

# NORTH CAROLINA.

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## GENERAL STATISTICS.

**General character of the state.**—North Carolina was one of the original thirteen states. With a gross area of 52,426 square miles; of which 48,740 represent land surface, it ranks twenty-seventh in size among the states. Its inhabitants in 1900 numbered 1,893,810, and in 1910, 2,206,287; and its estimated population in 1914 was 2,339,000. In total population North Carolina ranked sixteenth among the states in 1910; and in density of population it ranked twentieth, with 45.3 inhabitants per square mile, the corresponding figure for 1900 being 38.9.

The urban population of the state in 1910—that is, the population residing in incorporated places having 2,500 inhabitants or more—was 318,474, or 14.4 per cent of the total, as against 9.9 per cent in 1900. There were in the state in 1914, 10 cities each having an estimated population of more than 10,000; Asheville, Charlotte, Durham, Greensboro, High Point, New Bern, Raleigh, Rocky Mount, Wilmington, and Winston-Salem. These cities, whose aggregate population in that year formed 8.9 per cent of the estimated total population of North Carolina, reported 34.9 per cent of the state's manufactured products.

The steam-railway mileage in 1914 was 5,419, and the electric-railway mileage in 1912 was 171. In addition, the transportation facilities provided by the harbors and navigable rivers of the state are important factors in the furtherance of its manufacturing and commercial interests.

The natural resources of North Carolina, which are of great importance, have a marked influence in the establishment and growth of many industries. Some of the materials used in manufacturing, such as cotton, cereals, tobacco, timber, phosphate rock, and

kaolin, are produced in large quantities. The Appalachian forests, more than 5,000 square miles in extent, furnish an abundance of material for sawmills and for paper and pulp mills. The water power of the state is used extensively in generating electric energy, which is transmitted to distances as great as 210 miles.

Agriculture is the leading industry. The total value of all farm crops in 1909 was \$142,890,192, the most important products being cotton (including cotton seed), \$50,483,345; corn, \$31,286,102; and tobacco, \$13,847,559. The state's cotton crop of 1914 amounted to 930,631 equivalent 500-pound bales, or 5.8 per cent of the total for the United States.

The value of merchandise exported through the North Carolina customs district during the fiscal year ended June 30, 1914, was \$25,870,851; and of merchandise imported, \$4,134,459.

**Importance and growth of manufactures.**—North Carolina's manufactured products in 1914 were valued at \$289,411,987, and the average number of wage earners employed in its manufacturing industries was 136,844. In that year the state ranked eighteenth in the former respect and thirteenth in the latter; the corresponding rankings in 1909 were twenty-third and twelfth. The output of manufactured products in North Carolina in 1914 represented 1.2 per cent of the total for the United States, as measured by value; the corresponding proportion for both 1909 and 1904 was 1 per cent.

Table 1 gives the more important figures relative to all classes of manufactures combined, in the state of North Carolina, 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. <sup>1</sup>		
	1914	1909	1904	1899	1909-1914	1904-1909	1899-1904
Number of establishments.....	5,507	4,931	3,272	3,465	11.7	50.7	-5.0
Persons engaged.....	151,335	133,463	93,142	(2)	13.4	43.3	.....
Proprietors and firm members.....	5,950	5,451	3,731	(2)	9.2	46.1	.....
Salaried employees.....	8,541	6,529	4,072	2,804	30.8	60.3	40.7
Wage earners (average number).....	136,844	121,473	85,339	72,322	12.0	42.3	18.0
Primary horsepower.....	508,085	378,556	210,622	154,467	34.2	74.8	40.2
Capital.....	\$253,841,808	\$217,185,588	\$141,000,639	\$68,283,005	16.9	54.0	106.5
Salaries and wages.....	59,282,679	41,258,172	25,170,765	16,446,630	36.4	63.9	53.0
Salaries.....	10,244,232	6,903,547	3,795,471	2,394,846	48.4	81.9	58.5
Wages.....	49,038,447	34,354,625	21,375,294	14,051,784	34.0	60.7	52.1
Paid for contract work.....	1,957,489	1,793,937	1,580,823	(2)	9.1	13.5	.....
Rent and taxes (including internal revenue).....	14,088,823	6,392,132	3,752,512	(2)	120.4	.....	.....
Cost of materials.....	169,941,971	121,861,530	70,268,004	44,854,224	39.5	53.7	76.7
Value of products.....	289,411,987	216,656,055	142,520,776	85,274,683	33.6	52.0	67.1
Value added by manufacture (value of products less cost of materials).....	119,470,016	94,794,525	63,252,772	40,419,850	26.0	49.9	56.5

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Figures not available.

<sup>3</sup> Exclusive of internal revenue.

It is interesting to note that the percentages of increase for North Carolina for the period 1909-1914 are greater in all important respects than the corresponding ones for the United States as a whole. The percentages of increase reported for North Carolina's wage earners, value of products, and value added by manufacture for that period were 12.6, 33.6, and 26, respectively; whereas the corresponding percentages, for the United States as a whole, were only 6.4, 17.3,

and 15.8, respectively. Thus the state's increases in wage earners and value of products were nearly twice as great, proportionally, as those for the United States as a whole; and its increase in value added by manufacture was relatively about two-thirds greater.

Table 2 shows the relative importance of the leading manufacturing industries in 1914, and gives percentages of increase for the three 5-year periods from 1899 to 1914.

INDUSTRY.	CENSUS OF 1914.						PER CENT OF INCREASE. <sup>1</sup>									
	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 .....	5,507	136,844	100.0	\$289,411,987	100.0	\$119,470,016	100.0	12.6	42.3	18.0	33.6	52.0	67.1	26.0	49.9	56.5
Cotton goods .....	293	53,708	39.2	90,743,083	31.4	28,405,261	23.8	13.7	29.9	20.1	24.8	57.8	66.5	18.4	68.6	29.5
Tobacco manufactures.....	33	10,407	7.0	57,861,378	20.0	33,551,378	28.1	27.6	12.5	10.8	60.8	102.8	61.3	23.6	88.1	
Lumber and timber products.....	2,952	34,374	25.1	39,031,573	13.7	23,311,474	19.5	1.1	100.2	-15.0	18.2	72.0	11.7	11.0	63.0	27.5
Oil, cottonseed, and cake.....	62	1,586	1.2	15,269,304	5.3	2,155,209	1.8	36.1	34.4	53.7	79.6	123.8	40.0	52.4	78.3	53.7
Fertilizers.....	41	1,690	1.2	10,307,856	3.6	2,603,639	2.2	81.1	2.8	112.6	63.2	103.8	106.9	22.1	142.1	94.1
Furniture.....	100	5,801	4.2	9,335,195	3.2	4,500,090	3.8	4.8	7.1	103.6	18.4	27.5	299.0	29.0	13.4	274.2
Flour-mill and gristmill products.....	293	688	0.4	8,963,501	3.1	1,319,718	1.1	18.5	-4.4	7.9	5.4	23.8	46.0	8.7	38.3	2.6
Hosiery and knit goods.....	74	7,787	5.7	8,892,362	3.1	2,482,703	2.1	51.2	75.0	96.9	72.6	107.4	142.8	16.0	96.5	109.8
Leather, tanned, curried, and finished.....	17	877	0.6	7,182,400	2.5	1,637,214	1.4	5.4	55.8	45.9	32.6	103.4	77.2	30.0	101.8	67.3
Cars and general shop construction and repairs by steam-railroad companies.....	16	2,806	2.1	5,047,536	1.7	2,208,723	1.8	9.3	30.2	72.9	72.0	20.0	61.7	60.9	23.7	79.6
Printing and publishing.....	2320	1,540	1.1	3,232,174	1.1	2,420,142	2.0	11.9	41.7	18.6	29.4	51.1	59.1	31.0	45.7	59.9
Carriages and wagons and materials.....	137	1,462	1.1	3,133,082	1.1	1,355,095	1.1	-10.2	18.6	71.6	-4.6	42.5	118.4	-2.4	29.2	101.3
Foundry and machine-shop products.....	136	1,526	1.1	2,895,965	1.0	1,569,564	1.3	2.4	22.5	52.6	4.5	2.4	94.0	2.7	14.5	102.9
Brick, tile, pottery, and other clay products.....	139	1,612	1.2	1,520,119	0.5	1,026,306	0.9	0.2	38.2	.....	15.1	64.7	.....	12.0	50.6	.....
Ice, manufactured.....	61	519	0.4	1,125,864	0.4	784,117	0.6	63.2	35.3	46.0	70.9	57.7	83.3	63.7	49.2	98.1
Marble and stone work.....	64	704	0.5	980,643	0.3	695,087	0.6	-12.8	163.8	-1.7	11.4	120.8	99.5	6.1	106.0	62.7
Copper, tin, and sheet-iron work.....	57	338	0.2	879,927	0.3	396,341	0.3	83.7	.....	150.5	92.8	92.1	147.5	83.9	67.3	
Broad and other bakery products.....	66	305	0.2	973,381	0.3	351,415	0.3	61.4	64.3	.....	62.0	110.1	129.9	77.3	75.2	130.6
Gas, illuminating and heating.....	20	210	0.2	710,379	0.2	464,406	0.4	39.1	45.2	.....	94.0	65.5	71.5	88.6	61.8	63.4
Coffins, burial cases, and undertakers' goods.....	14	312	0.2	801,066	0.2	347,240	0.3	38.0	23.5	61.2	96.3	20.0	127.7	77.9	-3.0	151.2
Textile goods.....	4	350	0.3	869,047	0.2	15,224	(*)	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woolen goods.....	5	391	0.3	608,541	0.2	272,391	0.2	-7.8	23.6	66.5	-1.2	21.4	91.7	-3.9	88.7	76.5
Saddlery and harness.....	37	138	0.1	529,565	0.2	195,794	0.2	2.2	-21.0	.....	24.1	39.5	102.6	15.3	47.8	79.7
Patent medicines and compounds.....	26	74	0.1	511,568	0.2	251,311	0.2	.....	.....	.....	8.0	78.2	195.6	-2.7	103.1	135.2
Paving materials.....	6	508	0.4	485,612	0.2	389,897	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mattresses and spring beds.....	29	174	0.1	378,389	0.1	153,140	0.1	4.8	.....	.....	10.4	92.1	192.9	7.0	155.4	194.7
Agricultural implements.....	17	140	0.1	305,108	0.1	206,840	0.2	12.9	23.4	.....	16.4	106.3	28.3	20.3	126.3	31.0
All other industries.....	470	6,863	5.0	16,627,700	5.7	6,396,727	5.4	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Percentages are based on figures in Table 2; a minus sign (-) denotes decrease. Percentages are omitted when base is less than 100, or when comparable figures can not be given.

<sup>2</sup> Excluding statistics for one establishment to avoid disclosure of individual operations.

<sup>3</sup> Less than one-tenth of 1 per cent.

To a large extent, the manufacturing industries of the state depend upon the products of agriculture. Cotton and tobacco alone furnished the raw material for more than 50 per cent of the total value of manufactured products in 1914, while lumber contributed more than a fourth of the remainder.

Separate statistics are presented for 27 industries, or industry groups, for each of which products valued at more than \$300,000 were reported for 1914. These industries include 5 with products exceeding \$10,000,000 in value, 5 with products between \$5,000,000 and \$10,000,000, 5 with products between \$1,000,000 and \$5,000,000, and 12 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: Bags, other than paper; dyestuffs and extracts; paper and wood pulp; and waste.

The industries in this table are arranged in the order of their importance as shown by value of products, but the arrangement would vary considerably from that given if based on average number of wage earners or value added by manufacture. Cotton goods, tobacco manufactures, and lumber and timber products, the three leading industries in regard to wage earners, value of products, and value added by manufacture, show variations in this respect. Cotton goods ranked first in value of products and number of wage earners, but second in value added by manufacture. Tobacco manufactures, second in value of

products, was third in number of wage earners and first in value added by manufacture. Lumber, third in value of products and value added by manufacture, was second in number of wage earners. Oil, cottonseed, and cake, fourth in value of products, was ninth in number of wage earners and in value added by manufacture. Fertilizers, fifth in value of products, was seventh in number of wage earners and fifth in value added by manufacture. Flour-mill and gristmill products was seventh in value of products, fifteenth in average number of wage earners, and thirteenth in value added by manufacture. This industry consists largely in the comparatively simple process of grinding grain, requiring few employees, and the proportional value added to the raw material by manufacture is very small in comparison with the corresponding proportions for 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, cotton goods, tobacco manufactures, lumber and timber products, and oil, cottonseed, and cake, held the same rank at both censuses. Fertilizers, furniture, flour-mill and gristmill products, and hosiery and knit goods, ranking fifth, sixth, seventh, and eighth, respectively, in 1914, were seventh, sixth, fifth, and ninth, respectively, in 1909. For the remainder of the industries slight changes from census to census are noticeable.

*Cotton goods.*—At the 1914 census, 293 establishments were reported as engaged in the manufacture of cotton goods in North Carolina. The value of the products of these establishments and the average number of wage earners employed by them represented 31.4 per cent and 39.3 per cent, respectively, of the corresponding totals for all industries in the state. The value of products reported for this industry, \$90,743,683, places North Carolina second in order of importance among the cotton manufacturing states. During the five-year period 1909–1914, the total value of products increased from \$72,680,000 to \$90,744,000, or by 24.8 per cent; the average number of wage earners from 47,231 to 53,703, or by 13.7 per cent, and the value added by manufacture from \$23,992,000 to \$28,405,000, or by 18.4 per cent. In horsepower reported, this industry led all others in the state.

*Tobacco manufactures.*—Second in importance in the state, this industry although showing a decrease from census to census in number of establishments, shows marked increases in average number of wage earners, amount paid in wages, cost of materials, and value of products. During the five-year period 1909–1914, the average number of wage earners increased by 27.6 per cent and the value of products by 60.8 per cent.

*Lumber and timber products.*—This industry, embracing the operations of logging camps, sawmills,

planing mills, and wooden-box factories, was third in importance in 1914. Its increase in average number of wage earners during the period 1909–1914 was comparatively small, amounting to only 373, or 1.1 per cent; but a considerable increase in value of products, from \$33,525,000 in 1909 to \$39,632,000 in 1914, or 18.2 per cent, is shown. The percentage of increase during the ten years from 1904 to 1914 was 103.4.

*Oil, cottonseed, and cake.*—The statistics presented comprise those for all establishments reported as engaged primarily in extracting oil from cotton seed or in refining crude cottonseed oil. The remarkable growth of this industry from census to census is shown by the increases in value of products and in number of wage earners. For the three five-year periods 1899–1904, 1904–1909, and 1909–1914, the percentages of increase in value of products were 40, 126.8, and 79.6, respectively. These percentages for the last two periods were twice as great as the corresponding ones for all industries combined. Furthermore, the percentage of increase for 1904–1909 was greater than for any other industry in the state; and the percentage for 1909–1914 was greater than for any other industry with products valued at more than one million dollars. These percentages, however, are affected somewhat by the general rise in prices, and so to some extent exaggerate the actual increase in quantity of products. The percentages of increase in wage earners, however, are also decidedly higher than for most other industries.

*Fertilizers.*—This industry, measured by value of products, ranked seventh in 1909, but took fifth place in 1914. The growth of the cottonseed-oil industry and the utilization of phosphate rock have resulted in a marked increase in the manufacture of fertilizers. The 41 establishments reported in 1914 gave employment to an average of 1,690 wage earners and manufactured products valued at \$10,308,000; the percentages of increases over the 1909 figures being 81.1 and 63.2, respectively.

*Persons engaged in manufacturing industries.*—Table 3 shows, for 1909 and 1914, the number of persons engaged in manufactures, distributed by sex, and the average number of wage earners distributed 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" at the beginning of this report.

In 1914 the number of persons engaged in manufactures was 151,335, of whom 136,844, or nine-tenths, were wage earners; 9,968 were proprietors and officials; and 4,523 were clerks and other subordinate salaried employees. Of the wage earners 16 years of age and over, 99,468, or four-fifths, were males, and 26,781, or one-fifth, were females. Figures for the sex and age distribution of wage earners for individual industries will be found in Table 33.

**Table 3**

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.					CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.				
		Total.	Male.	Female.	Per cent of total.				Total.	Male.	Female.	Per cent of total.	
					Male.	Female.						Male.	Female.
All classes.....	1914 1909	151,335 133,453	113,974 105,175	32,361 28,278	75.0 78.8	21.4 21.2	Clerks and other subordinate salaried employees.	1914 1909	4,523 3,043	3,682 2,513	841 530	81.4 82.6	18.6 17.4
Proprietors and officials.....	1914 1909	9,968 8,937	9,373 8,375	90 62	93.1 99.3	0.9 0.7	Wage earners (average number).....	1914 1909	136,844 121,473	105,414 93,787	31,430 27,686	77.0 77.2	23.0 22.8
Proprietors and firm members..	1914	5,950	5,880	61	99.0	1.0	16 years of age and over.....	1914	126,249	99,468	26,781	78.8	21.2
Salaried officers of corporations..	1909	5,451	5,395	56	99.0	1.0	Under 16 years of age.....	1909	107,775	86,082	21,693	79.9	20.1
Superintendents and managers..	1914 1909	1,637 1,460	1,613 1,458	24 4	98.5 99.7	1.5 0.3		1914	10,595	5,946	4,649	56.1	43.9
	1914 1909	2,381 2,026	2,376 2,024	5 2	99.8 99.9	0.2 0.1		1909	13,998	7,705	6,293	55.2	43.8

Table 4 shows, 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.

This table shows an increase during the five-year period for each of the several classes of employees, with the exception of wage earners under 16 years of

age, in which group a decrease of 22.6 per cent took place. The largest percentage of increase for both sexes combined, 48.6, is shown for clerks and other subordinate salaried employees. Wage earners 16 years of age and over represented 83.4 per cent of the total number of persons engaged in manufacturing industries in the state in 1914 and 80.7 in 1909.

**Table 4**

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.								
	Per cent of increase, <sup>1</sup> 1909-1914.			Per cent distribution.					
	Total.	Male.	Female.	Total.		Male.		Female.	
				1914	1909	1914	1909	1914	1909
All classes.....	13.4	13.1	14.4	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials.....	11.5	11.3	.....	6.6	6.7	8.3	8.4	0.3	0.2
Proprietors and firm members.....	9.2	9.2	.....	3.9	4.1	4.9	5.1	0.2	0.2
Salaried officers of corporations.....	12.1	10.8	.....	1.1	1.1	1.4	1.4	0.1	(3)
Superintendents and managers.....	17.5	17.4	.....	1.6	1.5	2.0	1.9	(2)	(2)
Clerks and other subordinate salaried employees.....	48.6	46.5	58.7	3.0	2.3	3.1	2.4	2.6	1.9
Wage earners (average number).....	12.0	12.4	13.5	90.4	91.0	88.6	89.2	97.1	97.9
16 years of age and over.....	17.1	15.6	23.5	83.4	80.8	83.6	81.8	82.8	76.7
Under 16 years of age.....	-22.6	-22.8	-22.4	7.0	10.3	5.0	7.3	14.4	21.2

<sup>1</sup>A minus sign (-) denotes decrease. Percentages are omitted when base is less than 100.

<sup>2</sup>Less than one-tenth of 1 per cent.

Table 5 shows, for the three principal classes of persons engaged in manufactures, the numbers and the per cent distribution for 1914, 1909, and 1904, together with the percentages of increase for the two five-year periods.

Each of the three classes shown in this table as well as the total for all classes combined show increases for both five-year periods; but the increases, both absolute and relative, are much greater for the earlier than for the later period.

**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.....	151,335	133,453	93,142	100.0	100.0	100.0	13.4	43.3
Proprietors and firm members.....	5,950	5,451	3,731	3.9	4.1	4.0	9.2	46.1
Salaried employees.....	8,541	6,529	4,072	5.6	4.9	4.4	30.8	60.3
Wage earners (average number).....	136,844	121,473	85,339	90.4	91.0	91.6	12.6	42.3

Table 6 shows, for 1914, 1909, and 1904, for all industries combined and for 1914 and 1909, for important industries separately, 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.

For all industries combined, the proportion of male wage earners 16 years of age and over has been greater at each successive census, while the proportion of females decreased between 1904 and 1909 but increased somewhat during the next five-year period. The actual number of females employed, however, has increased from census to census. The proportion of children under 16 employed as wage earners has decreased from census to census, although this class increased in actual number between 1904 and 1909.

Of the 16 industries for which separate figures are given in this table, 10 show an increase from 1909 to 1914 in proportion of males and 11 an increase in proportion of females, while in only one—marble and stone work—was there an increase in proportion of

children under 16 years of age. There were, however, only 14 children employed in this industry in 1914 and 8 in 1909. Hosiery and knit goods is the only industry in which the combined proportion of women and children employed as wage earners is greater than that of men. In this industry children under 16 years of age formed 27.7 per cent of the total average number

of wage earners in 1909, but by 1914 the proportion had fallen to 16.8 per cent. The wage earners under 16 years of age, in North Carolina, are employed principally in the hosiery and knit goods, cotton goods, and tobacco manufactures industries, which together employ about nine-tenths of all the wage earners in this age period.

Table 6

INDUSTRY.	Census year.	WAGE EARNERS.					INDUSTRY.	Census year.	WAGE EARNERS.				
		Average number.	Per cent of total.			Average number.			Per cent of total.				
			16 years of age and over.		Under 16 years of age.				16 years of age and over.		Under 16 years of age.		
			Male.	Female.					Male.	Female.			
All industries.....	1914 1909 1904	136,844 121,473 85,339	72.7 70.9 64.9	19.6 17.9 21.4	7.7 11.3 13.6	Hosiery and knit goods.....	1914 1909	7,787 5,151	30.8 22.5	52.4 49.7	16.8 27.7		
Brick, tile, pottery, and other clay products.	1914 1909	1,612 1,608	97.0 92.5	..... 3.0	..... 7.5	Ice, manufactured.....	1914 1909	519 318	98.1 98.1	1.5 .....	0.4 1.9		
Carrriages and wagons and materials.....	1914 1909	1,462 1,629	98.6 95.2	0.9 0.4	0.5 4.4	Leather, tanned, curried, and finished.....	1914 1909	877 832	99.5 99.5	0.3 .....	0.1 0.5		
Cars and general shop construction and repairs by steam-railroad companies.	1914 1909	2,806 2,568	99.1 99.6	0.9 0.2	..... 0.2	Lumber and timber products.....	1914 1909	34,374 34,001	98.9 98.6	0.3 0.1	0.8 1.3		
Cotton goods.....	1914 1909	53,703 47,231	55.3 51.1	31.4 30.0	13.3 18.9	Marble and stone work.....	1914 1909	704 807	98.2 99.3	..... .....	1.8 0.7		
Fertilizers.....	1914 1909	1,090 933	100.0 100.0	..... .....	..... .....	Oil, cottonseed, and cake.....	1914 1909	1,586 1,165	99.4 97.9	0.1 0.1	0.5 2.1		
Flour-mill and gristmill products.....	1914 1909	588 490	99.8 98.0	..... 0.6	0.2 1.4	Printing and publishing.....	1914 1909	1,540 1,376	76.9 70.0	15.3 12.1	7.8 8.9		
Foundry and machine-shop products.....	1914 1909	1,526 1,490	99.3 98.8	0.4 0.3	0.3 0.9	Tobacco manufactures.....	1914 1909	10,467 8,203	57.5 54.1	33.1 28.8	9.4 17.1		
Furniture.....	1914 1909	5,801 5,533	93.9 92.4	0.2 (2)	5.0 7.6	All other industries.....	1914 1909	9,802 8,132	76.2 62.2	20.3 29.2	3.5 8.6		

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

Table 7 shows the average number and the per cent distribution of wage earners in each of the 10 cities having more than 10,000 inhabitants, classi-

fied 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—									
		Asheville.	Charlotte.	Durham.	Greensboro.	High Point.	New Bern.	Raleigh.	Rocky Mount.	Wilmington.	Winston-Salem.
Total.....	1914 1909 1904	951 1,978 792	3,799 4,199 2,234	4,764 1,3,699 .....	1,220 952 1,008	3,582 ..... .....	848 ..... .....	1,051 1,023 585	1,454 ..... .....	1,721 1,213 1,594	9,634 27,636 .....
16 years of age and over:											
Male.....	1914 1909 1904	764 1,712 550	2,772 2,930 1,312	2,546 1,1,751 .....	799 602 1,751	2,585 ..... .....	829 ..... .....	789 655 502	1,313 ..... .....	1,548 1,096 1,414	5,543 4,248 .....
Female.....	1914 1909 1904	169 217 118	781 956 649	1,614 1,080 .....	318 271 273	688 ..... .....	5 ..... .....	236 273 74	128 ..... .....	154 77 150	3,227 2,206 .....
Under 16 years of age.....	1914 1909 1904	18 49 124	246 313 273	604 868 .....	112 79 74	309 ..... .....	14 ..... .....	26 95 9	13 ..... .....	19 40 130	864 1,182 .....
Per cent of total:											
16 years of age and over—											
Male.....	1914 1909 1904	80.3 72.8 69.4	73.0 69.8 58.7	53.4 47.3 .....	65.0 63.2 65.4	72.2 ..... .....	97.8 ..... 0.6	75.1 64.0 85.8	90.3 ..... 8.8	80.9 90.4 88.7	57.5 55.0 .....
Female.....	1914 1909 1904	17.8 22.2 14.9	20.6 22.8 29.1	33.9 29.2 .....	25.9 28.5 24.9	10.2 ..... .....	0.6 ..... .....	22.4 26.7 12.6	8.8 ..... .....	9.0 6.3 9.4	33.5 28.9 .....
Under 16 years of age.....	1914 1909 1904	1.9 5.0 15.7	6.5 7.4 12.2	12.7 23.5 .....	9.1 8.3 6.7	8.6 ..... .....	1.6 ..... .....	2.5 9.3 1.5	0.9 ..... .....	1.1 3.3 1.9	9.0 15.5 .....

<sup>1</sup> 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.  
<sup>2</sup> Figures represent a consolidation of Winston and Salem.

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.

As might be expected, 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 cities in which the proportion of adult males in 1914 fell below 65 per cent being Durham and Winston-Salem; and in each of these places it increased between 1909 and 1914. The percentages for all cities combined were 67.1 for men, 25.2 for women, and 7.7 for children. The 4 cities for which per cents are given show marked decreases from census to census in both numbers and proportions of wage earners under 16 years of age.

Wilmington is the only city which shows a decrease from 1909 to 1914 in the proportion of male wage earners 16 years of age and over. This decrease, however, is very slight. The female wage earners in Wilmington represent only a small proportion of the total—9 per cent in 1914, as against 6.3 per cent in 1909.

In Winston-Salem, by far the most important city of the state in respect to number of wage earners employed, the percentage of males 16 years of age and over increased from 55.6 in 1909 to 57.5 in 1914, and during the same period the percentage of adult females rose from 28.9 to 33.5, while that of children employed as wage earners decreased from 15.5 to 9.

The highest percentage of increase during the last five-year period in total number of wage earners, 41.9, is shown for Wilmington; the next highest, 29.1, for Greensboro; and the third highest, 28.8, for Durham.

CITY.	PER CENT OF INCREASE <sup>1</sup> IN AVERAGE NUMBER OF WAGE EARNERS.				
	Period.	Total.	16 years of age and over.		Under 16 years of age.
			Male.	Female.	
Asheville.....	1904-1914	20.0	38.0	43.2	.....
	1909-1914	-2.8	7.3	-22.1	.....
	1904-1909	23.5	20.4	83.0	-60.5
Charlotte.....	1904-1914	70.0	111.3	20.3	-9.0
	1909-1914	-0.5	-5.4	-18.3	-21.4
	1904-1909	88.0	123.3	47.3	14.6
Durham.....	1909-1914	28.8	45.4	40.4	-30.4
Greensboro.....	1904-1914	11.0	6.4	16.5	.....
	1909-1914	20.1	32.7	17.3	.....
	1904-1909	-13.3	-19.8	-0.7	.....
Raleigh.....	1904-1914	79.6	57.2	218.0	.....
	1909-1914	2.7	20.4	-13.6	.....
	1904-1909	74.9	30.5	268.9	.....
Wilmington.....	1904-1914	8.0	9.5	2.7	.....
	1909-1914	41.9	41.2	100.0	.....
	1904-1909	-23.9	-22.5	-48.7	.....
Winston-Salem.....	1909-1914	26.2	30.5	46.3	-26.0

<sup>1</sup> A minus sign (-) denotes decrease. Percentages are omitted when base is less than 100.

**Wage earners employed, by months.**—Table 9 shows, for all industries combined, the total number of wage earners employed on the 15th of each month, or the nearest representative day, for the years 1914 and

1909, and the average number employed 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.

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number. <sup>1</sup>			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January.....	138,553	117,007	82,610	97.9	90.9	94.4
February.....	138,731	118,464	84,597	98.0	92.0	96.0
March.....	141,491	120,354	87,106	100.0	93.5	99.5
April.....	140,511	120,038	87,546	99.3	93.2	100.0
May.....	139,150	118,441	86,828	98.3	92.0	99.2
June.....	137,182	117,713	85,717	97.0	91.4	97.9
July.....	136,775	118,953	82,928	96.7	92.4	94.7
August.....	135,010	120,417	81,683	95.4	93.5	93.3
September.....	134,405	123,496	85,955	95.0	95.9	98.2
October.....	133,804	126,265	87,156	94.6	98.1	99.6
November.....	133,545	127,774	86,876	94.4	99.2	99.2
December.....	132,911	128,764	85,066	93.0	100.0	97.2

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

For 1914 the spring months show the greatest activity in the combined industries of the state, the maximum number of wage earners appearing for March and the minimum for December. The year 1909 shows a very different condition, the maximum month being December and the minimum January, while in 1904 the maximum was April and the minimum August. The greatest difference between the maximum and minimum months in any one of the three census years was 11,747, or 0.1 per cent of the maximum, in 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 10 cities having more than 10,000 inhabitants.

Of the selected industries, oil, cotton seed, and cake, an industry ranking fourth in the state, shows the greatest degree of fluctuation, the number of wage earners in July being but 19.4 per cent of the number in February. This industry, however, together with brick, tile, pottery, and other clay products and fertilizers, being a seasonal one, the fluctuation is natural. The least fluctuation is shown for flour mill and grist-mill products, for which industry the proportion which the minimum formed of the maximum was 98.1 per cent.

Of the 10 cities, New Bern shows the greatest fluctuation, the percentage that the minimum formed of the maximum for this city being only 61.1. For no other city was the corresponding percentage less than 78. The smallest degree of fluctuation appears for Rocky Mount, for which the percentage was 95.7; and for three other cities—Durham, Winston-Salem, and Charlotte—it was more than 90.

Table 10

WAGE EARNERS: 1914.  
[The month of maximum employment for each industry is indicated by boldface figures and that of minimum employment by italic figures.]

INDUSTRY AND CITY.	Average number employed during year.	Number employed on 15th day of the month or nearest representative day.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	136,844	138,553	138,731	<b>141,401</b>	140,511	139,150	137,182	136,775	135,010	134,465	133,804	133,545	<i>132,911</i>	93.9
Brick, tile, pottery, and other clay products.....	1,612	827	909	1,228	1,957	2,237	<b>2,299</b>	2,270	2,159	2,001	1,526	1,115	816	35.5
Carriages and wagons and materials.....	1,462	1,565	1,009	1,653	1,043	1,641	1,653	1,599	1,701	1,237	1,174	1,104	960	56.4
Cars and general shop construction and repairs by steam-railroad companies.....	2,806	2,818	2,844	2,883	<b>2,964</b>	2,830	2,805	2,936	2,865	2,833	2,645	<b>2,620</b>	2,620	88.4
Cotton goods.....	53,703	<b>54,680</b>	54,462	54,988	54,440	54,208	53,842	53,695	52,743	<i>52,451</i>	52,969	53,141	53,357	95.9
Fertilizers.....	1,690	1,530	1,822	3,062	<b>3,081</b>	1,929	1,236	1,030	1,150	1,243	1,451	1,378	1,302	33.4
Flour-mill and gristmill products.....	588	586	587	589	586	581	585	591	589	592	591	589	590	98.1
Foundry and machine-shop products.....	1,526	1,562	1,591	1,609	1,601	1,598	1,598	1,582	1,522	1,522	1,360	1,340	1,349	83.7
Furniture.....	5,801	6,407	6,330	6,331	6,183	6,013	5,936	5,917	5,925	5,589	5,202	4,938	<b>4,841</b>	75.6
Hosiery and knit goods.....	7,787	7,863	7,612	<b>8,095</b>	8,056	8,021	7,951	7,765	7,709	7,749	7,276	7,445	7,602	89.9
Ice, manufactured.....	510	317	324	340	414	627	731	859	729	637	513	376	361	36.9
Leather, tanned, carried, and finished.....	877	797	781	844	929	954	991	1,006	968	854	820	799	781	77.6
Lumber and timber products.....	34,374	34,791	34,441	<b>35,326</b>	34,569	34,709	34,422	34,525	33,850	<i>35,078</i>	34,347	34,053	33,922	95.3
Marble and stone work.....	704	618	727	793	726	755	732	777	771	722	716	678	593	66.7
Oil, cottonseed, and cake.....	1,586	2,443	2,464	2,152	1,492	916	533	478	502	1,127	2,118	2,397	2,410	19.4
Printing and publishing.....	1,540	1,514	<i>1,506</i>	1,523	1,514	1,535	1,533	1,533	1,525	1,534	1,585	1,589	1,589	94.8
Tobacco manufactures.....	10,467	10,517	10,479	10,542	10,275	10,525	10,579	10,594	10,476	<b>10,757</b>	<i>10,161</i>	10,391	10,337	94.5
All other industries.....	9,892	9,902	9,943	10,158	10,141	10,011	9,758	9,604	9,700	9,939	<i>9,560</i>	9,616	9,442	92.0
Total for cities.....	20,033	20,687	20,804	<b>30,066</b>	20,591	20,354	20,250	20,075	28,609	28,806	28,285	28,247	27,622	91.9
ASHVILLE.....	951	853	864	916	977	965	1,007	1,020	1,025	1,009	988	920	877	83.2
CHARLOTTE.....	3,790	3,906	4,021	3,956	3,860	3,699	3,699	3,676	3,738	3,712	3,785	3,741	3,795	91.4
DURHAM.....	4,764	4,773	4,674	4,860	4,643	4,764	4,715	4,643	4,820	4,858	4,879	4,879	4,715	94.4
GREENSBORO.....	1,229	1,230	1,221	1,203	1,201	1,258	1,258	1,258	1,232	1,215	1,148	1,144	1,064	78.4
HIGH POINT.....	3,582	3,792	3,823	<b>3,862</b>	3,816	3,752	3,750	3,619	3,428	3,428	3,338	3,202	3,065	79.1
NEW BERN.....	848	937	1,012	903	1,057	832	825	939	679	<i>646</i>	834	840	967	61.1
RALPHIGH.....	1,051	1,094	1,125	1,131	1,004	1,045	1,075	1,045	1,028	1,007	1,012	988	998	87.4
ROCKY MOUNT.....	1,454	1,474	1,482	1,472	1,480	1,464	1,422	1,420	1,419	1,430	1,459	1,463	1,457	95.7
WILMINGTON.....	1,721	1,828	1,870	<b>1,978</b>	1,766	1,665	1,665	1,666	1,687	1,680	1,674	1,683	1,605	89.3
WINSTON-SALEM.....	9,634	9,710	9,712	9,676	9,647	9,810	9,813	9,722	9,606	9,762	9,189	9,482	9,470	93.6

Prevailing hours of labor.—Table 11 presents, for 1914 and 1909, for all industries combined and for selected industries throughout the state, a classification of wage earners 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.

