	4	3	37	4	127	6	460	9	1,670	3	1,139	4	2,901	2	4,037
Clothing, men's, including shirts	32	1,282	1	6	17	9	104	4	126	8	577	4	458						
Coke, not including gas-house coke	11	852				2	17	5	158	2	140	1	221	1	316				
Cooperage	110	1,390	3	72	183	27	285	5	130	1	76			2	716				
Copper, tin, and sheet-iron products	37	528		23	41	11	127	1	34	1	64			1	262				
Cotton goods	9	6,310						1	50	2	142	2	419	1	419	1	607	2	4,673
Fertilizer	57	2,470		7	15	22	271	9	275	13	1,110	6	799						
Flour-mill and gristmill products	533	1,082	99	401	692	31	287	1	32	1	71								
Foundry and machine-shop products	103	2,444	5	37	87	38	424	14	434	5	365			4	1,134				
Furniture	38	1,221	3	13	35	7	77	4	146	9	692	2	271						
Gas, illuminating and heating	22	533	2	6	20	6	70	4	125	3	179	1	139						
Glass	4	606								1	100	3	506						
Hosiery and knit goods	13	2,272				3	47			1	74	4	526	5	1,625				
Ice, manufactured	87	714		47	123	31	321	8	210	1	60								
Iron and steel, blast furnaces	8	689						1	28	5	362	2	299						
Leather goods	51	1,428	7	29	64	5	68	4	125	3	202	2	389			1	580		
Leather, tanned, curried, and finished	21	1,205	1	5	5	3	53			7	511	5	636						
Lime	34	694		10	25	13	162	7	225	3	168	1	114						
Lumber and timber products	2,218	26,307	34	1,252	3,218	756	8,189	109	3,363	39	2,864	15	2,385	11	4,094			2	2,194
Marble and stone work	76	1,260	8	45	98	10	124	6	237	4	262	2	222	1	317				
Paper and wood pulp	8	1,260				1	19	2	93	1	78	3	433			1	637		
Peanuts, grading, roasting, cleaning, and shelling	25	1,505	1	3	8	2	35	6	180	8	559	5	723						
Printing and publishing	396	2,790	72	232	585	60	610	22	662	6	437	4	496						
Silk goods, including throwsters	9	691				2	38	3	131	1	53	3	469						
Tobacco manufactures	76	6,308	12	35	91	9	91	6	187	2	170	6	843	2	586	1	517	3	3,823
All other industries	724	18,938	40	393	890	161	1,776	68	2,153	31	2,253	25	3,550	1	366	3	2,313	2	5,637

Table 20—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.		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.
Total for cities [1]	1,089	41,363	81	457	1,219	279	3,153	126	3,886	66	4,803	47	6,782	20	6,740	6	4,127	7	10,653
ALEXANDRIA	49	1,504	3	23	63	9	112	6	174	2	113	5	684	1	358	.....	.....	.....	.....
DANVILLE	43	2,691	3	13	33	12	127	9	273	3	223	1	102	1	378	.....	.....	1	1,555
LYNCHBURG	73	3,474	6	26	81	16	217	10	293	6	477	3	385	6	2,021	.....	.....	.....	.....
NORFOLK	211	5,900	11	91	243	53	602	30	884	10	751	11	1,558	5	1,862	.....	.....	.....	.....
PETERSBURG	37	3,903	3	32	88	24	290	12	370	10	668	3	528	1	330	1	580	1	1,049
PORTSMOUTH	42	767	2	20	48	13	152	4	119	2	154	.....	.....	1	294	.....	.....	.....	.....
RICHMOND	466	17,282	47	192	519	120	1,298	46	1,483	27	2,019	22	3,197	4	1,207	5	3,547	3	4,012
ROANOKE	73	5,496	4	34	85	17	189	9	290	4	277	2	328	1	290	.....	.....	2	4,037
STAUNTON	45	346	2	26	59	15	166	.....	.....	2	121	.....	.....	.....	.....	.....	.....	.....	.....

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

Table 21 presents, for 1914, percentages based on the figures in Table 20; and for 1909, similar percentages for all industries combined and for individual industries in the state as a whole.

Table 21

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	7.2	14.7	10.2	12.8	16.3	11.7	7.3	19.8
	1909	7.3	16.9	11.2	12.9	15.2	10.5	12.9	13.2
Boots and shoes	1914	.....	.....	4.3	.....	30.1	65.6	.....	.....
	1909	0.1	0.2	1.1	5.2	10.2	12.7	29.6	40.9
Bread and other bakery products	1914	20.4	25.3	25.6	7.3	21.5	.....	.....	.....
	1909	23.0	28.2	28.2	8.8	11.8	.....	.....	.....
Brick, tile, and other clay products.	1914	2.2	25.0	23.4	39.2	10.3	.....	.....	.....
	1909	4.5	18.5	27.9	25.0	11.4	12.7	.....	.....
Canning and preserving	1914	38.8	36.4	18.1	6.7	.....	.....	.....	.....
	1909	32.6	39.1	16.6	11.6	.....	.....	.....	.....
Carriages and wagons and materials.	1914	9.0	29.9	14.8	23.0	23.3	.....	.....	.....
	1909	12.3	32.4	10.8	35.6	8.8	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	(1)	0.4	1.2	4.4	16.1	11.0	28.0	38.9
	1909	0.1	0.5	0.4	5.6	21.3	6.7	42.7	22.7
Clothing, men's, including shirts.	1914	1.3	8.1	9.8	45.0	35.7	.....	.....	.....
	1909	0.5	5.0	9.3	53.4	31.7	.....	.....	.....
Coke, not including gas-house coke.	1914	.....	2.0	18.5	16.4	25.9	37.1	.....	.....
	1909	0.3	1.7	8.4	18.6	48.9	22.2	.....	.....
Cooperage	1914	13.2	20.5	9.4	5.5	.....	51.5	.....	.....
	1909	30.6	13.6	.....	.....	55.8	.....	.....	.....
Copper, tin, and sheet-iron products.	1914	7.8	24.1	6.4	12.1	.....	49.6	.....	.....
	1909	5.5	26.3	6.8	7.3	.....	54.0	.....	.....
Cotton goods	1914	.....	.....	0.8	2.3	6.6	6.6	9.6	74.1
	1909	.....	.....	0.5	2.3	7.3	8.9	18.0	63.0
Fertilizers	1914	0.6	11.0	11.1	44.9	32.3	.....	.....	.....
	1909	1.0	6.9	17.0	34.6	27.7	12.9	.....	.....
Flour-mill and gristmill products	1914	64.0	26.5	3.0	6.6	.....	.....	.....	.....
	1909	61.5	25.0	6.7	6.7	.....	.....	.....	.....
Foundry and machine-shop products.	1914	3.6	17.3	17.8	14.9	.....	46.4	.....	.....
	1909	3.9	16.3	16.0	15.1	11.6	37.1	.....	.....
Furniture	1914	2.9	6.3	12.0	56.7	22.2	.....	.....	.....
	1909	3.2	5.1	27.8	51.2	12.7	.....	.....	.....
Gas, illuminating and heating	1914	3.8	13.1	23.5	33.6	26.1	.....	.....	.....
	1909	4.2	24.9	24.1	46.8	.....	.....	.....	.....
Glass	1914	.....	.....	.....	16.5	83.5	.....	.....	.....
	1909	.....	.....	.....	41.6	58.4	.....	.....	.....
Hosiery and knit goods	1914	.....	2.1	.....	3.3	23.2	71.5	.....	.....
	1909	.....	.....	1.2	15.3	48.2	35.3	.....	.....
Ice, manufactured	1914	17.2	45.0	29.4	8.4	.....	.....	.....	.....
	1909	27.4	41.7	30.9	.....	.....	.....	.....	.....
Iron and steel, blast furnaces	1914	.....	.....	4.1	52.5	43.4	.....	.....	.....
	1909	.....	1.5	3.8	46.7	48.0	.....	.....	.....
Leather goods	1914	4.5	4.8	8.8	14.1	27.2	.....	40.6	.....
	1909	3.2	5.6	9.1	4.1	35.1	.....	42.9	.....
Leather, tanned, curried, and finished.	1914	0.4	4.4	.....	42.4	52.7	.....	.....	.....
	1909	1.4	.....	19.4	17.1	62.0	.....	.....	.....
Lime	1914	3.6	23.3	32.4	24.2	16.4	.....	.....	.....
	1909	4.9	20.5	15.6	37.6	21.4	.....	.....	.....
Lumber and timber products	1914	12.2	31.1	12.8	10.9	9.1	15.6	.....	8.3
	1909	10.8	35.3	14.8	7.3	9.1	11.6	6.6	4.5
Marble and stone work	1914	7.8	9.8	18.8	20.8	17.6	25.2	.....	.....
	1909	5.0	9.3	19.4	23.5	14.2	28.6	.....	.....
Paper and wood pulp	1914	.....	1.5	7.4	6.2	34.4	.....	50.6	.....
	1909	0.2	1.3	.....	30.2	26.5	41.8	.....	.....
Peanuts, grading, roasting, cleaning, and shelling.	1914	0.5	2.3	12.0	37.1	48.0	.....	.....	.....
	1909	0.8	2.9	13.2	51.2	31.9	.....	.....	.....
Printing and publishing	1914	21.0	21.9	23.7	15.7	17.8	.....	.....	.....
	1909	21.4	25.2	21.5	27.1	4.8	.....	.....	.....
Silk goods, including throwsters.	1914	.....	5.5	19.0	7.7	67.9	.....	.....	.....
	1909	.....	.....	6.2	20.3	33.5	40.0	.....	.....
Tobacco manufactures	1914	1.4	1.4	3.0	2.7	13.4	9.3	8.2	60.6
	1909	1.5	1.9	4.2	9.9	14.6	10.6	40.4	16.9
All other industries	1914	4.7	9.4	11.4	11.9	18.7	1.9	12.2	29.8
	1909	5.4	8.6	11.4	10.5	11.4	5.9	16.0	30.7
Total for cities [2]	1914	2.9	7.6	9.4	11.6	16.4	16.3	10.0	25.8
ALEXANDRIA	1914	4.2	7.4	11.6	7.5	45.5	23.8	.....	.....
DANVILLE	1914	1.2	4.7	10.1	8.3	3.8	14.0	.....	57.8
LYNCHBURG	1914	2.3	6.2	8.4	13.7	11.1	58.2	.....	.....
NORFOLK	1914	4.1	10.2	15.0	12.7	26.4	31.6	.....	.....
PETERSBURG	1914	2.2	7.4	9.5	17.1	13.5	8.5	14.9	26.9
PORTSMOUTH	1914	6.3	19.8	15.5	20.1	.....	38.3	.....	.....
RICHMOND	1914	3.0	7.5	8.6	11.7	18.5	7.0	20.5	23.2
ROANOKE	1914	1.5	3.4	5.3	5.0	6.0	5.3	.....	73.5
STAUNTON	1914	17.1	48.0	.....	35.0	.....	.....	.....	.....

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

[2] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

Of the 5,508 establishments reported for all industries, 324, or 5.9 per cent, employed no wage earners. In these establishments the work was done by proprietors, firm members, or persons classed as salaried employees, or where wage earners were reported the number was so small and the term of employment so

short that in computing the average, as described in "Explanation of terms," the number was less than one person and the establishment was classed as one having "no wage earners." The proportions in the remaining groups were as follows: Those employing from 1 to 5 wage earners, 56.6 per cent; 6 to 20, 25.1 per cent; 21 to 50, 6.1 per cent; 51 to 100, 3.3 per cent; 101 to 250, 2.1 per cent; 251 to 500, six-tenths of 1 per cent; 501 to 1,000 and over 1,000, each, two-tenths of 1 per cent. The corresponding percentages for average number of wage earners—7.2, 14.7, 10.2, 12.8, 16.3, 11.7, 7.3, and 19.8, respectively—differ greatly from those given for number of establishments. The single group reporting the largest number of establishments is that for establishments employing from 1 to 5 wage earners and, while representing 56.6 per cent of the total number of establishments, comprised but 7.2 per cent of the total number of wage earners. The groups of establishments having more than 100 wage earners, although representing only 3.1 per cent of the total number of establishments, gave employment to 55.1 per cent of the total number of wage earners.