The figures in this table, for the state as a whole and for the selected industries, emphasize the tendency toward a shortening of the working day of wage earners. In 1909, 52,647, or more than two-fifths of the total average number of wage earners for all industries combined, were employed in establishments where the prevailing hours of labor were more than 60 per week, whereas 9,877, or only about one-fourteenth, were so employed in 1914. On the other hand, the number of wage earners whose working hours were 60 per week increased from 47,974, or 39.5 per cent of the total for the state, in 1909 to 100,236, or 73.2 per cent of the total, in 1914; and during the five-year period there was a marked increase in the pro-

portion in each of the four classes working fewer than 60 hours per week.

Among the separate industries cotton goods shows the most pronounced decrease in hours of labor. In 1909, 16 per cent of the wage earners were employed in establishments where the hours were 60 or fewer per week, but in 1914 the proportion had increased to 99.6 per cent. A change in the same direction will also be noted in the case of hosiery and knit goods.

In 1914, for all industries combined and for most of them separately, the majority of the wage earners were employed in establishments in which the prevailing hours of labor were 60 per week. There were, however, a few notable exceptions. In tobacco manufactures nearly all the employees—95.6 per cent—were reported by establishments with prevailing hours between 54 and 60 per week; in cars and general shop construction and repairs by steam-railroad companies considerably more than half were reported by establishments where the prevailing hours were 54 per week, and nearly all the remainder by establishments with prevailing hours between 60 and 72; in printing and publishing the prevailing hours for nearly half of the employees were 48 and under, and more than half the remainder were establishments reporting 54 hours.

In the cottonseed-oil industry all wage earners were employed in establishments operating 60 hours and over per week; and in the manufacture of ice such establishments gave employment to 97.1 per cent of the wage earners reported for the industry.

Of the combined total average number of wage earners, 29,033, for the 10 cities in 1914, 26,849, or 92.5 per cent, were in establishments where the prevailing hours were 60 or fewer per week, while only 2,184 were in establishments in which the hours were more than 60 per week.

In Winston-Salem the proportion of wage earners in establishments in which the prevailing hours were more than 54 but less than 60 per week was nearly four-fifths—much greater than in any other city. The largest proportion in the 60-hour group—nearly three-fourths—is shown by Charlotte; and the largest in establishments with prevailing hours between 60 and 72—nearly 70 per cent—appears for Rocky Mount. On the other hand, by far the greatest proportion in establishments reporting their prevailing hours as 48 and under—22 per cent—is found for Raleigh.

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 1909	136,844 121,473	2,361 1,048	2,578 1,447	3,948 3,711	12,844 14,016	100,236 47,974	7,429 49,834	1,937 2,672	511 141
Brick, tile, pottery, and other clay products.....	1914 1909	1,612 1,608	07 20	113 86	64 23	404 288	870 1,138	20 43	14	10
Carrriages and wagons and materials.....	1914 1909	1,462 1,029	8 19	4 8	50 32	410 252	980 1,300	1 4	8	
Cars and general shop constructions and repairs by steam-railroad companies.....	1914 1909	2,806 2,698		121	1,070 2,389	8	61 58	1,067		
Cotton goods.....	1914 1909	53,708 47,231				52	53,491 7,499	212 39,680		
Fertilizers.....	1914 1909	1,690 933	6 2	9 70	60 2	501 70	983 686	101 36	25 139	
Flour-mill and gristmill products.....	1914 1909	588 406	11 14	4 4	5 7	15 18	369 307	114 117	44 20	
Foundry and machine-shop products.....	1914 1909	1,520 1,490	9 6	43 6	324 118	195 234	965 1,123	3		
Furniture.....	1914 1909	5,801 5,533	162 3	429 1	170 168	592 862	4,538 4,569			
Hosiery and knit goods.....	1914 1909	7,737 5,151			0	683 689	7,080 2,524	18 1,938		
Ice, manufactured.....	1914 1909	519 318			3	15	140 71	33 3	159 154	172 87
Leather, tanned, curried, and finished.....	1914 1909	877 832		1	1	139 8	738 820	2		
Lumber and timber products.....	1914 1909	34,374 34,601	635 738	1,075 729	223 257	3,245 2,645	23,410 22,838	4,053 6,540	8 259	225
Marble and stone work.....	1914 1909	704 807	605 118	5 319	135 220	15 74	44 76			
Oil, cottonseed, and cake.....	1914 1909	1,586 1,165					77 43	759 95	750 1,025	2
Printing and publishing.....	1914 1909	1,540 1,376	720 527	79 70	420 308	90 137	231 297	37		
Tobacco manufactures.....	1914 1909	10,467 8,203	1 66	60 59	36 4	10,007 7,628	363 446			
All other industries.....	1914 1909	9,802 8,132	238 142	161 43	779 209	1,555 1,119	5,867 4,183	151 1,336	937 1,058	114 42
Total for cities.....	1914	29,033	812	480	1,056	10,038	12,963	1,623	369	192
ASHEVILLE.....	1914	951	70	31	62	99	620	36	14	13
CHARLOTTE.....	1914	3,799	81	40	413	170	2,799	94	141	61
DURHAM.....	1914	4,764	61	19	57	2,261	2,407			19
GREENSBORO.....	1914	1,220	77	5	322	114	685	14	8	4
HIGH POINT.....	1914	3,582	81	349	112	513	2,562	7	18	
NEW BERN.....	1914	848	11		214		473	132	18	
RALEIGH.....	1914	1,051	232	2	67	33	625	61	31	
ROCKY MOUNT.....	1914	1,454	4	1	10	6	377	1,014	25	17
WILMINGTON.....	1914	1,721	109	14	345	188	714	217	99	35
WINSTON-SALEM.....	1914	9,634	80	19	54	7,614	1,761	48	15	43

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

In accepting the statistics in this table it must be remembered that some of the cities, notably High Point, New Bern, and Rocky Mount, that had a population of 10,000 and over at the census of 1914 were

included in the district outside of the cities at prior censuses. The table shows that for 1914 the cities, which represented 8.9 per cent of the estimated population of the state, reported 41.6 per cent of the total

value added by manufacture, 34.9 per cent of the total value of products, 21.2 per cent of the total average number of wage earners, but only 11.2 per cent of the total number of establishments.

**Table 12**

	Census year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER.						DISTRICTS OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 AND OVER.	
			Total.		10,000 to 25,000.		25,000 to 100,000.		Number or amount.	Per cent of aggregate.
			Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.		
Number of places.....	1914 1910 1900		10 7 0		7 5 0		3 2			
Population <sup>1</sup> .....	1914 1910 1900	2,339,452 2,206,287 1,893,810	208,050 154,578 87,447	8.9 7.0 4.6	114,190 94,816 87,447	4.8 4.3 4.6	94,706 59,702	4.1 2.7	2,130,496 2,051,709 1,806,363	91.1 93.0 95.4
Number of establishments.....	1914 1909 1890	5,507 4,031 3,405	618 465 256	11.2 9.4 7.4	367 293 256	6.7 5.9 7.4	251 172	4.6 3.5	4,839 4,466 3,209	88.8 90.6 92.6
Average number of wage earners.....	1914 1909 1890	136,844 121,473 72,322	29,033 19,700 9,204	21.2 16.2 12.8	13,879 14,288 9,264	10.1 11.8 12.8	15,164 5,412	11.1 4.5	107,811 101,773 63,058	78.8 83.8 87.2
Value of products.....	1914 1909 1890	\$289,411,087 216,650,055 85,274,083	\$100,986,515 62,336,066 14,530,073	34.9 28.8 17.0	\$47,711,215 48,872,265 14,530,073	16.5 22.0 17.0	\$53,275,300 13,464,401	18.4 6.2	\$188,425,472 154,319,380 70,743,410	65.1 71.2 83.0
Value added by manufacture.....	1914 1909 1890	119,470,016 94,794,525 40,419,850	49,087,509 31,946,204 7,139,230	41.0 33.7 17.7	23,292,055 26,916,387 7,139,230	19.5 28.4 17.7	26,395,514 5,029,877	22.1 5.3	69,782,447 62,848,261 33,280,629	58.4 66.3 82.3

<sup>1</sup> Census estimate of population for 1914.

Table 13 shows the relative importance in manufactures of each of the 10 cities having more than 10,000 inhabitants, as measured by average number of wage earners and by value of products, in 1914, 1909, and 1904. The cities are listed in the order of their importance as shown by value of products. Those for which comparative figures are not shown for 1909 and 1904 had less than 10,000 inhabitants in those years.

**Table 13**

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1914	1909	1904	1914	1909	1904
Winston-Salem.....	9,634	17,636		\$37,287,683	\$18,239,743	
Durham.....	4,761	3,690		27,597,258	23,026,578	
Charlotte.....	3,790	4,199	2,234	10,962,113	10,459,684	\$4,840,630
High Point.....	3,582			5,931,761		
Wilmington.....	1,721	1,213	1,594	5,025,504	3,004,717	2,004,323
Greensboro.....	1,229	952	1,098	3,464,328	2,031,609	1,743,837
Asheville.....	951	978	792	3,143,802	2,198,466	1,018,362
Raleigh.....	1,051	1,023	585	2,915,707	2,375,827	1,080,671
Rocky Mount.....	1,454			2,742,802		
New Bern.....	848			1,910,497		

<sup>1</sup> Figures represent a consolidation of Winston and Salem.  
<sup>2</sup> 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.

Winston and Salem were consolidated in 1913, and the figures published in this table for 1909 are therefore the combined totals for the city of Winston and the town of Salem. The principal industries in Winston-Salem are hosiery and knit goods, tobacco manufactures, woolen, worsted, and felt goods, and lumber and timber products. Durham also has large cotton and hosiery and knitting mills, and the output of its tobacco-manufacturing establishments is the greatest for any city in the state. Charlotte, which ranks third among the cities, has a diversity of indus-

tries, the most important being cotton goods, fertilizers, foundry and machine-shop products, oil, cottonseed, and cake, and printing and publishing.

It will be noted that the ranking of Greensboro, Asheville, and Rocky Mount in number of wage earners varies from their ranking in value of products.

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

This table shows for all industries combined an increase during the decade in the number of establishments throughout the state under each form of ownership. The greatest proportion of the establishments—nearly one-half of 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. In 1914, although only 26 per cent of the total number of establishments in the state were under corporate ownership, this class reported 86.2 per cent of the total value of products and 82 per cent of the total average number of wage earners. In 1909 and 1904 the corresponding proportions are only slightly less. The proportions of average number of wage earners and value of products reported by corporations have been greater at each

successive census. For both 1914 and 1909, with the single exception of marble and stone work for 1914, the largest proportion of the total value of products for each of the 15 industries for which separate statis-

tics are given is shown for establishments under corporate ownership. This condition prevailed also in 1914, as regards all industries combined, in each of the 10 cities.

Table 14

INDUSTRY AND CITY.	Cen-sus year.	AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		NUMBER OF ESTABLISHMENTS OWNED BY—			In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.				
		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.		
																		Total.	Total.
All industries.....	1914 1909 1904	2,680 2,265 1,425	1,444 1,330 879	1,383 1,327 908	136,844 121,473 85,330	14,538 14,215 10,184	112,216 95,885 65,954	10,091 11,873 9,201	10.6 11.7 11.9	82.0 78.9 77.3	7.4 9.4 10.8	\$280,411,087 210,650,055 142,520,770	\$21,131,123 17,451,170 14,318,310	\$249,417,500 182,140,664 113,510,110	\$18,863,355 17,004,212 14,692,347	7.3 8.1 10.0	86.2 84.1 79.0	6.5 7.8 10.3	
Brick, tile, pottery, and other clay products.	1914 1909	53 73	34 42	62 61	1,612 1,608	345 442	768 689	490 477	21.4 27.5	47.0 42.8	31.0 20.7	1,520,119 1,320,545	293,220 361,636	846,450 501,380	380,440 367,520	19.3 27.4	55.7 44.8	25.0 27.8	
Carrriages and wagons and materials.	1914 1909	71 71	29 29	37 38	1,402 1,629	407 423	771 800	284 400	27.8 26.0	52.8 40.1	10.4 24.0	3,133,082 3,282,634	596,542 692,098	1,940,900 1,847,250	589,571 743,277	19.0 21.1	62.2 56.3	18.8 22.6	
Cars and general shop construction and repairs by steam-railroad companies.	1914 1909	..... 12	16 .....	..... .....	2,806 2,568	..... 2,806	..... .....	..... .....	..... 100.0	..... 100.0	..... .....	5,047,530 2,933,779	..... .....	5,047,530 2,933,770	..... .....	..... 100.0	..... 100.0	..... .....	
Cotton goods.....	1914 1909	11 9	273 262	9 10	53,703 47,231	834 648	52,075 45,040	794 943	1.5 1.4	97.0 96.6	1.5 2.0	90,743,683 72,680,385	1,811,435 924,409	87,694,395 70,401,045	1,237,853 1,354,931	2.0 1.3	96.6 96.9	1.4 1.8	
Fertilizers.....	1914 1909	4 6	33 22	4 6	1,690 933	52 22	1,611 873	27 38	3.1 2.4	95.3 93.0	1.6 4.1	10,307,858 6,316,485	384,074 50,123	9,882,332 6,115,481	411,450 141,880	3.7 0.9	95.9 96.8	0.4 2.2	
Flour-mill and gristmill products.	1914 1909	136 106	54 42	103 101	588 496	221 146	190 166	177 181	37.6 29.4	32.3 34.1	30.1 36.5	8,063,501 8,501,219	2,640,852 2,210,058	3,784,363 3,581,027	2,538,286 2,700,534	29.5 26.1	42.2 42.1	28.3 31.8	
Foundry and machine-shop products.	1914 1909	54 38	55 45	27 19	1,520 1,490	242 330	956 1,005	328 155	15.9 22.1	62.0 67.5	21.5 10.4	2,895,095 2,771,287	430,180 400,164	1,873,860 2,112,722	591,025 198,401	14.9 16.0	64.7 78.2	20.4 7.2	
Furniture.....	1914 1909	4 11	80 98	16 8	5,801 5,533	113 182	5,259 5,191	429 160	1.9 3.3	90.7 93.8	7.4 2.0	9,335,195 7,884,979	246,340 207,100	8,356,631 7,462,105	732,224 215,384	2.6 2.6	89.5 94.6	7.8 2.7	
Hosiery and knit goods...	1914 1909	10 5	57 44	7 13	7,787 5,161	360 240	7,241 4,390	186 521	4.6 4.7	93.0 85.2	2.4 10.1	8,892,362 6,161,692	296,800 185,322	8,407,655 4,407,458	187,901 558,112	3.3 3.6	94.6 85.0	2.1 10.8	
Ice, manufactured.....	1914 1909	7 3	44 37	10 6	519 318	36 7	462 301	21 10	6.9 2.2	89.0 94.7	4.1 3.1	1,125,864 659,377	36,500 13,300	1,034,878 629,415	54,486 10,602	3.2 2.0	91.9 95.5	4.8 2.5	
Leather, tanned, curried, and finished.	1914 1909	5 18	6 10	0 11	877 832	..... 34	613 653	264 145	..... 4.1	69.9 78.5	30.1 17.4	7,182,400 5,415,495	..... 102,093	4,241,230 3,646,020	2,041,161 1,667,374	..... 1.9	59.1 97.3	40.9 30.8	
Lumber and timber products.	1914 1909	1,782 1,429	277 313	893 802	34,374 34,001	9,676 9,773	10,049 17,857	5,650 6,371	28.2 28.7	55.4 52.5	16.4 18.7	39,031,573 33,524,653	9,692,084 8,122,842	23,361,089 19,645,935	6,577,500 5,755,876	24.5 24.2	58.9 58.0	16.6 17.2	
Marble and stone work...	1914 1909	30 21	10 13	24 22	704 807	107 97	284 496	313 214	15.2 12.0	40.3 61.5	44.5 26.5	980,643 881,343	224,884 177,557	297,013 438,878	458,746 294,908	22.0 20.1	30.3 49.8	46.8 30.1	
Printing and publishing..	1914 1909	173 161	102 82	54 79	1,540 1,376	473 470	894 634	203 272	30.7 34.1	56.1 46.1	13.2 19.8	3,232,174 2,497,493	789,019 665,546	2,086,233 1,413,208	356,022 418,739	24.4 26.6	64.5 56.6	11.1 16.6	
Tobacco manufactures....	1914 1909	14 18	12 14	7 11	10,467 8,203	199 200	9,995 7,283	273 621	1.9 3.0	95.5 88.8	2.6 7.0	57,861,378 35,986,639	432,614 619,737	56,976,534 34,192,231	452,230 1,174,671	0.7 1.7	98.5 95.0	0.8 3.3	
Total for cities.....	1914	193	338	87	29,033	1,487	20,410	1,136	5.1	91.0	3.9	100,086,515	3,553,249	95,151,047	2,281,619	3.5	94.2	2.3	
ASHEVILLE.....	1914	18	21	6	951	94	766	91	9.0	80.5	9.6	3,148,802	150,000	2,776,325	213,468	5.0	88.2	6.8	
CHARLOTTE.....	1914	19	75	13	3,789	270	3,454	75	7.1	90.9	2.0	10,062,113	627,047	10,100,935	233,531	5.7	92.1	2.1	
DURHAM.....	1914	25	30	7	4,764	83	4,654	22	1.8	97.7	8.5	27,597,268	258,116	27,276,043	62,100	0.9	98.9	0.2	
GREENSBORO.....	1914	27	30	13	1,229	194	925	110	15.8	75.3	8.9	3,494,328	583,783	2,702,053	178,462	16.9	73.0	5.1	
HIGH POINT.....	1914	23	47	12	3,532	195	3,095	202	5.4	86.4	8.2	5,031,761	381,473	5,056,839	494,460	6.4	85.3	8.3	
NEW BERN.....	1914	0	17	3	848	58	725	65	6.8	85.5	7.7	1,010,497	160,084	1,665,464	75,949	8.8	87.2	4.0	
RALEIGH.....	1914	24	29	9	1,051	193	810	78	15.6	77.1	7.4	2,915,767	306,111	2,439,489	170,176	10.6	83.7	5.8	
ROCKY MOUNT.....	1914	3	15	2	1,454	28	1,412	14	1.9	97.1	1.0	2,742,802	33,346	2,836,040	23,416	1.2	97.9	0.9	
WILMINGTON.....	1914	27	35	9	1,721	141	1,432	148	8.2	83.2	8.0	5,025,594	445,258	4,279,538	300,709	8.9	85.1	6.0	
WINSTON-SALEM.....	1914	18	42	13	9,034	256	9,137	241	2.7	94.8	2.5	37,287,683	591,123	36,197,230	629,330	1.6	97.0	1.4	

Size of establishments.—Table 15 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, and value added by manufacture. The per cent distribution of the items constituting each total is also given.

For 1914, 554 establishments, or 10 per cent of the total number in the state, each reported products exceeding \$100,000 in value, as compared with 431, or 8.7 per cent of the total, for 1909, and 318, or 9.7 per cent, for 1904. For 1914 these establishments re-

ported 72 per cent of the total average number of wage earners for the state, 80 per cent of the total value of products, and 76.1 per cent of the total value added by manufacture. In the same year the small establishments—those having products less than \$5,000 in value—although representing 48.6 per cent of the total number of establishments, reported only 2 per cent of the total value of products. For the establishments having products valued at \$100,000 and over, the proportion of the total shows an increase at each successive census, from 71.1 per cent in 1904 to 74.2 per cent in 1909 and 80 per cent in 1914.

**Table 15**

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
	All classes.....	5,507	4,931	3,272	136,844	121,473	85,339	\$289,411,987	\$216,656,055	\$142,620,776	\$119,470,016	\$94,794,525
Less than \$5,000.....	2,674	2,322	1,276	6,152	6,970	2,916	5,731,874	5,151,695	3,118,617	3,930,522	3,432,538	2,061,917
\$5,000 to \$20,000.....	1,453	1,358	1,076	11,335	11,902	8,573	14,503,860	13,690,273	10,894,177	8,186,091	7,799,055	6,232,879
\$20,000 to \$100,000.....	826	820	602	20,802	24,074	17,030	37,767,441	37,172,248	27,111,101	16,346,915	16,501,882	11,818,958
\$100,000 to \$1,000,000.....	522	409	309	70,961	57,932	47,351	133,260,619	101,973,523	70,985,231	45,923,110	37,902,430	25,823,306
\$1,000,000 and over.....	32	22	9	27,594	20,595	8,530	98,155,193	58,668,316	30,411,650	45,083,345	29,065,020	17,312,682
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.....	48.0	47.1	39.0	4.5	5.7	3.5	2.0	2.4	2.2	3.3	3.6	3.3
\$5,000 to \$20,000.....	20.4	27.5	32.9	8.3	9.8	10.0	5.0	6.3	7.6	6.9	8.2	9.0
\$20,000 to \$100,000.....	15.0	16.0	18.4	15.2	19.8	21.0	13.0	17.2	19.0	13.7	17.5	18.7
\$100,000 to \$1,000,000.....	9.5	8.3	9.4	61.8	47.7	55.5	46.1	47.1	49.8	38.4	40.0	40.8
\$1,000,000 and over.....	0.0	0.4	0.3	20.2	17.0	10.0	33.9	27.1	21.3	37.7	30.7	27.4

Table 16 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 15 for all industries combined.

For 1914, as compared with 1909, this table shows that for two of the six industries—flour-mill and grist-mill products and lumber and timber products—there were increases, and for the others, decreases, in the number of establishments having products under \$5,000

in value. For all industries the establishments having products valued at \$100,000 and over show increases in average number of wage earners and value of products; and for all except flour-mill and gristmill products the establishments in this class also show increases in value added by manufacture. For all industries with the exception of flour-mill and gristmill products the large establishments reported greater proportions of the average number of wage earners, value of products, and value added by manufacture for 1914 than for 1909.

**Table 16**

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.		Per cent distribution.		AVERAGE NUMBER OF WAGE EARNERS.		Per cent distribution.		VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1914	1909	1914	1909	1914	1909	1914	1909	1914	1909	Per cent distribution.	1914	1909	Per cent distribution.		
COTTON GOODS.....	293	281	100.0	100.0	53,703	47,231	100.0	100.0	\$90,743,683	\$72,080,385	100.0	100.0	\$28,406,261	\$23,092,813	100.0	100.0
Less than \$5,000.....	5	10	1.7	3.6	78	121	0.1	0.3	82,108	114,193	0.1	0.2	13,306	30,283	0.1	0.1
\$5,000 to \$20,000.....	53	78	18.1	27.8	2,381	3,761	4.4	8.0	3,616,828	5,237,425	4.0	7.2	1,013,718	1,476,857	3.6	6.2
\$20,000 to \$100,000.....	221	184	75.4	65.5	38,697	34,868	72.1	73.8	62,877,545	51,858,858	69.3	71.4	20,093,657	17,399,276	70.7	72.5
\$100,000 and over.....	14	9	4.8	3.2	12,547	8,478	23.4	18.0	21,137,204	15,469,909	26.6	21.3	7,284,680	5,088,397	25.6	21.2
FLLOUR-MILL AND GRIST-MILL PRODUCTS.....	293	249	100.0	100.0	588	496	100.0	100.0	8,963,501	8,501,219	100.0	100.0	1,319,718	1,214,331	100.0	100.0
Less than \$5,000.....	47	27	16.0	10.8	47	15	8.0	3.0	138,821	83,942	1.5	1.0	34,102	16,681	2.6	1.4
\$5,000 to \$20,000.....	132	106	45.1	42.0	152	129	25.9	26.0	1,498,950	1,315,678	16.7	15.5	290,459	241,204	22.0	19.9
\$20,000 to \$100,000.....	100	103	34.1	41.4	270	239	45.9	48.2	4,368,521	4,260,144	48.7	50.2	720,649	628,559	54.6	51.8
\$100,000 to \$1,000,000.....	14	13	4.8	5.2	119	113	20.2	22.8	2,957,209	2,835,455	33.0	33.4	274,698	327,887	20.8	27.0
FURNITURE.....	109	117	100.0	100.0	5,801	5,533	100.0	100.0	9,335,195	7,884,679	100.0	100.0	4,599,990	3,486,869	100.0	100.0
Less than \$5,000.....	7	11	6.4	9.4	23	32	0.4	0.6	18,847	26,020	0.2	0.3	12,698	16,502	0.3	0.5
\$5,000 to \$20,000.....	17	16	15.6	13.7	221	183	3.8	3.3	201,402	170,572	2.2	2.3	105,585	89,203	2.3	2.6
\$20,000 to \$100,000.....	45	61	41.3	52.1	1,692	2,417	29.2	43.7	2,442,394	3,230,470	26.2	41.0	1,218,435	1,508,616	27.1	43.3
\$100,000 to \$1,000,000.....	40	29	36.7	24.8	3,885	2,901	66.6	52.4	6,669,552	4,448,608	71.4	56.4	3,163,372	1,872,548	70.3	53.7
LEATHER, TANNED, CURRIED, AND FINISHED.....	17	39	100.0	100.0	877	832	100.0	100.0	7,182,400	5,415,495	100.0	100.0	1,637,214	1,259,344	100.0	100.0
Less than \$5,000.....	6	22	35.3	56.4	8	18	0.9	2.2	12,403	30,420	0.2	0.6	5,429	13,731	0.3	1.1
\$5,000 to \$20,000.....	3	9	17.6	23.1	17	62	1.9	7.4	102,759	225,091	1.4	4.2	17,764	48,014	1.1	3.8
\$20,000 to \$100,000.....	8	8	47.1	20.5	852	752	97.2	90.4	7,067,238	5,159,978	98.4	95.3	1,614,021	1,197,599	98.6	95.1
\$100,000 and over.....																
LUMBER AND TIMBER PRODUCTS.....	2,952	2,544	100.0	100.0	34,374	34,001	100.0	100.0	39,631,573	33,624,653	100.0	100.0	23,311,474	20,991,056	100.0	100.0
Less than \$5,000.....	1,872	1,525	63.4	59.9	4,744	5,499	13.8	16.2	3,817,361	3,271,530	9.6	9.8	2,730,128	2,294,528	11.8	10.9
\$5,000 to \$20,000.....	739	685	25.0	26.9	7,266	7,586	21.1	22.3	6,911,375	6,427,028	17.5	19.2	4,460,293	4,278,951	19.1	20.4
\$20,000 to \$100,000.....	256	284	8.7	11.2	7,841	10,099	22.8	29.7	10,688,020	11,843,690	27.0	35.3	5,438,458	6,921,160	23.3	33.0
\$100,000 and over.....	85	50	2.9	2.0	14,523	10,817	42.3	31.8	18,184,817	11,982,415	45.9	35.7	10,673,595	7,496,411	45.8	35.7
TOBACCO MANUFACTURES.....	33	43	100.0	100.0	10,467	8,203	100.0	100.0	57,861,378	35,986,639	100.0	100.0	33,651,378	22,170,571	100.0	100.0
Less than \$5,000.....	10	13	30.3	30.2	7	19	0.1	0.2	16,235	27,837	0.1	0.1	11,124	15,683	0.1	0.1
\$5,000 to \$20,000.....	6	8	18.2	18.6	82	93	0.8	1.1	69,371	95,237	0.1	0.3	45,938	60,280	0.1	0.3
\$20,000 to \$100,000.....	5	7	15.1	16.3	125	196	1.2	2.4	244,637	301,083	0.4	0.8	136,885	171,937	0.4	0.8
\$100,000 and over.....	12	15	36.4	34.9	10,253	7,895	97.9	96.2	57,531,135	35,582,482	99.4	98.8	33,357,431	21,922,671	99.5	98.9

<sup>1</sup> Includes the group "less than \$5,000."

<sup>2</sup> Includes the group "\$5,000 to \$20,000."

<sup>3</sup> Includes the group "\$1,000,000 and over."

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

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.
<b>ASHEVILLE</b> .....	45	951	100.0	\$3,148,802	100.0	\$1,011,205	100.0
Less than \$5,000.....	11	12	1.3	25,558	0.8	16,412	1.6
\$5,000 to \$20,000.....	13	88	9.2	142,070	4.5	76,555	7.6
\$20,000 to \$100,000.....	16	231	24.3	662,827	22.0	390,733	38.6
\$100,000 and over <sup>1</sup> .....	6	620	65.2	2,288,347	72.7	527,695	52.2
<b>CHARLOTTE</b> .....	107	3,799	100.0	10,962,113	100.0	3,479,905	100.0
Less than \$5,000.....	13	18	0.5	28,181	0.3	15,352	0.4
\$5,000 to \$20,000.....	28	148	3.9	337,954	3.1	207,726	6.0
\$20,000 to \$100,000.....	39	753	19.8	1,799,426	16.4	910,780	26.2
\$100,000 and over <sup>1</sup> .....	27	2,880	75.8	8,796,552	80.2	2,346,047	67.4
<b>DURHAM</b> .....	62	4,764	100.0	27,597,258	100.0	15,093,932	100.0
Less than \$5,000.....	16	19	0.4	35,404	0.1	21,256	0.1
\$5,000 to \$20,000.....	25	106	2.2	265,868	1.0	134,278	0.9
\$20,000 to \$100,000.....	11	172	3.6	444,166	1.6	216,854	1.4
\$100,000 to \$1,000,000.....	6	665	14.0	1,586,033	5.7	462,010	3.1
\$1,000,000 and over.....	4	3,802	79.8	25,265,787	91.6	14,259,534	94.5
<b>GREENSBORO</b> .....	70	1,220	100.0	3,464,328	100.0	1,358,114	100.0
Less than \$5,000.....	17	25	2.0	47,781	1.4	36,990	2.7
\$5,000 to \$20,000.....	24	163	13.3	259,848	7.5	158,481	11.7
\$20,000 to \$100,000.....	20	393	32.0	914,539	26.4	447,502	33.0
\$100,000 to \$1,000,000.....	9	648	52.7	2,242,160	64.7	715,141	52.6
<b>HIGH POINT</b> .....	82	3,582	100.0	5,931,761	100.0	2,786,660	100.0
Less than \$5,000.....	18	34	0.9	55,980	0.9	31,936	1.1
\$5,000 to \$20,000.....	23	149	4.2	241,411	4.1	128,008	4.6
\$20,000 to \$100,000.....	22	641	17.9	1,132,841	19.1	540,815	19.4
\$100,000 to \$1,000,000.....	10	2,758	77.0	4,501,629	75.9	2,085,901	74.9
<b>NEW BERN</b> .....	20	848	100.0	1,010,407	100.0	705,983	100.0
Less than \$5,000.....	8	17	2.0	25,014	1.3	16,400	2.3
\$5,000 to \$20,000.....	7	110	13.0	93,950	4.9	61,431	8.7
\$20,000 to \$100,000.....	7	126	14.8	318,435	16.7	124,645	17.7
\$100,000 to \$1,000,000.....	7	595	70.2	1,473,008	77.1	503,507	71.3
<b>RALEIGH</b> .....	59	1,051	100.0	2,015,767	100.0	1,296,054	100.0
Less than \$5,000.....	9	5	0.5	21,770	1.1	10,630	0.8
\$5,000 to \$20,000.....	27	141	13.4	328,645	16.3	200,480	15.5
\$20,000 to \$100,000.....	15	202	19.2	630,647	31.3	403,176	31.1
\$100,000 and over <sup>1</sup> .....	8	643	61.2	1,028,606	51.4	681,768	52.6
<b>ROCKY MOUNT</b> .....	20	1,454	100.0	2,742,802	100.0	1,040,017	100.0
Less than \$20,000 <sup>2</sup> .....	10	65	4.5	110,789	4.0	66,750	6.4
\$20,000 to \$100,000.....	5	159	10.9	227,435	8.3	127,778	12.3
\$100,000 and over <sup>1</sup> .....	5	1,230	84.6	2,404,578	87.7	845,489	81.3
<b>WILMINGTON</b> .....	71	1,721	100.0	5,025,504	100.0	1,840,926	100.0
Less than \$5,000.....	11	25	1.5	25,910	0.5	17,530	1.0
\$5,000 to \$20,000.....	24	167	9.7	271,075	5.4	135,190	7.3
\$20,000 to \$100,000.....	25	436	25.3	1,320,397	26.3	630,847	34.3
\$100,000 and over <sup>1</sup> .....	11	1,093	63.5	3,408,122	67.8	1,057,359	57.4
<b>WINSTON-SALEM</b> .....	73	9,634	100.0	37,287,683	100.0	21,074,683	100.0
Less than \$5,000.....	14	10	0.1	42,865	0.1	26,372	0.1
\$5,000 to \$20,000.....	13	61	0.6	143,537	0.4	85,617	0.4
\$20,000 to \$100,000.....	30	643	0.7	1,429,895	3.8	678,489	3.2
\$100,000 and over <sup>1</sup> .....	16	8,920	92.6	35,671,386	95.7	20,284,205	96.2

<sup>1</sup> Includes the group "\$1,000,000 and over."

<sup>2</sup> Includes the group "less than \$5,000."

In the cities the same general condition prevails as that found throughout the state, namely, a preponderance as to number of wage earners, value of products, and value added by manufacture for establishments having products valued at \$100,000 and over. The highest percentages of total value of products reported by establishments in this class, 97.3 and 95.7, appear for Durham and Winston-Salem, the principal

manufacturing cities of the state; and the lowest, 64.7, is shown for Greensboro.

Table 18 shows, for 1914, for all industries combined, for 16 of the more important industries, and for each of the 10 cities, the number of establishments and the number of wage earners, classified according to the average number of wage earners reported for each establishment.

Table 18

INDUSTRY AND CITY.	ESTABLISHMENTS EMPLOYING—								
	TOTAL.		No wage earners.	1 to 5 wage earners.		6 to 20 wage earners.		21 to 50 wage earners.	
	Estab-lish-ments.	Wage earners (average number).		Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
All industries.....	5,507	130,844	180	3,116	7,108	1,272	13,821	411	13,388
Brick, tile, pottery, and other clay products.....	139	1,612	4	53	157	61	697	20	609
Carrriages and wagons and materials.....	137	1,462	4	81	166	35	372	11	327
Cars and general shop construction and repairs by steam-railroad companies.....	16	2,806	.....	3	7	3	26	2	86
Cotton goods.....	203	53,703	.....	1	5	8	111	36	1,333
Fertilizers.....	41	1,690	.....	4	17	16	181	7	220
Flour-mill and gristmill products.....	203	588	31	248	452	14	136	.....	.....
Foundry and machine-shop products.....	136	1,626	4	74	191	33	356	21	655
Furniture.....	109	5,801	.....	8	21	25	321	30	1,051
Hosiery and knit goods.....	74	7,787	.....	2	2	9	120	27	829
Ice, manufactured.....	61	519	1	30	37	24	273	6	159
Leather, tanned, curried, and finished.....	17	877	1	7	12	1	12	.....	.....
Lumber and timber products.....	2,052	34,374	20	1,889	4,278	782	8,260	157	4,906
Marble and stone work.....	64	704	7	35	84	14	166	5	187
Oil, cottonseed, and cake.....	62	1,586	.....	4	17	27	411	26	885
Printing and publishing.....	329	1,540	40	219	565	52	514	11	376
Tobacco manufactures.....	33	10,467	2	11	20	5	77	3	102
All other industries.....	751	9,802	57	447	1,027	163	1,788	49	1,713
Total for cities.....	618	20,033	38	200	561	204	2,370	78	2,650
ASHEVILLE.....	45	951	4	14	37	22	264	3	108
CHARLOTTE.....	107	3,799	6	28	76	35	400	22	829
DURHAM.....	62	4,764	5	31	73	16	201	2	60
GREENSBORO.....	70	1,220	4	30	77	21	237	10	317
HIGH POINT.....	82	3,582	3	26	60	23	281	10	323
NEW BERN.....	29	848	1	7	17	13	148	2	79
RALEIGH.....	59	1,051	8	20	64	20	224	6	214
ROCKY MOUNT.....	20	1,454	.....	7	20	7	70	2	56
WILMINGTON.....	71	1,721	1	26	84	28	300	8	256
WINSTON-SALEM.....	78	9,634	6	20	53	19	236	13	408

Table 18—Continued.

INDUSTRY AND CITY.	ESTABLISHMENTS EMPLOYING—									
	51 to 100 wage earners.		101 to 250 wage earners.		251 to 500 wage earners.		501 to 1,000 wage earners.		Over 1,000 wage earners.	
	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
All industries.....	204	14,943	228	35,472	59	20,253	22	14,424	9	17,435
Brick, tile, pottery, and other clay products.....	.....	.....	1	140	.....	.....	.....	.....	.....	.....
Carrriages and wagons and materials.....	4	323	2	274	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	4	322	1	214	1	256	2	1,805	.....	.....
Cotton goods.....	67	5,061	131	20,627	32	10,950	14	8,781	4	6,326
Fertilizers.....	10	714	4	558	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.....	3	209	1	115	.....	.....	.....	.....	.....	.....
Furniture.....	32	2,382	14	2,026	.....	.....	.....	.....	.....	.....
Hosiery and knit goods.....	16	1,202	14	2,218	3	967	2	1,326	1	1,123
Ice, manufactured.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leather, tanned, curried, and finished.....	5	361	2	240	1	252	.....	.....	.....	.....
Lumber and timber products.....	33	2,250	43	6,828	16	5,044	2	1,086	1	1,122
Marble and stone work.....	2	116	1	151	.....	.....	.....	.....	.....	.....
Oil, cottonseed, and cake.....	5	323	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing.....	1	85	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco manufactures.....	2	140	4	574	2	684	1	506	3	8,304
All other industries.....	20	1,455	10	1,408	4	1,491	1	830	.....	.....
Total for cities.....	38	2,817	32	4,815	12	3,858	3	2,474	4	9,488
ASHEVILLE.....	.....	.....	.....	.....	2	542	.....	.....	.....	.....
CHARLOTTE.....	8	642	7	1,052	.....	.....	1	800	.....	.....
DURHAM.....	1	84	2	285	2	745	.....	.....	3	3,316
GREENSBORO.....	4	293	.....	.....	1	305	.....	.....	.....	.....
HIGH POINT.....	10	740	6	851	4	1,327	.....	.....	.....	.....
NEW BERN.....	4	265	2	339	.....	.....	.....	.....	.....	.....
RALEIGH.....	3	204	2	345	.....	.....	.....	.....	.....	.....
ROCKY MOUNT.....	1	53	2	274	.....	.....	1	972	.....	.....
WILMINGTON.....	4	288	3	537	1	256	.....	.....	.....	.....
WINSTON-SALEM.....	3	248	8	1,132	2	683	1	702	1	6,172

Table 19 presents, for 1914, percentages based on the figures in Table 18 and for 1909 similar percentages for all industries combined and for individual industries in the state as a whole. Considering the total for all industries, there were 186 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 one or two 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. Flour and grist mills, lumber mills, and job printing offices are the industries in which the largest number of these small establishments were reported.

Of the 5,507 establishments reported for all industries, 4,388, or 79.7 per cent, employed on the average less than 20 wage earners during the year. On the other hand, while these small establishments predominate in number, they gave employment to only 20,929 wage earners, or 15.3 per cent of the total for all establishments. There were only 318 establishments in the state that reported the employment of more than 100 wage earners each, but these establishments gave employment to 87,584, or 63.9 per cent of the total average number of wage earners reported for all establishments. These large establishments are shown especially for the manufacture of textiles, lumber, and tobacco, and in railroad repair shops.

Among the cities, the highest percentages of the total number of wage earners reported by establishments employing more than 100 wage earners each are shown for Durham, 91.2; and Winston-Salem, 90.3.

**Engines and power.**—Table 20 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 in the establishments reporting.

This table shows an increase in primary power amounting to 129,529 horsepower, or 34.2 per cent, from 1909 to 1914, somewhat more than half of which was due to the increase in rented power. The use of rented power, now almost wholly electric, has greatly increased since 1904, when it represented only 1.3 per cent of the total primary power reported. In 1909 the amount of rented power had increased 16.2 per cent of the total, and in 1914, 25.7 per cent of the total. The increase in the use of electric motors run by current generated within the same establishments, although considerable, has not kept pace with that in rented power. The power of motors operated by current generated in the same establishments represented 56.4 per cent of the total electric power in 1904, but only 21.1 per cent in 1914.

In spite of the great increase in rented power, owned power increased 76.7 per cent during the decade 1904-1914 and 19 per cent during the last five-year period. This was due in part to the fact that some of the large factories have installed electricity as emergency power, while others are using electric power and hold their steam engines in readiness for emergency.

The use of internal-combustion engines increased rapidly during the decade, but not so rapidly as that of rented electric power. The horsepower of such engines, however, represented only 1 per cent of the total primary power in 1914.

During the last five-year period there was a very slight decrease in the horsepower of water wheels, turbines, and motors, which in 1914 formed 8.1 per cent of the total primary power.

INDUSTRY AND CITY.	Census year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER.								
		1 to 5	6 to 20	21 to 50	51 to 100	101 to 250	251 to 500	501 to 1,000	Over 1,000	
All industries.....	1914	5.2	10.1	9.8	10.9	25.9	14.8	10.5	12.7	
	1909	5.1	12.2	11.0	14.0	20.8	17.9	8.8	10.2	
Brick, tile, pottery, and other clay products.	1914	0.7	43.2	37.8	.....	9.2	.....	.....	.....	
	1909	13.7	47.7	30.4	.....	8.2	.....	.....	.....	
Carriages and wagons and materials.	1914	11.4	25.4	22.4	22.1	18.7	.....	.....	.....	
	1909	9.2	25.3	34.2	25.0	6.3	.....	.....	.....	
Cars and general shop construction and repairs by steam-railroad companies.	1914	0.2	0.9	3.1	11.5	7.6	9.1	67.5	.....	
	1909	0.4	1.8	.....	2.1	13.4	.....	34.3	47.9	
Cotton goods.....	1914	( <sup>1</sup> )	0.2	2.5	9.4	38.4	20.4	16.4	12.7	
	1909	( <sup>1</sup> )	0.3	3.5	11.1	31.4	30.8	13.5	9.4	
Fertilizers.....	1914	1.0	10.7	13.0	42.2	33.0	.....	.....	.....	
	1909	3.2	13.0	15.4	52.9	14.8	.....	.....	.....	
Flour-mill and gristmill products.	1914	70.0	23.1	.....	.....	.....	.....	.....	.....	
	1909	74.4	25.6	.....	.....	.....	.....	.....	.....	
Foundry and machine-shop products	1914	12.5	23.3	42.9	13.7	7.5	.....	.....	.....	
	1909	7.5	25.2	39.7	27.5	.....	.....	.....	.....	
Furniture.....	1914	0.4	5.5	18.1	41.1	34.9	.....	.....	.....	
	1909	0.7	4.0	20.0	46.0	18.8	4.5	.....	.....	
Hosiery and knit goods.....	1914	( <sup>1</sup> )	1.5	10.6	15.4	28.5	12.4	17.0	14.4	
	1909	0.4	3.4	6.1	26.7	20.4	16.3	17.0	.....	
Ice, manufactured.....	1914	16.8	52.6	30.6	.....	.....	.....	.....	.....	
	1909	20.4	69.5	10.1	.....	.....	.....	.....	.....	
Leather, tanned, curried, and finished.	1914	1.4	1.4	.....	41.2	27.4	28.7	.....	.....	
	1909	4.6	4.9	5.0	45.8	39.7	.....	.....	.....	
Lumber and timber products...	1914	12.4	24.0	14.3	6.5	19.9	16.4	3.2	3.3	
	1909	10.7	28.0	16.0	12.1	12.8	9.2	3.5	7.1	
Marble and stone work.....	1914	11.0	23.6	26.6	16.5	21.4	.....	.....	.....	
	1909	7.0	22.3	29.2	9.6	.....	31.2	.....	.....	
Oil, cottonseed, and cake.....	1914	1.1	25.9	52.6	20.4	.....	.....	.....	.....	
	1909	0.9	34.3	53.4	11.3	.....	.....	.....	.....	
Printing and publishing.....	1914	36.7	33.4	24.4	5.5	.....	.....	.....	.....	
	1909	33.3	43.9	8.1	9.0	.....	.....	.....	.....	
Tobacco manufactures.....	1914	0.2	0.7	1.0	1.3	5.5	0.5	4.8	70.9	
	1909	0.3	1.1	2.2	1.3	12.6	21.3	7.7	53.4	
Total for cities.....	1914	1.9	8.2	9.1	9.7	16.6	13.3	8.5	32.7	
ASHEVILLE.....	1914	3.0	27.8	11.4	.....	.....	56.9	.....	.....	
CHARLOTTE.....	1914	2.0	10.5	21.8	16.9	27.7	.....	21.1	.....	
DURHAM.....	1914	1.5	4.2	1.3	1.8	0.0	15.6	.....	69.6	
GREENSBORO.....	1914	6.3	19.3	25.8	23.8	.....	24.8	.....	.....	
HIGH POINT.....	1914	1.7	7.8	9.0	20.7	23.8	37.0	.....	.....	
NEW BERN.....	1914	2.0	17.5	0.3	31.3	30.9	.....	.....	.....	
RALEIGH.....	1914	3.1	21.3	20.4	19.4	32.8	.....	.....	.....	
ROCKY MOUNT.....	1914	1.4	5.4	3.9	3.6	18.8	.....	65.9	.....	
WILMINGTON.....	1914	4.9	17.4	14.0	16.7	31.2	14.9	.....	.....	
WINSTON-SALEM.....	1914	0.0	2.4	4.1	2.6	11.8	7.1	7.3	94.1	

<sup>1</sup> Less than one-tenth of 1 per cent.

The comparatively small establishments still predominate in the majority of the industries of the state.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total.....	10,046	7,373	3,504	508,085	378,650	216,622	100.0	100.0	100.0
Owned.....	5,944	5,385	3,504	377,602	317,201	213,697	74.3	83.8	98.6
Steam engines and turbines <sup>1</sup> .....	4,920	4,500	2,951	331,132	271,944	183,106	65.2	71.8	84.6
Internal-combustion engines.....	492	316	104	5,379	3,391	2,149	1.0	0.9	1.0
Water wheels, turbines, and motors.....	528	570	449	41,181	41,026	28,382	8.1	11.1	13.1
Rented.....	4,702	1,987	.....	130,393	61,295	2,925	25.7	16.2	1.4
Electric.....	4,702	1,987	( <sup>2</sup> )	128,000	60,044	2,423	25.3	15.9	1.1
Other.....	.....	.....	.....	1,733	1,251	502	0.3	0.3	0.2
Electric.....	0,739	2,708	196	163,101	86,002	5,553	100.0	100.0	100.0
Rented.....	4,702	1,987	( <sup>2</sup> )	128,000	60,044	2,423	78.9	69.8	43.6
Generated by establishments reporting.....	2,037	721	196	34,501	25,958	3,130	21.1	30.2	56.4

<sup>1</sup> Figures for horsepower include for 1909 and 1904 the amount reported under the head of "other" owned power.

<sup>2</sup> Not reported.

**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.

INDUSTRY AND CITY.	COAL.					Gas (1,000 cubic feet).	INDUSTRY AND CITY.	COAL.					Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels).	Gas (1,000 cubic feet).			Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels).	Gas (1,000 cubic feet).	
All industries.....	23,164	1,192,237	22,258	29,724	14,888	.....	Leather, tanned, curried, and finished.....	3,225	17,504	510	1	.....	
Agricultural implements.....	.....	641	398	131	.....	.....	Lumber and timber products.....	30	66,442	65	1,908	46	
Bread and other bakery products.....	237	838	1,120	16	385	.....	Marble and stone work.....	.....	4,059	.....	116	.....	
Brick, tile, pottery, and other clay products.....	2,288	67,020	1,689	92	5	.....	Oil, cottonseed, and cake.....	208	70,892	32	526	8,266	
Carriages and wagons and materials.....	95	3,320	438	330	10	.....	Printing and publishing.....	10	2,260	2	37	322	
Cars and general shop construction and repairs by steam-railroad companies.....	.....	46,187	.....	3,527	.....	.....	Tobacco manufactures.....	1,187	41,323	970	1,415	1,754	
Copper, tin, and sheet-iron work.....	4	443	8	78	44	.....	All other industries.....	.....	214,110	.....	.....	.....	
Cotton goods.....	13,500	486,293	5,434	539	.....	.....	Total for cities.....	3,896	208,176	0,356	12,881	11,789	
Fertilizers.....	.....	26,466	.....	1,217	.....	.....	ASHEVILLE.....	5	13,614	643	.....	7	
Flour-mill and gristmill products.....	155	7,083	70	1,610	.....	.....	CHARLOTTE.....	140	60,050	3,112	2,076	1,566	
Foundry and machine-shop products.....	218	5,023	4,766	506	55	.....	DURHAM.....	5	24,344	1,063	17	684	
Furniture.....	50	17,955	239	81	264	.....	GREENSBORO.....	204	11,410	718	1,497	1,130	
Gas, illuminating and heating.....	10	35,407	5,766	17,038	.....	.....	HIGH POINT.....	208	14,615	221	686	60	
Hosiery and knit goods.....	1,608	27,570	562	370	572	.....	NEW BERN.....	.....	2,220	338	1,000	.....	
Ice, manufactured.....	232	50,540	200	93	3,000	.....	RALEIGH.....	84	8,912	1,302	4,192	3,870	
Leather goods.....	37	102	18	175	.....	.....	ROCKY MOUNT.....	165	16,618	85	1,064	.....	
.....	.....	.....	.....	.....	.....	.....	WINSTON-SALEM.....	159	16,749	428	2,257	2,336	
.....	.....	.....	.....	.....	.....	.....	.....	2,896	30,614	1,326	62	1,636	

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 which no provision is made on the general schedule. Certain data of this character for five important industries in North Carolina are here presented, and also statistics for power laundries.

**Textiles.**—The progress of the textile industries is indicated by the increase in the number of spindles, looms, knitting machines, and other equipment. The following table shows the number of the more important machines used in these industries for 1914, 1909, and 1904.

In addition to the number of spindles reported in connection with the census of manufactures, statistics of the number employed in all branches of the textile

industry are reported monthly to the Bureau of the Census. The total number of cotton spindles in the state of North Carolina for 1914, as compiled from these monthly reports, was 3,813,940, and of these 3,770,316 were active some time during the year ending August 31.

MACHINE.	Census year.	Total.	Cotton goods, including cotton small wares.	Hosiery and knit goods.	Woolen, worsted, and felt goods, and wool hats.	Silk goods, including throwsters.
Producing spindles.....	1914	3,823,380	3,708,622	62,050	12,820	39,842
	1909	2,972,261	2,908,383	24,944	13,434	25,500
	1904	1,914,259	1,880,950	13,264	8,779	11,266
Looms.....	1914	61,622	60,931	.....	175	516
	1909	51,467	50,810	.....	266	361
	1904	43,554	43,219	.....	235	100
Knitting machines.....	1914	10,959	.....	10,959	.....	.....
	1909	6,395	.....	6,395	.....	.....
	1904	3,043	.....	3,043	.....	.....

**Cotton goods.**—In the following table the materials and products of the cotton-goods industry are shown by kind, quantity, cost, and value for the census years 1914, 1909, and 1904:

Table 23	1914	1909	1904
<b>MATERIALS.</b>			
Total cost.....	\$62,338,422	\$48,087,572	\$33,025,340
Cotton:			
Domestic—			
Pounds.....	415,424,339	348,979,258	240,937,988
Cost.....	\$51,040,020	\$40,005,341	\$27,502,908
Foreign—			
Pounds.....	2,846,386	1,231,350	1,422,760
Cost.....	\$402,599	\$231,543	\$229,790
Cotton waste, purchased:			
Pounds.....	1,919,953	6,041,351	1,399,977
Cost.....	\$128,442	\$335,595	\$52,433
Cotton yarns, purchased:			
Pounds.....	10,550,303	9,738,724	10,056,597
Cost.....	\$2,097,731	\$1,789,555	\$1,920,393
Starch, cost.....	\$300,070	\$214,975	\$152,474
Chemicals and dyestuffs, cost.....	\$1,004,210	\$713,030	\$543,394
Cost of fuel and rent of power and heat.....	\$3,096,070	\$2,170,315	\$1,332,821
All other materials, cost.....	\$4,148,074	\$2,627,213	\$1,201,097
<b>PRODUCTS.</b>			
Total value.....	\$90,743,683	\$72,680,385	\$47,254,054
Unbleached and bleached sheetings, shirtings, and muslins: <sup>1</sup>			
Square yards.....	307,405,671	269,693,201	198,872,898
Value.....	\$14,200,826	\$13,285,070	\$8,910,430
Ginghams:			
Square yards.....	100,741,627	111,094,426	70,050,081
Value.....	\$6,427,154	\$7,103,532	\$4,747,074
Napped fabrics:			
Square yards.....	90,152,119	64,627,068	62,053,042
Value.....	\$7,262,674	\$5,380,195	\$3,749,475
Fancy weaves, total: <sup>2</sup>			
Square yards.....	154,448,622	167,925,952	113,090,210
Value.....	\$14,060,732	\$16,374,324	\$8,031,233
Drills—			
Square yards.....	18,438,152	18,040,774	5,270,874
Value.....	\$912,700	\$1,110,822	\$394,316
Twill, satens, etc.—			
Square yards.....	15,718,054	12,473,068	15,785,124
Value.....	\$1,230,480	\$814,707	\$515,868
Other fancy weaves <sup>2</sup> —			
Square yards.....	120,293,816	136,511,510	92,034,212
Value.....	\$12,814,463	\$13,439,735	\$7,451,040
Yarns for sale:			
Pounds.....	168,310,924	142,213,460	95,481,949
Value.....	\$37,638,174	\$28,312,873	\$18,560,247
Cotton waste for sale:			
Pounds.....	38,455,783	34,861,543	22,235,597
Value.....	\$1,390,461	\$830,652	\$657,908
All other products, value.....	\$8,891,062	\$2,378,430	\$1,985,021

<sup>1</sup> The figures for these fabrics represent the combined quantities and values of those designated at prior censuses as "plain cloths for printing and converting" and "brown or bleached sheetings and shirtings."

<sup>2</sup> Does not include fancy woven ginghams, napped fabrics, nor unbleached or bleached shirtings.

The increase in the quantity of raw cotton consumed during the ten-year period covered by the statement—from 242,360,738 pounds to 418,270,725 pounds, or 72.6 per cent—is a fair measure of the growth of the industry, as cotton yarns purchased for manufacturing purposes show but little change in quantity from census to census. The total cost of materials and total value of products increased during the same period by 88.8 per cent and 92 per cent, respectively. Plain cloths—sheetings, shirtings, and muslins—show considerable increases in both quantity and value, as do also napped fabrics. Fancy weaves as a whole, while showing large increases for the ten-year period, decreased in both quantity and value during the period 1909–1914. Yarns spun for sale increased 76.3 per cent in quantity and 102.2 per cent in value between 1904 and 1914. Data for the other textile industries are shown in the general tables.

**Flour-mill and gristmill products.**—Table 24 gives quantities and values of flour-mill and gristmill products for the last three census years.

Table 24	1914	1909	1904
Total value.....	\$8,963,501	\$8,501,219	\$6,863,770
Wheat flour:			
Barrels.....	951,805	750,072	713,400
Value.....	\$5,231,853	\$4,763,956	\$3,810,448
Corn meal and corn flour:			
Barrels.....	543,491	506,872	648,481
Value.....	\$2,043,292	\$2,291,852	\$1,738,154
Rye flour:			
Barrels.....	2,250	1,155	1,972
Value.....	\$11,869	\$5,470	\$9,140
Buckwheat flour:			
Pounds.....	55,700	73,500	132,448
Value.....	\$1,765	\$2,310	\$3,072
Hominy and grits:			
Pounds.....	2,100,250	8,056,030	8,976,400
Value.....	\$40,120	\$143,658	\$134,718
Bran and middlings:			
Tons.....	42,145		
Value.....	\$1,045,345		
Feed and oil:			
Tons.....	10,550	47,949	48,803
Value.....	\$550,017	\$1,271,025	\$1,120,632
All other products, value.....	\$32,340	\$18,948	\$35,600

Wheat flour is the most important product of this industry in North Carolina, and shows substantial gains during the ten-year period in quantity and value of products. At the census of 1914 the establishments reporting the manufacture of wheat flour numbered 239, as compared with 208 in 1909 and 213 in 1904. In 1914 the value of wheat flour and bran and middlings together constituted 70.1 per cent of the total value of products, the proportion for wheat flour alone being 58.4 per cent. Corn meal and corn flour constitute the next most important product, representing 22.8 per cent of the total value of products in 1914. The production of wheat flour increased during the period 1909–1914 by 25.4 per cent in quantity and 9.8 per cent in value.

**Hosiery and knit goods.**—Table 25 shows for this industry, for 1914, 1909, and 1904, the quantity and cost of materials used and the quantity and value of products made.

The principal materials used in this industry are raw cotton and cotton yarns. A comparison of the figures for the last two census years discloses a marked tendency toward a largely increased use of the former. In 1909 cotton represented only 27 per cent of the combined quantity of cotton and cotton yarn, but in 1914 its proportion had increased to 45.3 per cent. In 1909 cotton and cotton yarn represented 13.2 per cent and 61.7 per cent, respectively, of the total cost of materials, but in 1914 the corresponding percentages were 25.9 and 40.6.

The principal products are cotton hose and half-hose and cotton shirts and drawers. In addition to the total shown for this industry, four establishments reported the manufacture of hosiery and knit goods to the value of \$460,890 as a by-product in 1914.

Hosiery represented 69.8 per cent of the total value of the products in 1914, 79.6 per cent in 1909, and 81.3 per cent in 1904; and the value of shirts

and drawers formed 20.1 per cent of the total in 1914, as compared with 15.6 per cent in 1909 and 16.7 per cent in 1904.

	1914	1909	1904
<b>MATERIALS.</b>			
Total cost.....	\$6,400,059	\$3,012,295	\$1,304,811
Cotton:			
Pounds.....	10,212,853	3,531,967	2,112,100
Cost.....	\$1,058,419	\$398,635	\$236,118
Cotton yarn, purchased:			
Pounds.....	12,333,975	9,527,471	5,115,009
Cost.....	\$2,002,344	\$1,858,700	\$910,779
Chemicals and dyestuffs, cost.....	\$230,471	\$151,329	\$73,104
Cost of fuel and rent of power.....	\$180,412	\$92,812	\$17,351
All other materials, cost.....	\$1,729,013	\$510,759	\$121,450
<b>PRODUCTS.</b>			
Total value.....	\$8,802,362	\$5,151,092	\$2,483,827
Cotton hose:			
Dozen pairs.....	5,017,700	3,870,392	1,950,578
Value.....	\$1,450,870	\$2,877,022	\$1,408,000
Cotton half hose:			
Dozen pairs.....	2,820,273	1,026,748	977,454
Value.....	\$1,763,598	\$1,222,707	\$610,308
Cotton shirts and drawers:			
Dozens.....	980,510	400,035	174,549
Value.....	\$1,790,005	\$805,043	\$414,583
Cotton combination suits:			
Dozens.....	95,467	47,050	(2)
Value.....	\$307,145	\$95,302	(2)
Cotton yarn, for sale:			
Pounds.....	1,747,877	664,287	(2)
Value.....	\$307,353	\$92,643	(2)
All other products, value.....	\$132,782	\$57,415	\$50,816

<sup>1</sup> Includes 115,491 pounds of mercerized cotton yarn, worth \$62,066, comparable data for which were not obtained separately at previous censuses.

<sup>2</sup> Figures not available.

The proportionate increases in total value of products and in value of hosiery were considerably less for the period 1909 to 1914 than for 1904 to 1909. For the other classes of products the increases from 1909 to 1914 were proportionally greater than for hosiery. The increase shown by cotton yarn made for sale is very great, the output of this product in 1914 exceeding that in 1909 by 163.1 per cent in quantity and 328.9 per cent in value.

Leather, tanned, curried, and finished.—Table 26 gives for 1914, 1909, and 1904, the quantity and value of the principal products reported for this industry.

	1914	1909	1904
Total value.....	\$7,182,400	\$5,415,495	\$2,002,174
Leather:			
Oak sole—			
Sides.....	447,568	371,401	74,883
Value.....	\$3,388,498	\$2,077,033	\$398,390
Belting and harness—			
Sides.....	222,542	200,568	123,009
Value.....	\$2,002,988	\$1,677,963	\$552,954
All other, value.....	\$325,618	\$657,205	\$1,074,176
All other products, value.....	\$87,413	\$53,494	\$21,109
Work on materials for others, value.....	\$387,973	\$349,800	\$15,540

The manufacture of leather shows a noteworthy increase—169.8 per cent—in value of products during the decade 1904–1914. Oak sole, belting, and harness leathers are the leading products. For the first named there appear substantial increases in both quantity and value as compared with previous censuses. The figures for belting and harness leather (combined to avoid disclosing the operations of individual establishments), however, while showing large

increases in value as compared with 1904 and 1909, and in quantity as compared with 1904, show a decrease in quantity as compared with 1909. The decline in the value of “all other leather” is due largely to the decrease in rough leather sold as such. This product, the value of which for 1904 and 1909 is included in that of “all other leather,” was formerly of some importance, but its output decreased greatly between those years, and none was reported for 1914. The amount received for tanning, currying, or finishing for others, which was insignificant in 1904, formed 5.4 per cent of the total value of products in 1914.

Oil, cottonseed, and cake.—North Carolina ranked sixth among the states in value of cottonseed products manufactured in 1914. The increase in the output of these products from census to census shows a rapid growth of the industry in the state. 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, and 1904:

MATERIAL AND PRODUCT.	QUANTITY.		
	1914	1909	1904
Cotton seed crushed, tons.....	328,705	214,582	148,097
Crude products manufactured:			
Oil, gallons.....	14,602,325	9,611,304	6,269,062
Meal and cake, tons (2,000 lbs.).....	148,800	92,906	59,787
Hulls, tons (2,000 lbs.).....	95,335	68,450	53,184
Linters, pounds.....	17,250,360	8,442,520	4,472,965

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 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.

The total quantity of cotton seed crushed increased 205.3 per cent during the 15-year period 1899–1914. Of the 63 mills reported for 1914 as crushing cotton seed, 6 crushed less than 1,000 tons each during the census year; 8 crushed 1,000 but less than 2,000 tons; 27 crushed 2,000 but less than 5,000 tons; 15 crushed 5,000 but less than 10,000 tons; and 7 crushed 10,000 tons or more.

The quantities of the various products obtained in 1914 per ton of seed, as received at the mill, were as follows: Crude oil, 44.4 gallons; meal, 906 pounds; hulls, 580 pounds; and linters, 53 pounds. The ratios which the several products bore to the total weight of the seed when received at the mill were: Crude oil, 16.7 per cent; meal and cake, 45.3 per cent; hulls,

29 per cent; and linters, 2.6 per cent. It will be observed that hulls have represented a decreasing proportion of the total quantity of products from census to census. This change is due to the installation of cold-process machinery, which expresses the oil without hulling the seed, the resulting cake thus containing the hulls.

**Laundries.**—Statistics for power laundries are not included in the general tables nor in the totals for all manufacturing industries. Table 28, however, summarizes these statistics for North Carolina for 1914 and 1909.

	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase, <sup>1</sup> 1909-1914.
	1914	1909	
Number of establishments.....	59	43	.....
Persons engaged.....	1,335	924	44.5
Proprietors and firm members.....	56	43	.....
Salaried employees.....	114	69	.....
Wage earners (average number).....	1,165	812	43.5
Primary horsepower.....	1,359	1,000	35.9
Capital.....	\$798,650	\$424,642	88.1
Salaries and wages.....	462,189	265,038	74.4
Salaries.....	100,092	53,519	88.1
Wages.....	361,497	211,519	70.9
Paid for contract work.....	6,792	261	2,502.3
Rent and taxes.....	35,261	14,391	145.0
Cost of materials.....	240,947	107,865	123.4
Amount received for work done.....	1,026,858	559,949	83.3

<sup>1</sup> Percentages are omitted where base is less than 100.

In 1914 North Carolina ranked thirty-second among the states in amount received for work done and thirty-first in number of persons engaged in the industry. The table shows increases in all the items given, those in receipts for work done and in average number of wage earners, amounting to 83.3 per cent and 43.5 per cent, respectively. Establishments owned by individuals reported 41.9 per cent of the amount received for work done; those owned by corporations, 42.8 per cent; and those under other forms of ownership, 15.3 per cent.

Table 29 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.

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January.....	1,074	745	80.4	84.4
February.....	1,068	754	79.9	85.4
March.....	1,070	756	80.1	85.6
April.....	1,139	785	84.6	88.9
May.....	1,168	815	87.4	92.3
June.....	1,220	852	91.8	96.5
July.....	1,297	877	97.1	99.3
August.....	1,336	883	100.0	100.0
September.....	1,254	871	93.9	98.6
October.....	1,160	822	86.8	93.1
November.....	1,094	786	81.9	89.0
December.....	1,108	798	82.9	90.4

Table 30 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.

KIND.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
	1914	1909	Amount.		Per cent of increase, 1909-1914.
			1914	1909	
Primary power, total.....	96	56	1,359	1,010	34.6
Owned.....	49	41	1,126	877	28.4
Steam.....	45	40	1,074	867	23.9
Internal combustion.....	3	1	14	.....	.....
Water wheels and motors.....	1	1	38	10	.....
Rented.....	47	15	233	133	75.2
Electric.....	47	15	213	133	80.2
Other.....	.....	.....	20	.....	.....
Generated in establishments reporting electric.....	35	.....	70	.....	.....

Table 31 shows the kinds and quantities of fuel used in the laundries, as reported at the censuses of 1914 and 1909, with percentages of increase.

KIND.	Unit.	QUANTITY.		Per cent of increase, 1909-1914.
		1914	1909	
Anthracite coal.....	Tons (2,240 lbs.).....	651	.....	.....
Bituminous coal.....	Tons (2,000 lbs.).....	13,670	8,372	54.1
Coke.....	Tons (2,000 lbs.).....	5	.....	.....
Oil.....	Barrels.....	120	101	18.8
Gas.....	1,000 feet.....	2,475	1,468	68.6

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 for the cities having more than 10,000 inhabitants, similar data for all industries combined.