The single group reporting the largest number of employees is that for establishments employing over 1,000 wage earners, which gave employment to 20,364 wage earners, or 19.8 per cent of the total for all industries. This group shows an average of 1,851 wage earners per establishment. More than one-half of the total number employed in cotton goods and tobacco manufactures were in this group.

As an indication of the nature of the industries embracing the smaller establishments, it will be noticed that in bread and other bakery products; canning and preserving; cooperage; copper, tin, and sheet-iron products; flour-mill and gristmill products; ice; leather goods; lumber and timber products; marble and stone work; and printing and publishing the majority of the establishments employed from 1 to 5 wage earners.

For the cities of the state, 52 per cent of the wage earners in 1914 were reported for establishments employing 251 or more. The cities showing the largest percentages in these establishments were Roanoke, Danville, Lynchburg, Richmond, and Petersburg.

Engines and power.—Table 22 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 22

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total	9,466	7,388	3,326	337,567	283,928	176,998	100.0	100.0	100.0
Owned	5,738	5,727	3,326	300,425	270,160	172,213	89.0	95.2	97.3
Steam engines and turbines [1]	4,528	4,656	2,621	249,044	221,303	143,917	73.8	77.9	81.3
Internal-combustion engines	495	306	131	6,659	3,664	1,715	2.0	1.3	1.0
Water wheels, turbines, and motors	715	765	574	44,722	45,193	26,581	13.2	15.9	15.0
Rented	3,728	1,661	.....	37,142	13,768	4,785	11.0	4.8	2.7
Electric	3,728	1,661	(2)	37,142	13,356	4,403	11.0	4.7	2.5
Other	.....	.....	.....	.....	412	382	.....	0.1	0.2
Electric	6,581	2,936	.....	102,013	42,043	12,687	100.0	100.0	100.0
Rented	3,728	1,661	(2)	37,142	13,356	4,403	36.4	31.8	34.7
Generated by establishments reporting	2,853	1,275	454	64,871	28,687	8,284	63.6	68.2	65.3

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

The total primary power increased 53,639 horsepower, or 18.9 per cent, from 1909 to 1914, nearly one-half of which was due to the increase in rented power. The use of rented power, now wholly electric, has steadily increased since 1904, when it represented only 2.7 per cent of the total primary power reported, as compared with 4.8 per cent in 1909, and 11 per cent in 1914, whereas steam power has steadily decreased in importance during the decade. The horsepower of steam engines and turbines in 1914 formed 73.8 per cent of the total primary power as compared with 77.9 per cent in 1909 and 81.3 per cent in 1904.

The use of internal-combustion engines has increased rapidly during the decade. The horsepower, however, of such engines represented only 2 per cent of the primary power in 1914.

The horsepower of electric motors operated by current generated in the same establishment formed 63.6 per cent of the total electric power in 1914, as against 68.2 per cent in 1909.

During the five-year period 1909–1914 there was a slight decrease in number and horsepower of water wheels, turbines, and motors, which in 1914 formed 13.2 per cent of the total primary power.

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

Table 23 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 cities in the state having more than 10,000 inhabitants.

Table 23

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	14,981	2,823,292	558,028	128,690	697,699
Boots and shoes	.....	4,976	.....	.....	161
Bread and other bakery products	2,196	3,866	2,335	76	3,171
Brick, tile, and other clay products	60	112,474	4,157	853	.....
Canning and preserving	365	5,966	57	137	.....
Carriages and wagons and materials	91	4,962	3	215	240
Cars and general shop construction and repairs by steam-railroad companies	290	161,108	8,551	10,756	.....
Coke, not including gas-house coke	.....	1,292,094	.....	.....	.....
Confectionery and ice cream	241	4,017	403	50	1,083
Cotton goods	.....	56,429	.....	.....	.....
Dyestuffs and extracts	.....	32,356	.....	.....	.....
Fertilizers	954	56,284	.....	305	.....
Flour-mill and gristmill products	349	18,306	11	2,037	1,125
Foundry and machine-shop products	527	7,967	18,450	244	772
Furniture	166	4,639	.....	61	191
Gas, illuminating and heating	417	147,841	1,629	82,432	661,987
Glass	.....	16,350	.....	1,237	.....
Grease and tallow, not including lubricating greases	.....	9,233	.....	.....	.....
Hosiery and knit goods	.....	11,231	.....	28	.....
Ice, manufactured	.....	103,482	3,000	205	.....
Iron and steel, blast furnaces	.....	33,122	487,026	.....	.....
Leather, tanned, curried, and finished	.....	25,419	.....	211	133
Lime	3,846	34,746	2,924	3	.....
Liquors, distilled	.....	7,432	.....	154	.....
Liquors, malt	.....	18,027	.....	.....	.....
Lumber and timber products	27	67,430	353	754	.....
Marble and stone work	10	23,562	.....	105	160
Paper and wood pulp	.....	152,855	.....	600	.....
Peanuts, grading, roasting, cleaning, and shelling	27	9,194	22	10	150
Printing and publishing	1,144	3,671	98	325	12,232
Slaughtering and meat packing	.....	17,400	.....	29	168
Tobacco manufactures	325	26,357	2	22	160
All other industries	3,946	350,496	29,007	27,841	15,966
Total for cities [1]	7,128	487,696	167,888	108,168	695,084
ALEXANDRIA	225	39,192	41	450	190
DANVILLE	124	27,154	239	157	1,038
LYNCHBURG	45	37,331	7,899	52	703
NORFOLK	576	86,017	12,416	24,025	4,613
PETERSBURG	52	23,162	922	1,542	1,134
PORTSMOUTH	702	7,933	529	2,976	1,635
RICHMOND	5,199	173,231	10,234	59,685	683,187
ROANOKE	42	89,916	134,761	17,487	2,502
STAUNTON	163	3,760	847	1,794	22

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

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 five important industries in Virginia are here presented. Statistics for power laundries are also given.

Flour-mill and gristmill products.—Table 24 gives the quantities and values of flour-mill and gristmill products for 1914, 1909, and 1904.

Table 24

	1914	1909	1904
Total value	$18,084,413	$17,598,045	$13,832,299
Wheat flour:			
Barrels	2,161,767	1,898,712	1,777,169
Value	$10,702,588	$10,263,031	$8,855,726
Rye flour:			
Barrels	4,746	3,204	2,477
Value	$21,829	$12,839	$6,866
Buckwheat flour:			
Pounds	532,980	1,449,417	564,320
Value	$16,452	$35,080	$14,336
Barley meal:			
Pounds	734,930	338,770	150,400
Value	$12,680	$5,657	$2,212
Corn meal and corn flour:			
Barrels	1,099,215	1,410,351	1,218,294
Value	$3,861,142	$4,456,117	$2,844,946
Bran and middlings:			
Tons	91,142	109,142	103,028
Value	$2,457,357	$2,725,432	$2,059,768
Feed and offal:			
Tons	31,466		
Value	$933,213		
All other cereal products, value	$12,754	$70,337	$34,388
All other products, value	$66,398	$29,552	$14,057

The two most important cereals consumed in the mills of the state in 1914 were wheat and corn. For the five-year period 1909–1914 the quantity of wheat used in the flour and grist mills increased 5.8 per cent, but for corn there was a decrease of 12.8 per cent.

Wheat flour constituted in 1914, 59.2 per cent of the total value of products, 58.3 per cent in 1909, and 64 per cent in 1904. When measured by quantity of production, a comparison with 1909 shows that wheat flour increased 13.9 per cent; rye flour, 48.1 per cent; barley meal, 116.9 per cent; and bran and middlings and feed and offal, 12.3 per cent. The equipment of the mills was 1,630 stands of rolls, 726 runs of stone, and 205 attrition mills. Twenty-three of the establishments manufactured barrels and one made sacks.

Leather, tanned, curried, and finished.—The following table gives the quantity and value of the principal kinds of leather produced in the state of Virginia in 1914, 1909, and 1904:

Table 25

	1914	1909	1904
Total value	$9,834,439	$8,266,850	$5,829,812
Leather:			
Oak sole—			
Sides	936,781	673,757	563,907
Value	$7,535,199	$4,878,935	$2,926,054
Belting and harness—			
Sides	184,711	414,526	139,105
Value	$1,475,819	$2,378,897	$590,059
All other, value	$589,910	$701,168	$2,213,353
All other products, value	$233,511	$307,850	$100,346

Oak sole leather predominated and formed 76.6 per cent of the total value of leather products for the state in 1914. Its production increased by 263,024 sides, or 39 per cent, as compared with 1909. Belting and harness and all other leather combined decreased $1,014,336, or 32.9 per cent, during the five-year period 1909–1914. The production of rough leather and custom tanning have almost entirely ceased, though formerly of some importance in the state.

Iron and steel, blast furnaces.—Table 26 shows the quantity and value of the pig iron produced by the blast furnaces of the state in 1914, 1909, and 1904:

Table 26	1914	1909	1904
Total value	$3,772,382	$5,389,287	$3,343,427
Pig iron:			
Tons	293,077	387,328	279,103
Value	$3,753,082	$5,324,997	$3,333,273
All other products, value	$19,300	$64,290	$10,154

The statistics show the effect of the industrial depression of 1914. The pig iron product in 1914 was nearly 25 per cent below that of 1909, in tonnage, and only a little greater than that of 1904, which was also a poor year. The blast-furnace equipment of the state at the close of the year 1914, active and idle plants, comprised 22 furnaces of 1,018,000 tons annual capacity, according to the annual statistical report of the American Iron and Steel Institute. Hence the year's output was not quite 30 per cent of the capacity of all furnaces. The product was chiefly foundry iron, forge or mill and all other grades, amounting to but 8,531 tons. Coke iron constituted nearly 99 per cent and charcoal iron a little over 1 per cent of the total tonnage.

Printing and publishing.—The relative importance of the different classes of newspapers and periodicals is probably best indicated by their aggregate circulation. Table 27 gives the number of the different classes of publications in Virginia, and the aggregate circulation per issue, for 1914, 1909, and 1904.

Table 27 — Period of issue	Number of publications			Aggregate circulation per issue		
	1914	1909	1904	1914	1909	1904
Total	265	258	241	1,232,608	1,019,968	885,391
Daily	32	32	31	233,975	174,149	131,099
Sunday	9	8	10	117,531	79,258	62,688
Semiweekly and triweekly	6	12	8	13,385	16,789	17,000
Weekly	165	161	149	429,016	392,100	352,856
Monthly	31	28	30	232,195	183,605	167,448
Quarterly	16	7	10	201,475	167,111	150,000
All other classes [1]	6	10	3	5,031	6,950	4,300

[1] Of the "all other" classes of publications, three were issued bimonthly, two semiannually, and one semimonthly.

The total number of publications in 1914 was 265, compared with 258 in 1909; 32, or 12.1 per cent, were dailies, and 165, or 62.3 per cent, weeklies. Of the total circulation in 1914, dailies constituted 19 per cent; weeklies, 34.8 per cent; and monthlies, 18.8 per cent. All of the publications were in the English language, except two, one daily and one weekly, which were printed in German. All classes made gains in circulation during both five-year periods, except the semiweeklies and triweeklies, which show a decrease. The circulation of the dailies increased from 174,149 in 1909 to 233,975 in 1914, a gain of 59,826, or 34.5 per cent; and that of the Sunday publications, from 79,258 to 117,531, an increase of 38,273, or 48.3 per cent. The circulation of the weeklies increased from 392,100 to 429,016, a gain of 36,916, or 9.4 per cent.

Fertilizers.—The following table shows the quantity and value of the materials used and the quantity and value of the different kinds of products reported for this industry, for 1904, 1909, and 1914.