Table 33 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 32.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1914	5,507	130,814	508,685	\$40,038	\$109,942	\$280,412	Hosiery and knit goods....	1914	74	7,787	7,879	\$2,045	\$6,410	\$8,882
	1909	4,931	121,473	378,556	34,355	121,861	210,656		1909	62	5,151	4,024	1,080	3,012	5,132
	1904	3,272	85,339	210,622	21,375	70,268	142,521		1904	40	2,944	2,148	617	1,395	2,484
Agricultural implements...	1914	17	149	389	71	98	305	Ice, manufactured.....	1914	61	519	8,329	263	342	1,126
	1909	22	132	356	50	90	202		1909	45	618	5,385	127	180	659
	1904	13	107	296	31	51	127		1904	32	235	2,901	83	97	418
Boots and shoes.....	1914	4	70	217	14	104	149	Leather, tanned, curried, and finished.	1914	17	877	2,890	355	5,545	7,182
	1909	7	178	140	46	242	408		1909	39	832	2,672	290	4,156	5,415
	1904	7	89	70	25	117	186		1904	34	584	1,521	149	2,038	2,662
Bread and other bakery products.	1914	60	305	360	127	622	873	Lumber and timber prod- ucts.	1914	12,952	84,374	140,386	12,554	16,320	39,632
	1909	54	189	148	80	341	539		1909	2,544	34,001	115,542	9,707	12,534	33,525
	1904	34	115	42	36	133	246		1904	1,364	16,983	65,020	5,119	6,612	19,499
Brick and tile, pottery, and other clay products.	1914	139	1,012	7,061	505	494	1,520	Marble and stone work....	1914	64	704	1,721	404	286	981
	1909	170	1,008	7,520	412	405	1,321		1909	56	807	1,863	384	226	881
	1904	117	1,163	3,547	207	194	802		1904	22	396	382	156	81	399
Carriages and wagons and materials.	1914	137	1,402	2,176	644	1,777	3,133	Mattresses and spring beds.	1914	20	174	191	56	223	376
	1909	138	1,620	1,910	603	1,894	3,283		1909	23	166	134	65	172	315
	1904	125	1,373	1,310	482	1,220	2,304		1904	9	69	76	16	108	164
Cars and general shop con- struction and repairs by steam-railroad companies.	1914	16	2,806	1,941	1,074	2,839	5,048	Oil, cottonseed, and cake...	1914	62	1,586	15,874	530	13,114	15,269
	1909	12	2,568	1,458	1,206	1,561	2,934		1909	53	1,165	9,641	320	7,090	8,504
	1904	11	1,973	988	1,023	1,384	2,444		1904	43	807	7,935	233	2,956	3,749
Coffins, burial cases, and undertakers' goods.	1914	14	312	1,230	113	344	691	Patent medicines and com- pounds.	1914	26	74	17	27	260	512
	1909	9	226	431	71	157	352		1909	26	60	28	18	216	474
	1904	9	183	394	52	70	271		1904	20	55	6	11	139	356
Copper, tin, and sheet-iron work.	1914	57	338	108	187	541	937	Printing and publishing...	1914	320	1,540	1,084	877	806	3,232
	1909	26	184	5	76	214	374		1909	322	1,376	1,110	661	645	2,497
	1904	13	93	10	40	107	194		1904	258	971	582	404	382	1,653
Cotton goods.....	1914	293	53,703	245,600	15,706	62,338	90,744	Saddlery and harness.....	1914	37	138	117	60	334	530
	1909	281	47,231	164,009	12,131	48,688	72,680		1909	33	135	99	52	257	427
	1904	212	39,356	92,215	7,604	33,025	47,254		1904	13	171	158	52	191	396
Fertilizers.....	1914	41	1,690	8,155	734	7,704	10,308	Tobacco manufactures.....	1914	33	10,467	6,070	2,984	24,310	57,861
	1909	34	933	3,132	393	4,183	6,316		1909	43	8,203	3,712	1,913	13,816	35,987
	1904	27	908	2,653	282	2,218	3,099		1904	55	7,293	2,017	1,457	10,149	28,088
Flour-mill and gristmill products.	1914	293	588	14,227	231	7,614	8,064	Turpentine and rosin.....	1914	35	45	33	10	98	147
	1909	210	406	11,578	180	7,287	8,501		1909	79	139	19	23	483	674
	1904	234	519	10,359	160	5,986	6,864		1904	87	148	4	39	578	743
Foundry and machine- shop products.	1914	136	1,520	3,159	843	1,329	2,893	Woolen goods.....	1914	5	301	685	105	394	667
	1909	102	1,490	2,700	718	1,245	2,771		1909	11	424	968	116	392	675
	1904	70	1,216	1,732	550	1,374	2,707		1904	12	343	840	71	406	555
Furniture.....	1914	109	5,801	11,837	1,850	4,835	9,335	All other industries.....	1914	441	7,596	24,219	2,865	10,679	17,386
	1909	117	5,583	11,379	1,585	4,398	7,885		1909	354	6,143	20,364	1,880	7,854	13,476
	1904	105	5,164	9,113	1,311	3,106	6,182		1904	288	4,997	9,929	1,167	5,121	8,641
Gas, illuminating and heat- ing.	1914	20	210	765	102	252	716								
	1909	14	151	308	62	123	369								
	1904	12	104	399	38	71	223								

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

ASHEVILLE.....	1914	45	951	2,275	\$386	\$2,138	\$3,149	RALEIGH.....	1914	59	1,051	3,093	\$515	\$1,620	\$2,916
	1909	51	973	2,075	356	2,264	3,198		1909	55	1,023	2,970	384	1,276	2,376
	1904	45	792	.....	229	1,247	1,918		1904	42	585	.....	226	512	1,067
CHARLOTTE.....	1914	107	3,799	10,990	1,477	7,482	10,962	WILMINGTON.....	1914	71	1,721	5,468	857	3,185	5,026
	1909	108	4,199	12,384	1,557	6,532	10,460		1909	64	1,213	4,580	470	1,993	3,005
	1904	73	2,234	.....	693	2,869	4,850		1904	53	1,594	.....	605	1,715	2,994
DURHAM.....	1914	62	4,764	8,465	1,501	12,503	27,597	WINSTON-SALEM.....	1914	73	9,634	8,253	2,858	16,213	37,288
	1909	60	3,699	5,217	1,079	9,654	23,027		1909	66	7,936	6,020	1,830	7,656	18,240
GREENSBORO.....	1914	70	1,229	2,271	509	2,106	3,464								
	1909	61	952	1,545	338	1,100	2,032								
	1904	63	1,098	.....	315	978	1,744								

<sup>1</sup> Apparently an error; figures should be 2,608.  
<sup>2</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.  
<sup>3</sup> Includes "automobile repairing," "hardware," "iron and steel, cast-iron pipe," "plumbers' supplies," and "structural ironwork, not made in steel works or rolling mills," for which separate figures are given in Table 33.  
<sup>4</sup> Includes "boxes, wooden packing" and "lumber, planing-mill products, not including planing mills connected with sawmills," shown in Table 33.

<sup>5</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.  
<sup>6</sup> 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.  
<sup>7</sup> Figures represent a consolidation of Winston and Salem.

TABLE 33.—DETAILED STATEMENT FOR THE STATE, BY INDUSTRIES,

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

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

1 All industries.....	5,507	151,335	5,960	4,018	3,682	841	136,844	Mh 141,491	De 132,911	( <sup>3</sup> )	\$253,841,808				
2 Agricultural implements.....	17	173	12	7	3	2	149	Je 181	Oc 114	141	141				385,442
3 Automobile repairing.....	18	77	18	7	1	2	40	Je 51	Se 47	50	40	1			105,720
4 Boots and shoes.....	4	82	7	3	2		70	Au 74	Ja 66	71	70		1		155,170
5 Boxes and cartons, paper.....	4	113		6	1		106	My 114	De 75	110	51	53	1	5	79,476
6 Boxes, wooden packing.....	32	1,006	31	33	17	1	924	Je 1,071	Mh 843	1,041	913	69	59		1,015,061
7 Bread and bakery products, other than biscuits and crackers.....	66	494	83	27	13	6	305	De 332	Ja 205	322	281	28	12	1	322,720
8 Brick and tile.....	127	1,801	167	90	10	3	1,601	Je 2,285	De 809	2,308	2,236		69	1	1,773,386
9 Brooms, from broom corn.....	4	32	5	3			24	Oc 26	Ja 22	25	19		6		27,906
10 Butter.....	3	9		2			7	De 8	Se 6	8	8				24,450
11 Canning and preserving, fruits and vegetables.....	21	112	22	7	3		80			319	94	182	20	23	112,630
12 Canned vegetables.....	12	73	13	1			59	Au 202	Ap 1	203	66	131	4	2	26,131
13 Canned fruits.....	9	39	9	0	3		21	Au 98	De 1	116	28	51	16	21	86,508
14 Carriage and wagon materials.....	6	98	3	7		3	85	Mh 129	Se 21	122	122				170,908
15 Carriages, wagons, and repairs.....	131	1,655	162	69	55	12	1,377	Au 1,570	De 939	1,540	1,517	15	8		4,087,913
16 Cars and general shop construction and repairs by steam-railroad companies.....	10	2,995		32	132	25	2,806	Ap 2,904	No 2,620	2,620	2,006	23			2,209,423
17 Clothing, men's and youths'.....	9	432	2	17	23	5	385	Je 442	De 258	392	70	300		22	338,138
18 Coffins, burial cases, and undertakers' goods.....	14	377	6	27	30	2	312	Ja 320	No 297	311	286	17	8		801,238
19 Confectionery and ice cream.....	29	181	30	18	10	7	110			106	80	24	2		325,832
20 Confectionery.....	13	62	13	9	15	2	53	No 67	Fe 48	56	32	24			154,600
21 Ice cream.....	10	89	17	9	1	5	67	Jy 71	Fe 43	60	48		2		171,142
22 Cooperage.....	37	209	9	7	2		182	No 220	Ap 150	255	243	11	1		174,244
23 Copper, tin, and sheet-iron work.....	67	442	61	21	15	7	338	Jy 376	De 299	365	361		4		557,974
24 Cotton goods.....	203	65,206	33	953	401	116	53,703	Ja 54,080	Se 52,451	54,218	29,991	17,005	3,014	3,305	80,065,283
25 Dyeing and finishing textiles.....	4	204	2	6	1	1	194	My 220	Se 175	183	116	64	2	1	179,158
26 Electrical machinery, apparatus, and supplies.....	4	91		4	5	4	78	Se 86	Ap 63	86	37				131,490
27 Fertilizers.....	41	1,931	13	75	130	23	1,090	Ap 3,081	Jy 1,030	1,702	1,700		1		16,702,881
28 Flour-mill and gristmill products.....	293	1,121	301	77	52	13	588	Se 502	My 581	604	603		1		3,576,664
29 Food preparations for animals and fowls.....	4	14		5	4		5	Oc 9	Fe 2	9	9				31,008
30 Foundry and machine-shop products.....	112	1,593	102	115	68	20	1,270			1,133	1,128	3	4		3,330,784
31 Foundries.....	6	94	3	7	3	3	78	Mh 93	No 46	56	56				278,999
32 Machine shops.....	108	1,499	99	108	65	26	1,201	Mh 1,299	De 1,053	1,077	1,070	3	4		3,052,385
33 Furnishing goods, men's.....	3	24	2	3	1		18	Je 24	De 2	23	3	20			17,928
34 Furniture.....	109	6,337	32	229	204	71	5,801			5,674	5,327	0	338		8,799,116
35 Wood, other than rattan and willow.....	100	6,056	29	215	191	65	5,556	Ja 6,122	De 4,619	5,430	5,104	4	322		8,200,014
36 Metal, including store and office fixtures.....	9	281	3	14	13	6	245	Ja 285	Oc 185	244	223	5	16		599,102
37 Gas, illuminating and heating.....	20	290		36	26	18	210	My 220	Fe 191	214	207		7		4,164,192
38 Hosiery and knit goods.....	74	8,130	51	176	87	29	7,787	Mh 8,095	Oc 7,276	8,214	2,532	4,302	586	794	8,227,232
39 Ice, manufactured.....	61	712	30	91	65	7	519	Jy 850	Ja 317	552	541	8	3		2,736,640
40 Jute goods.....	4	365		13	1	4	350	My 406	De 209	270	201	66	3		555,493
41 Leather, tanned, curried, and finished.....	17	951	22	24	25	3	877	Jy 1,006	De 781	703	789	3	1		6,260,962
42 Lime.....	9	122	6	6	3		105	No 133	Ap 89	113	112		1		91,820
43 Liquors, vinous.....	6	45	2	4			39	Se 73	Ja 31	53	38	15			254,078
44 Lumber and timber products.....	2,714	35,307	3,641	683	344	49	30,590	Mh 31,629	Se 29,857	40,600	40,367	64	219	10	35,528,885
45 Lumber, planing-mill products, not including planing mills connected with sawmills.....	206	3,348	202	201	65	20	2,800	Jy 2,975	De 2,700	2,839	2,510		29		4,318,393
46 Marble and stone work.....	64	865	88	38	26	9	704	Jy 777	Ja 518	668	654		14		1,067,962
47 Mattresses and spring beds.....	29	231	24	14	11	8	174	Mh 179	Au 172	176	138	29	8		245,697
48 Mineral and soda waters.....	132	730	147	73	33	7	470	Jy 631	Fe 417	482	455	1	28		977,163
49 Minerals and earths, ground.....	7	361	2	16	5	2	336	Mh 408	Se 260	397	397				357,599
50 Mirrors, framed and unframed.....	6	284	2	10	8	1	263	Ja 283	De 231	238	238				413,509
51 Oil, cottonseed, and cake.....	62	1,928	3	185	142	12	1,586	Fe 2,404	Jy 478	2,452	2,438	2	12		8,434,016
52 Patent medicines and compounds.....	26	153	22	18	34	5	74	Mh 83	No 62	73	31	40		2	424,300
53 Paving materials.....	6	532	0	10	7	1	508	Ja 552	Oc 461	559	558		1		658,088
54 Peanuts, grading, roasting, cleaning, and shelling.....	0	207	5	8	5	3	186	Ja 291	Jy 88	289	80	208		1	346,379
55 Pottery, earthen and stone ware.....	12	24	13				11	Jy 15	De 7	15	15				11,560
56 Printing and publishing, book and job.....	91	759	70	55	31	22	569			598	448	128	18	4	653,796
57 Job printing.....	85	739	73	53	31	21	561	De 591	Au 512	590	440	128	18	4	939,380
58 Book publishing and printing.....	6	17	6	2		1	8			8	8				14,326
59 Printing and publishing, newspapers and periodicals.....	238	1,534	108	151	147	67	971			992	776	115	97	4	1,920,555
60 Printing and publishing.....	40	641	31	64	103	27	416	Se 420	Ap 413	419	315	37	67		951,352
61 Printing, publishing, and job printing.....	164	833	154	73	31	20	555	No 578	Fe 535	573	461	78	30	4	930,507
62 Publishing, without printing.....	25	60	13	14	13	20									38,696
63 Saddlery and harness.....	37	206	40	15	11	2	138	Mh 153	Oc 122	128	124				483,813

<sup>1</sup> Owned power only.

<sup>2</sup> Includes rented power, other than electric.

<sup>3</sup> No figures given, for reasons explained in the text of introduction.

# MANUFACTURES—NORTH CAROLINA.

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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.		Total.	Primary horsepower.				Electric horse-power 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.		Steam engines. <sup>1</sup>			Internal-combustion engines. <sup>2</sup>		Water wheels and motors. <sup>1</sup>	Electric (rented).	
\$6,074,025	\$4,170,207	\$40,038,447	\$1,057,480	\$373,200	\$13,715,023	\$103,706,300	\$6,235,071	\$289,411,087	\$110,470,016	508,085	331,132	7,112	41,181	128,660	34,501	1
30,310	4,080	71,178	1,280	483	5,407	91,197	7,071	306,108	206,840	880	112	100	.....	177	25	2
7,075	1,100	25,436	.....	3,005	812	28,062	1,332	92,140	62,746	101	3	33	.....	65	5	3
2,300	2,700	14,084	.....	.....	379	103,416	520	148,035	44,999	217	75	16	125	.....	1	4
6,910	180	20,403	.....	1,520	1,197	57,786	705	130,902	81,501	23	.....	8	.....	15	5	5
59,306	10,739	340,700	110,911	450	8,036	1,010,441	16,457	1,808,453	781,555	4,036	3,081	237	98	940	400	6
26,475	6,774	127,398	81	21,075	2,026	498,891	23,075	873,381	351,415	360	60	7	.....	287	11	7
95,421	6,635	502,015	3,582	2,080	8,345	109,707	382,800	1,506,894	1,014,327	7,959	7,185	34	.....	740	12	8
2,484	6,170	.....	.....	310	140	.....	327	53,520	10,678	16	4	6	.....	6	9	9
1,500	3,300	.....	.....	.....	151	50,743	735	63,367	11,889	39	37	.....	.....	2	10	10
4,333	300	12,605	51,833	135	812	99,710	810	194,583	94,054	130	136	3	.....	.....	11	11
200	.....	8,807	200	15	156	17,164	385	30,711	10,162	50	50	.....	.....	.....	12	12
4,133	300	3,738	51,633	120	650	32,555	425	157,872	74,802	89	86	3	.....	.....	13	13
8,025	1,272	42,030	.....	.....	1,201	107,934	2,340	170,150	65,876	306	345	21	.....	.....	14	14
107,840	77,154	601,793	100	15,618	20,743	1,634,758	32,340	2,950,026	1,280,810	1,810	1,040	302	8	451	36	15
42,297	110,870	1,073,975	.....	300	2,077	2,752,042	80,771	5,047,536	2,208,723	1,041	1,737	65	.....	139	3,110	16
20,198	22,603	109,223	224	4,476	4,264	309,631	4,088	603,538	229,819	128	60	8	.....	60	20	17
40,447	41,820	112,080	100	975	4,823	332,595	11,231	691,066	347,240	1,239	590	.....	12	637	.....	18
21,555	18,352	42,533	.....	10,910	2,778	201,907	13,901	475,085	169,187	234	99	32	.....	103	30	19
11,180	16,182	10,787	.....	6,142	1,077	114,249	4,115	203,559	85,195	37	9	.....	.....	28	20	20
10,360	2,170	22,743	.....	4,768	1,701	177,658	9,876	271,526	83,992	197	90	32	.....	75	30	21
8,193	1,620	69,377	2,213	4,603	1,953	109,323	1,047	332,672	165,302	493	430	12	.....	51	22	22
21,285	14,479	187,109	1,685	10,696	4,088	537,150	3,427	930,927	390,341	108	.....	34	.....	74	23	23
1,601,139	401,731	15,795,742	205,464	13,994	667,590	50,241,752	3,096,670	90,743,083	28,405,201	245,000	108,577	555	30,913	105,555	15,431	24
7,000	1,500	60,619	211	1,320	1,182	90,832	14,678	203,379	97,800	273	225	40	.....	8	25	25
4,600	6,210	31,280	.....	3,175	1,621	105,066	1,220	177,075	70,709	89	.....	21	.....	68	26	26
103,224	221,730	733,018	13,866	13,530	90,197	7,682,875	121,342	10,307,856	2,603,630	8,155	4,740	892	25	2,498	1,577	27
68,014	51,498	231,074	260	3,523	21,304	7,514,924	128,850	8,963,501	1,310,718	14,227	5,138	700	5,496	2,833	87	28
2,080	530	1,607	.....	820	78	31,504	273	41,601	0,914	63	.....	.....	.....	63	.....	29
152,148	68,290	734,112	.....	15,957	20,435	1,041,048	59,168	2,470,653	1,376,437	2,607	1,069	253	50	1,325	5	30
5,600	3,600	37,997	.....	45	2,938	57,156	3,389	127,814	67,260	103	140	.....	.....	53	31	31
142,548	64,690	696,115	.....	15,912	23,407	983,892	55,770	2,348,830	1,309,168	2,504	929	253	50	1,272	5	32
1,080	420	6,080	.....	350	138	27,480	120	40,488	12,888	11	.....	.....	.....	11	33	33
340,932	216,083	1,855,846	3,074	2,762	48,023	1,761,014	73,191	9,335,195	4,500,090	11,837	11,040	180	55	502	280	34
323,010	199,952	1,758,822	3,074	2,162	46,401	4,528,557	69,537	8,890,680	4,304,580	11,278	10,540	180	55	503	276	35
17,313	16,131	97,024	.....	600	2,522	233,357	6,654	435,515	195,504	559	500	.....	.....	59	10	36
37,761	22,432	102,351	.....	10,764	47,030	204,037	204,037	716,379	464,406	705	621	5	.....	79	37	37
237,384	91,848	2,045,492	11,770	3,048	59,453	6,220,247	180,412	8,892,362	2,482,703	7,879	4,448	152	1,960	1,319	1,449	38
104,161	45,525	263,058	1,000	20,110	30,455	133,808	207,879	1,125,864	784,117	8,329	7,058	53	.....	318	323	39
30,340	3,214	97,011	7,491	1,020	3,276	641,929	11,894	609,047	15,224	598	30	.....	.....	500	40	40
144,028	21,912	355,101	12,000	37,373	5,492,650	52,530	7,182,400	1,637,214	2,806	2,806	2,550	6	88	102	1,453	41
5,310	1,580	38,584	1,503	4,437	27,558	12,654	12,654	103,157	62,945	448	415	33	.....	35	42	42
4,080	.....	13,146	.....	3,500	1,082	79,782	225	122,763	42,750	135	75	25	.....	35	43	43
920,756	334,746	11,129,702	1,169,922	43,209	220,521	10,106,416	250,837	30,620,211	20,171,958	124,048	121,502	2,109	642	360	4,363	44
227,057	62,340	1,077,921	77,920	16,326	32,068	4,896,717	30,231	7,293,909	2,357,061	11,707	10,513	141	43	1,010	85	45
48,117	24,276	403,927	17,683	7,017	5,022	253,606	31,050	980,643	695,087	1,721	1,338	70	.....	313	217	46
23,012	8,425	56,415	2,203	2,760	1,795	219,057	4,192	376,389	153,140	191	25	16	.....	150	66	47
82,702	24,514	199,048	2,346	25,294	17,395	919,307	16,021	1,706,745	771,417	428	13	151	7	257	3	48
12,825	3,526	123,809	9,702	3,604	7,836	30,873	13,868	215,502	161,761	975	535	75	365	.....	85	49
20,400	8,510	114,844	.....	1,500	2,672	623,973	10,669	914,704	280,062	288	35	.....	.....	.....	50	50
263,075	127,443	535,823	60	63,777	12,820,920	284,229	15,200,364	2,155,209	15,874	15,874	14,098	11	.....	1,705	963	51
21,265	48,435	26,788	920	2,973	3,863	249,136	11,121	511,568	251,311	17	.....	.....	.....	16	52	52
14,765	4,733	338,214	.....	843	74,075	21,640	21,640	485,612	339,807	1,196	746	.....	.....	450	60	53
10,830	4,900	31,341	.....	2,340	1,574	838,120	2,471	1,030,150	180,568	318	280	.....	.....	38	.....	54
.....	.....	3,237	50	75	31	228	1,018	13,225	11,079	2	.....	.....	.....	.....	55	55
75,002	36,122	346,015	3,945	30,621	8,343	320,028	17,945	1,083,720	745,147	488	6	30	.....	452	2	56
75,302	36,066	341,061	437	29,651	7,980	315,248	17,716	1,059,170	726,206	483	6	30	.....	447	2	57
600	56	4,654	3,508	970	363	5,380	220	21,550	18,941	5	.....	.....	.....	5	.....	58
194,710	146,760	531,403	47,495	33,527	15,047	423,710	43,740	2,148,454	1,680,395	1,196	120	300	2	774	61	59
102,314	103,351	258,283	4,692	9,504	8,200	206,169	25,457	1,126,428	894,802	591	90	69	.....	432	61	60
75,186	28,189	273,120	2,298	23,288	6,774	210,094	18,068	900,856	672,694	605	30	231	2	342	.....	61
17,210	15,220	.....	40,601	735	613	7,447	224	121,170	113,499	.....	.....	.....	.....	.....	62	62
18,082	12,139	60,131	7,080	3,197	3,197	380,857	2,944	529,565	195,764	117	45	17	.....	55	.....	63

\* Same number reported for one or more other months.

\* Same number reported throughout the year.

MANUFACTURES—NORTH CAROLINA.

TABLE 33.—DETAILED STATEMENT FOR THE STATE BY INDUSTRIES,

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

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

1	Shipbuilding, wooden, including boat building.	10	69	11	1	1	.....	56	.....	.....	.....	52	52	.....	.....	.....	.....	\$85,005
2	New vessels.	5	40	5	1	1	.....	33	Ja	53	De	28	28	.....	.....	.....	.....	50,450
3	Small boats, including repair work.	5	29	6	.....	.....	.....	23	.....	423	.....	24	24	.....	.....	.....	.....	28,555
4	Show cases.	5	34	5	.....	.....	.....	24	My	28	De	17	18	.....	.....	.....	.....	25,803
5	Tobacco, chewing and smoking.	20	10,419	16	161	1,118	174	8,050	.....	.....	.....	.....	9,283	5,569	2,876	479	350	34,421,087
6	Chewing.	14	1,939	12	65	144	20	1,698	Se	1,841	Ja	1,464	1,041	1,143	617	80	101	4,579,350
7	Smoking.	6	8,480	4	96	974	154	7,252	Ja	7,493	Oc	6,040	7,342	4,426	2,259	399	258	29,842,931
8	Tobacco, cigars, and cigarettes.	13	1,741	13	20	159	32	1,517	At	1,589	De	1,395	1,436	606	605	81	84	2,153,010
9	Turpentine and rosin.	35	96	47	2	1	1	45	My	65	Fe	26	65	64	.....	.....	.....	60,240
10	Wood, turned and carved.	23	183	18	13	4	1	147	Ja	162	Jy	128	190	191	.....	8	.....	152,055
11	Wooden goods, not elsewhere specified.	6	36	5	2	1	.....	28	De	33	Jy	23	38	36	.....	.....	.....	29,570
12	Woolen goods.	5	413	3	9	9	.....	391	Do	404	Ja	370	405	220	158	13	14	901,435
13	All other industries*	102	4,450	74	129	124	30	4,093	.....	.....	.....	.....	.....	.....	.....	.....	.....	11,430,244

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

1	ASHEVILLE	45	1,096	31	53	44	17	951	Au	1,025	Ja	853	923	742	164	10	7	\$2,015,206
2	CHARLOTTE	107	4,278	49	199	180	51	3,799	Fe	4,021	Je	3,676	3,924	2,864	806	142	112	11,807,559
3	DURHAM	62	5,453	35	85	470	99	4,764	Se	4,920	Ap	4,643	4,777	2,553	1,018	365	241	17,752,123
4	GREENSBORO	70	1,505	53	108	83	32	1,229	My	1,358	De	1,064	1,201	839	334	78	40	4,137,793
5	HIGH POINT	82	3,932	63	126	146	45	3,532	Mh	3,862	De	3,055	3,514	2,536	675	157	146	4,914,953
6	NEW BERN	29	955	17	45	37	8	848	Ap	1,057	Se	646	920	899	6	15	.....	2,561,022
7	RALEIGH	59	1,255	46	51	80	27	1,051	Mh	1,131	No	988	1,068	892	240	17	9	2,011,585
8	ROCKY MOUNT	20	1,611	9	31	99	18	1,464	Fe	1,482	Au	1,419	1,474	1,331	130	1	12	999,361
9	WILMINGTON	71	1,975	43	96	97	18	1,721	Mh	1,978	No	1,588	1,861	1,674	166	11	10	3,698,732
10	WINSTON-SALEM	73	10,964	55	234	905	136	9,634	Je	9,813	Oc	9,189	9,716	5,590	3,254	471	401	25,792,762

\*Owned power only.

†Includes rented power, other than electric.

*All other industries embrace—	10	Cars and general shop construction and repairs by electric-railroad companies.	3	Dyestuffs and extracts.	4
Artificial stone products.	2	Cars, electric-railroad, not including operations of railroad companies.	1	Flavoring extracts.	1
Automobile bodies and parts.	1	Clocks.	1	Glass, cutting, staining, and ornamenting.	1
Automobiles.	1	Clothing, women's.	1	Hand stamps.	3
Awnings, tents, and sails.	3	Cordage and twine.	1	Hardware.	1
Bags, other than paper.	5	Cordials and flavoring sirups.	2	House-furnishing goods, not elsewhere specified.	3
Baking, leather.	2	Drug grinding.	1	Iron and steel, cast-iron pipe.	1
Blankings, stains, and dressings.	1	Druggists' preparations.	1	Mucilage and paste.	1
Bookbinding and blank-book making.	1			Musical instruments, organs.	1
Bookbinding and presorving, fish.	1			Oil, fish.	1
Canning and presorving, oysters.	3				

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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$1,200	\$520	\$33,853		\$175	\$1,106	\$37,471	\$428	\$93,175	\$55,276	100	62	35		3		1
1,200	520	23,054		75	660	30,420	324	67,800	37,056	46	15	28		3		2
2,650	650	10,709		100	536	7,051	104	25,375	18,220	54	47	7				3
		12,520		120	202	24,039	448	54,056	29,560	38				38		4
387,202	1,490,806	2,504,434	\$100	1,070	0,211,002	20,278,557	117,452	46,484,216	26,088,207	5,231	4,855	6		370	2,933	5
90,021	221,060	383,353	100	1,070	1,052,124	2,054,218	31,994	4,318,260	2,232,057	1,297	1,010			287	172	6
297,181	1,268,036	2,121,081			8,150,778	18,224,330	85,458	42,165,947	23,856,160	3,934	3,846	6		83	2,761	7
58,011	202,740	470,682	1,968	759	2,030,450	3,887,416	20,575	11,377,152	7,463,171	830	820			19	328	8
1,120	1,680	10,202	3,573	220	530	90,989	1,285	146,081	48,407	33	13	20				9
3,700	1,530	35,627	108	488	970	61,704	2,552	144,865	80,609	605	522	25	10	48		10
1,323	240	7,895	25	144	165	13,503	306	20,935	15,946	88	75	6		7		11
20,000	7,030	105,447			5,531	383,319	10,831	666,541	272,391	685	475		210		20	12
230,555	128,840	1,532,801	102,722	28,008	71,457	5,471,306	500,525	0,818,814	3,777,893	17,857	13,179	226	1,050	3,402	1,057	13

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

\$97,121	\$44,681	\$385,607	\$14,139	\$17,171	\$20,837	\$2,068,380	\$60,127	\$3,148,802	\$1,011,295	2,575	1,376	6		1,194	308	1
369,716	201,360	1,476,675	7,358	42,563	85,011	7,203,064	278,244	10,962,113	3,470,005	10,000	9,001	46		7,853	434	2
235,443	634,059	1,509,913	204,677	12,181	5,220,709	12,353,753	149,573	27,597,258	15,063,932	8,405	6,130	16		2,319	864	3
139,150	90,512	508,598	21,950	16,831	66,876	2,036,705	60,509	3,464,328	1,358,114	2,271	1,110	157		1,004	37	4
106,440	138,609	1,255,317	5,671	13,411	20,004	3,068,320	76,775	5,931,761	2,786,660	5,240	4,166	30		994	851	5
63,067	44,653	374,133	20,725	3,886	15,020	1,183,059	20,855	1,910,497	705,983	2,550	2,331	00		159	225	6
105,940	100,812	515,087	14,711	32,886	20,657	1,520,640	99,064	2,915,767	1,290,054	3,093	944	33		2,116	39	7
40,434	96,291	780,066	8,227	3,367	8,702	1,053,115	49,670	2,742,302	1,040,017	2,114	1,980	56		78	1,270	8
144,460	89,047	857,123		40,219	28,507	3,088,108	96,470	5,025,504	1,840,926	5,468	4,440	07	50	902	154	9
432,028	1,118,620	2,857,816	8,260	19,116	6,313,470	16,014,078	198,922	37,287,683	21,074,683	8,253	5,775	30		2,448	3,385	10

\* Same number reported for one or more other months.

† Same number reported throughout the year.

\* All other industries embrace (continued)—

Optical goods.....	3	Roofing materials.....	1	Structural ironwork, not made in steel works or rolling mills.....	3
Paints.....	3	Sausage.....	2	Tools, not elsewhere specified.....	1
Paper and wood pulp.....	3	Scales and balances.....	1	Upholstering materials.....	3
Paper goods, not elsewhere specified.....	1	Shipbuilding, iron and steel.....	1	Waste.....	4
Pickles and preserves.....	2	Shirts.....	1	Wheelbarrows.....	1
Plated ware.....	1	Signs.....	2	Window shades and fixtures.....	1
Plumbers' supplies, not elsewhere specified.....	1	Silk goods, including throwsters.....	4	Wood distillation, not including turpentine and rosin.....	2
Pocketbooks.....	1	Slaughtering and meat packing.....	1		
Pumps, not including power pumps.....	1	Stoves and ranges.....	1		

# NORTH DAKOTA.

By MARY E. FEENEY.

## GENERAL STATISTICS.

**General character of the state.**—North Dakota, with a gross area of 70,837 square miles, of which 70,183 represent land surface, ranks sixteenth in size among the states. Its inhabitants in 1900 numbered 319,146, and in 1910, 577,056, and its estimated population in 1914 was 687,000. In population North Dakota ranked thirty-seventh among the states in 1910; and in density of population it ranked thirty-ninth, with 8.2 inhabitants per square mile, the corresponding number for density in 1900 being 4.5.

The urban population in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 63,236, or 11 per cent of the total, as against 7.3 per cent in 1900. There were, in the state in 1914, two cities, each having an estimated population of more than 10,000, namely, Fargo and Grand Forks. These two cities, whose aggregate population in that year formed but 4.5 per cent of the estimated total population of North Dakota, reported 22.8 per cent of the state's manufactured products.

Several important railway systems traverse the state, from east to west, and these lines, with connecting railways, provide good transportation facilities. The steam-railway mileage in 1914, as reported by the Interstate Commerce Commission, was 5,160.

North Dakota is primarily an agricultural state. In 1909 more than three-fifths of its entire land area was in farms. The total value of all farm crops in that

year was \$180,635,520, of which more than three-fifths, \$109,129,869, represented wheat. This state leads all others in the production of wheat, its crop in 1909 being 116,781,886 bushels, or more than one-sixth of the total for the United States.

The mineral products of North Dakota in 1914, according to the annual report of the United States Geological Survey, were valued at \$1,063,540, the principal product being brown coal or lignite.

**Importance and growth of manufactures.**—In 1914 the value of the products of North Dakota's manufacturing industries was \$21,147,431; the average number of wage earners engaged in such industries, 3,275; and the value added by manufacture, which is the best measure of importance of manufacturing industries, was \$6,663,116. In 1914 the state ranked forty-sixth in value of products, forty-eighth in average number of wage earners, and forty-seventh in value added by manufacture; while in 1909 it ranked forty-fifth, forty-eighth, and forty-sixth, respectively. At each of the last three censuses the value of the manufactured products of North Dakota represented only one-tenth of 1 per cent of the total for the United States.

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

**Table 1**

	MANUFACTURING INDUSTRIES.				PER CENT OF INCREASE. <sup>1</sup>		
	1914	1909	1904	1899	1909-1914	1904-1909	1899-1904
Number of establishments.....	609	752	507	337	-7.0	48.3	50.4
Persons engaged.....	4,627	4,148	2,545	(2)	11.5	63.0	.....
Proprietors and firm members.....	603	723	494	(2)	-16.6	46.4	.....
Salaried employees.....	749	636	296	152	17.8	114.9	94.7
Wage earners (average number).....	3,275	2,790	1,755	1,358	17.4	58.9	29.2
Primary horsepower.....	15,002	13,106	9,873	7,851	14.1	33.7	34.3
Capital.....	\$14,213,362	\$11,584,747	\$5,703,837	\$3,511,965	22.7	103.1	62.4
Salaries and wages.....	3,302,200	2,416,135	1,289,119	800,853	36.7	87.4	61.0
Salaries.....	885,065	628,730	257,812	129,532	40.9	143.9	96.0
Wages.....	2,416,235	1,787,405	1,031,307	671,321	35.2	73.3	53.6
Paid for contract work.....	72,009	21,323	17,869	(2)	237.7	19.3	.....
Rent and taxes (including internal revenue).....	213,328	159,787	877,961	(2)	33.5	.....	.....
Cost of materials.....	14,484,315	13,073,590	7,005,985	4,150,860	5.9	92.7	71.0
Value of products.....	21,147,431	19,137,508	10,217,614	6,259,840	10.5	87.3	63.2
Value added by manufacture (value of products less cost of materials).....	6,663,116	5,463,916	3,121,628	2,108,980	21.9	75.0	48.0

<sup>1</sup> A minus sign (-) denotes decrease; percentages are omitted where comparable figures can not be given.

<sup>2</sup> Figures not available.

<sup>3</sup> Exclusive of internal revenue.

During the period covered by the table the number of establishments engaged in manufactures, the number of wage earners employed, and the primary horsepower used in these manufactures have more than doubled, and the value of manufactured products have more than trebled.

All of the items, except contract work, show smaller increases from 1909 to 1914 than for the preceding five-year period, while two show actual decreases. The decrease of 53, or 7 per cent, from 1909 to 1914 in the number of establishments was due chiefly to the decreases in the flour-mill and gristmill and bakery

industries, and the decrease of 16.6 per cent in the number of proprietors and firm members was due largely to the smaller number of establishments in the two industries referred to, which were chiefly of individual or partnership organization. The large percentage of increase shown for contract work does not signify the expansion of manufacturing operations, but a change of the methods employed. The industry which influenced the increase in this item in 1914 was print-

ing and publishing. The value added by manufacture, although greater in amount at each successive census for which figures are given in the table, shows a smaller proportional increase from 1909 to 1914 than for either of the 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. <sup>1</sup>								
	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.....	669	3,276	100.0	\$21,147,431	100.0	\$6,663,116	100.0	17.4	58.9	29.2	10.5	87.3	63.2	21.9	75.0	48.0
Flour-mill and gristmill products.....	69	424	12.9	12,029,905	56.9	1,957,001	29.4	-2.5	39.4	14.7	3.0	80.8	67.9	20.1	63.0	33.7
Printing and publishing.....	351	752	23.0	2,220,217	10.5	1,735,211	26.5	-4.0	53.0	34.8	16.2	72.1	54.2	20.1	68.4	56.7
Butter.....	58	115	3.5	1,739,692	8.2	275,215	4.1	.....	.....	.....	69.1	83.1	360.7	100.0	64.3	223.1
Cars and general shop construction and repairs by steam-railroad companies.....	7	371	26.6	1,235,171	5.8	823,555	12.4	-88.1	217.1	15.9	81.6	236.6	43.3	116.6	214.0	59.2
Bread and other bakery products.....	58	205	6.3	810,465	3.8	365,785	5.5	40.4	.....	.....	31.8	93.2	281.0	43.1	100.8	183.6
Confectionery.....	3	105	3.2	442,914	2.1	140,612	2.1	.....	.....	.....	-2.0	.....	.....	-10.2	.....	.....
Saddlery and harness.....	10	88	2.7	421,973	2.0	148,414	2.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Copper, tin, and sheet-iron work.....	9	65	2.0	321,018	1.5	113,893	1.7	.....	.....	.....	21.4	183.5	78.4	-13.0	172.9	37.1
Mineral and soda waters.....	21	56	1.7	282,300	1.3	161,569	2.4	.....	.....	.....	-7.2	94.0	239.1	-6.8	62.7	318.0
Gas, illuminating and heating.....	9	52	1.6	273,022	1.3	193,639	2.5	.....	.....	.....	37.2	95.1	.....	35.5	77.9	.....
Brick.....	9	171	5.2	270,199	1.3	211,210	3.2	-9.0	60.7	8.3	-5.9	68.8	28.8	-1.4	67.4	33.3
All other industries.....	102	371	11.3	1,100,555	5.2	530,322	8.0	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Percentages are based on figures in Table 22; 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 11 industries or industry groups, for each of which products valued at more than \$250,000 were reported for 1914. These industries include 1 with products exceeding \$12,000,000, 3 with products between \$1,000,000 and \$3,000,000, and 7 with products valued at less than \$1,000,000.

The industries in this table are arranged in the order of their importance as shown by value of products, but the arrangement would vary considerably from that shown, if determined by average number of wage earners, or value added by manufacture. Flour mills and gristmills ranked first in value of products and value added by manufacture but third in average number of wage earners. Butter, third in value of products, was fifth in value added by manufacture and sixth in average number of wage earners. The operations of steam-railroad repair shops ranked fourth in value of products, was first in 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, flour mills and gristmills, printing and publishing, and butter held the same rank in value of products at both censuses. The operations of steam-railroad repair shops and bakeries, ranking fourth and fifth, respectively, in 1914, were fifth and sixth in 1909. Confectionery, which was sixth in 1914, ranked seventh in 1909.

*Flour-mill and gristmill products.*—This industry, which excludes custom mills grinding for toll or local consumption, is the most important industry in the state as measured by value of products, contributing 56.9 per cent of the total value of products for the state in 1914 and 1.4 per cent of the total value of products of this industry reported for the United States. There was an increase of \$344,789, or 3 per cent, in value of products, and of \$327,459, or 20.1 per cent, in value added by manufacture. Machinery is largely used 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.

*Printing and publishing.*—In 1914 over one-half of the total number of establishments reported in the state were engaged in this industry, which was second in importance in wage earners employed, value of products, and value added by manufacture. Although there was an increase of 21 in the number of establishments reporting in 1914, as compared with 1909, the average number of wage earners decreased by 36, or 4.6 per cent. In 1914 the value of products was \$2,220,217, an increase of \$310,703, or 16.2 per cent, over 1909; the growth was more pronounced from 1904 to 1909, when the increase was 72.1 per cent.

*Butter.*—The 58 establishments in this industry were practically wholly engaged in the manufacture of butter in 1914. In value of products it was third in importance in the state in 1914 and in 1909. The increase in value of products from 1909 to 1914 was \$710,557, or 69.1 per cent. The growth of this industry was much greater during the census period 1899–1904, when the value of products increased by 360.7 per cent, and the value added by manufacture, 223.1 per cent, than during the two following census periods.

*Cars and general shop construction and repairs by steam-railroad companies.*—The statistics for this industry represent the work done in car shops operated by steam-railroad companies but do not include the minor repairs made in roundhouses. The operations consist principally of repairs to rolling stock and equipment but include also shopwork done for the track and bridge and building departments. Employment was given to an average of 871 wage earners, the largest number reported by any of the industries. This number represents an increase of 408, or 88.1 per cent, as compared with 1909. The value of work done in 1914 was \$1,235,171, or 81.6 per cent increase over 1909.

*Persons engaged in manufacturing industries.*—Table 3 shows, for 1914 and 1909, the number of persons engaged in manufactures, distributed by sex, the average number of wage earners being distributed also by age. The sex and age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms."

In 1914 the number of persons engaged in manufactures was 4,627, of whom 3,275, or more than two-

thirds, were wage earners, 860 were proprietors and officials, and 492 were clerks and other subordinate salaried employees. Ninety per cent of the total number of persons engaged in manufactures were males. The largest number of males (2,972) reported for 1914 were employed as wage earners. The largest proportion of females (27.6) were reported as clerks and other subordinate salaried employees. Figures for individual industries will be found in Table 23.

Table 3

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.				
		Total.	Male.	Female.	Per cent of total.	
					Male.	Female.
All classes.....	1914 1909	4,627 4,148	4,164 3,777	463 371	90.0 91.1	10.0 8.9
Proprietors and officials.....	1914 1909	860 905	836 936	24 29	97.2 97.0	2.8 3.0
Proprietors and firm members.....	1914 1909	603 723	582 697	21 26	96.5 96.4	3.5 3.6
Salaried officers of corporations.....	1914 1909	63 64	62 64	1 0	98.4 100.0	1.6 0.0
Superintendents and managers.....	1914 1909	194 178	192 175	2 3	99.0 98.3	1.0 1.7
Clerks and other subordinate salaried employees.....	1914 1909	492 394	356 303	136 91	72.4 76.9	27.6 23.1
Wage earners (average number).....	1914 1909	3,275 2,789	2,972 2,538	303 251	90.7 91.0	9.3 9.0
16 years of age and over.....	1914 1909	3,245 2,732	2,945 2,489	300 243	90.8 91.1	9.2 8.9
Under 16 years of age.....	1914 1909	30 67	27 49	3 8	90.0 85.0	10.0 14.0

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, <sup>1</sup> 1909-1914.			Per cent distribution.					
	Total.	Male.	Female.	Total.		Male.		Female.	
				1914	1909	1914	1909	1914	1909
All classes.....	11.5	10.2	24.8	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials.....	-10.9	-10.7	.....	18.6	23.3	20.1	24.8	5.2	7.8
Proprietors and firm members.....	-16.6	-16.5	.....	13.0	17.4	14.0	18.5	4.5	7.0
Salaried officers of corporations.....	.....	.....	.....	1.4	1.5	1.5	1.7	0.2	.....
Superintendents and managers.....	9.0	9.7	.....	4.2	4.3	4.0	4.6	0.4	0.8
Clerks and other subordinate salaried employees.....	24.9	17.5	.....	10.6	9.5	8.5	8.0	20.4	24.5
Wage earners (average number).....	17.4	17.1	20.7	70.8	67.2	71.4	67.2	65.4	67.7
16 years of age and over.....	18.8	18.3	23.5	70.1	65.9	70.7	65.9	64.8	65.5
Under 16 years of age.....	.....	.....	.....	0.6	1.4	0.6	1.3	0.6	2.2

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

This table shows increases in the total of the several classes of employees but a decrease in proprietors and firm members. This class formed 13 per cent of the total for all classes in 1914, having decreased from 17.4 per cent in 1909. The decrease is due to reductions in the number of small establishments operated by individuals or firms, as previously explained, and also to the fact that some establishments,

reported in 1909 as owned by individuals or firms, were incorporated during the period between the censuses. Wage earners over 16 years of age formed 70.1 per cent of the total number of persons engaged in manufacturing industries in the state in 1914 and 65.9 per cent in 1909. The largest percentage of increase for both sexes combined, 24.9, is shown for clerks and other subordinate salaried employees. The proportion

which this class formed of the total number for all classes was 10.6 per cent in 1914 and 9.5 per cent in 1909.

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

Table 5

INDUSTRY.	Census year.	WAGE EARNERS.			
		Average number. <sup>1</sup>	Per cent of total.		
			16 years of age and over.		Under 16 years of age.
			Male.	Female.	
All industries.....	1914 1909 1904	3,275 2,789 1,755	89.0 89.3 86.7	9.2 8.7 11.3	0.9 2.0 2.0
Bread and other bakery products.....	1914 1909	205 140	72.2 77.4	27.3 10.9	0.5 2.7
Brick.....	1914 1909	171 188	100.0 97.3	.....	2.7
Butter.....	1914 1909	115 62	97.4 98.4	0.9 .....	1.7 1.6
Cars and general shop construction and repairs by steam-railroad companies.	1914 1909	871 403	99.8 100.0	.....	0.2
Confectionery.....	1914 1909	105 98	85.2 88.8	64.8 61.2	.....
Flour-mill and gristmill products.....	1914 1909	424 435	100.0 99.8	.....	0.2
Printing and publishing.....	1914 1909	752 788	79.9 77.4	17.2 17.8	2.9 5.3
All other industries.....	1914 1909	632 609	92.2 95.4	7.8 2.8	0.5 0.8

<sup>1</sup> For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see "Explanation of terms."

For all industries combined, the proportion of male wage earners over 16 years of age has increased from census to census. The proportion of females decreased during the decade but shows a small increase from 1909 to 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 was the same in 1904 and in 1909, but shows a decrease for the decade.

Of the seven industries for which comparative figures are given, three show an increased proportion of males in 1914, as compared with 1909; three an increased proportion of females; and two an increase in the proportion of children employed. In the manufacture of brick and of flour-mill and gristmill products in 1914, all of the wage earners were males 16 years of age and over, while in the confectionery industry, females over 16 years of age formed 64.8 per cent of the wage earners employed. The brick industry, which employed an average of five children under 16 years of age as wage earners in 1909, reported none of this class in 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.

Table 6

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number. <sup>1</sup>			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January.....	3,000	2,356	1,522	82.8	77.2	78.0
February.....	2,054	2,380	1,521	81.5	78.2	78.0
March.....	2,070	2,443	1,501	82.1	80.0	81.0
April.....	3,104	2,580	1,577	85.0	84.5	81.8
May.....	3,207	2,810	1,773	88.5	82.3	93.0
June.....	3,442	3,041	1,907	95.0	90.0	98.9
July.....	3,025	3,004	1,878	100.0	98.4	97.4
August.....	3,554	2,880	1,928	98.0	94.4	100.0
September.....	3,533	2,927	1,928	97.5	95.9	100.0
October.....	3,307	3,038	1,890	93.7	99.4	98.3
November.....	3,333	3,052	1,894	91.9	100.0	95.1
December.....	3,175	2,950	1,735	87.0	95.7	90.0

<sup>1</sup> 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 the summer months show the greatest activity in the employment of wage earners in the combined industries of the state, the maximum number appearing for July and the minimum number for February, the minimum number forming 81.5 per cent of the maximum. The year 1909 shows a different condition, when the largest number was employed in November and the smallest number in January, the minimum number forming 77.2 per cent of the maximum. The greatest difference between the numbers for the maximum and minimum months in any one of the three census years was 696, in 1909; the corresponding figures for 1914 and 1904 being 671 and 407, respectively.

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

Among the selected industries, a marked variation is shown between the maximum and minimum number of wage earners employed during the different months. The manufacture of brick, which is a seasonal industry, shows a great variation in the number of wage earners employed, the 53 reported for February, the minimum month, forming only 16.3 per cent of the 326 reported for June, the maximum month. The greatest stability of employment is shown for printing and publishing, where the proportion which the minimum number formed of the maximum was 90.8 per cent. Of the two cities, the greatest stability of employment of wage earners is shown in Fargo, for which the percentage that the minimum number formed of the maximum was 80.5.

Table 7

INDUSTRY AND CITY.	WAGE EARNERS: 1914. [Month of maximum employment for each industry is indicated by boldface figures and that of minimum by italic figures.]														Per cent minimum is of maximum.
	Number employed on 15th day of the month or nearest representative day.														
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.			
All Industries.....	3,275	<b>3,000</b>	<i>2,954</i>	<b>2,976</b>	3,104	3,207	<b>3,442</b>	<b>3,625</b>	3,554	<b>3,533</b>	<b>3,307</b>	<b>3,333</b>	3,175	81.6	
Bread and other bakery products.....	205	<b>188</b>	<i>188</i>	<b>187</b>	193	195	199	224	227	227	224	217	191	82.4	
Brick.....	171	<b>95</b>	<i>53</i>	<b>71</b>	130	212	326	321	255	210	140	124	115	16.3	
Butter.....	115	<b>89</b>	<i>89</i>	<b>92</b>	108	118	146	150	147	129	115	100	97	59.3	
Cars and general shop construction and repairs by steam-railroad companies.....	871	<b>812</b>	<i>837</i>	<b>838</b>	820	832	853	983	906	948	918	908	783	80.2	
Confectionery.....	105	<b>106</b>	<i>100</i>	<b>102</b>	100	95	90	84	100	127	127	120	109	66.1	
Flour-mill and gristmill products.....	424	<b>402</b>	<i>403</i>	<b>399</b>	411	<i>375</i>	381	414	417	472	486	466	462	77.2	
Printing and publishing.....	752	<b>750</b>	<i>751</i>	<b>746</b>	739	743	748	733	743	736	756	772	807	90.8	
All other industries.....	332	<b>558</b>	<i>533</i>	<b>541</b>	594	637	609	710	759	684	631	626	606	70.2	
Total for cities.....	1,033	<b>954</b>	<i>921</i>	<b>933</b>	981	1,006	1,101	1,101	1,118	1,120	1,081	1,053	1,017	82.2	
FARGO.....	600	<b>628</b>	<i>608</i>	<b>610</b>	646	684	697	727	754	755	745	727	687	80.5	
GRAND FORKS.....	343	<b>326</b>	<i>313</i>	<b>317</b>	335	322	404	374	364	365	336	326	330	77.5	

Prevailing hours of labor.—In Table 8 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 of the two cities having more than 10,000 inhabitants. The number employed in each establishment is classified as a total, even though a few employees worked a greater or 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	3,275	703	116	500	472	996	285	65	18
	1909	2,780	423	186	512	227	1,303	59	30	19
Bread and other bakery products.....	1914	205	12	10	33	2	122	16	10	
	1909	146	1		2	33	108	2		
Brick.....	1914	171		16			155			
	1909	188		4			184			
Butter.....	1914	115	3		9	5	60	27	11	
	1909	62	7		3		60		2	
Cars and general shop construction and repairs by steam-railroad companies.....	1914	871	280		88	341		102		
	1909	463		124	216		123			
Confectionery.....	1914	105			59	46				
	1909	98			40	58				
Flour-mill and gristmill products.....	1914	424			13	1	317	51	42	
	1909	435	3	1		3	348	52	28	
Printing and publishing.....	1914	752	405	91	180	9	59		2	
	1909	788	377	46	268	58	39			
All other industries.....	1914	632	63	15	156	68	283	29		18
	1909	609	35	15	49	93	303	5		19
Total for cities.....	1914	1,033	218	43	172	114	347	108	16	15
FARGO.....	1914	600	136	41	147	27	259	64	16	
GRAND FORKS.....	1914	343	82	2	25	87	88	44		

The figures in this table, for the state as a whole and for the selected industries, emphasize the tendency toward a shortening of the working day of wage earners. In 1914, for all industries combined, a larger proportion of the wage earners were employed in establishments where the prevailing hours of labor were 60 per week than in any other group. Of the total number of wage earners in the state,

58.4 per cent were in establishments where the hours of labor were less than 60 per week; the corresponding proportion for 1909 was 49.4 per cent. In 1909, in the operations of steam-railroad repair shops, 73.4 per cent of the wage earners were employed in establishments where the working hours were less than 60 per week, but in 1914 the proportion of wage earners thus employed had increased to 81.4 per cent. In

the printing and publishing industry 53.9 per cent of the wage earners were reported by establishments where the prevailing hours of labor were 48 per week and under, as compared with 1909 where the proportion of wage earners thus employed was 47.8 per cent.

Of the combined total average number of wage earners employed in Fargo and in Grand Forks in 1914, slightly more than one-half (547) were in establishments where the prevailing hours of labor were fewer than 60 per week, while only 139, or 13.5 per cent, were in establishments in which the hours of labor were more than 60 per week.

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

A comparison of the total for the two cities combined in 1914 with those for 1909 shows actual increases in each item, a condition similar to that which prevailed in the districts outside the two cities, except in number of establishments.

The table shows that for 1914 the two cities, which represented only 4.5 per cent of the estimated population of the state, reported 31.5 per cent of the total average number of wage earners; 31.3 per cent of the total value added by manufacture; 22.8 per cent of the total value of products; and 15.5 per cent of the total number of establishments.

In Fargo, in 1914, the total value of products was \$3,006,043, the most important industries, as measured by value of products, being printing and publishing and the making of butter, bakery products, and sad-

dlery and harness. The total value of products in Grand Forks was \$1,815,669, where flour milling and gristmilling, printing and publishing, and the making of confectionery were the leading industries.

**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 1910	..... .....	2 2	..... .....	..... .....	..... .....
Population <sup>1</sup> .....	1914 1910	688,966 577,056	31,178 20,800	4.5 4.0	655,788 550,247	95.5 95.4
Number of establishments.	1914 1909	690 752	108 90	15.5 13.2	591 653	84.5 86.8
Average number of wage earners.	1914 1909	3,275 2,789	1,033 860	31.5 30.8	2,242 1,929	68.5 69.2
Value of products.....	1914 1909	\$21,147,431 10,137,506	\$4,821,712 4,380,007	22.8 22.0	\$16,325,719 14,750,509	77.2 77.1
Value added by manufacture.	1914 1909	0,083,116 5,403,916	2,087,718 1,726,061	31.3 31.6	4,575,398 3,737,855	68.7 68.4

<sup>1</sup> 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. In order to avoid disclosing the operations of individual establishments, it is necessary to omit several important industries from this table.

**Table 10**

INDUSTRY AND CITY.	Census year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.						VALUE OF PRODUCTS.							
		Individuals.	Corporations.	All others.	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.
All industries.....	1914 1909 1904	418 472 295	165 133 81	116 147 131	3,275 2,789 1,755	703 775 565	2,366 1,752 826	206 262 364	21.5 27.8 32.2	72.2 62.8 47.1	6.3 9.4 20.4	\$21,147,431 10,137,506 10,217,014	\$3,202,469 3,553,037 2,546,425	\$16,140,195 13,580,608 5,146,817	\$1,744,707 1,004,061 2,524,072	15.4 18.6 24.9	76.3 71.0 50.4	8.3 10.4 24.7
Bread and other bakery products.	1914 1909	48 55	5 3	5 9	205 146	99 90	91 40	16 10	48.3 05.8	44.4 27.4	7.3 6.8	810,405 600,621	374,288 435,369	353,506 113,067	82,071 52,185	46.2 72.5	43.6 18.8	10.2 8.7
Butter.....	1914 1909	14 14	21 16	23 38	115 62	27 10	56 18	32 34	23.5 16.1	48.7 20.0	27.8 54.8	1,730,692 1,029,135	425,525 217,563	881,514 207,249	432,653 544,323	24.4 21.1	50.7 26.0	24.9 52.9
Flour-mill and gristmill products.	1914 1909	13 32	37 35	9 17	424 435	38 52	354 342	32 41	9.0 12.0	83.5 78.6	7.5 9.4	12,029,905 11,685,116	1,005,772 1,268,695	10,345,606 9,581,286	678,537 835,135	8.4 10.0	86.0 82.0	5.6 7.1
Printing and publishing..	1914 1909	256 257	44 31	51 42	752 788	360 389	343 327	49 72	47.9 40.4	45.6 41.5	6.5 9.1	2,220,217 1,909,514	917,075 807,080	1,010,195 820,231	283,947 183,203	41.3 47.0	45.9 43.4	12.8 9.6
Total for cities.....	1914	37	55	16	1,033	137	862	34	13.3	83.4	3.3	4,821,712	456,632	4,170,158	194,922	9.5	86.5	4.0
FARGO.....	1914	28	36	12	690	109	552	29	15.8	80.0	4.2	3,006,043	306,715	2,504,307	105,021	13.2	83.3	3.5
GRAND FORKS.....	1914	9	19	4	343	28	310	5	8.2	90.4	1.4	1,815,669	59,917	1,665,851	89,901	3.3	91.7	5.0

This table shows, for all industries combined, an increase during the decade in the number of establishments throughout the state that were operated under both individual and corporate ownership and a decrease in the "all other" class. The greatest proportion of the establishments, nearly three-fifths of 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 predominated. In 1914, although only 23.6 per cent of the total number of establishments in the state were under corporate ownership, this class reported 76.3 per cent of the total value of products and 72.2 per cent of the total average number of wage

earnings. In 1909 and 1904 the corresponding percentages were slightly less. In the bread and bakery industry, 91.4 per cent of the establishments, reporting 56.4 per cent of the value of products, were under individual and all other forms of ownership. The largest proportion of the value of products for the four industries was shown for corporate ownership, with the exception of bread and bakery products, in which the proportion for corporations is only slightly less than that for individual ownership. For all industries

combined in Fargo and Grand Forks in 1914 more than one-half of the establishments were under corporate ownership, and the proportion of value of products and average number of wage earners was greatly in excess of that for the individual and the all other forms of ownership combined.

**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.....	699	752	507	3,275	2,780	1,765	\$21,147,431	\$19,137,506	\$10,217,914	\$6,663,116	\$5,463,916
Less than \$5,000.....	300	382	285	302	351	290	906,316	916,406	669,773	677,473	658,537	469,202
\$5,000 to \$20,000.....	206	238	132	581	623	439	2,000,450	2,350,795	1,262,776	1,009,318	1,103,610	641,385
\$20,000 to \$100,000.....	92	99	66	886	951	501	4,038,110	4,767,125	2,708,317	1,677,089	1,703,216	1,024,540
\$100,000 and over.....	141	133	24	1,506	859	435	14,202,546	11,104,180	5,487,048	3,290,236	1,998,558	986,801
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.....	51.5	50.8	56.2	9.2	12.6	16.5	4.3	4.8	6.6	10.2	12.1	15.0
\$5,000 to \$20,000.....	29.5	31.0	26.0	17.7	22.5	25.0	9.5	12.3	12.4	15.1	20.2	20.5
\$20,000 to \$100,000.....	13.2	13.2	13.0	27.1	34.1	33.7	19.1	24.0	27.4	25.2	31.2	32.8
\$100,000 and over.....	5.9	4.4	4.7	46.0	30.8	24.8	67.2	58.0	53.7	49.5	36.0	31.6

<sup>1</sup> Includes the group "\$1,000,000 and over."

This table shows that of the 699 establishments reported for the state in 1914, 41, or 5.9 per cent of the total number, each reported products exceeding \$100,000 in value, as compared with 33, or 4.4 per cent, in 1909, and 24, or 4.7 per cent, in 1904. For 1914 these establishments employed an average of 1,506 wage earners, or 46 per cent of the total for the state, and reported 67.2 per cent of the total value of products and 49.5 per cent of the total value added by manufacture. There was a general increase at each successive census in value of products and value added by manufacture in the relative importance of

these large establishments, and a decrease in each of the other classes. In the same year the small establishments—those having products valued at less than \$5,000—represented 51.5 per cent of the total number of establishments, but reported only 4.3 per cent of the total value of products and 10.2 per cent of the value added by manufacture.

Table 12 gives, for 1914 and 1909, for four 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.

**Table 12**

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1914		1909		1914		1909		1914		1909		1914		1909	
	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	Per cent distribution.	
<b>BREAD AND OTHER BAKERY PRODUCTS.....</b>	58	67	100.0	100.0	205	146	100.0	100.0	\$810,465	\$600,621	100.0	100.0	\$365,785	\$254,706	100.0	100.0
Less than \$5,000.....	21	31	36.2	46.3	14	14	6.8	9.0	64,779	82,071	8.0	13.7	30,562	38,881	8.4	15.3
\$5,000 to \$20,000.....	32	30	55.2	44.8	86	08	42.0	46.6	313,551	200,483	38.7	48.4	143,013	124,193	39.1	48.8
\$20,000 to \$1,000,000.....	15	6	8.0	9.0	105	04	51.2	43.8	432,135	228,067	53.3	38.0	192,210	91,632	52.5	36.0
<b>BUTTER.....</b>	58	68	100.0	100.0	115	02	100.0	100.0	1,739,692	1,029,135	100.0	100.0	275,215	137,806	100.0	100.0
Less than \$20,000.....	36	51	62.1	75.0	33	39	28.7	62.9	434,887	500,442	25.0	48.6	57,595	74,086	20.9	53.8
\$20,000 to \$100,000.....	17	17	20.3	25.0	40	23	34.8	37.1	567,606	528,693	32.6	51.4	91,522	63,710	33.3	46.2
\$100,000 to \$1,000,000.....	5	.....	8.6	.....	42	.....	36.5	.....	737,199	.....	42.4	.....	126,098	.....	45.8	.....
<b>FLOUR-MILL AND CRISTMILL PRODUCTS.....</b>	59	84	100.0	100.0	424	435	100.0	100.0	12,029,905	11,635,116	100.0	100.0	1,957,661	1,630,202	100.0	100.0
Less than \$5,000.....	3	3	5.1	3.6	1	2	0.2	0.5	10,428	11,123	0.1	0.1	1,821	1,869	0.1	0.1
\$5,000 to \$20,000.....	11	22	18.6	26.2	14	14	3.3	3.2	113,789	282,060	0.9	2.4	21,036	46,980	1.1	2.9
\$20,000 to \$100,000.....	24	35	40.7	41.7	65	105	15.3	24.1	1,160,300	2,029,101	9.6	17.4	211,702	302,469	10.8	22.2
\$100,000 and over.....	21	24	35.6	28.6	344	314	81.1	72.2	10,745,388	9,362,736	89.3	80.1	1,723,102	1,218,884	88.0	74.8
<b>PRINTING AND PUBLISHING.....</b>	351	330	100.0	100.0	752	788	100.0	100.0	2,220,217	1,909,514	100.0	100.0	1,765,211	1,400,733	100.0	100.0
Less than \$5,000.....	265	248	75.5	75.2	231	254	30.7	32.2	661,716	599,352	29.8	31.4	544,325	489,455	30.8	33.3
\$5,000 to \$20,000.....	70	69	19.9	20.9	231	216	30.7	31.2	560,468	539,883	25.2	29.3	454,794	439,454	25.2	29.9
\$20,000 to \$1,000,000.....	16	13	4.6	3.9	290	288	38.6	36.5	998,033	750,279	45.0	39.3	770,092	510,824	44.0	36.8

<sup>1</sup> Includes the group "\$100,000 to \$1,000,000."

<sup>2</sup> Includes the group "less than \$5,000."

<sup>3</sup> Includes the group "\$1,000,000 and over."

For 1914, as compared with 1909, this table shows that, for the industries reporting establishments having products of less than \$20,000 in value, the printing and publishing and bread and bakery industries show increases during the five-year period in value of products and in value added by manufacture, the former increasing also in number of establishments and the latter in the number of wage earners employed. For the industries reporting establishments having products valued at \$20,000 and over, the butter and the printing and publishing industries show increases in each item, while the flour-mill and gristmill industry decreased slightly in number of establishments and in average number of wage earners but increased in value of products and value added by manufacture.

Table 13 presents, for 1914, for all industries combined in each of the two cities having more than 10,000 inhabitants, statistics similar to those given in Table 11 for the state as a whole.

In the cities the same general condition prevails as that found in the state as a whole, namely, a greater proportion of the value of products and the value added by manufacture for establishments in the group of \$100,000 and over than in the other groups. In Fargo this class represented 55.6 per cent of the total value of products and 46 per cent of the total value added by manufacture for the city, and in Grand Forks the corresponding proportions were 65.7 and 59.4 per cent, respectively. In Fargo 28.9 per cent of the total number of establishments, 46.7 per cent of the wage

earners, and 35.5 per cent of the value of products are shown for the group "\$20,000 to \$100,000"; and in Grand Forks, this group forms 31.2 per cent of the total number of establishments, 45.5 per cent of the average number of wage earners, and 27.4 per cent of the total value of products for the city.

**Table 13**

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.
FARGO.....	76	690	100.0	\$3,000,043	100.0	\$1,205,101	100.0
Less than \$5,000.....	23	15	2.2	54,721	1.8	42,102	3.3
\$5,000 to \$20,000.....	21	82	11.9	214,507	7.1	131,751	10.4
\$20,000 to \$100,000.....	22	322	46.7	1,061,408	35.5	509,743	40.3
\$100,000 to \$1,000,000.....	10	271	39.3	1,672,347	55.6	581,505	46.0
GRAND FORKS.....	32	343	100.0	1,815,600	100.0	822,617	100.0
Less than \$5,000.....	9	14	4.1	26,170	1.4	17,926	2.2
\$5,000 to \$20,000.....	9	38	11.1	97,502	5.4	54,727	6.7
\$20,000 to \$100,000.....	10	158	45.5	408,365	27.4	261,006	31.8
\$100,000 to \$1,000,000.....	4	136	39.4	1,103,620	65.7	488,358	59.4

Table 14 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 seven of the more important industries, and for the two cities having more than 10,000 inhabitants.