Table 28	1914	1909	1904
MATERIALS.			
Total cost	$7,995,921	$5,389,110	$3,240,675
Ammoniates:			
Tons	194,312	(1)	(1)
Cost	$2,041,289	$2,668,909	$761,163
Cottonseed meal—			
Tons	10,762		
Cost	$192,061		
Tankage and ammoniates, not elsewhere specified—		59,635	(1)
Tons	56,813	$1,043,117	$567,530
Cost	$1,024,731		
Fish—			
Tons	126,737	(1)	(1)
Cost	$824,497	$1,625,792	$193,633
Ammonium sulphate:			
Tons	18,414	6,417	1,119
Cost	$1,125,171	$378,451	$73,634
Cyanamid or lime nitrogen:			
Tons	2,088	(1)	(1)
Cost	$92,581	(1)	(1)
Nitrate of soda:			
Tons	11,611	4,882	5,473
Cost	$546,069	$216,431	$225,697
Phosphate rock:			
Tons	130,199	75,493	69,755
Cost	$748,890	$465,220	$370,928
Bones, raw, steamed, and ground:			
Tons	4,206	(1)	(1)
Cost	$108,344	(1)	(1)
Pyrites:			
Tons	48,378	22,283	31,142
Cost	$231,464	$138,555	$145,927
Sulphuric acid:			
Purchased—			
Tons	23,612	21,250	14,343
Cost	$132,886	$93,528	$83,507
Made and consumed, tons	93,071	53,253	(1)
Superphosphate:			
Purchased—			
Tons	63,228	30,877	14,003
Cost	$492,450	$291,329	$115,281
Made and consumed (acid phosphate), tons	187,940	96,417	(1)
Kainit:			
Tons	24,798	29,941	26,109
Cost	$193,366	$256,883	$256,915
Potash salts:			
Tons	33,697	8,121	3,277
Cost	$696,480	$266,368	$127,190
All other materials, cost	$1,586,931	$613,436	$1,080,433
PRODUCTS.			
Total value	$11,579,589	$8,253,081	$4,659,281
The fertilizer industry, value	$11,350,120	$8,034,543	$4,659,281
Subsidiary fertilizer products from other industries, value	$229,469	$218,538	(1)
Fertilizers:			
Tons	540,328	373,407	248,347
Value	$9,522,207	$6,779,325	$3,879,385
Complete and ammoniated fertilizers—			
Tons	375,256	197,272	165,951
Value	$7,576,028	$4,128,046	$3,028,765
Superphosphates—			
Tons	76,130	68,389	52,207
Value	$669,654	$794,367	$502,016
Other fertilizers—			
Tons	88,942	107,746	30,189
Value	$1,276,525	$1,856,912	$348,604
Fish scrap:			
Tons	27,906	32,199	(1)
Value	$947,902	$998,761	(1)
Oil:			
Gallons	1,777,369	605,755	(1)
Value	$548,522	$142,835	(1)
All other products, value	$560,958	$332,160	$779,896

[1] Figures not available.

The total production of fertilizers in 1914 was 540,328 tons, of which complete and ammoniated fertilizers constituted 69.4 per cent, superphosphates 14.1 per cent, and other fertilizers 16.5 per cent.

In 1914 the fertilizer industry gave employment to 2,470 wage earners, an increase of 26.3 per cent over the number reported for 1909, and during the same period the value of products increased $3,315,577, or 41.3 per cent.

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for all manufacturing industries. Table 29 summarizes these statistics for Virginia for 1914 and 1909.

Table 29

	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase[1] 1909–1914.
	1914	1909	
Number of establishments	71	57	.....
Persons engaged	1,965	1,523	29.0
Proprietors and firm members	76	63	.....
Salaried employees	195	109	78.9
Wage earners (average number)	1,694	1,351	25.4
Primary horsepower	1,918	1,199	60.0
Capital	$1,055,152	$835,607	26.3
Salaries and wages	691,603	503,946	37.2
Salaries	167,266	89,569	86.7
Wages	524,337	414,377	26.5
Paid for contract work	16,503	296	5,475.3
Rent and taxes	38,532	22,552	70.9
Cost of materials	285,809	173,097	65.1
Amount received for work done	1,453,912	1,003,191	44.9

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

In 1914 Virginia ranked twenty-fifth among the states in amount received for work done and twenty-second in number of persons engaged in the industry; in 1909 it ranked twenty-sixth and twenty-third, respectively. The table shows increases in all items for the five-year period. Establishments owned by individuals reported 33.7 per cent of the amount received for work done; those owned by corporations, 45.6 per cent; and those under other forms of ownership, 20.7 per cent. For 1909 these percentages were 41.1, 32, and 26.9 per cent, respectively.

Table 30 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 30

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January	1,601	1,283	90.6	90.9
February	1,608	1,275	91.0	90.3
March	1,613	1,279	91.3	90.6
April	1,674	1,314	94.7	93.1
May	1,699	1,370	96.2	97.0
June	1,727	1,390	97.7	98.4
July	1,761	1,412	99.7	100.0
August	1,751	1,401	99.1	99.2
September	1,767	1,395	100.0	98.8
October	1,718	1,376	97.2	97.5
November	1,718	1,361	97.2	96.4
December	1,700	1,354	96.2	95.9

Table 31 gives statistics as to kinds and amounts of power used in the laundries of the state in 1914 and 1909, together with percentages of increase for the five-year period.

Table 31

KIND.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase,[1] 1909–1914.
	1914	1909	1914	1909	
Primary power, total	149	114	1,918	1,199	60.0
Owned	67	55	1,633	1,048	55.8
Steam	66	53	1,615	1,031	56.6
Internal combustion	1	2	18	17	.....
Rented	82	59	285	151	88.7
Electric	82	59	247	151	63.6
Other	.....	.....	38	.....	.....
Electric—Generated by establishments reporting	62	.....	126	.....	.....

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

Table 32 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 32

KIND.	Unit.	QUANTITY.		Per cent of increase,[1] 1909–1914.
		1914	1909	
Anthracite coal	Ton, 2,240 lbs	1,372	84	.....
Bituminous coal	Ton, 2,000 lbs	18,716	12,906	45.0
Coke	Ton, 2,000 lbs	.....	2,515	.....
Oil	Barrels	29	9	.....
Gas	1,000 cubic feet	6,377	7,215	−11.6

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

GENERAL TABLES.

Table 33 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, exclusive of Newport News, similar data for all industries combined.

Table 34 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 for each of the cities in the state having from 10,000 to 50,000 inhabitants, exclusive of Newport News, similar data for all industries combined.

TABLE 33.—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	5,508	102,820	337,567	$44,873	$155,320	$264,039
	1909	5,685	105,676	283,928	38,154	125,583	219,794
	1904	3,187	80,285	176,998	27,943	83,649	148,857
Agricultural implements.	1914	20	269	539	122	168	484
	1909	16	272	503	117	244	516
	1904	11	314	383	116	182	404
Boots and shoes	1914	8	1,555	1,343	716	2,561	3,709
	1909	10	2,711	1,410	805	4,020	5,809
	1904	6	1,738	515	369	1,915	2,627
Boxes and cartons, paper.	1914	14	499	406	151	289	726
	1909	10	558	193	128	153	413
	1904	8	549	127	104	105	324
Bread and other bakery products.	1914	140	1,033	1,161	559	2,188	3,697
	1909	135	870	761	418	1,721	2,766
	1904	80	569	221	236	1,061	1,606
Brick, tile, and other clay products.	1914	64	1,663	5,852	614	513	1,493
	1909	86	2,090	5,540	732	510	1,922
	1904	84	1,964	4,977	680	429	1,804
Butter	1914	13	90	245	48	476	608
	1909	8	10	135	4	35	44
	1904	4	3	14	1	16	20
Canning and preserving.	1914	[1] 443	2,169	3,907	360	1,632	2,360
	1909	325	1,860	1,382	277	1,208	1,854
	1904	[2] 170	1,071	1,048	181	790	1,218
Carriages and wagons and materials.	1914	119	1,246	2,229	586	1,539	2,748
	1909	130	1,329	2,032	529	1,283	2,485
	1904	102	1,332	1,735	473	1,196	2,292
Cars and general shop construction and repairs by electric-railroad companies.	1914	11	317	458	207	156	426
	1909	7	117	121	72	82	162
	1904	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914	32	10,375	6,980	6,607	10,762	18,216
	1909	28	7,588	6,412	4,082	5,255	9,956
	1904	29	7,345	4,117	3,663	4,577	8,693
Clothing, men's, including shirts.	1914	32	1,282	340	383	1,792	2,765
	1909	23	1,160	346	288	1,160	1,819
	1904	20	891	239	201	642	1,142
Coffee and spice, roasting and grinding.	1914	9	75	281	29	918	1,137
	1909	10	78	263	36	925	1,206
	1904	4	28	53	8	184	246
Coke, not including gas-house coke.	1914	11	852	2,057	384	1,070	1,607
	1909	16	1,425	1,760	543	1,818	2,416
	1904	13	1,094	4,830	440	1,183	1,885
Confectionery	1914	32	480	551	165	1,401	1,952
	1909	33	341	341	103	1,103	1,525
	1904	17	226	214	68	474	688
Cooperage	1914	110	1,390	1,340	480	1,409	2,231
	1909	114	788	1,236	251	662	1,090
	1904	42	601	1,029	170	451	793
Copper, tin, and sheet-iron products.	1914	[3] 37	528	499	265	1,002	1,632
	1909	43	818	296	361	1,061	2,048
	1904	.....	.....	.....	.....	.....	.....
Cotton goods	1914	9	6,310	34,220	$2,174	$6,057	$10,216
	1909	10	5,057	19,750	1,480	4,699	7,490
	1904	10	3,456	9,340	884	2,802	4,484
Dyestuffs and extracts	1914	13	429	4,309	161	1,138	1,677
	1909	14	346	4,209	123	686	1,200
	1904	12	424	4,400	137	393	737
Fertilizers	1914	57	2,470	19,577	1,051	7,996	11,350
	1909	45	1,956	5,560	760	5,389	8,035
	1904	37	1,801	5,643	571	3,241	4,659
Flour-mill and grist-mill products.	1914	533	1,082	23,086	463	15,390	18,084
	1909	458	1,014	21,454	398	15,164	17,598
	1904	365	957	16,082	349	12,171	13,832
Foundry and machine-shop products.	1914	[4] 103	2,444	7,828	1,413	3,565	6,906
	1909	110	2,798	4,012	1,385	3,148	5,727
	1904	74	2,095	2,671	917	1,404	3,393
Furniture	1914	38	1,221	2,783	520	1,080	2,085
	1909	34	900	2,326	349	724	1,438
	1904	26	713	1,500	229	382	803
Gas, illuminating and heating.	1914	22	533	1,488	306	750	2,150
	1909	21	378	1,116	217	431	1,472
	1904	19	268	357	136	285	980
Glass	1914	4	606	286	328	258	690
	1909	5	524	245	306	251	682
	1904	4	472	100	264	169	549
Grease and tallow, not including lubricating greases.	1914	5	213	793	106	469	671
	1909	3	134	225	61	155	220
	1904	3	65	375	32	76	136
Hosiery and knit goods	1914	13	2,272	1,343	751	2,108	3,516
	1909	11	1,715	1,079	503	1,467	2,463
	1904	14	1,842	1,211	430	1,326	2,108
Ice, manufactured	1914	87	714	13,057	378	501	1,796
	1909	74	475	8,553	220	268	1,143
	1904	48	346	4,604	138	172	636
Iron and steel, blast furnaces.	1914	8	689	15,210	352	3,282	3,772
	1909	14	1,320	17,320	546	4,418	5,389
	1904	10	1,081	12,465	346	2,717	3,343
Leather goods	1914	[5] 51	1,428	1,105	624	1,943	3,464
	1909	31	1,487	958	527	1,901	3,492
	1904	22	1,363	599	479	1,148	2,120
Leather, tanned, curried, and finished.	1914	21	1,205	3,648	525	8,218	9,834
	1909	39	1,590	4,223	589	6,445	8,267
	1904	44	1,055	2,508	358	4,719	5,830
Lime	1914	34	694	1,729	273	471	995
	1909	35	716	924	232	300	856
	1904	20	418	371	148	235	497
Liquors, distilled	1914	47	123	1,111	52	475	1,850
	1909	65	126	1,557	48	233	1,572
	1904	98	114	999	30	84	431
Liquors, malt	1914	6	310	2,810	240	533	1,545
	1909	6	354	3,176	185	411	1,616
	1904	6	272	2,172	151	292	1,201

[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] Includes "tinware, not elsewhere specified."
[4] Includes "automobile repairing;" "gas machines;" "iron and steel, cast-iron pipe;" "pumps, steam;" "steam fittings and steam and hot-water heating apparatus;" and "structural ironwork, not made in steel works or rolling mills."
[5] Includes "saddlery and harness" and "trunks and valises."