Table 15 presents, for 1914, percentages based on the figures in Table 14, and for 1909, similar percentages for all industries combined and for individual industries in the state as a whole.

**Table 14**

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.	
			Estab-lish-ments.	Wage earners (average number).	Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
All industries.....	600	3,275	131	469	893	60	660	23	687	7	445	2	279	1	341		
Bread and other bakery products.....	58	205	11	39	78	7	59	.....	.....	1	68	.....	.....	.....	.....		
Brick.....	9	171	.....	1	4	6	79	1	28	1	60	.....	.....	.....	.....		
Butter.....	58	115	3	52	74	2	15	1	26	.....	.....	.....	.....	.....	.....		
Cars and general shop construction and repairs by steam-railroad companies.....	7	871	.....	.....	.....	.....	.....	1	40	3	211	2	279	1	341		
Confectionery.....	3	105	.....	.....	.....	.....	.....	3	105	.....	.....	.....	.....	.....	.....		
Flour-mill and gristmill products.....	59	424	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....		
Printing and publishing.....	351	752	3	37	90	12	107	6	172	1	55	.....	.....	.....	.....		
All other industries.....	154	632	27	99	218	22	257	6	157	.....	.....	.....	.....	.....	.....		
Total for cities.....	108	1,033	16	46	116	27	292	17	506	2	110	.....	.....	.....	.....		
FARGO.....	70	690	15	29	82	19	193	12	347	1	68	.....	.....	.....	.....		
GRAND FORKS.....	32	343	1	17	34	8	99	5	159	1	51	.....	.....	.....	.....		

Of the 699 establishments reported for all industries combined in the state, 131, or 18.7 per cent, employed no wage earners. These establishments were small and as a rule the work was done by the proprietors, firm members, or persons classed as salaried employees. If wage earners were reported, the number was so small and the term of employment so short that in computing the average, as described in the "Explanation of

terms," the number was less than one person, and the establishment was classed as having "no wage earners." The small establishments—those employing from 1 to 5 wage earners—formed 67.1 per cent of the total for the state, and gave employment to 26.4 per cent of the total number of wage earners. The establishments employing 50 or fewer wage earners constituted 79.8 per cent of the total number of establish-

ments and gave employment to 67.6 per cent of the total number of wage earners. There were only 10 establishments in the state having more than 50 wage

earners and they gave employment to 1,065 wage earners, or 32.5 per cent of the total wage earners employed.

Table 15

INDUSTRY AND CITY.	Cen- sus year.	PER CENT OF TOTAL AVERAGE NUM- BER OF WAGE EARNERS IN ESTAB- LISHMENTS EMPLOYING SPECIFIED NUMBER.						INDUSTRY AND CITY.	Cen- sus year.	PER CENT OF TOTAL AVERAGE NUM- BER OF WAGE EARNERS IN ESTAB- LISHMENTS EMPLOYING SPECIFIED NUMBER.					
		1 to 5	6 to 20	21 to 50	51 to 100	101 to 250	251 to 500			1 to 5	6 to 20	21 to 50	51 to 100	101 to 250	251 to 500
All industries.....	1914	26.4	20.2	21.0	13.6	8.5	10.4	Flour-mill and gristmill products.....	1914	21.2	25.2	40.6	13.0	.....	.....
	1909	34.3	23.4	25.3	8.1	8.9	.....		1909	20.7	32.2	29.2	12.0	.....	
Bread and other bakery products...	1914	38.0	28.8	.....	33.2	.....	.....	Printing and publishing.....	1914	53.1	19.0	21.1	6.8	.....	
	1909	63.0	15.8	21.2	.....	.....	.....		1909	54.7	19.3	26.0	.....		
Brick.....	1914	2.3	46.2	16.4	35.1	.....	.....	All other industries.....	1914	34.5	40.7	24.8	.....		
	1909	6.9	47.9	46.2	.....	.....	.....		1909	39.7	37.8	22.5	.....		
Butter.....	1914	64.3	13.0	22.6	.....	.....	.....	Total for cities.....	1914	11.2	28.3	49.0	11.5	.....	
	1909	100.0	.....	.....	.....	.....	.....	FARGO.....	1914	11.9	28.0	50.3	9.9	.....	
Cars and general shop construction and repairs by steam-railroad com- panies.	1914	.....	.....	4.6	24.2	32.0	30.2	GRAND FORKS.....	1914	9.9	28.9	46.4	14.9	.....	
	1909	.....	.....	9.1	37.6	53.3	.....		1914	.....	.....	.....	.....		
Confectionery.....	1914	.....	100.0	.....	.....	.....	.....		1914	.....	.....	.....	.....		
	1909	.....	19.4	80.6	.....	.....	.....		1914	.....	.....	.....	.....		

A comparison of the industries shown in this table brings out the fact that in 1914 a majority of the wage earners engaged in the manufacture of butter and in printing and publishing were in establishments that employed from 1 to 5 wage earners; while in the steam-railroad repair shops, the majority of the wage earners were in establishments where more than 100 were employed. In Fargo 50.3 per cent of the wage earners were in establishments employing from 21 to

50 wage earners and in Grand Forks 46.4 per cent were in this group.

**Engines and power.**—Table 16 shows, for 1914, 1909, and 1904, for all industries combined, the number and horsepower of engines or motors employed in generat- ing power (including electric motors operated by pur- chased current). It also shows separately the num- ber and horsepower of electric motors operated by current generated by establishments reporting.

Table 16

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1914	1909	1904	Amount.			Per cent distribution.		
				1914	1909	1904	1914	1909	1904
Primary power, total.....	1,036	749	290	15,062	13,196	9,873	100.0	100.0	100.0
Owned.....	438	442	200	11,124	12,001	9,586	73.9	91.0	97.1
Steam engines and turbines <sup>1</sup> .....	135	169	147	9,627	10,170	8,619	63.9	77.1	87.3
Internal-combustion engines.....	294	265	136	1,198	1,304	645	8.0	9.0	6.5
Water wheels, turbines, and motors.....	0	8	7	299	530	322	2.0	4.0	3.3
Rented.....	598	307	( <sup>2</sup> )	3,938	1,192	287	26.1	9.0	2.9
Electric.....	598	307	( <sup>2</sup> )	3,856	1,101	281	25.6	8.8	2.8
Other.....	.....	.....	.....	82	28	6	0.5	0.2	0.1
Electric.....	660	335	14	4,800	1,698	477	100.0	100.0	100.0
Rented.....	598	307	( <sup>2</sup> )	3,856	1,101	281	80.3	68.6	58.9
Generated by establishments reporting.....	62	28	14	944	597	196	19.7	31.4	41.1

<sup>1</sup> Figures for horsepower include for 1909 and 1904 the amounts reported under the head of "other" owned power.

<sup>2</sup> Not reported.

This table shows that during the period from 1909 to 1914 the power of engines and other prime movers employed in the manufactures of the state increased 1,866 horsepower, or 14.1 per cent. This increase was due entirely to the increase in rented power, as each kind of owned power decreased. The use of rented power, now almost wholly electric, has greatly increased since 1904, when it represented only 2.9 per cent of the total primary power reported. In 1909 the amount of rented power had increased to 9 per cent, and in 1914, to 26.1 per cent of the total. The increase in the use of electric motors run by current generated within the same establishments, although considerable, has not kept pace with that in rented power. The

power of motors operated by current generated in the same establishments represented 41.1 per cent of the total electric power in 1904, but decreased to 19.7 per cent in 1914.

**Fuel.**—Closely related to the kind of power em- ployed in manufactures is that of fuel consumed in generating this power or otherwise used in the manu- facturing processes.

Table 17 gives, 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 of the two cities.

INDUSTRY AND CITY.	COAL.					INDUSTRY AND CITY.	COAL.				
	Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels.).	Gas (1,000 cubic feet).		Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels.).	Gas (1,000 cubic feet).
All industries.....	5,282	145,871	1,371	3,280	2,221	Gas, illuminating and heating.....	10	10,504	542	1,224	.....
Bread and other bakery products.....	303	1,437	219	23	403	Printing and publishing.....	707	1,912	45	782	1,508
Brick.....	2,800	12,147	.....	.....	.....	All other industries.....	220	2,333	505	210	294
Butter.....	174	3,704	.....	349	16	Total for cities.....	903	22,230	374	11	2,111
Cars and general shop construction and repairs by steam-railroad companies.....	.....	43,287	.....	6	.....	FARGO.....	70	12,542	336	11	1,709
Flour-mill and gristmill products.....	1,062	64,547	.....	686	.....	GRAND FORKS.....	893	9,688	38	.....	402

## 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 three important industries in North Dakota are here presented, and also statistics for power laundries.

Flour-mill and gristmill products.—Table 18 gives the quantity and value of flour-mill and gristmill products for the last three census years.

	1914	1909	1904
Total value.....	\$12,029,905	\$11,685,110	\$0,403,228
Wheat flour:			
Barrels.....	2,165,078	1,825,920	1,223,210
Value.....	\$9,864,400	\$9,034,418	\$5,513,554
Rye flour:			
Barrels.....	844	153	50
Value.....	\$4,037	\$581	\$300
Corn meal and corn flour:			
Barrels.....	445	1,026	.....
Value.....	\$2,120	\$5,124	.....
Bran and middlings:			
Tons.....	80,415	.....	.....
Value.....	\$1,594,885	.....	.....
Feed and offal:			
Tons.....	13,575	100,032	64,124
Value.....	\$403,155	\$2,300,171	\$945,076
Breakfast foods:			
Pounds.....	303,701	.....	.....
Value.....	\$18,480	.....	.....
All other cereal products, value.....	\$74,019	\$206,213	\$417
All other products, value.....	\$3,200	\$18,009	\$3,881

In 1914 there were 59 establishments engaged in this industry, a decrease of 25 as compared with 1909. Wheat flour is the principal product and shows substantial gains during the two five-year periods. The output of wheat increased 339,158 barrels, or 18.6 per cent, from 1909 to 1914, and 602,701, or 49.3 per cent, from 1904 to 1909. Measured by value of products, wheat flour constituted 82 per cent of the total of the flour-mill and gristmill industry for the state in 1914, 77.3 per cent in 1909, and 85.3 per cent in 1904. Bran and middlings and feed and offal were the next most important products, but represented only 17.1 per cent of the total value of the products of the industry in 1914.

The equipment of the mills reported in 1914 consisted of 380 stands of rolls, 5 runs of stone, and 23 attrition mills. One establishment manufactured barrels and four manufactured sacks.

Printing and publishing.—Table 19 shows the number and aggregate circulation per issue for the different classes of newspaper and periodical publications for the census years 1914, 1909, and 1904.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1914	1909	1904	1914	1909	1904
Total.....	341	333	235	457,505	372,042	245,711
Daily.....	10	12	9	74,600	59,954	31,008
Sunday.....	2	4	2			
Semiweekly.....	2	1	3	267,275	200,288	175,513
Weekly.....	315	310	212			
Monthly.....	10	5	0	115,660	31,500	19,630
All other classes.....	2	1	3			

For the five-year period from 1909 to 1914 the total number of publications increased by 8 and the aggregate circulation per issue increased 84,953, or 22.8 per cent. Weekly and semiweekly publications had a circulation of 267,275, an increase of 6,987, or 2.7 per cent. Of the 341 newspapers and periodicals published in 1914, 315, or 92.4 per cent, were published weekly. There was a decrease of 2 each, in the dailies and Sundays from 1909 to 1914, and during the same period the circulation of both decreased. There was an increase both in the number and circulation of the monthly publications. The circulation of these are combined with 2 bimonthly publications in "all other," to avoid disclosure. The increase in circulation of this group was 84,160, or more than double, and it was practically limited to the monthly publications. All of the publications were in the English language, except 17, all weeklies, 11 of which were in English and German, 3 in German, and 3 in Norwegian, with a combined circulation of 35,273.

Butter.—Table 20 gives the quantity and value of products for 1914, 1909, and 1904.

There has been a steady increase in the amount of butter manufactured in the state at each successive census, but a slight decrease in the number of establishments engaged primarily in the industry. During the decade the output of butter increased from 3,013,151 pounds, valued at \$556,408 in 1904, to 5,814,240 pounds, valued at \$1,506,492 in 1914, a gain of 93 per cent in quantity and 170.8 per cent in

value. Of the total quantity of butter manufactured in 1914, 77.7 per cent was packed solid and 22.3 per cent was put up in prints or rolls; the packed butter greatly exceeded that reported as prints or rolls at each census, in both quantity and value.

	1914	1909	1904
Total value.....	\$1,730,692	\$1,029,135	\$582,481
Butter:			
Packed solid—			
Pounds.....	4,518,736	2,873,510	2,057,328
Value.....	\$1,161,820	\$750,158	\$485,758
Prints or rolls—			
Pounds.....	1,295,504	810,160	355,823
Value.....	\$344,872	\$225,197	\$70,650
Cream sold:			
Pounds.....	307,547	3,348	120
Value.....	\$30,941	\$496	\$12
All other products, value.....	\$202,250	\$47,284	\$6,081

<sup>1</sup> Includes ice cream to the value of \$134,805.

Laundries.—Statistics for power laundries are not included in the general tables or in the totals for manufacturing industries. Table 21, however, summarizes these statistics for 1914 and 1909.

In 1914 North Dakota ranked thirty-ninth among the states in amount received for work done and forty-

second in number of persons engaged in the industry. In 1909 it ranked thirty-seventh and fortieth, respectively. Establishments owned by individuals reported \$186,808, or 31.5 per cent of the amount received for work done; those owned by corporations, \$229,293, or 38.7 per cent; and those under other forms of ownership, \$176,742, or 29.8 per cent.

	POWER LAUNDRIES.		Per cent of increase, <sup>1</sup> 1909-1914.
	Number or amount.		
	1914	1909	
Number of establishments.....	30	34	.....
Persons engaged.....	478	503	-5.0
Proprietors and firm members.....	81	39	.....
Salaried employees.....	38	30	.....
Wage earners (average number).....	409	434	-5.8
Primary horsepower.....	725	606	19.6
Capital.....	\$552,458	\$444,817	24.2
Salaries and wages.....	242,805	208,492	16.4
Salaries.....	34,852	20,366	71.1
Wages.....	207,953	188,126	10.5
Paid for contract work.....	2,155	5,466	-60.6
Rent and taxes.....	13,884	13,562	2.4
Cost of materials.....	142,804	102,412	39.4
Amount received for work done.....	592,843	548,175	8.1

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

GENERAL TABLES.

Table 22 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 23 presents, for 1914, statistics in detail for each industry in the state that can be shown without the disclosure of individual operations, and for the cities having more than 10,000 inhabitants, for all industries combined.

TABLE 22.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Expressed in thousands.			INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Expressed in thousands.		
					Wages.	Cost of materials.	Value of products.						Wages.	Cost of materials.	Value of products.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All Industries.....	1914	690	3,275	15,062	\$2,416	\$14,484	\$21,147	Flour-mill and gristmill products.	1914	50	424	7,810	\$330	\$10,072	\$12,030
	1909	752	2,789	13,196	1,787	13,674	19,138		1909	84	435	8,907	283	10,055	11,685
	1904	507	1,755	9,873	1,031	7,006	10,218		1904	50	312	5,770	200	5,403	6,403
Bread and other bakery products.	1914	58	205	226	121	445	810	Gas, illuminating and heating.	1914	9	52	65	29	109	273
	1909	67	146	88	84	346	601		1909	6	28	52	13	78	189
	1904	39	86	14	44	184	311		1904	4	10	1,825	6	34	102
Brick.....	1914	9	171	1,728	101	59	270	Mineral and soda waters..	1914	24	56	149	35	121	282
	1909	13	188	668	88	73	287		1909	26	63	103	38	133	304
	1904	14	117	407	60	34	170		1904	16	36	62	21	44	156
Butter.....	1914	58	115	669	93	1,464	1,740	Printing and publishing..	1914	361	752	2,212	547	455	2,220
	1909	68	62	854	46	891	1,029		1909	330	788	948	535	440	1,910
	1904	60	55	618	38	478	562		1904	226	515	392	313	237	1,110
Cars and general shop construction and repairs by steam-railroad companies.	1914	7	871	718	746	412	1,235	Saddlery and harness.....	1914	10	88	57	63	274	422
	1909	5	463	332	340	300	680		1909	19	98	93	53	462	683
	1904	3	146	98	102	81	202		1904	3	48	18	28	86	151
Confectionery.....	1914	3	105	72	50	302	443	All other industries.....	1914	102	371	1,284	250	564	1,101
	1909	3	98	60	38	298	455		1909	123	357	1,055	230	471	1,047
	1904	6	40	8	26	43	91		1904	77	300	661	193	412	900

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

FARGO.....	1914	76	690	1,275	\$447	\$1,741	\$3,006	GRAND FORKS.....	1914	32	343	913	\$288	\$993	\$1,816
	1909	61	510	789	325	1,410	2,477		1909	38	350	773	218	1,261	1,510

MANUFACTURES—NORTH DAKOTA.

TABLE 23.—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--			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

1 All industries.....	699	4,627	603	257	350	136	3,275	Jy	3,625	Fe	2,951	(*)	(*)	(*)	(*)	(*)	\$14,213,362
2 Artificial stone products.....	10	27	11	.....	1	1	14	Jy	20	Fe	3	25	25	.....	.....	.....	53,884
3 Automobile repairing.....	6	23	7	2	1	1	13	So	14	Jy	12	14	14	.....	.....	.....	49,943
4 Bread and other bakery products.....	58	296	53	9	16	8	205	So	227	Mh	187	195	141	53	1	.....	535,688
5 Brck.....	9	189	3	9	5	1	171	Je	326	Fe	53	255	255	.....	.....	.....	1,030,390
6 Butter.....	58	178	22	17	13	11	115	Jy	150	Fe	89	115	112	1	2	.....	757,057
7 Carriages, wagons, and repairs.....	5	20	5	.....	.....	.....	15	Ap	17	At	13	17	17	.....	.....	.....	51,273
8 Cars and general shop construction and repairs by steam-railroad companies.....	7	931	.....	20	28	3	871	Jy	983	De	788	788	786	.....	2	.....	1,870,058
9 Confectionery and ice cream.....	6	181	3	4	13	2	109	.....	.....	.....	.....	105	34	67	.....	.....	270,320
10 Confectionery.....	3	124	4	4	13	2	105	Oe	127	Jy	84	102	33	60	.....	.....	254,954
11 Ice cream.....	3	7	3	.....	.....	.....	4	So	5	De	3	3	2	1	.....	.....	24,375
12 Copper, tin, and sheet-iron work.....	9	86	0	7	8	.....	45	No	87	Ja	41	77	77	.....	.....	.....	263,642
13 Flour-mill and gristmill products.....	59	699	33	62	141	39	424	Oe	486	My	375	462	462	.....	.....	.....	4,040,709
14 Foundry and machine-shop products.....	17	106	21	3	4	2	76	At	95	Fe	66	70	70	.....	.....	.....	270,368
15 Gas, illuminating and heating.....	9	74	2	7	11	2	52	Jy	76	Mh	40	50	49	1	.....	.....	832,804
16 Lumber, planing-mill products, not including planing mills connected with sawmills.....	6	84	2	8	3	2	69	So	84	Fe	43	67	67	.....	.....	.....	198,166
17 Marble and stone work.....	7	32	7	2	1	1	21	At	26	Ja	14	19	19	.....	.....	.....	118,835
18 Mineral and soda waters.....	24	99	20	10	10	3	56	At	70	Ja	44	51	49	.....	2	.....	270,074
19 Printing and publishing, job work only.....	20	176	14	15	9	11	127	De	140	Jy	118	140	107	32	1	.....	403,004
20 Printing and publishing, newspapers and periodicals.....	331	1,128	330	40	77	41	625	.....	.....	.....	.....	665	537	100	19	3	2,148,364
21 Printing and publishing.....	6	71	6	5	17	5	38	No	42	Ja	34	38	32	6	.....	.....	107,762
22 Printing, publishing, and job printing.....	308	1,040	321	42	55	35	687	De	627	So	573	627	505	100	19	3	2,007,380
23 Publishing without printing.....	17	17	9	2	5	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33,216
24 Saddlery and harness.....	10	113	9	10	5	1	88	Je	98	De	76	93	93	.....	.....	.....	580,110
25 Tobacco, cigars.....	18	51	19	1	1	1	29	No	32	Oe	25	32	24	6	2	.....	50,205
26 All other industries*.....	30	184	25	13	9	7	130	.....	.....	.....	.....	.....	.....	.....	.....	.....	375,460

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

1 FARGO.....	70	914	40	63	73	48	600	So	755	Fe	608	601	556	134	1	.....	\$2,060,781
2 GRAND RAPIDS.....	32	402	16	28	53	22	343	Je	404	Fe	313	307	348	47	2	.....	1,345,733

\* Owned power only.

† Includes rented power, other than electric.

\* All other industries embrace—

Automobile bodies and parts.....	1	Coffee, roasting and grinding.....	2	Food preparations for animals and fowls.....	2
Awnings, tents, and sails.....	1	Corsots.....	1	Fur goods.....	1
Canning, vegetables.....	1	Fire extinguishers, chemical.....	1	Furniture, wood, other than rattan and willow.....	1
Cars and general shop construction and repairs by electric-railroad companies.....	2	Flax and hemp, dressed.....	4	Furs, dressed.....	1

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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

\$400,002	\$470,003	\$2,410,245	\$72,009	\$110,463	\$66,865	\$13,057,277	\$527,038	\$21,147,431	\$6,663,116	15,062	0,627	1,280	269	3,856	944	1
1,872	720	11,211	200	41	250	27,678	175	48,245	20,302	47	40	2	5	2	2	2
690	690	8,376	200	564	272	13,204	1,403	36,651	21,984	33	31	1	2	3	3	3
13,710	18,280	121,183	700	14,622	5,777	422,770	21,004	810,465	365,785	226	19	19	207	4	4	4
19,800	4,210	101,446	1,222	1,725	3,018	12,251	46,708	270,190	211,240	1,728	1,026	69	633	5	5	5
12,380	14,123	93,308	1,222	1,725	3,370	1,441,300	20,108	1,730,692	275,215	660	404	100	20	145	6	6
45,037	20,585	12,320	1,222	1,725	516	0,000	1,187	31,900	21,713	25	643	6	19	7	7	7
		745,900			1,725	301,355	110,261	1,235,171	823,555	718			75	332	8	8
11,488	20,672	52,105		2,280	2,011	318,590	3,177	474,434	152,667	90	50	10	30	32	9	9
11,488	20,672	40,887		1,380	1,886	290,513	2,780	442,014	140,612	72	50		22	32	10	10
		2,308		600	155	10,077	388	31,520	12,055	18	10		8	11	11	11
10,600	10,608	50,916		3,060	1,521	205,440	1,685	321,618	113,803	72	4		68	12	12	12
111,224	226,070	320,850	482	4,820	30,545	0,805,336	176,008	12,020,905	1,957,661	7,810	6,798	286	270	456	668	13
7,050	5,245	61,478	150	2,482	1,887	76,511	5,242	215,521	133,788	184	20	48	116	14	14	14
9,371	9,286	28,501	4,050	220	8,030	26,296	83,087	273,032	103,630	65	40	25	68	15	15	15
15,420	4,586	52,773	194	265	2,451	163,044	3,831	240,144	82,200	289	147	16	127	5	16	16
3,000	1,800	10,530		288	974	49,056	668	92,466	42,742	19	4		15	17	17	17
13,521	0,800	35,428	1,255	5,320	1,808	110,234	4,497	282,300	161,560	149	35	13	101	2	18	18
23,373	23,130	04,932	2,250	10,273	2,778	133,968	4,225	415,146	276,958	1,158	8	5	1,153	19	19	19
72,307	84,280	451,678	54,387	50,303	10,954	283,364	33,449	1,805,071	1,488,253	1,054	8	506	7	443	1	20
4,980	10,808	22,349		2,040	655	16,134	801	80,144	72,110	54		2	52	21	21	21
65,037	07,604	420,329	10,001	46,943	16,092	207,160	32,558	1,603,054	1,304,230	1,000	8	594	7	301	1	22
1,450	5,784		43,696	1,320	207	64		111,073	111,009							23
18,080	7,940	62,715		3,447	3,240	272,170	1,380	421,973	148,414	57		7	60			24
960	1,352	17,673		1,380	4,091	28,334	611	60,904	41,019							25
16,770	5,077	07,627	0,120	0,343	2,830	158,301	6,463	325,144	190,380	689	456	2	211			26

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

\$101,291	\$110,383	\$47,155	\$22,085	\$30,006	\$21,643	\$1,655,913	\$85,020	\$3,000,043	\$1,205,101	1,275	275	16	084	4	1
48,170	69,538	288,150	1,121	12,112	13,485	624,286	68,700	1,815,600	822,617	913	499	82	332	30	2

<sup>1</sup> No figures given for reasons stated under "Explanation of terms."

<sup>2</sup> Same number reported for one or more other months.

Hand stamps.....	1	Optical goods.....	1	Sand-lime brick.....	1
Hosiery and knit goods.....	1	Patent medicines and compounds.....	1	Tools, not elsewhere specified.....	1
Looking-glass and picture frames.....	1	Perfumery and cosmetics.....	1	Trunks and valises.....	2
Mattresses and spring beds.....	1	Pickles and sauces.....	1		

# OHIO.

By W. W. SAWYER.

## GENERAL STATISTICS.

**General character of the state.**—Ohio was admitted to the Union as a state in 1803. With a gross area of 41,040 square miles, of which 40,740 represents land surface, it ranks thirty-fifth in size among the states. Its inhabitants in 1900 numbered 4,157,545, and in 1910, 4,767,121, and its estimated population in 1914 was 5,026,898. In total population Ohio ranked fourth among the states in 1910 and in density of population it ranked eighth, with 117 inhabitants per square mile, the corresponding figure for 1900 being 102.1.

The urban population of the state in 1910—that is, the population residing in cities and towns of 2,500 inhabitants or more—was 2,665,143, or 55.9 per cent of the total, as against 48.1 per cent in 1900. There were in the state in 1914, 9 cities having an estimated population of more than 50,000, as follows: Cleveland, 639,431; Cincinnati, 402,175; Columbus, 204,567; Toledo, 184,126; Dayton, 123,794; Youngstown, 93,341; Akron, 80,291; Canton, 57,426; and Springfield, 50,058. There were also 34 cities with an estimated population of 10,000, but less than 50,000. These 43 cities, whose aggregate population in 1914 formed 49.1 per cent of the estimated population of the state, reported 77.4 per cent of the state's manufactured products.

The industrial importance of Ohio is due in great measure to its natural resources. The value of the output of the mines, quarries, and wells, in 1914, as reported by the United States Geological Survey, was \$101,661,384, the most important being bituminous coal, \$21,250,642; natural gas, \$14,667,790; and petroleum, \$13,372,729. The state ranked fourth in 1914 in total value of mineral products, first in output of clay products, fifth in quantity and fourth in value of coal, fourth in quantity and third in value of natural gas, and seventh in output of petroleum. Furthermore, the splendid transportation facilities, both by rail and water, can not be overestimated. Lake Erie and the Erie Canal make a direct outlet to the Atlantic seaboard, while the western Great Lakes and the Sault Ste. Marie Canal furnish a water route to the North-western states. The Ohio River, which forms 436 miles of the southern boundary of the state, furnishes communication with Pennsylvania and the states of the Mississippi Valley. Two canals, one from Cleveland to Portsmouth and the other from Toledo to Cincinnati, connect Lake Erie with the Ohio River. The steam-railway mileage in 1914 was 9,148 and the electric-railway mileage in 1912 (the latest year for which statistics are available) was 3,852. Ohio is

the sixth state in the mileage of steam railways and third in the mileage of electric railways.

The total value of all farm crops in 1909 was \$230,337,981, the most important products being cereals, \$137,907,934; and hay and forage, \$42,357,364.

**Importance and growth of manufactures.**—The value of the state's manufactured products in 1914 was \$1,782,808,279, the average number of wage earners employed in its manufacturing industries was 510,435, and the value added by manufacture, which is the best measure of the importance of manufacturing industries, amounted to \$762,026,264. In 1914 Ohio ranked fourth among the states in all three items, and fifth in 1909. The value of manufactured products in Ohio in 1914 represented 7.4 per cent of the total for the United States. The corresponding proportions for 1909 and 1904 were 7 per cent and 6.5 per cent, respectively.

The statistics in this report do not include the manufacture of clothing, bedding, and other articles at the National Home for Disabled Volunteer Soldiers, located near Dayton, in Montgomery County. In 1914 this establishment employed an average of 172 wage earners and turned out products valued at \$152,782.

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

This table brings out the fact that the manufacturing industries of Ohio show a lower rate of development during the period 1909–1914 than during the preceding five-year period. There was an increase from 1909 to 1914, however, in every item, except proprietors and firm members and amount paid for contract work.

The decrease of 1,095, or 7.4 per cent, in the number of proprietors and firm members is probably due to the fact that some establishments under individual or firm ownership in 1909 were incorporated during the period between the censuses. The number of salaried employees increased by 34.9 per cent during the five-year period. The decrease of 19.1 per cent in the amount paid for contract work is no indication of a depression in any industry, because the expenditure for such work depends upon the methods used and not upon the magnitude of the operations.

The percentages of increase for average number of wage earners, value of products, and value added by manufacture for Ohio for the period 1909–1914 were 14.2, 24, and 24.2, respectively, whereas the corre-

sponding percentages for the United States were only 6.4, 17.3, and 15.8, respectively. Thus the state's increase in wage earners was more than twice as great

proportionally as that for the United States as a whole, and its increases in value of products and value added by manufacture were about one-third greater.

Table 1

	MANUFACTURING INDUSTRIES.				PER CENT OF INCREASE. <sup>1</sup>		
	1914	1909	1904	1899	1909-1914	1904-1909	1899-1904
Number of establishments.....	15,658	15,138	13,785	13,808	3.4	9.8	-0.6
Persons engaged.....	906,807	523,004	417,046	(2)	16.0	25.1	.....
Proprietors and firm members.....	13,024	14,710	13,657	(2)	-7.4	7.8	.....
Salaries employees.....	82,748	61,351	30,601	28,109	34.0	53.4	42.3
Wage earners (average number).....	510,435	446,934	364,298	308,100	14.2	22.7	18.2
Primary horsepower.....	2,002,780	1,583,155	1,110,032	783,005	26.5	41.7	42.5
Capital.....	\$1,077,651,633	\$1,300,732,732	\$850,088,830	\$570,008,008	20.0	51.8	50.1
Salaries and wages.....	424,188,049	317,507,403	225,864,263	164,679,020	33.6	40.6	37.2
Salaries.....	105,204,830	72,147,490	43,434,808	28,151,441	45.0	66.1	54.3
Wages.....	317,983,219	245,359,913	182,429,455	136,527,579	29.5	34.5	33.7
Paid for contract work.....	5,437,438	0,717,474	5,377,027	(2)	-19.1	24.0	.....
Rent and taxes (including internal revenue).....	37,433,863	20,413,298	8,016,120	(2)	27.3	.....	.....
Cost of materials.....	1,020,782,015	824,201,947	527,630,585	400,302,501	23.8	56.2	28.9
Value of products.....	1,782,808,279	1,437,935,817	900,811,857	748,070,855	24.0	49.7	28.3
Value added by manufacture (value of products less cost of materials).....	762,026,264	613,733,870	373,175,272	330,368,354	24.2	41.7	27.6

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Figures not available.

<sup>3</sup> Exclusive of internal revenue.

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. <sup>1</sup>									
	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.....	15,658	510,435	100.0	\$1,782,808,279	100.0	\$762,026,264	100.0	14.2	22.7	18.2	24.0	40.7	28.3	24.2	41.7	27.6
Iron and steel, steel works and rolling mills.....	70	46,397	9.1	205,023,391	11.5	65,346,000	8.0	20.2	30.0	0.4	3.7	70.6	13.0	11.6	73.3	9.8
Foundry and machine-shop products.....	1,379	78,108	14.3	178,855,069	10.0	101,852,051	13.3	12.8	22.3	5.7	22.6	40.6	17.3	21.7	37.4	19.0
Rubber goods, not elsewhere specified.....	54	21,705	4.3	100,058,005	6.2	50,921,120	6.7	106.1	115.6	37.4	103.4	237.7	117.8	137.2	274.2	123.0
Automobiles, including bodies and parts.....	102	18,762	3.7	85,710,585	4.8	30,380,088	-4.0	54.6	345.6	3,065.1	120.7	510.9	4,284.8	49.5	434.0	4,376.5
Iron and steel, blast furnaces.....	33	5,780	1.1	72,069,368	4.1	12,230,844	1.6	-20.7	34.2	-10.0	-12.8	104.8	1.2	-19.9	82.2	-50.2
Slaughtering and meat packing.....	160	3,610	0.7	60,674,379	3.7	6,993,270	0.0	17.3	33.3	29.8	31.2	74.3	40.4	8.3	68.0	30.2
Printing and publishing.....	1,783	18,070	3.5	55,008,024	3.1	38,538,044	5.1	14.7	13.7	4.9	33.5	33.0	31.4	29.5	31.4	31.3
Flour-mill and gristmill products.....	649	2,303	0.4	45,171,200	2.5	6,213,814	0.8	-8.0	-4.3	15.7	-6.1	17.7	16.5	-7.8	28.9	2.7
Brick, tile, pottery, and other clay products.....	540	27,334	5.4	38,607,374	2.2	20,401,410	3.5	14.0	0.0	31.4	26.0	18.9	110.0	21.2	13.7	110.0
Electrical machinery, apparatus, and supplies.....	110	12,605	2.5	36,120,978	2.0	18,038,730	2.4	57.3	57.9	35.5	92.4	70.4	69.4	61.4	82.8	99.6
Boots and shoes, including cut stock and findings.....	73	14,674	2.9	33,041,705	1.9	18,768,680	1.8	-8.4	14.2	0.9	6.6	22.6	41.0	8.5	18.0	54.9
Cars and general shop construction and repairs by steam-railroad companies.....	88	21,630	4.2	33,280,205	1.9	17,232,484	2.3	4.4	21.7	47.0	16.0	33.0	65.1	19.5	28.8	50.8
Bread and other bakery products.....	1,634	7,065	1.5	30,939,881	1.7	13,205,708	1.7	28.3	12.8	50.5	32.8	47.1	58.7	42.0	41.0	48.6
Liquors, malt.....	101	5,310	1.0	31,990,274	1.8	22,790,702	3.0	22.0	15.5	11.2	20.3	17.2	19.0	21.5	10.8	12.2
Lumber and timber products.....	1,188	11,021	2.3	31,852,094	1.8	13,835,983	1.8	-11.4	-0.8	-17.8	-7.9	5.1	0.3	-5.4	-3.7	-3.2
Tobacco manufactures.....	961	13,282	2.0	28,497,070	1.6	16,550,307	2.2	5.2	13.0	10.3	-1.5	41.1	20.6	-1.7	20.6	14.4
Clothing, men's, including shirts.....	257	10,768	2.1	27,021,420	1.5	13,805,405	1.8	8.1	38.5	0.8	11.1	28.5	11.7	16.0	27.0	20.0
Food preparations, not elsewhere specified.....	76	1,523	0.3	27,346,187	1.5	7,311,430	1.0	49.3	16.7	20.5	152.3	37.9	9.7	185.0	72.1	-17.8
Copper, tin, and sheet-iron products.....	288	7,448	1.4	25,050,351	1.4	10,600,662	1.4	12.9	66.2	48.5	31.3	102.7	75.1	42.1	83.3	87.6
Paper and wood pulp.....	48	5,430	1.1	23,284,192	1.3	7,174,918	0.9	16.2	20.3	22.0	37.2	54.8	67.5	18.9	26.2	73.3
Clothing, women's.....	170	9,776	1.9	22,881,753	1.3	10,791,944	1.4	10.5	38.6	32.4	17.4	52.2	64.7	17.3	52.5	81.6
Stoves and furnaces, including gas and oil stoves.....	105	8,875	1.7	19,981,599	1.1	11,566,412	1.5	17.9	11.8	.....	30.1	50.7	.....	27.7	46.4	.....
Paint and varnish.....	95	2,107	0.4	19,325,576	1.1	7,987,354	1.0	37.3	38.2	31.9	41.9	50.6	27.2	58.3	88.7	3.3
Butter, cheese, and condensed milk.....	286	1,480	0.3	19,325,977	1.1	3,367,766	0.4	38.7	118.7	25.4	99.4	111.0	20.6	67.5	132.1	14.6
Glass.....	39	10,997	2.2	19,101,342	1.1	12,145,005	1.6	8.2	29.5	72.5	33.7	59.1	98.5	25.6	56.2	87.9
Agricultural implements.....	50	5,464	1.1	17,484,615	1.0	6,674,830	1.3	-8.0	6.9	-17.4	21.1	12.0	-7.8	19.1	12.8	-9.0
Furniture and refrigerators.....	213	7,831	1.5	16,087,460	0.9	9,288,205	1.2	-4.9	-5.1	29.0	2.6	17.6	45.3	2.7	8.9	51.3
Carrriages and wagons and materials.....	341	5,997	1.2	15,192,440	0.9	7,631,487	1.0	-32.0	-20.1	-5.4	-26.2	-8.6	5.3	-27.6	-5.5	4.9
Coffee and spice, roasting and grinding.....	35	822	0.2	13,912,493	0.7	3,128,109	0.4	7.0	28.7	-12.7	18.6	12.7	70.2	6.1	26.4	104.4
Cars, steam-railroad, not including operations of railroad companies.....	5	2,885	0.6	11,795,726	0.7	3,237,432	0.4	26.4	10.5	14.4	32.0	16.5	40.5	43.5	3.4	89.7
Leather, tanned, curried, and finished.....	28	1,605	0.3	11,627,916	0.7	3,121,663	0.4	-14.8	17.0	16.3	14.8	55.5	25.7	20.7	17.4	45.7
Chemicals.....	29	2,017	0.4	11,388,140	0.6	4,662,147	0.6	78.2	10.4	68.3	47.1	68.7	28.4	55.7	88.7	6.4
Petroleum, refining.....	7	1,610	0.3	11,469,189	0.6	1,244,744	0.2	-8.4	-12.7	88.5	3.9	-1.8	30.4	-52.3	-20.6	48.1
Tin plate and terneplate.....	7	953	0.2	10,820,098	0.6	1,383,355	0.2	41.0	.....	.....	37.2	.....	.....	88.4	.....	.....
Liquors, distilled.....	18	332	0.1	10,683,552	0.6	8,695,341	1.1	-11.2	.....	.....	87.2	-11.0	-24.8	28.4	-8.4	-24.4
Confectionery.....	182	3,149	0.6	10,133,602	0.6	4,053,093	0.5	26.3	42.5	29.0	38.7	55.1	23.2	25.9	31.9	34.0
Iron and steel, wrought pipe.....	5	2,285	0.4	9,307,581	0.5	3,215,372	0.4	111.4	63.8	.....	174.1	30.5	.....	252.7	80.7	.....
Canning and preserving.....	135	2,507	0.5	8,951,175	0.5	3,054,175	0.4	24.8	-6.3	9.3	92.1	3.8	38.3	96.0	-13.0	36.0

<sup>1</sup> Percentages are based on figures in Table 54; a minus sign (-) denotes decrease; percentages are omitted where base is less than 100, or where comparable figures can not be given.

Table 2—Continued.

INDUSTRY.	CENSUS OF 1914.						PER CENT OF INCREASE. <sup>1</sup>									
	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
Hosiery and knit goods.....	38	3,411	0.7	\$8,654,103	0.5	\$3,621,578	0.5	8.3	20.5	75.4	34.5	60.9	152.2	40.2	41.9	134.8
Paper goods, not elsewhere specified.	20	2,260	0.4	8,148,155	0.5	3,950,785	0.5	11.2	-0.4	175.4	20.2	58.7	47.0	37.5	34.4	63.4
Brass, bronze, and copper products..	84	2,277	0.4	7,843,092	0.4	3,553,547	0.5	2.0	50.3	12.9	10.3	98.4	40.0	20.2	68.6	43.7
Patent medicines and compounds and druggists' preparations.....	252	1,032	0.2	7,734,181	0.4	4,715,814	0.6	14.0	-13.5	20.4	32.0	-20.5	52.2	18.8	-24.4	54.6
Fertilizers.....	24	1,005	0.2	7,245,998	0.4	2,619,304	0.3	19.5	71.6	22.5	63.4	93.8	38.1	37.8	110.4	41.1
Iron and steel forgings, not made in steel works or rolling mills.....	29	2,308	0.5	0,752,467	0.4	2,815,031	0.4	15.3	45.3	.....	67.0	42.3	.....	54.4	20.2	.....
Cutlery and tools, not elsewhere specified.....	81	3,199	0.6	6,611,607	0.4	4,650,800	0.6	13.4	14.3	55.5	31.3	41.2	46.1	37.4	46.5	47.1
Leather goods.....	187	1,743	0.3	5,717,732	0.3	2,244,835	0.3	-7.8	-21.6	2.0	15.8	-9.3	19.4	7.9	-17.2	40.4
Marble and stone work.....	213	2,523	0.5	5,263,092	0.3	3,214,875	0.4	25.4	-33.7	44.7	36.8	-20.9	50.0	34.1	-23.4	62.5
Gas and electric fixtures and lamps and reflectors.....	52	1,832	0.4	4,899,005	0.3	2,299,426	0.3	27.5	117.1	-7.4	37.5	177.5	22.8	28.7	123.2	27.6
Shipbuilding, including boat building.....	29	2,870	0.6	4,710,787	0.3	2,808,207	0.4	-10.0	.....	.....	-16.0	.....	.....	-12.0	.....	.....
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works and rolling mills.....	15	2,365	0.5	4,651,422	0.3	2,049,608	0.3	-15.4	20.0	.....	-25.7	49.1	.....	-27.7	50.0	.....
Sewing machines and attachments.....	3	1,925	0.4	4,505,758	0.3	1,001,461	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Safes and vaults.....	10	1,760	0.3	4,337,430	0.2	2,854,552	0.4	-12.0	-6.5	62.2	21.0	12.1	103.3	-14.2	16.8	121.0
Ice cream.....	160	816	0.2	4,208,066	0.2	1,925,935	0.3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boxes, fancy and paper.....	49	2,450	0.5	4,060,322	0.2	1,673,707	0.3	-2.9	45.2	18.2	11.7	70.4	51.5	15.8	60.6	34.6
Oil, kerosene.....	3	150	(2)	3,957,930	0.2	315,930	(2)	-29.2	200.0	-51.7	0.1	51.1	-23.0	-42.1	106.0	17.3
Cooperage and wooden goods, not elsewhere specified.....	95	1,516	0.3	3,945,068	0.2	1,399,245	0.2	-8.8	-3.5	-4.3	12.2	-1.2	36.3	7.6	-18.3	26.5
Roofing materials.....	18	715	0.1	3,005,812	0.2	1,586,715	0.2	67.1	67.8	.....	0.2	23.0	.....	110.9	2.0	.....
Cars, electric-railroad, not including operations of railroad companies.....	4	916	0.2	3,594,103	0.2	1,304,833	0.2	24.8	-4.1	178.2	88.8	6.9	239.8	51.6	13.4	147.2
Signs and advertising novelties.....	50	1,372	0.3	3,551,045	0.2	1,807,190	0.2	25.2	.....	.....	36.7	.....	.....	0.1	.....	.....
Musical instruments, pianos and organs and materials.....	27	1,745	0.3	3,544,680	0.2	1,871,769	0.2	-5.2	-16.7	180.6	-0.7	6.0	153.9	-6.6	-2.7	177.9
Paving materials.....	66	1,957	0.4	3,507,253	0.2	2,784,008	0.4	3,394.6	.....	.....	1,570.8	.....	.....	1,868.0	.....	.....
Wirework, including wire rope and cable.....	43	810	0.2	3,434,551	0.2	1,267,400	0.2	-44.3	5.5	.....	-5.1	43.8	.....	-30.1	46.3	.....
Mattresses and spring beds.....	43	934	0.2	3,420,908	0.2	1,420,362	0.2	-2.8	44.9	50.3	3.6	44.0	135.5	-12.1	79.8	128.3
Furnishing goods, men's.....	40	2,368	0.5	3,296,867	0.2	1,182,573	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pumps, not including power pumps.....	17	1,014	0.2	3,277,182	0.2	1,873,162	0.2	13.0	143.1	344.6	19.3	308.8	248.2	26.9	225.1	340.8
Screws, machine.....	7	1,464	0.3	3,275,186	0.2	1,906,898	0.2	351.0	-26.0	.....	447.7	-24.6	.....	354.0	-14.6	.....
Ice, manufactured.....	132	1,277	0.2	3,134,302	0.2	2,258,393	0.3	43.2	71.5	73.9	38.1	86.5	108.7	32.4	84.4	107.9
Coffins, burial cases, and undertakers' goods.....	19	1,252	0.2	2,966,388	0.2	1,672,652	0.2	0.0	7.0	18.3	-3.1	21.3	40.1	-3.7	28.9	45.1
Motorcycles, bicycles, and parts.....	9	752	0.1	2,931,383	0.2	1,297,217	0.2	-20.2	111.2	87.4	27.0	121.7	-74.0	4.4	112.7	-68.4
Bags, paper.....	9	640	0.1	2,893,011	0.2	1,661,732	0.1	16.0	15.6	121.1	20.9	58.2	110.4	40.7	35.3	168.3
Springs, steel, car and carriage.....	7	810	0.2	2,773,660	0.2	1,223,167	0.2	157.5	.....	.....	332.1	.....	.....	254.2	.....	.....
Ink, printing.....	7	254	(2)	2,763,537	0.2	1,409,003	0.2	38.8	35.6	32.4	44.9	44.6	86.6	28.4	20.4	174.7
Oil, not elsewhere specified.....	20	138	(2)	2,675,050	0.2	787,494	0.1	-12.1	12.1	.....	31.4	29.7	.....	0.4	49.5	.....
Flags, banners, regalia, society badges and emblems.....	17	1,074	0.2	2,604,870	0.1	1,402,004	0.2	-14.9	12.7	15.0	-13.9	34.1	25.7	-7.0	22.9	57.4
Carriages and sleds, children's.....	7	1,207	0.2	2,426,231	0.1	1,305,480	0.2	22.4	-4.7	38.0	22.7	8.4	.....	0.5	16.9	.....
Cars and general shop construction and repairs by electric-railroad companies.....	48	1,879	0.4	2,385,584	0.1	1,308,178	0.2	42.6	778.7	-34.5	41.1	883.1	-30.9	47.0	600.7	-24.5
Lime.....	38	1,416	0.3	2,334,349	0.1	1,628,367	0.2	11.2	41.6	.....	44.1	21.4	.....	59.3	27.4	.....
Wood, turned and carved.....	61	985	0.2	2,284,105	0.1	967,868	0.1	-18.5	0.1	.....	-7.1	11.1	.....	-28.5	21.3	.....
Cordage and twine and jute goods.....	6	560	0.1	2,241,073	0.1	835,166	0.1	-29.2	-29.1	1.7	-18.2	-16.1	0.9	12.6	1.6	15.8
Salt.....	8	813	0.2	2,197,204	0.1	902,960	0.1	25.5	20.2	-20.5	21.6	54.7	42.8	38.5	42.0	28.2
Stationery goods, not elsewhere specified.....	15	708	0.1	2,174,425	0.1	1,268,311	0.2	-27.9	113.0	.....	-10.7	182.6	.....	-11.8	209.3	.....
Coke, not including gas-house coke.....	5	480	0.1	2,156,314	0.1	550,169	0.1	98.8	117.7	59.2	153.5	228.6	1.6	160.7	137.1	-23.9
Awnings, tents, and sails.....	38	615	0.1	2,130,707	0.1	860,571	0.1	56.9	62.7	.....	53.7	.....	.....	61.2	.....	.....
Cement.....	7	840	0.2	2,111,574	0.1	1,221,244	0.2	-4.3	10.4	.....	44.2	-2.0	.....	47.6	-15.1	.....
Sugar, beet.....	3	282	0.1	2,051,307	0.1	1,174,270	0.2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mineral and soda waters.....	202	575	0.1	2,003,699	0.1	1,143,540	0.2	25.8	2.2	.....	43.6	42.0	.....	21.2	31.9	.....
Artificial stone products.....	403	954	0.2	1,946,130	0.1	1,182,816	0.2	19.0	186.4	.....	41.3	209.0	.....	34.6	215.1	.....
Millinery and lace goods.....	30	911	0.2	1,917,919	0.1	912,608	0.1	-32.9	197.6	16.3	-30.1	360.4	8.8	-28.9	317.2	37.5
Toys and games.....	30	1,103	0.2	1,908,700	0.1	1,100,661	0.1	185.0	2.1	.....	148.0	.....	.....	185.3	.....	.....
Clocks and watches, including cases and materials.....	9	1,305	0.3	1,808,486	0.1	1,120,166	0.1	-10.4	-15.0	34.7	-8.7	6.0	27.4	-22.4	26.0	16.4
Liquors, vinous.....	28	186	(2)	1,800,050	0.1	747,307	0.1	24.8	-12.4	-5.0	33.0	-2.3	66.5	27.5	-0.0	72.7
Wall plaster.....	22	626	0.1	1,713,618	0.1	943,629	0.1	141.7	-44.4	.....	83.3	-0.8	.....	88.4	-23.5	.....
Brushes.....	16	677	0.1	1,544,399	0.1	812,417	0.1	59.3	.....	.....	.....	.....	.....	35.7	.....	.....
Explosives.....	11	311	0.1	1,439,009	0.1	466,005	0.1	-13.1	-16.4	21.6	-16.3	-6.7	38.6	-24.1	8.3	2.0
Gas, illuminating and heating.....	25	398	0.1	1,431,826	0.1	952,045	0.1	-40.2	-70.3	61.2	-53.5	-36.0	22.4	-57.7	-35.0	13.8
House-furnishing goods, not elsewhere specified.....	20	320	0.1	1,430,265	0.1	434,735	0.1	-12.1	-0.5	.....	-8.3	97.3	.....	-31.0	81.2	.....
Wool, shoddy.....	5	523	0.1	1,353,121	0.1	533,459	0.1	10.4	2.8	-10.1	7.6	1.5	-16.2	3.5	77.0	-27.4
Dairymen's, poultrymen's, and apiarists' supplies.....	18	442	0.1	1,277,115	0.1	555,546	0.1	-7.7	32.7	.....	11.1	34.9	.....	-10.6	43.6	.....
Jewelry.....	57	477	0.1	1,265,090	0.1	861,622	0.1	34.0	35.9	17.0	0.8	92.2	-24.4	35.5	50.0	21.5
Grease and tallow, not including lubricating greases.....	34	400	0.1	1,215,913	0.1	544,437	0.1	33.3	140.0	.....	19.5	58.2	.....	27.7	116.9	.....
Hats and caps, other than felt, straw, and wool.....	28	431	0.1	1,040,277	0.1	465,810	0.1	6.2	16.3	-46.8	29.4	25.2	-36.1	22.0	3.2	14.2
All other industries.....	1,254	36,156	7.1	124,516,683	7.0	58,222,716	7.6	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Percentages are based on figures in Table 54; a minus sign (-) denotes decrease; percentages are omitted where base is less than 100, or where comparable figures can not be given.

<sup>2</sup> Less than one-tenth of 1 per cent.

Separate statistics are presented for 101 industries, or industry groups, for which products valued at more than \$1,000,000 were reported for 1914. These industries include 7 with products exceeding \$50,000,000 in value; 12 with products between \$25,000,000 and \$50,000,000; 17 with products between \$10,000,000 and \$25,000,000; 11 with products between \$5,000,000 and \$10,000,000; and 54 with products between \$1,000,000 and \$5,000,000.

Among those included under the head of "all other industries" are the following, which have products exceeding in value some for which figures are presented in the table: Babbitt metal and solder; bags, other than paper; cash registers and calculating machines; clothing, horse; firearms and ammunition; galvanizing; locomotives, not made by railroad companies; matches; cottonseed oil and cake; enameled oilcloth; oleomargarine; scales and balances; silk goods; soap; waste; wire; wool pulling; and woolen, worsted, and felt goods. Statistics for these can not be shown separately without the possibility of disclosing the operations of individual establishments.

More than one-half of the value of the manufactured products of the state is represented by the first 10 industries shown in the preceding table, but there are a large number of others which are of considerable importance. It will be seen from Table 55 that there is a wide diversity in the manufactures of the state, since of the 353 classifications shown for the United States in 1914, 291 were represented in Ohio. The leading industries of the state are steel works and rolling mills, foundries and machine shops, rubber goods, and automobiles, the first three of which in 1914 reported products in excess of \$100,000,000 each in value.

The industries in this table are arranged in the order of their importance as measured by value of products, but would vary considerably if based on average number of wage earners, or value added by manufacture. Steel works and rolling mills and foundries and machine shops, ranking first and second, respectively, in value of products, were second and first, respectively, in both average number of wage earners and value added by manufacture. A marked variation in these items appears for iron and steel, blast furnaces; slaughtering and meat packing; and flour-mill and gristmill products. Iron and steel, blast furnaces ranked fifth in value of products, twentieth in average number of wage earners, and fifteenth in value added by manufacture; slaughtering and meat packing held sixth place in value of products, but only twenty-fourth in number of wage earners and twenty-sixth in value added by manufacture; and flour-mill and gristmill products ranked eighth in value of products, and thirty-third and twenty-seventh, respectively, in number of wage earners and value added by manufacture. Printing and publishing, seventh in value of products and average number of wage earners, was fourth 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, steel works and rolling mills, foundries and machine shops, and printing and publishing held the same rank at both censuses. Automobiles, including bodies and parts, advanced from eighth place in 1909 to fourth in 1914, while iron and steel, blast furnaces, slaughtering and meat packing, flour-mill and gristmill products, and boots and shoes, ranking third, fifth, sixth, and tenth, respectively, in 1909, were fifth, sixth, eighth, and eleventh, respectively, in 1914. Electrical machinery, apparatus, and supplies advanced from twentieth place in 1909 to tenth in 1914, whereas lumber and timber products dropped from ninth place in 1909 to fifteenth in 1914. Tobacco manufactures and men's clothing ranked twelfth and fifteenth, respectively, in 1909, but only sixteenth and seventeenth, respectively, in 1914. The changes in rank are affected somewhat by the inclusion in the table of "rubber goods, not elsewhere specified," in 1914, and by reason of the fact that the establishments engaged in the manufacture of brick and tile and of pottery products were reclassified at the census of 1914, and are shown combined in the table, in order to present comparative figures for the manufacture of clay products for the different censuses.

*Iron and steel.*—Steel works and rolling mills and blast furnaces may be grouped, for convenience of presentation, with the tin-plate and terneplate industry. The three allied industries combined gave employment in 1914 to an average of 53,136 wage earners, and turned out products valued at \$288,818,857, or 10.4 per cent and 16.2 per cent of the respective totals for all manufactures in the state. These figures represent an increase over 1909 in the average number of wage earners of 6,579, or 14.1 per cent, and in value added by manufacture of \$4,415,472, or 5.9 per cent, but a decrease in the value of products of \$549,791, or two-tenths of 1 per cent. While there were increases in average number of wage earners, value of products, and value added by manufacture in the steel works and rolling mills and the tin-plate and terneplate branches of the industry, in the blast furnace branch there was a decrease of 1,509, or 20.7 per cent, in average number of wage earners, \$10,729,870, or 12.8 per cent, in value of products, and \$3,043,672, or 19.9 per cent, in value added by manufacture.

The plating of sheet metal with tin or with terne (a mixture of lead and tin) is treated as a separate industry, notwithstanding the fact that nearly all the establishments so engaged roll all or a portion of the plates dipped. Measured by value of products, in 1914 Ohio ranked second among the states in the combined industries, and also in each of the two leading branches, and third in tin plate and terneplate, contributing 22.3 per cent of the total value reported in 1914 for all steel works and rolling mills in the United States, 23 per cent for

all blast furnaces, and 15.8 per cent for all tin-plate and terno-plate mills. The corresponding percentages for the respective branches in 1909 were 20.1 per cent, 21.4 per cent, and 16.4 per cent, respectively.

*Foundry and machine-shop products.*—The statistics presented for this classification cover products of great diversity, embracing not only the output of general foundries and machine shops, but also that of establishments engaged in automobile repairing, where repairs partake of the character of machine-shop work; the manufacture of bells; cast-iron and cast-steel pipe; steam and gas engines; gas machines and gas and water meters; hardware; saddlery hardware; power pumps; plumbers' supplies; steam fittings and steam and hot-water heating apparatus; and structural iron-work, not made in steel works or rolling mills. The statistics for nine branches of the industry are shown separately for 1914 in Table 55. The foundry and machine-shop industry in its broadest sense is of greater importance in the state than is indicated by the statistics presented under this specific title, for the reason that some machine shops manufacturing special products, such as cash registers and calculating machines; cutlery and tools; electrical machinery; files; firearms; iron and steel bolts, nuts, washers, and rivets; doors and shutters; locomotives; sewing machines; stoves and furnaces; vault lights and ventilators; and washing machines and clothes wringers, have been assigned to other classifications. The foundry and machine-shop industry gave employment to an average of 73,103 wage earners in 1914, which was 14.3 per cent of the total reported for all manufactures, and was the largest number shown for any of the industries specified in the table; it represented an increase of 8,286, or 12.8 per cent, over the number reported for 1909. During the same period the value of products increased \$33,018,421, or 22.6 per cent, and value added by manufacture, \$20,075,301, or 24.7 per cent.

*Rubber goods.*—This classification covers the manufacture of rubber tires, clothing, mats, type, springs, tubing, brushes, bands, etc. Ohio held first rank among the states in the manufacture of rubber goods, both in 1914 and 1909, the value of products for the industry in the state representing 49 per cent of the total value of products for the industry for the United States in 1914 and 42 per cent in 1909. In 1914 the industry gave employment to an average of 21,705 wage earners, an increase of 11,323, or 109.1 per cent, over the number reported for 1909, while the value of products increased \$55,748,074, or 103.4 per cent, and value added by manufacture, \$29,453,013, or 137.2 per cent, during the same period. As measured by value of products, the manufacture of rubber goods ranked third in 1914 and fourth in 1909 among the industries of the state. The growth of this industry during recent years is due principally to the increased demand for rubber tires, the value of which repre-

sented the greater part of the total value of products reported for the industry in 1914.

*Automobiles, including bodies and parts.*—In addition to the articles named in the industry designation, this classification includes the manufacture of automobile accessories; this branch of the industry, however, is to a considerable extent interwoven with other industries. A number of the foundries and machine shops and establishments engaged in the manufacture of electrical machinery, apparatus, and supplies and in brass and bronze products incidentally manufacture automobile accessories and parts, while, as already stated, a number of establishments classified under the head of "rubber goods, not elsewhere specified" manufacture automobile tires. In 1914, as in 1909, Ohio ranked second among the states in the manufacture of automobiles, although the proportion which the state contributed of the total value of products for the industry in the United States was slightly less in 1914 than in 1909, being 13.5 per cent and 15.6 per cent, respectively. There was an increase of 6,622, or 54.6 per cent, in the average number of wage earners employed from 1909 to 1914, while the value of products increased \$46,871,831, or 120.7 per cent, and value added by manufacture, \$10,063,332, or 49.5 per cent, during the same period.

*Slaughtering and meat packing.*—Under this head are included wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage exclusively. During the five-year period 1909-1914 the value of products for this industry showed an increase of \$15,870,278, or 31.2 per cent, while the average number of wage earners employed increased 533, or 17.3 per cent. The industry developed more rapidly, however, during the period 1904-1909 than during either the preceding or later census periods.

*Printing and publishing.*—This classification includes establishments engaged in job printing; the printing and publishing of books, newspapers, and periodicals, and of music; bookbinding and blank-book making; steel engraving and plate printing; and lithographing. The industry as a whole shows an increase in value of products of \$13,951,618, or 33.5 per cent, from 1909 to 1914, only slightly more than that for the preceding five-year period.

*Flour-mill and gristmill products.*—This classification includes all merchant mills grinding wheat, corn, rye, or other grains. It does not, however, include factories making fancy cereal foods as a chief product. During the five-year period 1909-1914 the number of establishments in the industry decreased 24, or 3.6 per cent, the average number of wage earners, 222, or 8.6 per cent, while the decrease in value of products was \$2,922,153, or 6.1 per cent. Notwithstanding these decreases, Ohio ranked fifth among the states in this industry, as measured by value of products, both in 1909 and 1914.

*Brick, tile, pottery, and other clay products.*—At the censuses of 1909, 1904, and 1899 the statistics for clay products were shown separately for "brick and tile" and "pottery, terra-cotta, and fire-clay products," but in 1914 the establishments were classified differently and included under the headings "brick and tile, terra-cotta, and fire-clay products" and "pottery." For the combined industry, Ohio ranked first among the states in 1914, contributing 22.2 per cent of the total value of products of the industry in the United States; the corresponding proportions for 1909 and in 1904 were 18.1 per cent and 19 per cent, respectively. In 1914 the total value of products for the combined industry was \$38,667,374, an increase over 1909 of \$8,136,372, or 26.6 per cent, and over 1904 of \$12,980,504, or 50.5 per cent.

*Electrical machinery, apparatus, and supplies.*—The rapid advance in the use of electricity in science and industry has created a great demand for electrical machinery and appliances of all sorts. The industry in Ohio shows remarkable development during the last decade, the value of products having increased over threefold and the average number of wage earners more than doubled. The increase in value of products of 92.4 per cent over 1909 is an indication of the rapid advance the state has made in recent years in the manufacture of electrical machinery. Measured by value of products, this industry ranked tenth among the manufacturing industries of the state in 1914, having advanced from twentieth place in 1909.

*Boots and shoes, including cut stock and findings.*—Of the 73 establishments included under this classification in 1914, 62 were engaged primarily in the manufacture of boots and shoes, giving employment to 14,461 wage earners and turning out products amounting to \$32,773,922. Although there was a decrease from 1909 to 1914 of 1,352, or 8.4 per cent, in the average number of wage earners employed, the value of products increased \$2,090,748, or 6.6 per cent.

*Cars and general shop construction and repairs by steam-railroad companies.*—This industry represents the work done in car shops of steam-railroad companies and consists principally of repairs to the rolling stock and equipment of the companies, although there may be some new construction of rolling stock. The statistics exclude minor repairs in roundhouses. As measured by value of products, the growth of the industry was less during the five-year period 1909–1914 than during either of the preceding five-year periods. In 1914 employment was given to 21,639 wage earners, this being the fifth largest number reported by any of the industries of the state specified in the table and representing an increase of 87.6 per cent over the number reported in 1899 and 27.1 per cent for the decade.

*Liquors, malt.*—Although the number of establishments reported for this industry in 1914 was smaller

by four than the number in 1909, the average number of wage earners increased 984, or 22.6 per cent, the value of products \$6,658,215, or 26.3 per cent, and value added by manufacture \$4,030,833, or 21.5 per cent. The percentage of increase was greater for all items for the period 1909–1914 than for either of the earlier census periods.

*Lumber and timber products.*—This industry embraces not only logging operations, sawmills, and planing mills, but also establishments engaged in the manufacture of wooden packing boxes and window and door screens and weather strips. The industry as a whole was practically at a standstill at the census of 1909, the increase at that census over 1904 being only 5.1 per cent, while from 1909 to 1914 there were decreases as follows: Number of establishments, 202, or 14.5 per cent; average number of wage earners, 1,535, or 11.4 per cent; and value of products, \$2,744,375, or 7.9 per cent.

*Tobacco manufactures.*—The statistics for this industry in Ohio include the manufacture of chewing and smoking tobacco and snuff, and of cigars. Of the 961 establishments reporting, 937 were cigar factories, but the value of their products represented only about 40 per cent of the total for the combined industry. From 1909 to 1914 there was a decrease in the value of products of \$440,190, or 1.5 per cent, while for the decade 1904–1914 there was an increase of \$7,978,557, or 38.9 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."

Table 3

CLASS.	Cen- sus year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.					
		Total.	Malo.	Fe- male.	Per cent of total.		
					Malo.	Fe- male.	
All classes.....	1914 1909	906,807 623,004	512,621 439,811	94,186 83,193	84.5 84.1	15.5 15.9	
Proprietors and officials.....	1914 1909	32,542 31,213	31,622 30,341	920 872	97.1 97.2	2.9 2.8	
Proprietors and firm members....	1914 1909	13,924 14,719	13,001 14,141	923 578	95.4 96.1	4.6 3.9	
Salaried officers of corporations....	1914 1909	7,114 6,371	6,945 6,258	169 113	97.6 98.2	2.4 1.8	
Superintendents and managers....	1914 1909	11,844 10,123	11,676 9,942	168 181	98.6 98.2	1.4 1.8	
Clerks and other subordinate salaried employees.	1914 1909	63,790 44,857	46,357 34,101	17,433 10,756	72.7 76.0	27.3 24.0	
Wage earners (average number)....	1914 1909	510,435 440,934	434,642 375,369	75,793 71,565	85.2 84.0	14.8 16.0	
16 years of age and over.....	1914 1909	508,693 441,090	433,325 372,694	75,368 68,396	85.2 84.4	14.8 15.6	
Under 16 years of age.....	1914 1909	1,742 6,244	1,317 2,676	425 2,569	75.6 51.0	24.4 49.0	

In 1914 there were 606,807 persons engaged in the manufactures of the state of whom 510,435, or more than four-fifths, were wage earners, 32,582 were proprietors and officials, and 63,790 were clerks and other subordinate salaried employees. Of the wage earners 16 years of age and over, 433,325, or more than four-fifths, were males, and 75,368, or less than one-sixth, were females. The largest number of females were employed as wage earners, but of the classes pre-

sented, that of clerks and other subordinate salaried employees shows the largest proportion. Figures for the sex and age distribution of wage earners for individual industries will be found in Table 55.

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, <sup>1</sup> 1909-1914.			Per cent distribution.					
	Total.	Male.	Female.	Total.		Male.		Female.	
				1914	1909	1914	1909	1914	1909
All classes.....	16.0	16.6	13.2	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials.....	4.4	4.2	10.1	5.4	6.0	0.2	6.9	1.0	1.0
Proprietors and firm members.....	-7.4	-8.1	7.8	2.2	2.8	2.5	3.2	0.7	0.7
Salaried officers of corporations.....	11.7	11.0	49.6	1.2	1.2	1.4	1.4	0.2	0.1
Superintendents and managers.....	17.0	17.4	-7.2	2.0	1.9	2.3	2.3	0.2	0.2
Clerks and other subordinate salaried employees.....	42.2	35.9	62.1	10.5	8.6	9.0	7.8	18.5	12.9
Wage earners (average number).....	14.2	15.8	5.9	84.1	85.4	84.8	85.3	80.5	86.0
16 years of age and over.....	15.2	16.3	9.2	83.8	84.4	84.5	84.7	80.0	82.9
Under 16 years of age.....	-66.8	-50.8	-83.5	0.3	1.0	0.3	0.0	0.5	3.1

<sup>1</sup> A minus sign (-) denotes decrease.

This table shows increases for the five-year period for each of the several classes of employees with the exception of proprietors and firm members and for wage earners under 16 years of age. The largest percentage of decrease is shown for the latter class, but the proportion which this class formed of the total number of wage earners was only three-tenths of 1 per cent in 1914 and 1 per cent in 1909. The decrease in proprietors and firm members is referred to in connection with Table 1. The largest percentage of increase for both sexes combined is shown for clerks and other subordinate salaried employees. Wage earners over 16 years of age represented 83.8 per cent of the total number of persons engaged in the manufacturing industries of the state in 1914 and 84.4 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.