TABLE 33.—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.	Cost of materials.	Value of products.
					Expressed in thousands.		
Lumber and timber products.	1914	[1] 2,218	26,307	85,754	$9,621	$13,365	$32,449
	1909	2,617	33,287	99,474	9,962	13,892	35,855
	1904	938	15,134	44,212	4,972	6,891	18,727
Marble and stone work.	1914	76	1,260	3,676	568	388	1,404
	1909	70	1,585	4,553	651	351	1,306
	1904	15	587	933	234	168	595
Mattresses and spring beds.	1914	22	159	283	75	227	445
	1909	18	103	181	41	129	244
	1904	14	73	90	28	94	145
Mineral and soda waters	1914	88	290	465	123	581	1,197
	1909	76	222	227	78	275	622
	1904	28	105	55	38	61	195
Paper and wood pulp...	1914	8	1,260	13,585	692	3,424	5,501
	1909	9	912	9,770	412	2,148	3,657
	1904	9	993	7,800	363	1,789	3,034
Peanuts, grading, roasting, cleaning, and shelling.	1914	25	1,505	2,973	328	9,518	10,981
	1909	25	1,516	2,271	258	7,126	7,933
	1904	26	1,332	1,562	196	6,149	7,055
Printing and publishing	1914	[2] 396	2,790	2,881	1,596	2,067	7,070
	1909	369	2,555	2,210	1,307	1,405	5,370
	1904	309	2,101	1,309	903	973	3,522
Silk goods, including throwsters.	1914	9	691	1,798	210	1,094	1,773
	1909	7	819	1,858	261	1,011	1,544
Slaughtering and meat packing.	1914	21	396	3,084	$212	$3,725	$4,362
	1909	24	342	1,491	118	4,057	4,601
	1904	[3] 14	158	650	69	1,746	1,996
Stoves and ranges.....	1914	5	324	555	208	187	528
	1909	9	363	464	206	242	683
	1904	4	299	300	186	181	537
Tobacco manufactures..	1914	76	6,308	3,259	2,165	12,102	30,096
	1909	104	7,882	3,591	2,162	11,189	25,385
	1904	143	7,931	3,385	1,829	6,664	16,768
Upholstering materials, excelsior.	1914	14	177	1,610	67	145	275
	1909	10	129	1,235	41	78	176
	1904	10	109	1,040	37	71	162
Vinegar and cider.....	1914	12	27	123	12	185	271
	1909	28	32	286	10	213	358
	1904	6	17	54	4	31	61
Wood, turned and carved.	1914	19	223	1,223	74	138	340
	1909	19	135	737	38	71	151
	1904	13	97	552	29	28	79
Woolen goods.....	1914	12	431	911	168	420	790
	1909	16	542	1,352	176	567	999
	1904	24	649	1,656	179	760	1,250
All other industries.....	1914	361	14,106	52,816	7,361	25,644	40,165
	1909	315	12,257	34,810	5,758	15,499	26,219
	1904	232	16,233	28,501	6,567	13,222	25,250

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.	Cost of materials.	Value of products.
NORFOLK—All industries.	1914	211	5,900	13,038	$2,534	$8,308	$14,955
	1909	215	4,749	20,408	2,041	5,482	10,341
	1904	121	2,935	.....	1,091	3,202	5,739
Bread and other bakery products.	1914	15	199	259	129	530	836
	1909	17	178	210	95	350	595
	1904	13	112	.....	63	204	335
Ice, manufactured.....	1914	8	108	3,572	86	115	419
	1909	6	79	1,500	43	63	225
	1904	4	60	.....	24	51	132
Lumber and timber products.	1914	[4] 13	1,173	2,672	468	1,033	1,912
	1909	13	1,052	14,082	498	748	1,515
	1904	[3] 7	264	.....	103	436	671
Mineral and soda waters.	1914	6	36	52	14	93	178
	1909	5	27	22	13	63	127
Printing and publishing	1914	[5] 35	224	296	155	247	849
	1909	33	251	255	155	151	684
	1904	22	233	.....	129	106	416
Tobacco, cigars and cigarettes.	1914	15	48	.....	30	44	106
	1909	13	79	.....	42	59	139
	1904	9	76	.....	38	41	124
All other industries.....	1914	119	4,112	6,187	1,652	6,246	10,655
	1909	128	3,083	4,339	1,195	4,048	7,056
	1904	66	2,190	.....	734	2,364	4,061
RICHMOND—All industries.	1914	466	17,282	33,940	8,440	30,559	62,491
	1909	380	14,849	20,087	5,821	24,252	47,358
	1904	300	12,444	.....	4,150	13,763	27,745
Boxes and cartons, paper.	1914	9	360	301	110	129	501
	1909	6	444	160	99	90	276
	1904	4	466	.....	85	50	223
RICHMOND—Con. Bread and other bakery products.	1914	21	446	459	$231	$925	$1,615
	1909	23	408	334	191	839	1,291
	1904	18	266	.....	100	521	769
Carriages and wagons...	1914	19	117	101	79	96	257
	1909	14	124	53	71	104	286
	1904	12	122	.....	55	45	140
Confectionery.....	1914	10	154	188	56	423	698
	1909	10	156	129	43	254	400
	1904	6	86	.....	28	186	274
Ice, manufactured.....	1914	8	94	2,003	51	71	286
	1909	6	60	1,452	33	37	199
	1904	4	74	.....	33	26	109
Leather goods.....	1914	[6] 13	348	278	198	738	1,210
	1909	12	387	210	160	594	1,045
	1904	[3] 5	83	.....	28	144	236
Lumber and timber products.	1914	[4] 17	689	2,410	370	716	1,319
	1909	15	632	1,726	286	656	1,187
	1904	13	407	.....	186	377	718
Marble and stone work..	1914	13	71	130	53	32	113
	1909	9	53	54	36	34	92
	1904	[7] 3	72	.....	37	37	89
Mineral and soda waters	1914	10	47	62	29	151	271
	1909	7	23	17	12	25	64
Printing and publishing	1914	[5] 103	1,334	1,479	758	1,213	3,811
	1909	82	1,089	941	585	732	2,786
	1904	71	897	.....	390	531	1,747
All other industries.....	1914	243	13,622	26,529	6,505	26,065	52,410
	1909	196	11,473	15,011	4,305	20,887	39,732
	1904	164	9,971	.....	3,208	11,846	23,440

[1] Includes "boxes, wooden packing;" "lumber, planing-mill products, not including planing mills connected with sawmills;" and "window and door screens."
[2] Includes "bookbinding and blank-book making;" "engraving, steel and copper plate, including plate printing:" and "lithographing."
[3] Excludes statistics for one establishment, to avoid disclosure of individual operations.
[4] Includes "boxes, wooden packing," and "lumber, planing-mill products, not including planing mills connected with sawmills."
[5] Includes "engraving, steel and copper plate, including plate printing."
[6] Includes "saddlery and harness" and "trunks and valises."
[7] Excludes statistics for two establishments, to avoid disclosure of individual operations.

TABLE 33.—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[1]—ALL INDUSTRIES COMBINED.							
ALEXANDRIA	1914	49	1,504	3,375	$858	$1,960	$3,660
	1909	54	1,470	3,250	697	2,731	4,420
	1904	51	1,291	.....	655	992	2,187
DANVILLE	1914	43	2,691	7,209	1,042	3,212	5,558
	1909	52	3,076	4,634	963	3,236	5,389
	1904	34	3,018	.....	811	2,766	4,775
LYNCHBURG	1914	73	3,474	6,505	1,545	6,511	9,919
	1909	82	4,026	7,952	1,544	6,468	10,188
	1904	55	2,534	.....	789	2,882	4,965
PETERSBURG	1914	87	3,903	6,549	1,392	8,393	12,610
	1909	72	3,887	5,239	1,107	5,759	8,896
	1904	72	3,288	.....	866	3,794	5,891
PORTSMOUTH	1914	42	767	2,664	$347	$1,017	$1,731
	1909	31	842	1,777	307	776	1,528
	1904	28	551	.....	185	486	945
ROANOKE	1914	73	5,496	11,708	3,326	11,198	16,582
	1909	62	3,544	6,774	1,718	4,044	7,261
	1904	54	3,089	.....	1,526	3,232	5,545
STAUNTON	1914	45	346	850	149	1,087	1,448
	1909	44	339	601	118	896	1,223

[1] Statistics for Newport News are omitted, to avoid disclosure of individual operations.

TABLE 34.—DETAIL STATEMENT FOR THE STATE AND FOR CITIES OF 50,000 INHABITANTS

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

	Industry and city.	Number of establishments.	Persons engaged in the industry. Total.	Proprietors and firm members.[1]	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	All industries	5,508	118,109	6,125	3,290	4,744	1,130	102,820	Se 108,590	De 93,522	(2)	(2)	(2)	(2)	(2)	$261,501,288
2	Agricultural implements	20	318	18	16	10	5	269	Fe 321	No 243	252	250	.....	2	.....	561,896
3	Automobile repairing	3	6	1	.....	.....	.....	5	[3] 5	[3] 5	5	5	.....	.....	.....	10,967
4	Awnings, tents, and sails	10	60	5	4	1	2	48	Je 75	Ja 35	48	35	13	.....	.....	49,048
5	Bookbinding and blank-book making	6	226	9	3	2	3	209	Au 232	De 191	191	68	116	2	5	253,190
6	Boots and shoes	8	1,738	6	39	45	93	1,555	Ja 1,730	De 1,140	1,540	964	509	46	21	2,452,888
7	Boxes and cartons, paper	14	570	7	33	21	10	499	Fe 519	Jy 472	507	181	316	5	5	611,182
8	Boxes, wooden packing	21	2,102	10	55	37	11	1,989	Ap 2,247	Au 1,648	2,233	1,688	355	155	35	2,423,479
9	Bread and other bakery products	140	1,386	148	46	112	47	1,033	Je 1,067	Fe 996	1,078	932	130	16	.....	1,725,547
10	Brick, tile, and other clay products	64	1,800	49	58	22	8	1,663	Je 2,294	Fe 901	1,984	1,938	.....	46	.....	3,634,956
11	Brooms	12	57	11	2	1	.....	43	Mh [4] 45	No [4] 40	43	39	1	3	.....	27,576
12	Butter	13	119	5	8	11	5	90	Jy 103	Ja [4] 82	91	87	.....	4	.....	183,909
13	Canning and preserving, fish	19	244	14	11	7	1	211	Ap 561	Mh 47	577	341	186	40	10	339,742
14	Canning and preserving, fruits and vegetables.	412	2,492	642	48	7	2	1,793	.....	.....	8,921	2,660	4,785	518	958	1,507,396
15	Canned vegetables	402	2,389	626	42	7	1	1,713	Se 8,372	Ja 6	8,656	2,527	4,658	515	956	1,234,535
16	Canned fruits	7	77	15	5	.....	1	56	Se 135	De 9	167	98	64	3	2	242,376
17	Dried fruits	3	26	1	1	.....	.....	24	Oc 98	Se 34	98	35	63	.....	.....	30,485
18	Carriage and wagon materials	6	197	3	6	7	1	180	Je 204	De 150	151	149	.....	2	.....	350,209
19	Carriages, wagons, and repairs	113	1,327	130	57	63	11	1,066	.....	.....	967	958	4	5	.....	3,084,193
20	Carriages and wagons	96	1,274	111	57	63	11	1,032	Ja 1,198	No 787	932	923	4	5	.....	3,049,718
21	Repair work only	17	53	19	.....	.....	.....	34	Au [4] 36	Ja [4] 31	35	35	.....	.....	.....	34,475
22	Cars and general shop construction and repairs by electric-railroad companies.	11	338	.....	15	6	.....	317	Jy 345	Fe 300	295	292	3	.....	.....	7,019,648
23	Cars and general shop construction and repairs by steam-railroad companies.	32	11,027	.....	130	512	10	10,375	Mh 10,613	Au 10,050	10,429	10,419	10	.....	.....	6,258,149
24	Clothing, men's and youths'	29	1,383	17	40	81	21	1,224	Mh 1,460	Se 971	1,220	142	1,067	5	6	1,490,127
25	Coffee and spice, roasting and grinding	9	176	6	12	68	15	75	De 78	Oc [4] 71	78	56	19	3	.....	412,921
26	Coke, not including gas-house coke	11	922	.....	17	52	1	852	Fe 1,000	Oc. 693	971	971	.....	.....	.....	3,908,951
27	Confectionery and ice cream	66	847	56	51	99	24	617	.....	.....	707	449	252	6	.....	1,386,225
28	Confectionery and chewing gum	32	616	23	31	69	13	480	De 529	Ja 425	519	286	233	.....	.....	929,396
29	Ice cream	34	231	33	20	30	11	137	De 175	Ja 103	188	163	19	6	.....	456,829
30	Cooperage	110	1,640	187	38	21	4	1,390	.....	.....	1,919	1,704	163	43	9	1,244,590
31	Hogsheads and barrels	106	1,621	183	38	21	4	1,375	Je [4] 1,761	Au 811	1,891	1,681	163	38	9	1,232,410
32	All other	4	19	4	.....	.....	.....	15	Je 25	De 2	28	23	.....	5	.....	12,180
33	Copper, tin, and sheet-iron work	34	247	41	15	19	4	168	Jy 194	Fe [4] 149	191	190	1	.....	.....	410,083
34	Cotton goods	9	6,379	.....	23	44	2	6,310	De 6,713	Au 5,857	6,817	4,431	2,088	169	129	18,437,898
35	Dairymen's, poultrymen's, and apiarists' supplies.	15	114	19	5	6	1	83	Mh 128	Se 56	86	80	.....	6	.....	166,141
36	Druggist's preparations	5	64	3	7	12	2	40	Au 47	Ja 34	42	11	28	2	1	91,068
37	Dyestuffs and extracts	13	480	6	27	13	5	429	De 455	Ja 377	489	483	.....	6	.....	2,002,230
38	Engraving, steel and copper plate, including plate printing.	4	28	3	.....	.....	3	22	Oc [4] 23	Ja [4] 21	23	14	7	2	.....	8,550
39	Fertilizers	57	2,846	7	126	209	34	2,470	Ap 3,246	De 1,227	3,217	3,215	.....	2	.....	20,559,658
40	Flour-mill and gristmill products	533	1,995	682	118	75	38	1,082	Au 1,118	My 1,036	1,126	1,123	2	1	.....	8,911,364
41	Food preparations	11	74	10	6	6	3	49	Fe 58	Au [4] 41	57	49	2	1	5	141,351
42	Foundry and machine-shop products	83	1,187	84	71	53	16	963	.....	.....	970	967	1	2	.....	2,997,570
43	Boiler and machine shops	69	1,005	66	64	48	14	813	Ja 845	No 780	829	827	1	1	.....	2,686,162
44	Foundries	14	182	18	7	5	2	150	Je 175	De [4] 137	141	140	.....	1	.....	311,408
45	Furniture	38	1,361	32	50	45	13	1,221	.....	.....	1,171	1,090	4	77	.....	1,972,474
46	Wood, other than rattan and willow.	34	1,242	28	47	44	10	1,113	Mh 1,187	De 1,038	1,064	983	4	77	.....	1,843,407
47	Store and office fixtures	4	119	4	3	1	3	108	Ap 115	Ja 93	107	107	.....	.....	.....	129,067
48	Gas, illuminating and heating	22	650	1	34	56	26	533	Je 680	Oc 467	488	488	.....	.....	.....	7,407,783
49	Glass	4	624	.....	11	3	4	606	Ap 790	Au 79	669	618	22	29	.....	543,554
50	Grease and tallow, not including lubricating greases.	5	241	2	13	10	3	213	Se 240	De 193	193	193	.....	.....	.....	387,270
51	Hosiery and knit goods	13	2,335	7	21	26	9	2,272	Ap 2,361	Au 2,150	2,255	785	1,215	98	157	2,014,390
52	Ice, manufactured	87	941	68	95	55	9	714	Jy 1,020	Ja 502	755	737	.....	18	.....	4,215,294
53	Iron and steel, blast furnaces	8	743	.....	24	30	.....	689	Mh 844	No 371	720	718	.....	2	.....	4,250,389
54	Leather, tanned, curried, and finished	21	1,286	16	32	27	6	1,205	Je 1,317	De 1,115	1,145	1,108	35	2	.....	9,289,330
55	Lime	34	787	19	42	24	8	694	Ap 827	De 547	647	647	.....	.....	.....	1,253,823
56	Liquors, distilled	47	200	44	21	8	4	123	.....	.....	192	190	2	.....	.....	296,220
57	Whisky	15	139	10	21	8	4	96	De 118	Au 66	122	122	.....	.....	.....	234,838
58	Fruit brandy	32	61	34	.....	.....	.....	27	Se 70	Je 1	70	68	2	.....	.....	61,382
59	Liquors, malt	6	386	.....	34	38	4	310	Jy 345	De 287	324	324	.....	.....	.....	2,757,882
60	Looking-glass and picture frames	4	14	2	2	.....	.....	10	Mh [4] 12	Se [4] 9	12	10	2	.....	.....	12,633
61	Lumber and timber products	2,031	25,326	2,591	354	247	34	22,100	Ap 24,448	De 19,694	28,564	28,322	23	217	2	21,515,522
62	Lumber, planing-mill products	164	2,671	175	154	98	28	2,216	Je 2,369	De 2,057	2,199	2,147	1	51	.....	4,826,497
63	Marble and stone work	76	1,435	78	46	47	4	1,260	.....	.....	1,319	1,261	.....	58	.....	4,741,446
64	Marble and stone work, other than slate.	71	1,049	76	32	36	3	902	Se 993	Fe 769	984	980	.....	4	.....	2,192,800
65	Roofing slate	5	386	2	14	11	1	358	Jy 401	Fe 324	335	281	.....	54	.....	2,548,646

[1] Owned power only.

[2] No figures given for reason 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.	Water wheels and motors.[1]	Electric (rented).	Electric horsepower generated in establishments reporting.	
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
$5,863,051	$5,381,796	$44,873,435	$1,893,922	$656,410	$8,717,117	$147,872,130	$7,447,446	$264,039,041	$108,719,465	337,567	249,044	6,659	44,722	37,142	64,871	1
24,526	10,733	121,664	.....	4,830	2,963	155,987	11,929	484,240	316,324	539	286	67	20	166	.....	2
.....	.....	3,802	.....	354	120	1,130	212	8,854	7,512	17	.....	12	.....	5	.....	3
4,536	2,580	24,484	.....	3,485	188	62,519	805	121,387	58,063	20	.....	.....	.....	20	.....	4
3,960	2,698	77,249	3,049	3,080	1,364	101,442	3,287	261,766	157,037	105	.....	.....	.....	105	.....	5
72,796	45,645	715,806	4,234	5,915	29,656	2,543,432	17,882	3,708,558	1,147,244	1,343	1,200	.....	.....	143	801	6
48,613	25,094	151,050	.....	15,688	4,167	282,049	7,370	726,430	437,011	406	165	10	.....	231	2	7
113,886	47,267	691,102	.....	2,330	12,794	2,428,012	2,409	3,816,150	1,385,729	4,972	4,875	.....	.....	97	590	8
71,589	90,715	558,767	.....	28,728	16,862	2,125,414	62,175	3,697,279	1,509,690	1,161	400	44	.....	717	90	9
84,276	21,898	614,160	600	940	13,429	165,948	346,628	1,493,285	980,709	5,852	5,369	228	.....	255	.....	10
1,980	1,080	14,865	.....	1,180	337	35,002	587	62,099	26,510	29	6	6	.....	17	.....	11
9,800	8,019	47,670	.....	3,995	1,470	460,062	15,829	607,640	131,749	245	144	4	.....	97	.....	12
10,340	3,193	47,929	.....	375	1,008	161,420	5,426	251,009	84,163	330	322	3	.....	5	.....	13
15,603	1,617	258,247	.....	4,297	4,120	1,258,077	22,232	1,773,766	493,457	3,469	3,274	142	25	28	.....	14
10,828	1,197	233,480	.....	4,285	3,681	1,227,093	18,751	1,692,378	446,534	3,246	3,108	116	.....	22	.....	15
4,700	420	17,612	.....	.....	349	19,792	750	49,578	29,036	201	166	10	25	.....	.....	16
75	.....	7,155	.....	12	90	11,192	2,731	31,810	17,887	22	.....	16	.....	6	.....	17
10,884	8,031	67,361	150	12	1,310	173,458	4,909	284,506	106,139	600	585	5	.....	10	.....	18
91,480	72,090	518,181	15,000	23,503	19,453	1,338,900	22,005	2,463,557	1,102,652	1,629	813	239	42	535	33	19
91,480	72,090	501,666	15,000	21,493	19,291	1,322,981	21,073	2,411,870	1,067,816	1,558	813	189	42	514	33	20
.....	.....	16,515	.....	2,010	162	15,919	932	51,687	34,836	71	.....	50	.....	21	.....	21
61,767	3,390	206,538	702	2,040	27,053	152,862	2,725	426,334	270,747	458	.....	.....	.....	458	29	22
193,459	459,915	6,607,104	.....	.....	35,178	10,463,372	298,209	18,216,056	7,454,475	6,980	6,021	31	.....	928	11,021	23
54,896	77,966	369,201	142,741	10,133	7,427	1,718,955	26,469	2,673,734	928,310	333	4	28	.....	301	9	24
24,599	51,952	29,478	.....	5,914	2,499	908,951	9,372	1,137,189	218,866	281	10	.....	.....	271	.....	25
28,070	46,094	383,710	.....	.....	21,530	50,759	1,019,547	1,606,809	536,503	2,057	1,672	.....	.....	385	880	26
100,003	90,605	236,373	757	35,267	13,206	1,794,482	37,161	2,712,845	881,202	1,089	457	25	.....	607	.....	27
58,869	74,343	165,335	757	15,196	8,814	1,384,542	16,171	1,952,156	551,443	551	350	2	.....	199	.....	28
41,134	16,262	71,038	.....	20,071	4,392	409,940	20,990	760,689	329,759	538	107	23	.....	408	.....	29
36,696	18,098	480,346	1,137	9,973	3,605	1,405,241	3,511	2,230,630	821,878	1,340	1,217	59	15	49	.....	30
36,696	18,098	476,879	137	9,973	3,558	1,402,668	3,511	2,219,835	813,656	1,259	1,136	59	15	49	.....	31
.....	.....	3,467	1,000	.....	47	2,573	.....	10,795	8,222	81	81	.....	.....	.....	.....	32
22,700	16,408	90,675	300	4,853	2,255	310,417	2,514	506,689	193,758	165	45	.....	.....	120	.....	33
119,800	89,142	2,174,057	.....	.....	111,723	5,864,500	192,801	10,216,185	4,158,884	34,220	18,210	.....	15,277	733	15,736	34
6,550	12,048	35,751	.....	1,424	435	73,903	4,733	170,747	92,111	266	92	76	.....	98	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
9,500	14,868	16,227	.....	3,130	817	118,102	178	195,052	76,772	.....	.....	.....	.....	.....	.....	37
66,712	18,993	160,951	.....	981	14,416	1,025,517	112,359	1,676,879	539,003	4,309	4,238	.....	56	15	23	
.....	1,000	14,354	200	1,070	71	5,377	490	28,233	22,366	4	.....	.....	.....	4	.....	38
234,617	272,047	1,050,645	13,432	2,982	82,711	7,770,639	225,282	11,350,120	3,354,199	19,577	13,809	206	32	5,530	752	39
141,247	81,380	463,025	.....	25,967	45,326	15,273,312	116,198	18,084,413	2,694,903	23,086	4,491	2,020	14,018	2,557	193	40
5,042	12,258	20,942	.....	3,792	905	263,632	3,887	332,800	65,281	284	37	2	.....	245	.....	41
104,238	59,318	618,801	100	21,264	18,354	610,750	46,013	1,654,510	997,747	2,414	476	448	215	1,275	139	42
97,518	55,696	524,867	.....	20,994	16,931	519,337	33,730	1,425,339	872,272	2,024	393	440	190	1,001	133	43
6,720	3,622	93,934	100	270	1,423	91,413	12,283	229,171	125,475	390	83	8	25	274	6	44
71,325	38,010	519,812	.....	4,188	11,270	1,057,384	22,274	2,085,442	1,005,784	2,783	2,207	32	.....	544	15	45
62,641	34,930	443,469	.....	2,448	10,749	985,312	20,522	1,903,584	897,750	2,627	2,147	32	.....	448	15	46
8,684	3,080	76,343	.....	1,740	521	72,072	1,752	181,858	108,034	156	60	.....	.....	96	.....	47
57,584	61,971	305,892	.....	30	29,432	102,157	648,100	2,149,938	1,399,681	1,488	1,421	.....	.....	67	22	48
23,460	5,976	327,752	.....	.....	1,704	203,009	55,094	696,420	432,317	286	155	.....	.....	131	.....	49
20,458	10,265	106,461	.....	6,600	2,540	438,137	30,386	670,609	202,086	793	573	.....	.....	220	.....	50
78,329	38,080	751,027	.....	26,372	10,708	2,071,435	36,305	3,515,916	1,408,176	1,343	1,220	15	.....	108	408	51
127,523	49,873	378,089	.....	23,851	38,342	204,313	296,393	1,795,645	1,294,939	13,057	11,947	100	302	708	1,526	52
57,136	25,813	352,434	.....	.....	27,980	1,918,447	1,363,549	3,772,382	490,386	15,210	15,210	.....	.....	.....	465	53
91,150	33,862	524,896	.....	4,000	32,003	8,158,647	59,391	9,834,439	1,616,401	3,648	3,523	110	.....	15	332	54
53,083	22,199	273,211	910	1,561	5,194	285,915	185,090	995,361	524,356	1,729	1,618	24	.....	87	.....	55
22,625	8,255	51,784	.....	1,320	1,159,547	453,314	21,819	1,849,876	1,374,743	1,111	1,093	3	10	5	.....	56
22,625	8,255	46,934	.....	700	1,110,840	431,597	20,452	1,758,451	1,306,402	936	928	3	.....	5	.....	57
.....	.....	4,850	.....	620	48,707	21,717	1,367	91,425	68,341	175	165	.....	10	.....	.....	58
87,265	51,303	240,400	.....	.....	254,064	482,182	50,376	1,544,757	1,012,199	2,810	2,755	.....	.....	55	137	59
950	.....	6,090	.....	970	134	5,700	113	21,545	15,732	2	.....	.....	.....	2	.....	60
537,695	279,153	7,914,068	1,251,387	20,168	138,414	7,098,626	135,138	22,938,189	15,704,425	70,125	67,907	555	703	960	240	61
224,181	87,234	1,015,827	10,981	24,452	29,377	3,666,233	32,054	5,688,874	1,990,587	10,650	8,864	202	400	1,184	499	62
57,059	34,729	567,512	11,765	9,058	11,855	335,928	52,216	1,404,086	1,015,942	3,676	2,380	131	875	290	405	63
41,849	28,191	452,360	10,897	7,956	9,603	316,592	41,178	1,172,378	814,608	2,996	1,700	131	875	290	405	64
15,210	6,538	115,152	868	1,102	2,252	19,336	11,038	231,708	201,334	680	680	.....	.....	.....	.....	65

[3] Same number reported throughout the year.

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

TABLE 34.—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.	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	Mattresses and spring beds	22	210	16	17	16	2	159	Se	171	De	139	154	123	31	.....	.....	$325,992
2	Millinery and lace goods, trimmed hats and hat frames.	3	24	4	.....	.....	1	19	No	27	Jy [2]	11	22	1	21	.....	.....	10,700
3	Mineral and soda waters	88	476	68	52	57	9	290	Je	355	Ja	236	303	278	18	7	.....	1,064,697
4	Minerals and earths, ground	6	86	3	4	3	1	75	My	90	Ja	59	66	65	1	.....	.....	456,839
5	Optical goods	4	24	3	1	.....	.....	20	(1)	20	(3)	20	20	17	3	.....	.....	23,239
6	Paints	4	60	5	3	3	3	46	Ja	47	No	45	45	45	.....	.....	.....	149,834
7	Paper and wood pulp	8	1,357	.....	32	54	11	1,260	Ja	1,351	My	1,214	1,361	1,260	101	.....	.....	7,511,395
8	Paper goods, not elsewhere specified	6	201	3	15	9	4	170	Mh	225	Se	142	215	89	116	1	9	371,121
9	Paving materials	21	716	14	28	27	5	642	Se	806	De	474	639	637	.....	2	.....	1,245,113
10	Peanuts, grading, roasting, cleaning, and shelling.	25	1,639	7	50	62	15	1,505	Mh	1,812	Oc	1,119	1,812	382	1,392	2	36	2,332,266
11	Printing and publishing, book and job.	165	1,932	157	119	112	92	1,452	.....		.....		1,474	1,056	388	30	.....	3,364,301
12	Job printing	160	1,892	155	112	96	85	1,444	Mh	1,476	Jy	1,399	1,465	1,047	388	30	.....	2,695,907
13	Book publishing and printing, including linotype work.	5	40	2	7	16	7	8	Mh [2]	9	Au [2]	7	9	9	.....	.....	.....	668,394
14	Printing and publishing, newspapers and periodicals.	218	1,801	229	128	350	125	969	.....		.....		962	792	130	40	.....	2,934,014
15	Printing and publishing	29	935	16	45	302	62	510	Oc	518	De	490	490	419	49	22	.....	1,718,477
16	Printing, publishing, and job printing.	150	718	168	50	25	30	445	No	464	Fe	433	458	360	81	17	.....	875,441
17	Publishing without printing	39	148	45	33	23	33	14	(3)	14	(3)	14	14	13	.....	1	.....	340,096
18	Saddlery and harness	40	352	45	14	32	7	254	Ja	270	No	230	255	251	3	1	.....	947,538
19	Shirts	3	67	3	4	1	1	58	Mh	95	Se	6	102	12	78	4	8	13,384
20	Silk goods, including throwsters	9	723	.....	13	12	7	691	.....		.....		663	204	342	49	68	903,073
21	Finished products	5	298	.....	7	11	3	277	My	353	No [2]	213	213	100	103	2	8	464,125
22	Throwing and winding	4	425	.....	6	1	4	414	Je	475	No	352	450	104	239	47	60	498,948
23	Slaughtering and meat packing	21	515	20	24	62	13	396	Ja	505	My	330	440	410	28	2	.....	2,259,042
24	Stoves and ranges	5	377	.....	19	29	5	324	Mh [2]	364	Jy	217	313	308	.....	5	.....	1,044,770
25	Structural ironwork, not made in steel works or rolling mills.	11	736	5	40	58	16	617	Je	820	No	377	748	745	3	.....	.....	2,220,812
26	Tinware	3	393	.....	10	19	4	360	Se	464	Ja	247	440	331	84	18	7	2,530,898
27	Tobacco, chewing and smoking	14	2,075	6	77	266	31	1,695	.....		.....		1,730	903	762	45	20	7,749,778
28	Plug or chewing	7	483	4	24	34	4	417	Ap	534	De	278	545	299	228	11	7	874,117
29	Smoking	7	1,592	2	53	232	27	1,278	Ja	1,390	De	1,145	1,185	604	534	34	13	6,875,661
30	Tobacco, cigars and cigarettes	62	5,195	70	106	354	52	4,613	Mh	4,916	Au	4,327	4,594	1,267	3,096	32	199	6,717,718
31	Trunks and valises	11	1,346	8	52	90	22	1,174	My	1,234	De	1,023	1,167	1,005	56	104	2	2,924,723
32	Upholstering materials, excelsior	14	219	22	13	4	3	177	Ja	190	No	168	198	189	.....	9	.....	291,153
33	Vinegar and cider	12	53	7	8	8	3	27	.....		.....		50	48	.....	2	.....	202,891
34	Vinegar	9	48	5	8	8	3	24	Oc	50	Ja [2]	13	39	37	.....	2	.....	184,751
35	Cider	3	5	2	.....	.....	.....	3	Se [2]	8	De [2]	4	11	11	.....	.....	.....	18,140
36	Wirework, miscellaneous	4	12	4	3	.....	.....	5	(3)	5	(3)	5	5	5	.....	.....	.....	19,050
37	Wood, turned and carved	19	262	22	12	4	1	223	Ap [2]	241	De	198	225	222	.....	3	.....	230,855
38	Woolen goods	12	464	13	12	7	1	431	De	510	Mh	397	531	383	133	9	6	901,149
39	All other industries *	245	15,405	177	414	769	162	13,883	.....		.....		.....	.....	.....	.....	.....	54,547,734

[1] Owned power only.

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

* All other industries embrace—

Artificial limbs	2
Artificial stone products	15
Automobile bodies and parts	3
Automobiles	1
Babbitt metal and solder	2
Bags, other than paper	10
Bags, paper	1
Baking powders and yeast	4
Baskets, and rattan and willow ware	2
Belting, leather	1
Billiard tables and materials	1
Blacking, stains, and dressings	1
Bluing	2
Boot and shoe cut stock	1
Boot and shoe findings	2
Boxes, cigar	2
Brass, bronze, and copper products	1
Canning and preserving, oysters	2
Cars, steam-railroad, not including operations of railroad companies	1
Cement	2
Cheese	1
Chemicals	3
Cleansing and polishing preparations	1
Clothing, horse	1
Clothing, women's	6
Coffins, burial cases, and undertakers' goods	5
Cordage and twine	1
Cordials and flavoring sirups	1
Cork, cutting	1
Electrical machinery, apparatus, and supplies	1
Electroplating	3
Envelopes	1
Felt goods	1
Fireworks	1
Flags and banners	3
Flavoring extracts	7
Fur goods	1
Gas machines and gas and water meters	1
Glass, cutting, staining, and ornamenting	2
Gloves and mittens, leather	3
Hand stamps	2
Hats and caps, other than felt, straw, and wool	1
Hats, straw	2
Iron and steel, steel works and rolling mills	2
Iron and steel, cast-iron pipe	3
Iron and steel, doors and shutters	1

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

THE STATES—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.	Water wheels and motors.[1]	Electric (rented).	Electric horsepower generated in establishments reporting.	
$23,504	$10,799	$74,672	$160	$7,146	$1,240	$221,993	$4,791	$445,020	$218,236	283	90	35	.....	158	.....	1
.....	180	5,195	.....	1,380	635	16,300	79	28,397	12,018	1	.....	.....	.....	1	.....	2
71,410	46,281	122,501	.....	17,334	7,735	570,478	10,032	1,196,734	616,224	465	199	49	7	210	14	3
5,030	4,299	38,040	1,744	1,797	980	39,164	7,460	107,326	60,702	850	175	5	500	170	200	4
1,800	.....	13,454	.....	1,350	134	21,086	579	45,658	23,993	6	.....	.....	.....	6	.....	5
3,900	4,480	20,623	.....	3,000	848	111,689	2,136	184,077	70,252	190	.....	.....	125	65	.....	6
126,575	101,446	691,753	.....	3,310	32,884	3,130,524	293,007	5,501,084	2,077,553	13,585	8,075	225	5,025	260	4,871	7
22,892	13,734	34,567	.....	1,872	2,492	232,005	2,544	376,847	142,208	288	45	12	150	81	.....	8
39,258	47,350	279,893	.....	5,719	4,107	512,240	42,594	1,135,097	580,263	2,110	1,985	.....	.....	125	72	9
115,183	66,816	327,955	841	11,447	17,641	9,487,430	30,646	10,981,159	1,463,083	2,973	2,805	.....	.....	168	108	10
221,661	137,538	845,432	217,327	56,639	26,943	1,144,424	43,253	3,402,181	2,214,504	1,347	167	30	.....	1,150	.....	11
201,780	115,877	838,647	53,922	54,809	22,465	1,091,535	42,547	3,060,596	1,926,514	1,344	167	30	.....	1,147	.....	12
19,881	21,661	6,785	163,405	1,830	4,478	52,889	706	341,585	287,990	3	.....	.....	.....	3	.....	13
189,416	342,695	599,466	180,507	51,738	16,529	580,238	45,184	3,094,585	2,469,163	1,250	33	177	.....	1,040	15	14
101,018	284,334	377,613	13,477	32,232	10,226	430,398	31,255	2,034,690	1,573,037	766	10	1	.....	755	15	15
46,398	24,328	209,553	8,048	15,888	4,643	135,909	13,452	697,988	548,627	452	23	172	.....	257	.....	16
42,000	34,033	12,300	158,982	3,618	1,660	13,931	477	361,907	347,499	32	.....	4	.....	28	.....	17
27,369	43,472	127,536	1,250	12,812	6,531	730,756	7,977	1,042,972	304,239	150	35	13	.....	102	.....	18
3,500	100	13,867	500	775	40	45,819	429	91,354	45,106	7	.....	.....	.....	7	.....	19
37,268	27,451	210,331	24,013	7,400	4,277	1,076,863	16,989	1,772,931	679,079	1,798	1,005	60	490	243	478	20
12,665	8,184	88,400	24,013	7,400	1,586	305,211	6,757	834,943	522,975	348	235	60	.....	53	66	21
24,603	19,267	121,931	.....	.....	2,691	771,652	10,232	937,988	156,104	1,450	770	.....	490	190	412	22
46,670	70,557	212,476	1,300	1,598	12,374	3,678,526	46,948	4,362,272	636,798	3,084	2,846	37	.....	201	306	23
43,946	44,008	208,381	.....	.....	6,658	173,035	13,751	528,447	341,661	555	105	.....	.....	450	.....	24
92,416	53,708	415,271	.....	2,591	12,135	1,519,846	34,772	3,140,530	1,585,912	4,261	170	19	.....	4,072	.....	25
28,542	24,685	174,110	600	132	6,918	677,853	11,016	1,125,294	436,425	334	245	10	.....	79	.....	26
166,836	349,482	499,072	.....	10,748	1,511,526	4,427,750	53,701	8,765,179	4,283,728	1,085	521	100	.....	464	92	27
34,762	36,400	109,988	.....	6,200	190,563	416,643	9,338	1,011,656	585,675	307	201	90	.....	16	.....	28
132,074	313,082	389,084	.....	4,548	1,320,963	4,011,107	44,363	7,753,523	3,698,053	778	320	10	.....	448	92	29
200,737	488,168	1,665,509	2,198	10,256	4,561,626	7,569,824	50,662	21,330,634	13,710,148	2,174	2,150	.....	.....	24	946	30
97,371	82,966	496,804	.....	1,305	20,086	1,197,235	7,088	2,420,881	1,216,558	955	911	12	.....	32	299	31
12,686	4,392	67,074	1,200	100	1,768	140,244	5,129	274,665	129,292	1,610	1,610	.....	.....	.....	460	32
9,615	6,950	11,876	254	1,910	633	183,312	1,808	270,934	85,814	123	36	23	.....	64	.....	33
9,615	6,950	11,105	254	1,910	586	177,287	1,618	261,059	82,154	87	.....	23	.....	64	.....	34
.....	.....	771	.....	.....	47	6,025	190	9,875	3,660	36	36	.....	.....	.....	.....	35
600	.....	2,360	25	420	65	3,065	146	10,167	6,956	7	.....	.....	.....	7	.....	36
14,560	3,360	74,460	.....	1,795	945	136,750	1,686	339,593	201,157	1,223	1,179	8	.....	36	.....	37
15,457	5,770	168,195	1,712	200	5,104	409,662	10,173	789,623	369,788	911	430	111	345	25	50	38
951,861	988,244	7,266,792	.....	91,564	204,947	24,248,879	1,089,434	39,338,170	13,999,857	49,651	35,136	906	6,090	7,519	22,613	39

[1] Same number reported throughout the year.

Iron and steel forgings, not made in steel works or rolling mills 2
Jewelry 1
Lard, refined, not made in slaughtering and meat-packing establishments 1
Liquors, vinous 2
Lithographing 2
Locomotives, not made by railroad companies 1
Millstones 1
Mirrors, framed and unframed, not elsewhere specified 2
Models and patterns, not including paper patterns 2
Musical instruments, organs 2
Oil, cottonseed, and cake 2
Patent medicines and compounds 32
Perfumery and cosmetics 4
Photo-engraving 2
Pickles, preserves, and sauces 10
Pipes, tobacco 2
Plated ware 1
Pottery 1
Printing and publishing, music 1
Printing materials 1
Pumps, steam 1
Regalia and society badges and emblems 1
Roofing materials 2
Rubber goods, not elsewhere specified 1
Sausage, not made in slaughtering and meat-packing establishments 1
Scales and balances 1
Shipbuilding, including boat building 29
Show cases 1
Signs and advertising novelties 1
Smelting and refining, copper 1
Smelting and refining, zinc 1
Smelting and refining, not from the ore 1
Soda-water apparatus 1
Statuary and art goods 1
Steam fittings and steam and hot-water heating apparatus 1
Stencils and brands 2
Stereotyping and electrotyping 1
Sulphuric, nitric, and mixed acids 1
Tools, not elsewhere specified 1
Varnishes 1
Wall plaster 3
Whips 1
Window and door screens 2
Window shades and fixtures 2
Wood preserving 3
Wooden goods, not elsewhere specified 1

TABLE 34.—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	**NORFOLK**—All industries	211	6,762	172	265	328	97	5,900	My 6,406	Au 5,320	6,136	4,764	1,308	41	23	$13,756,972
2	Bread and other bakery products	15	263	12	12	30	10	199	Se[2] 204	Fe 191	196	189	5	2	.....	389,338
3	Carriages and wagons	7	154	10	8	15	.....	121	Je 143	De 71	112	112	.....	.....	.....	399,799
4	Copper, tin, and sheet-iron work	3	23	4	.....	.....	1	18	([3]) 18	([3]) 18	18	18	.....	.....	.....	14,294
5	Foundry and machine-shop products	9	157	14	8	5	1	129	Ja 151	Se 113	127	126	.....	1	.....	226,840
6	Ice, manufactured	8	134	2	14	9	1	108	Jy[2] 131	De 88	99	99	.....	.....	.....	590,587
7	Lumber, planing-mill products, not including planing mills connected with sawmills	9	300	8	18	9	3	262	Jy 278	De 235	237	235	.....	2	.....	505,894
8	Marble and stone work	5	30	6	3	3	.....	18	Au 26	De 14	21	21	.....	.....	.....	59,350
9	Mineral and soda waters	6	55	2	7	8	2	36	Au 43	De 30	39	39	.....	.....	.....	110,099
10	Printing and publishing	35	418	34	42	98	20	224	Mh 231	Oc 217	219	178	35	6	.....	618,759
11	Tobacco, cigars and cigarettes	15	66	16	1	1	.....	48	Mh 60	Je 31	52	50	2	.....	.....	91,927
12	All other industries *	99	5,162	64	152	150	59	4,737	.....	.....	5,016	3,697	1,266	30	23	10,750,085

* All other industries embrace—

Agricultural implements	2	Brooms	1	Chemicals	1	Cooperage	2
Artificial stone products	2	Canning and preserving, oysters	1	Cleansing preparations	1	Cordials and flavoring sirups	1
Awnings, tents, and sails	1	Cars and general shop construction and repairs by electric-railroad companies	1	Clothing, horse	1	Dairymen's, poultrymen's, and apiarists' supplies	1
Bags, other than paper	4	Cars and general shop construction and repairs by steam-railroad companies	1	Clothing, men's and youth's	2	Druggists' preparations	1
Boot and shoe findings	1			Clothing, women's	1	Electroplating	1
Boxes and cartons, paper	3			Coffins, burial cases, and undertaker's goods	1	Fertilizers	2
Boxes, wooden packing	1			Confectionery and ice cream	11		
Brick	1						

1	**RICHMOND**—All industries	466	20,533	350	731	1,725	445	17,282	Ja 18,596	Au 16,372	17,703	13,038	4,273	179	213	$48,667,108
2	Awnings, tents, and sails	5	13	3	.....	.....	.....	10	Oc 16	De[2] 7	11	8	3	.....	.....	10,008
3	Boxes and cartons, paper	9	414	7	22	18	7	360	Oc 376	Je 344	368	120	240	5	3	484,999
4	Bread and other bakery products	21	550	23	13	47	21	446	Jy 460	Fe 432	451	364	86	1	.....	784,048
5	Carriages and wagons	19	149	24	3	5	.....	117	Je[2] 124	De 108	108	108	.....	.....	.....	219,915
6	Cars and general shop construction and repairs by steam-railroad companies.	4	2,071	.....	24	65	1	1,981	Se 2,009	Je 1,945	1,959	1,951	8	.....	.....	1,703,507
7	Confectionery and ice cream	22	318	15	20	53	16	214	.....	.....	268	188	75	5	.....	557,641
8	Confectionery and chewing gum	10	210	5	10	32	9	154	Oc[2] 160	Au 144	151	91	60	.....	.....	240,001
9	Ice cream	12	108	10	10	21	7	60	De 114	No 44	117	97	15	5	.....	317,640
10	Cooperage, hogsheads and barrels	4	82	5	.....	1	.....	76	Fe 105	Au 53	68	68	.....	.....	.....	64,259
11	Copper, tin, and sheet-iron work	10	81	12	4	4	1	60	Jy 72	Ja 50	63	63	.....	.....	.....	99,335
12	Food preparations	6	33	4	2	3	1	23	Fe 28	Jy[2] 18	27	19	2	1	5	60,045
13	Foundry and machine-shop products.	25	307	22	15	9	5	256	My 286	No 236	240	239	1	.....	.....	529,805
14	Furniture	8	225	7	8	1	4	205	Se 213	Ja 191	208	204	3	1	.....	267,618
15	Ice, manufactured	8	118	8	8	6	2	94	Jy[2] 107	Ja[2] 75	88	88	.....	.....	.....	1,101,810
16	Leather goods	13	405	8	11	30	8	348	Ja 365	No 324	347	333	13	1	.....	1,292,658
17	Lumber and timber products	17	775	14	27	39	6	689	Je 741	De 637	641	612	.....	29	.....	1,324,238
18	Marble and stone work	13	87	15	1	.....	.....	71	My 79	No[2] 66	70	70	.....	.....	.....	70,929
19	Mattresses and spring beds	5	45	6	3	.....	.....	36	Oc[2] 40	Jy 33	35	30	5	.....	.....	35,214
20	Mineral and soda waters	10	77	5	11	12	2	47	Au[2] 54	De[2] 39	40	37	3	.....	.....	74,960
21	Pickles and sauces	4	59	.....	9	3	3	44	De 62	Se 28	68	23	39	6	.....	83,078
22	Printing and publishing, book and job.	60	1,048	52	60	76	62	798	De 821	Jy 764	820	579	229	12	.....	1,884,374
23	Printing and publishing, newspapers and periodicals.	33	468	17	40	167	62	182	.....	.....	193	180	8	5	.....	840,811
24	Printing and publishing	7	332	3	12	149	25	143	Oc 149	My 135	147	143	1	3	.....	454,675
25	Printing, publishing, and job printing.	5	50	2	2	1	6	39	De[2] 46	Se[2] 36	46	37	7	2	.....	86,345
26	Publishing without printing	21	86	12	26	17	31	.....	.....	.....	.....	.....	.....	.....	.....	299,791
27	Tobacco manufactures	16	5,073	10	115	561	77	4,310	Ja 4,565	Au 4,112	4,233	1,388	2,661	17	167	12,174,114
28	All other industries *	154	8,135	93	335	625	167	6,915	.....	.....	7,397	6,366	897	96	38	25,003,742

[1] Owned power only.

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

* All other industries embrace—

Agricultural implements	2	Bluing	1	Coffee and spice, roasting and grinding	7	Flour-mill and gristmill products	3
Artificial limbs	2	Bookbinding and blank-book making	5	Coffins, burial cases, and undertakers' goods	1	Fur goods	1
Artificial stone products	1	Boot and shoe cut stock	1	Cork cutting	1	Gas, illuminating and heating	4
Automobile bodies and parts	2	Boot and shoe findings	1	Druggists' preparations	1	Glass	1
Babbitt metal and solder	2	Boots and shoes	2	Electrical machinery, apparatus, and supplies	1	Glass, cutting, staining, and ornamenting	1
Bags, other than paper	4	Boxes, cigar	1	Electroplating	2	Hand stamps	1
Bags, paper	1	Brick	3	Engraving, steel and copper plate, including plate printing	3	Hats and caps, other than felt, straw, and wool	1
Baking powders and yeast	4	Brooms	3	Envelopes	1	Iron and steel, steel works and rolling mills	2
Baskets, and rattan and willow ware	1	Cars and general shop construction and repairs by electric-railroad companies	3	Fertilizers	3	Iron and steel, forgings, not made in steel works or rolling mills	1
Belting, leather	1	Clothing, men's and youth's	1	Flavoring extracts	3		
Billiard tables and materials	1	Clothing, women's	1				
Blacking, stains, and dressings	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.					Electric horsepower generated in establishments reporting.
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.	Water wheels and motors.[1]	Electric (rented).	
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.															
$500,592	$360,493	$2,534,413	$109,410	$157,575	$169,136	$7,811,693	$496,535	$14,955,135	$6,646,907	13,038	9,031	74	.....	3,933	779	1
15,260	26,501	129,226	.....	5,326	3,422	518,067	11,526	836,030	306,437	259	67	16	.....	176	.....	2
16,400	13,172	70,761	.....	8,700	2,216	212,580	3,418	376,712	160,714	166	75	.....	.....	91	.....	3
.....	600	12,272	.....	745	66	10,692	104	37,786	26,990	2	.....	.....	.....	2	.....	4
11,800	6,106	89,785	100	2,640	1,691	73,617	6,285	227,175	147,273	215	40	.....	.....	175	.....	5
24,200	12,500	86,066	.....	20,900	12,158	34,876	79,847	419,223	304,500	3,572	3,542	.....	.....	30	95	6
27,038	12,180	121,169	.....	5,200	3,703	571,627	1,065	841,022	268,330	810	760	.....	.....	50	100	7
3,500	1,135	13,938	.....	970	565	34,344	267	74,571	39,960	19	.....	.....	.....	19	.....	8
11,880	4,814	13,695	.....	3,360	678	92,199	966	178,340	85,175	52	10	.....	.....	42	.....	9
69,044	100,856	154,887	5,546	19,570	4,917	235,893	11,438	848,703	601,372	296	.....	.....	.....	296	.....	10
1,200	900	29,585	.....	2,055	9,289	43,483	146	105,945	62,316	.....	.....	.....	.....	.....	.....	11
320,270	181,729	1,813,029	103,764	88,109	130,431	5,984,315	381,473	11,009,628	4,643,840	7,647	4,537	58	.....	3,052	584	12

Flavoring extracts..... 2
Flour-mill and gristmill products..... 1
Food preparations..... 2
Furniture..... 1
Gas, illuminating and heating..... 1
Hosiery and knit goods..... 3
Jewelry..... 1
Lime..... 1
Liquors, malt..... 1
Liquors, vinous..... 1
Looking-glass and picture frames..... 1
Lumber and timber products..... 3
Mattresses and spring beds..... 3
Millinery and lace goods, trimmed hats, and hat frames..... 1
Paints..... 1
Patent medicines and compounds..... 7
Peanuts, grading, roasting, cleaning, and shelling..... 3
Plated ware..... 1
Regalia and society badges and emblems..... 1
Rubber goods..... 1
Saddlery and harness..... 2
Shipbuilding, wooden, including boat building..... 8
Silk goods, finished products..... 1
Smelting and refining, copper..... 1
Stencils and brands..... 2
Structural ironwork, not made in steel works or rolling mills..... 2
Wirework..... 2

$1,560,518	$2,163,547	$8,439,602	$530,970	$217,337	$6,309,136	$29,689,870	$868,932	$62,490,667	$31,931,865	33,940	18,185	1,183	7,074	7,498	10,390	1
.....	.....	4,897	.....	1,475	64	8,601	326	21,561	12,634	6	.....	.....	.....	6	.....	2
35,353	21,390	110,350	.....	7,278	2,984	123,632	5,116	500,948	372,200	301	165	.....	.....	136	2	3
34,164	43,185	231,237	.....	5,750	9,098	898,322	26,423	1,615,285	690,540	459	142	.....	.....	317	.....	4
4,400	3,680	79,079	1,800	5,246	2,218	92,703	2,975	256,686	161,008	101	.....	11	.....	90	.....	5
38,293	61,706	1,311,942	.....	.....	7,145	983,984	53,474	2,618,262	1,580,804	1,854	1,854	.....	.....	.....	856	6
41,674	50,555	94,553	757	16,424	5,977	612,689	17,613	1,092,926	462,624	546	240	10	.....	296	.....	7
22,500	40,821	55,773	757	7,935	2,970	418,157	4,556	698,370	275,657	188	160	2	.....	26	.....	8
19,174	9,734	38,780	.....	8,489	3,007	194,532	13,057	394,556	186,967	358	80	8	.....	270	.....	9
.....	1,740	32,952	.....	1,500	405	96,666	278	149,467	52,523	3	.....	.....	.....	3	5	10
2,700	2,588	40,109	.....	2,074	1,220	50,302	558	111,366	60,506	22	.....	.....	.....	22	.....	11
2,100	8,538	8,233	.....	2,472	646	100,166	1,630	126,431	24,635	120	31	2	.....	87	.....	12
21,590	11,710	158,782	.....	8,216	4,591	130,171	12,175	401,701	259,355	476	152	63	25	236	10	13
18,474	5,181	134,936	.....	2,398	1,215	123,324	3,361	301,523	174,838	173	120	.....	.....	53	.....	14
17,425	6,463	51,090	.....	300	9,973	23,348	47,473	286,486	215,665	2,003	1,975	.....	12	16	1,158	15
39,501	49,625	197,582	1,250	5,536	9,076	730,728	7,557	1,209,966	471,681	278	195	12	.....	71	.....	16
57,211	34,618	369,894	.....	6,970	9,176	709,703	6,250	1,319,263	603,310	2,410	2,340	.....	.....	70	339	17
1,560	.....	52,967	2,347	1,160	751	29,350	2,407	112,893	81,136	130	.....	35	.....	95	.....	18
3,720	.....	21,613	.....	2,030	240	43,599	637	85,357	41,121	25	.....	5	.....	20	.....	19
17,460	14,045	28,902	.....	4,291	1,285	148,834	2,073	270,951	120,044	62	26	3	7	26	.....	20
14,780	2,637	18,866	.....	5,113	1,176	98,063	1,160	165,445	66,222	41	30	.....	.....	11	.....	21
131,090	87,674	457,081	210,158	28,197	16,155	743,524	25,378	2,097,734	1,328,832	792	150	2	.....	640	4	22
68,467	163,319	157,402	157,966	25,156	5,057	181,525	14,249	1,170,151	974,377	417	.....	.....	.....	417	.....	23
29,627	128,355	136,484	9,337	21,048	3,408	160,247	12,140	802,711	630,324	376	.....	.....	.....	376	.....	24
2,020	3,469	20,918	2,082	1,590	201	13,094	2,021	56,943	41,828	41	.....	.....	.....	41	.....	25
36,820	31,495	.....	146,547	2,518	1,448	8,184	88	310,497	302,225	.....	.....	.....	.....	.....	.....	26
284,152	771,014	1,520,397	2,198	8,650	5,771,282	9,404,045	80,948	24,856,752	15,371,759	1,899	1,450	.....	.....	449	578	27
726,404	823,879	3,356,738	154,494	77,101	449,402	14,356,591	556,871	23,719,513	8,806,051	21,822	9,315	1,040	7,030	4,437	7,438	28

[1] Same number reported throughout the year.

Leather, tanned, curried, and finished 2
Liquors, distilled..... 1
Liquors, malt..... 2
Lithographing..... 2
Locomotives, not made by railroad companies..... 1
Looking-glass and picture frames..... 2
Millinery and lace goods, trimmed hats and hat frames..... 2
Minerals and earths, ground..... 1
Mirrors, framed and unframed, not elsewhere specified..... 1
Models and patterns, not including paper patterns..... 2
Optical goods..... 1
Paints..... 2
Paper and wood pulp..... 3
Paper goods, not elsewhere specified. 3
Patent medicines and compounds..... 8
Paving materials..... 1
Peanuts, grading, roasting, cleaning, and shelling..... 1
Perfumery and cosmetics..... 4
Photo-engraving..... 2
Pottery..... 1
Printing materials..... 1
Roofing materials..... 2
Sausage, not made in slaughtering and meat-packing establishments..... 1
Scales and balances..... 1
Shirts..... 1
Silk goods, finished products..... 3
Slaughtering and meat packing..... 1
Smelting and refining, not from the ore 1
Soda-water apparatus..... 1
Statuary and art goods..... 1
Stereotyping and electrotyping..... 1
Stoves and ranges..... 3
Structural ironwork, not made in steel works or rolling mills..... 2
Tinware, not elsewhere specified..... 1
Varnishes..... 1
Vinegar and cider..... 2
Whips..... 1
Window shades and fixtures..... 1
Wirework..... 2
Wood, turned and carved..... 2
Wooden goods, not elsewhere specified 1

TABLE 34.—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 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
1	ALEXANDRIA	49	1,719	37	85	73	20	1,504	Ap 1,644	Au 1,296	1,542	1,425	84	22	11	$4,573,526
2	DANVILLE	43	2,860	31	57	67	14	2,691	Jy 2,760	Ja 2,579	2,799	1,821	874	49	55	6,783,464
3	LYNCHBURG	73	3,958	58	135	167	124	3,474	My 3,635	Au 3,155	3,669	2,507	1,051	63	48	8,425,636
4	PETERSBURG	87	4,320	63	174	141	39	3,903	Mh 4,180	De 3,633	3,933	2,265	1,449	171	48	6,497,139
5	PORTSMOUTH	42	900	47	37	40	9	767	Jy 868	Ja 690	835	633	170	22	10	1,477,650
6	ROANOKE	73	6,016	51	107	311	51	5,496	My 5,782	De 5,116	5,648	5,389	253	5	1	9,660,114
7	STAUNTON	45	446	49	21	27	3	346	My 381	De 275	369	251	99	19	.....	813,273

[1] Owned power only.

OR MORE, BY INDUSTRIES, AND FOR CITIES OF 10,000 to 50,000 INHABITANTS—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.	Water wheels and motors.[1]	Electric (rented).		
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.																
$143,650	$86,369	$857,645	$1,400	$3,666	$91,779	$1,833,822	$126,027	$3,660,291	$1,700,442	3,375	2,063	5	.....	1,307	309	1
95,979	89,797	1,041,535	4,125	8,922	203,606	3,097,913	114,256	5,558,431	2,346,262	7,209	3,484	3	3,475	247	2,519	2
261,075	182,935	1,545,113	437	37,550	180,304	6,358,208	152,731	9,918,779	3,407,840	6,505	4,655	90	620	1,140	703	3
253,253	153,444	1,392,205	360	24,032	162,053	8,302,471	90,749	12,609,943	4,216,723	6,549	4,939	20	690	900	1,426	4
66,583	36,535	347,055	8,421	16,806	14,473	963,020	54,179	1,730,657	713,458	2,664	1,805	34	.....	825	250	5
220,510	312,926	3,326,121	46	27,361	91,611	10,646,299	551,275	16,581,988	5,384,414	11,708	6,683	4	30	4,991	7,080	6
29,196	23,710	148,640	832	9,052	7,335	1,064,514	22,975	1,448,216	360,727	850	591	47	10	202	38	7