During the decade there were slight decreases in the percentage that proprietors and firm members and wage earners formed of the total number engaged in the manufactures of the state, and a corresponding increase in the proportion of salaried employees. Proprietors and firm members show an increase of 7.8 per cent from 1904 to 1909, but decreased by 7.4 per cent during the five-year period 1909-1914. The two other classes, as well as the total for all classes combined, show increases for both five-year periods.

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.

For all industries combined, the proportion of male wage earners 16 years of age and over was slightly larger in 1914 than in 1909, while the proportions for both females over 16 years of age and for children under 16 decreased.

In 1914, as compared with 1909, of the 42 industries for which separate figures are given in the table, 29 show an increased proportion of males and 12 an increased proportion of females, while but 4 show an increase in the proportion of children under 16 years of age. Five of the industries that gave employment to children under 16 years of age in 1909 reported no employees of this class in 1914.

In the manufacture of hosiery and knit goods in 1914, over three-fourths of the wage earners 16 years

**Table 5**

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.								
	Number.			Per cent distribution.			Per cent of increase. <sup>1</sup>		
	1914	1909	1904	1914	1909	1904	1909-1914	1904-1909	
Total.....	606,807	523,004	417,946	100.0	100.0	100.0	16.0	25.1	
Proprietors and firm members.....	13,624	14,719	13,057	2.2	2.8	3.1	-7.4	7.8	
Salaried employees.....	82,748	61,351	39,991	13.6	11.7	9.6	38.9	53.4	
Wage earners (average).....	510,435	446,934	364,898	84.1	85.5	87.2	14.2	22.7	

<sup>1</sup> A minus sign (-) denotes decrease.

of age and over were women, while in the manufacture of paper boxes, men's clothing and women's clothing, confectionery, and tobacco manufactures,

although the proportions were smaller, there was an increase in the proportion of female wage earners 16 years of age and over in 1914 as compared with 1909.

INDUSTRY.	Census year.	WAGE EARNERS.					INDUSTRY.	Census year.	WAGE EARNERS.						
		Average number. <sup>1</sup>	Per cent of total.			Under 16 years of age.			Average number. <sup>1</sup>	Per cent of total.			Under 16 years of age.		
			16 years of age and over.		Male.					Female.	16 years of age and over.			Male.	Female.
			Male.	Female.							Male.	Female.			
All industries.....	1914 1909 1904	510,436 446,934 364,293	84.9 83.4 83.4	14.8 15.4 15.2	0.3 1.2 1.4	Foundry and machine-shop products.....	1914 1909	73,103 64,817	98.1 98.8	1.4 1.3	0.5 0.4				
Agricultural implements.....	1914 1909	5,454 5,997	99.4 99.1	0.4 0.7	0.2 0.2	Furniture and refrigerators.....	1914 1909	7,831 8,232	94.0 96.7	4.4 2.4	1.0 0.9				
Automobiles, including bodies and parts.	1914 1909	18,752 12,130	97.8 98.6	2.1 1.1	0.2 0.2	Glass.....	1914 1909	10,997 10,159	91.6 87.6	7.9 8.2	0.5 4.3				
Boots and shoes, including cut stock and findings.	1914 1909	14,674 16,026	68.4 65.5	40.8 41.0	0.8 3.4	Hosiery and knit goods.....	1914 1909	3,411 3,149	22.9 18.5	76.4 76.5	0.7 7.0				
Boxes, fancy and paper.....	1914 1909	2,456 2,530	35.1 35.7	64.5 57.0	0.4 7.8	Iron and steel, blast furnaces.....	1914 1909	5,786 7,295	100.0 100.0	( <sup>2</sup> ) ( <sup>2</sup> )	.....				
Brass, bronze, and copper products.....	1914 1909	2,277 2,232	98.0 97.5	1.4 2.2	..... 0.3	Iron and steel, steel works and rolling mills.	1914 1909	46,397 38,586	99.3 99.2	0.6 0.8	( <sup>2</sup> ) ( <sup>2</sup> )				
Bread and other bakery products.....	1914 1909	7,065 5,972	79.1 80.7	20.5 18.5	0.4 0.0	Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	1914 1909	2,365 2,797	88.1 85.1	11.8 11.9	( <sup>2</sup> ) 3.0				
Brick, tile, pottery, and other clay products.	1914 1909	27,334 23,085	87.0 86.0	12.7 13.1	0.3 0.9	Iron and steel forgings, not made in steel works or rolling mills.	1914 1909	2,308 2,002	99.7 96.3	0.1 0.8	0.2 3.3				
Butter, cheese, and condensed milk.....	1914 1909	1,430 1,037	94.0 89.7	5.8 9.0	0.2 1.3	Iron and steel, wrought pipe.....	1914 1909	2,285 1,081	100.0 99.3	..... 0.7	.....				
Canning and preserving.....	1914 1909	2,507 2,009	55.2 45.0	44.3 52.8	0.5 1.6	Liquors, malt.....	1914 1909	5,340 4,356	99.8 99.8	0.2 0.2	..... ( <sup>2</sup> )				
Carrriages and wagons and materials.....	1914 1909	5,997 8,815	95.0 96.8	4.0 2.7	0.2 0.6	Lumber and timber products.....	1914 1909	11,921 13,456	98.8 98.8	1.1 1.1	0.1 0.2				
Cars and general shop construction and repairs by electric-railroad companies.	1914 1909	1,879 1,318	98.0 98.4	1.4 1.5	..... ( <sup>2</sup> )	Marble and stone work.....	1914 1909	2,523 2,012	99.9 99.3	0.1 ( <sup>2</sup> )	..... 0.6				
Cars and general shop construction and repairs by steam-railroad companies.	1914 1909	21,639 20,728	99.9 99.8	0.1 0.2	( <sup>2</sup> ) ( <sup>2</sup> )	Paint and varnish.....	1914 1909	2,197 1,535	92.0 88.5	7.9 11.5	( <sup>2</sup> ) 0.1				
Cars, steam-railroad, not including operations of railroad companies.	1914 1909	2,885 2,282	99.8 99.0	0.2 0.4	..... .....	Paper and wood pulp.....	1914 1909	5,430 4,673	87.7 84.5	11.7 15.4	0.6 0.1				
Chemicals.....	1914 1909	2,017 1,132	98.3 96.4	1.7 3.0	..... .....	Paper goods, not elsewhere specified.....	1914 1909	2,289 2,040	50.5 47.8	49.5 51.5	..... 0.7				
Clothing, men's, including shirts.....	1914 1909	10,758 9,950	29.5 30.0	69.6 66.5	0.9 3.5	Printing and publishing.....	1914 1909	18,070 15,760	77.1 73.7	21.8 24.0	1.1 1.4				
Clothing, women's.....	1914 1909	9,775 8,943	35.7 35.0	64.2 63.6	0.1 1.3	Rubber goods, not elsewhere specified....	1914 1909	21,705 19,382	88.8 84.8	11.1 14.3	0.1 0.9				
Confectionery.....	1914 1909	3,149 2,493	35.3 30.4	63.9 59.5	0.7 10.1	Shipbuilding, including boat building....	1914 1909	2,870 3,200	99.9 100.0	0.1 .....	.....				
Copper, tin, and sheet-iron products.....	1914 1909	7,448 6,568	81.5 78.7	18.3 18.3	0.2 5.0	Slaughtering and meat packing.....	1914 1909	3,610 3,086	97.7 97.8	2.2 2.2	( <sup>2</sup> ) .....				
Cutlery and tools, not elsewhere specified.	1914 1909	3,109 2,820	91.8 90.5	8.1 9.2	0.1 0.3	Stoves and furnaces, including gas and oil stoves.	1914 1909	8,575 7,274	99.3 99.5	0.4 0.3	0.3 0.2				
Electrical machinery, apparatus, and supplies.	1914 1909	12,695 8,073	77.0 67.6	22.0 31.5	0.1 0.9	Tobacco manufactures.....	1914 1909	13,282 12,631	32.9 32.3	69.9 66.8	0.1 0.9				
Flour-mill and gristmill products.....	1914 1909	2,363 2,535	99.1 96.0	0.8 4.0	( <sup>2</sup> ) .....	All other industries.....	1914 1909	91,819 80,330	80.3 78.2	19.3 20.3	0.5 1.6				

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

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the 43 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.

In each of the cities the male wage earners 16 years of age and over greatly outnumbered the females, the only cities in which the proportion of adult males fell

below 75 per cent in 1914 being Coshocton, East Liverpool, Findlay, Lancaster, Piqua, and Portsmouth. Nearly all of the cities show marked decreases from census to census in both numbers and proportions of wage earners under 16 years of age. Lorain shows the largest proportion of male wage earners 16 years of age and over at each of the five-year periods, although there was a slight decrease between 1909 and 1914.

Cleveland, the most important city in respect to number of wage earners employed in 1914, shows an increase, both actual and proportional, in adult males

and females during the five-year period 1909-1914. The number of wage earners under 16 years of age decreased 63.3 per cent, while the proportion which this class formed of the total decreased from 1.6 per cent in 1909 to five-tenths of 1 per cent in 1914. Cincinnati, the second city in respect to wage

earners, shows, for 1909-1914, an increase in the proportion of adult males, a slight decrease in the proportion of adult females, while the proportion of wage earners under 16 years of age decreased from 2.2 per cent in 1909 to six-tenths of 1 per cent in 1914.

Table 7

AVERAGE NUMBER OF WAGE EARNERS IN MANUFACTURING INDUSTRIES.

CITY.	Total.			16 years of age and over.						Under 16 years of age.			Per cent of total.								
				Male.			Female.						16 years of age and over.			Under 16 years of age.					
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904	Male.			Female.			1914	1909	1904
													1914	1909	1904	1914	1909	1904			
Akron.....	24,080	15,831	9,626	21,825	13,387	7,052	2,802	2,223	1,589	53	221	135	88.4	84.0	82.6	11.4	14.0	16.0	0.2	1.4	1.4
Alliance.....	2,333	2,624	.....	2,269	2,385	.....	64	131	.....	3	8	.....	97.1	94.5	.....	2.7	5.2	.....	0.1	0.3	.....
Ashtabula.....	1,808	1,471	840	1,770	1,334	787	95	128	107	9	9	2	94.8	90.7	87.1	5.1	8.7	12.6	0.2	0.6	0.2
Barberton.....	3,118	.....	.....	2,600	.....	.....	421	.....	.....	1	.....	.....	88.5	.....	.....	13.5	.....	.....	(1)	.....	.....
Bollairo.....	2,003	2,567	.....	2,357	2,301	.....	234	254	.....	12	42	.....	90.5	88.0	.....	9.0	9.5	.....	0.5	1.6	.....
Cambridge.....	1,455	1,230	.....	1,353	1,174	.....	98	50	.....	4	.....	.....	93.0	95.4	.....	6.7	4.0	.....	0.3	.....	.....
Canton.....	12,255	9,004	5,938	10,823	8,892	5,011	1,393	955	806	39	117	31	83.3	89.2	84.4	11.4	0.0	15.1	0.3	1.2	0.5
Chillicothe.....	1,557	1,674	1,553	1,239	1,157	1,207	815	517	816	3	.....	80	79.9	90.1	77.7	20.2	30.9	20.8	0.2	.....	1.9
Cincinnati.....	50,801	60,182	58,584	44,991	43,889	43,387	14,509	14,949	14,213	3011	3,444	984	75.2	72.9	74.1	24.2	24.8	24.3	0.0	2.2	1.7
Cleveland.....	103,317	84,728	64,041	85,009	69,643	53,310	17,756	13,746	9,302	4921	3,399	1,393	82.3	82.2	83.3	17.2	16.2	14.6	0.5	1.0	2.1
Columbus.....	17,230	10,428	14,350	14,269	13,137	11,503	2,922	3,140	2,476	45	145	311	82.8	80.0	80.6	17.0	10.2	17.3	0.3	0.0	2.2
Coshocton.....	1,614	.....	.....	991	.....	.....	623	.....	.....	.....	.....	.....	61.4	.....	.....	38.6	.....	.....	.....	.....	.....
Dayton.....	24,061	21,540	17,093	20,222	17,876	14,183	3,812	3,572	2,798	27	101	112	84.0	83.0	83.0	15.8	16.0	16.4	0.1	0.5	0.7
East Cleveland.....	129	.....	.....	124	.....	.....	5	.....	.....	.....	.....	.....	96.1	.....	.....	3.0	.....	.....	.....	.....	.....
East Liverpool.....	4,830	4,873	5,228	3,560	3,587	3,720	1,238	1,218	1,468	26	68	40	73.8	73.6	71.2	25.0	25.0	28.1	0.5	1.4	0.8
Elyria.....	2,735	2,673	.....	2,355	2,357	.....	376	289	.....	4	27	.....	80.1	88.2	.....	13.7	10.8	.....	0.1	1.0	.....
Findlay.....	1,737	1,370	1,343	1,020	921	1,044	709	454	294	8	1	5	53.7	66.9	77.7	40.8	33.0	21.9	0.5	0.1	0.4
Fosteria.....	1,252	.....	.....	1,013	.....	.....	239	.....	.....	.....	.....	.....	80.0	.....	.....	19.1	.....	.....	.....	.....	.....
Fremont.....	2,043	.....	.....	1,632	.....	.....	379	.....	.....	.....	.....	.....	81.5	.....	.....	18.4	.....	.....	.....	.....	.....
Hamilton.....	6,043	6,895	6,107	5,252	6,047	5,319	775	752	721	10	90	67	86.9	87.7	87.1	12.8	10.9	11.8	0.3	1.4	1.1
Ironton.....	1,420	1,920	1,800	1,193	1,047	1,714	207	269	78	20	4	10	84.0	85.8	95.2	14.6	14.0	4.2	1.4	0.2	0.6
Lakewood.....	1,774	.....	.....	1,555	.....	.....	210	.....	.....	.....	.....	.....	87.7	.....	.....	12.3	.....	.....	.....	.....	.....
Lancaster.....	1,583	1,532	.....	1,134	1,118	.....	449	412	.....	.....	.....	.....	71.6	73.0	.....	28.4	26.9	.....	.....	.....	.....
Lima.....	4,876	3,607	2,733	3,676	2,474	2,042	1,199	1,082	591	1	51	100	75.4	68.0	74.7	24.6	30.0	21.6	(1)	1.4	3.7
Lorain.....	6,439	6,097	3,102	6,357	6,473	3,075	77	20	26	2	8	1	98.8	98.7	99.1	1.2	0.3	0.8	(1)	(1)	(1)
Mansfield.....	3,398	3,204	3,021	2,663	2,201	2,215	730	984	780	5	10	20	78.4	68.7	73.9	21.5	30.7	26.0	0.1	0.6	0.7
Marietta.....	1,401	1,288	1,314	1,317	1,181	1,245	80	108	59	4	1	10	91.0	91.7	94.7	5.7	8.2	4.5	0.3	0.1	0.8
Marion.....	2,577	2,610	1,721	2,323	2,314	1,517	248	272	160	0	3	44	90.1	89.5	88.1	9.0	10.4	9.3	0.2	0.1	2.6
Massillon.....	1,708	1,931	1,995	1,591	1,826	1,760	177	87	54	.....	.....	.....	90.0	94.4	88.5	10.0	4.5	2.7	.....	1.1	3.8
Middletown.....	4,003	2,576	.....	3,523	1,895	.....	480	769	.....	.....	.....	.....	88.0	.....	.....	12.0	20.8	.....	.....	.....	.....
Mount Vernon.....	772	.....	.....	730	.....	.....	20	.....	.....	.....	.....	.....	95.3	.....	.....	2.6	.....	.....	.....	.....	.....
Nowark.....	4,583	3,913	3,627	4,132	3,576	3,326	440	286	220	11	51	75	90.2	91.4	91.7	9.0	7.3	6.2	0.2	1.3	2.1
Norwood.....	5,808	3,907	.....	4,538	3,215	.....	1,269	984	.....	.....	.....	.....	78.1	82.3	.....	21.9	17.5	.....	(1)	0.2	.....
Piquette.....	2,777	2,083	2,044	1,623	1,913	1,617	850	751	349	4	19	11	69.2	71.3	80.0	30.6	28.0	18.9	0.1	0.7	0.5
Potsdam.....	3,507	3,728	4,072	2,441	2,237	2,726	1,137	1,390	1,173	19	101	173	67.9	60.9	60.9	31.0	37.3	28.8	0.5	2.7	4.2
Sandusky.....	2,727	2,118	2,323	2,493	1,008	1,817	322	406	493	2	44	43	88.1	75.9	78.2	11.8	22.0	19.9	0.1	2.1	1.9
Springfield.....	7,868	7,405	6,258	7,074	6,616	5,762	786	777	482	8	12	14	80.9	89.3	92.1	10.0	10.5	7.7	0.1	0.2	0.2
Stenbauvillo.....	4,596	4,267	4,184	4,294	4,045	3,701	202	196	257	10	29	136	95.3	94.8	90.6	4.5	4.6	6.1	0.2	0.8	3.3
Tiffin.....	2,177	1,632	1,045	1,775	1,289	1,130	348	278	514	54	65	1	81.5	79.0	68.7	16.0	17.0	31.2	2.5	4.0	0.1
Toledo.....	27,076	18,878	15,607	23,859	15,279	13,517	4,115	3,327	2,114	102	272	66	84.4	80.9	80.1	15.2	17.6	13.5	0.4	1.4	0.4
Warron.....	2,892	1,798	.....	2,347	1,190	.....	511	547	.....	.....	.....	.....	82.0	66.2	.....	17.9	30.4	.....	.....	.....	.....
Youngstown.....	15,861	10,498	8,095	14,997	10,214	7,935	890	272	123	4	12	37	94.6	97.3	98.0	5.4	2.6	1.5	(1)	0.1	0.5
Zanesville.....	3,935	2,932	3,098	2,540	2,582	2,565	492	325	509	3	25	24	83.7	88.1	82.8	16.2	11.1	16.4	0.1	0.9	0.8

1 Less than one-tenth of 1 per cent.

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.

Table 8

PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS.<sup>1</sup>

PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS.<sup>1</sup>

CITY.	PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS. <sup>1</sup>				CITY.	PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS. <sup>1</sup>					
	Period.	Total.	16 years of age and over.			Period.	Total.	16 years of age and over.			
			Male.	Female.				Male.	Female.		
Akron.....	1904-1914	156.4	174.4	82.1	-60.7	Canton.....	1904-1914	106.4	116.0	65.5	.....
	1909-1914	55.0	63.0	26.0	-76.0		1909-1914	23.0	21.7	45.9	-66.7
	1904-1909	64.5	68.3	44.4	63.7		1904-1909	67.8	77.4	6.6	.....
Alliance.....	1909-1914	-7.6	-5.0	-51.1	.....	Chillicothe.....	1904-1914	0.3	2.7	-0.3	.....
Ashtabula.....	1904-1914	120.8	140.2	-11.2	.....		1909-1914	-7.0	7.1	-39.1	.....
	1909-1914	27.0	32.7	-25.7	.....		1904-1909	7.8	-4.1	63.6	.....
	1904-1909	73.9	81.0	19.6	.....	Cincinnati.....	1904-1914	2.2	3.7	2.1	-63.3
Bollairo.....	1909-1914	0.2	2.4	-7.9	.....		1909-1914	-0.5	2.5	-2.9	-73.1
Cambridge.....	1909-1914	18.3	15.2	.....	.....		1904-1909	2.7	1.2	5.2	30.6

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

**Table 8—Continued.**

CITY.	PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS. <sup>1</sup>					CITY.	PER CENT OF INCREASE IN AVERAGE NUMBER OF WAGE EARNERS. <sup>1</sup>				
	Period.	Total.	16 years of age and over.		Under 16 years of age.		Period.	Total.	16 years of age and over.		Under 16 years of age.
			Male.	Female.					Male.	Female.	
Cleveland.....	1904-1914	61.3	59.6	89.7	-63.0	Massillon.....	1904-1914	-11.4	-0.9	.....	
	1909-1914	21.9	22.2	20.2	-63.3		1909-1914	-8.6	-12.9	.....	
	1904-1909	32.3	30.6	40.8	-1.8		1904-1909	-3.1	3.4	-38.0	
Columbus.....	1904-1914	20.1	23.4	13.0	-85.5	Middletown.....	1900-1914	55.4	95.2	-37.6	
	1909-1914	4.9	8.6	-7.1	-69.0		1904-1914	26.4	24.2	94.7	
	1904-1909	14.5	13.6	27.1	-53.4		1909-1914	17.1	15.5	53.8	
Dayton.....	1904-1914	40.8	42.6	30.2	-75.0		1904-1909	7.9	7.5	20.5	
	1909-1914	11.7	13.1	6.7	-73.3	Norwood.....	1900-1914	48.7	41.2	85.5	
	1904-1909	28.1	26.0	27.7	-9.8		1904-1914	35.9	16.8	120.2	
East Liverpool.....	1904-1914	-7.3	-4.1	-15.7	.....		1909-1914	3.5	0.5	13.2	
	1909-1914	-0.9	-0.6	1.6	.....		1904-1909	31.3	16.2	94.6	
	1904-1909	-0.8	-3.0	-17.0	.....	Portsmouth.....	1904-1914	-11.7	-10.5	-3.1	
Elyria.....	1900-1914	2.3	-0.1	30.1	.....		1909-1914	-3.5	0.1	-18.2	
Findlay.....	1904-1914	29.3	-2.3	141.2	.....		1904-1909	-8.4	-17.9	18.5	
	1909-1914	26.2	10.7	56.2	.....	Sandusky.....	1904-1914	17.4	32.3	-30.5	
	1904-1909	2.5	-11.8	64.4	.....		1909-1914	28.8	49.4	-30.9	
Hamilton.....	1904-1914	-1.0	-1.3	7.5	.....		1904-1909	-8.8	-11.5	0.6	
	1909-1914	-12.4	-13.1	3.1	.....	Springfield.....	1904-1914	25.7	22.8	63.1	
	1904-1909	12.0	13.7	4.3	.....		1909-1914	6.3	6.9	1.2	
Ironton.....	1904-1914	-21.1	-30.4	.....	.....		1904-1909	18.3	14.8	61.2	
	1909-1914	-26.0	-27.6	-23.0	.....	Staubenville.....	1904-1914	7.7	13.3	-21.4	
	1904-1909	6.7	-3.9	.....	.....		1909-1914	5.6	6.2	3.1	
Lancaster.....	1909-1914	8.3	1.4	0.0	.....		1904-1909	2.0	6.7	-23.7	
Lima.....	1904-1914	78.4	80.0	102.9	-99.0	Tiffin.....	1904-1914	32.3	57.1	-32.3	
	1909-1914	35.2	48.6	10.8	-98.0		1909-1914	33.4	37.7	25.2	
	1904-1909	32.0	21.2	83.1	-40.0		1904-1909	-0.8	14.1	-45.9	
Lorain.....	1904-1914	107.5	109.7	.....	.....	Toledo.....	1904-1914	72.5	60.1	94.7	
	1909-1914	-3.9	-4.7	.....	.....		1909-1914	43.4	49.6	-62.5	
	1904-1909	116.9	117.0	.....	.....		1904-1909	20.3	13.0	57.4	
Mansfield.....	1904-1914	12.5	20.2	-7.1	.....	Warren.....	1900-1914	59.2	97.2	-6.6	
	1909-1914	6.1	21.0	-25.8	.....		1904-1914	95.0	80.0	599.2	
	1904-1909	6.1	-0.6	25.2	.....		1909-1914	51.1	46.8	216.2	
Marion.....	1904-1914	6.6	5.8	.....	.....		1904-1909	29.7	28.7	121.1	
	1909-1914	8.3	11.5	-24.5	.....	Zanesville.....	1904-1914	-2.0	-1.0	-3.3	
	1904-1909	-2.0	-5.1	.....	.....		1909-1914	3.5	-1.0	51.4	
Marion.....	1904-1914	49.7	53.1	55.0	.....		1904-1909	-5.4	0.7	-36.2	
	1909-1914	-1.6	-0.9	-8.8	.....						
	1904-1909	52.2	54.5	70.0	.....						

<sup>1</sup>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. <sup>1</sup>			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January.....	511,055	414,278	349,853	95.6	80.2	68.5
February.....	521,063	421,045	358,147	98.2	87.8	68.8
March.....	531,637	432,343	368,365	100.0	90.0	68.5
April.....	533,186	432,828	374,925	99.7	90.1	100.0
May.....	523,653	436,460	373,937	98.0	90.8	99.7
June.....	518,316	444,998	367,146	97.0	92.0	98.2
July.....	505,133	435,241	349,600	94.7	90.6	93.5
August.....	505,991	448,898	357,022	94.8	93.4	95.6
September.....	510,037	455,351	369,182	95.4	94.0	98.7
October.....	501,305	471,448	370,224	93.8	98.8	99.0
November.....	478,412	476,023	367,997	89.5	99.1	98.4
December.....	470,841	480,405	366,318	89.2	100.0	97.9

<sup>1</sup>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 for 1914 appearing for March and the minimum number for December, while in 1904 the maximum number was reported for April and the minimum for July.

The year 1909 shows a different season of activity, the maximum number being employed in December and the minimum in January. The greatest difference between the maximum and minimum months in any one of the three census years was 66,127 in 1909. The average monthly employment of wage earners in 1914 was 510,435; in 1909, 446,934; and in 1904, 364,298.

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 43 cities having more than 10,000 inhabitants.

Of the selected industries, canning and preserving, because of its seasonal character, shows the greatest degree of fluctuation, the number of wage earners employed in February being but 12.8 per cent of the number in September. In the manufacture of steam-railroad cars the number reported for December was but 51.3 per cent of the number reported for January, while in the glass industry the number reported for August was only 54.1 per cent of that for April. The greatest stability of employment is shown for flour-mill and gristmill products, printing and publishing, and tobacco manufactures, the percentages which the minimum formed of the maximum being 94.8, 97.4, and 95, respectively. Of the 43 cities, Middletown

and Portsmouth show the greatest fluctuation, the proportion which the minimum formed of the maximum being 32.4 per cent and 53 per cent, respectively, while the most steady employment of wage earners is

shown for Coshocton and East Liverpool, the proportion which the minimum number formed of the maximum for the former being 96.4 per cent and for the latter 93.8 per cent.

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 the 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.....	610,436	511,055	524,603	534,537	533,186	523,053	618,316	506,133	506,991	510,037	501,300	478,412	470,841	80.2
Agricultural implements.....	5,464	6,029	6,793	6,758	6,383	5,502	5,468	5,210	5,300	4,801	4,175	4,132	4,327	60.8
Automobiles, including bodies and parts.....	18,752	17,204	17,944	18,766	10,188	18,400	17,640	17,232	18,209	18,745	20,529	20,188	20,829	82.7
Boots and shoes, including cut stock and findings.....	14,674	14,048	16,385	15,210	11,633	13,003	15,346	15,042	15,400	14,374	14,006	14,070	14,853	71.0
Boxes, fancy and paper.....	2,456	2,522	2,588	2,603	2,505	2,447	2,460	2,381	2,418	2,405	2,422	2,385	2,381	87.6
Brass, bronze, and copper products.....	2,277	2,156	2,355	2,408	2,573	2,447	2,378	2,210	2,218	2,238	2,134	2,000	2,104	81.6
Bread and other bakery products.....	7,665	7,370	7,407	7,477	7,508	7,568	7,771	7,840	7,761	7,846	7,816	7,798	7,758	93.9
Brick, tile, pottery, and other clay products.....	27,334	24,861	25,094	20,136	27,911	29,123	29,276	28,009	28,945	28,772	27,664	26,100	25,427	84.0
Canning and preserving.....	2,507	1,020	600	1,080	1,076	1,336	2,220	1,863	4,765	7,739	4,823	1,986	1,177	12.8
Carrriages and wagons and materials.....	5,997	6,198	6,514	6,705	6,771	6,543	6,243	5,814	5,704	5,515	5,359	5,220	5,288	77.1
Cars and general shop construction and repairs by steam-railroad companies.....	21,030	21,847	22,070	22,371	20,053	21,006	20,207	21,020	21,820	22,637	22,271	21,610	21,238	80.3
Cars, steam-railroad, not including operations of railroad companies.....	2,885	3,015	3,445	3,311	3,042	3,440	3,055	3,073	2,132	2,304	2,281	2,614	2,005	51.3
Chemicals.....	2,017	2,158	2,063	2,130	2,100	1,978	1,960	1,892	1,892	1,974	1,959	2,005	1,905	87.9
Clothing, men's, including shirts.....	10,758	10,994	11,206	11,374	11,351	11,084	10,680	10,562	10,560	10,420	10,420	10,431	10,074	88.0
Clothing, women's.....	9,775	9,507	10,717	10,740	10,285	8,889	8,080	9,639	10,613	10,550	10,300	8,805	7,378	73.4
Confectionery.....	3,140	2,850	2,886	2,980	2,902	2,771	2,568	2,451	2,938	3,700	4,178	3,861	3,556	58.7
Copper, tin, and sheet-iron products.....	7,448	7,612	7,083	7,753	7,784	7,080	7,480	7,212	7,493	7,033	7,493	6,750	6,853	86.5
Cutlery and tools, not elsewhere specified.....	3,109	3,422	3,422	3,473	3,448	3,302	3,170	3,254	3,253	3,089	2,960	2,831	2,797	79.7
Electrical machinery, apparatus, and supplies.....	12,695	13,819	13,040	13,175	13,081	12,602	12,737	12,357	12,587	12,379	12,571	12,104	11,888	86.0
Flour-mill and gristmill products.....	2,363	2,350	2,342	2,352	2,348	2,301	2,299	2,382	2,425	2,420	2,374	2,370	2,384	94.8
Foundry and machine-shop products.....	73,103	76,180	77,408	77,895	77,292	76,340	75,216	73,241	72,212	69,692	68,454	66,698	66,726	85.6
Furniture and refrigerators.....	7,831	8,261	8,440	8,555	8,371	8,182	7,732	7,150	7,050	7,465	7,505	7,414	7,208	89.6
Glass.....	10,997	12,182	12,666	12,810	13,290	12,204	11,207	8,147	7,192	9,653	10,185	11,103	11,326	54.1
Hosiery and knit goods.....	3,411	3,635	3,646	3,709	3,646	3,587	3,592	3,400	3,179	3,166	3,261	3,081	3,000	83.1
Iron and steel, blast furnaces.....	5,786	6,277	6,199	6,440	6,639	6,440	6,282	5,098	5,781	5,637	5,105	4,450	4,508	67.2
Iron and steel, steel works and rolling mills.....	46,307	47,117	46,467	51,727	50,800	46,304	47,493	47,420	46,984	47,006	45,152	36,645	40,400	70.8
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.....	2,365	2,354	2,477	2,525	2,586	2,400	2,411	2,300	2,368	2,295	2,247	2,172	2,080	80.7
Iron and steel forgings, not made in steel works or rolling mills.....	2,308	2,508	2,622	2,697	2,639	2,440	2,172	2,075	2,008	2,075	2,103	2,044	2,154	74.5
Iron and steel, wrought, pipe.....	2,285	1,951	2,571	2,736	2,630	2,322	2,352	2,425	2,430	2,164	1,868	1,905	2,066	68.8
Liquors, malt.....	5,340	4,931	4,910	4,930	5,103	5,374	5,897	6,028	5,000	5,010	5,237	5,121	5,030	81.4
Lumber and timber products.....	11,921	11,290	11,327	11,986	12,540	12,802	13,733	12,453	12,073	11,905	11,580	11,383	10,661	85.5
Marble and stone work.....	2,523	2,308	2,252	2,389	2,748	2,765	2,600	2,679	2,636	2,692	2,474	2,247	2,336	81.3
Paint and varnish.....	10,907	2,056	2,168	2,247	2,297	2,299	2,227	2,075	2,059	2,095	1,972	1,969	1,970	89.8
Paper and wood pulp.....	5,430	5,456	5,470	5,534	5,480	5,404	5,534	5,338	5,427	5,490	5,508	5,307	5,104	92.2
Paper goods, not elsewhere specified.....	2,260	2,380	2,338	2,362	2,340	2,308	2,286	2,230	2,185	2,184	2,202	2,185	2,210	91.8
Printing and publishing.....	18,070	18,323	18,232	18,246	18,184	18,062	17,985	17,960	17,841	17,864	18,048	17,990	18,000	97.4
Shrub goods, not elsewhere specified.....	21,705	19,479	21,577	23,524	25,409	25,439	22,558	21,657	20,025	20,410	20,246	20,118	20,018	76.6
Shipbuilding, including boat building.....	2,870	3,175	3,431	3,566	3,443	3,209	2,852	2,800	2,752	2,444	2,077	2,078	2,033	58.2
Slaughtering and meat packing.....	3,619	3,755	3,619	3,657	3,453	3,458	3,545	3,580	3,473	3,452	3,513	3,725	4,298	80.8
Stoves and furnaces, including gas and oil stoves.....	8,575	8,209	8,042	8,045	8,073	8,672	8,887	7,850	8,151	8,405	8,701	8,458	8,403	86.6
Tobacco manufactures.....	13,282	13,270	13,731	13,641	13,374	13,198	13,050	13,052	13,176	13,140	13,253	13,202	13,300	95.0
All other industries.....	95,178	94,508	95,908	97,657	95,801	97,733	97,740	94,821	95,090	95,828	94,808	90,963	88,180	89.2
Total for cities.....	387,632	391,398	403,049	409,376	405,222	397,183	391,124	384,892	382,764	379,827	376,238	366,240	364,228	.....
AKRON.....	24,080	22,831	24,676	26,839	28,774	28,407	25,371	24,159	22,912	23,001	23,004	23,120	22,976	79.3
ALLIANCE.....	2,333	2,384	2,326	2,339	2,373	2,306	2,488	2,568	2,555	2,280	2,111	2,001	2,130	80.2
ASHTABULA.....	1,868	1,578	1,628	1,784	1,878	1,860	1,920	1,906	2,087	2,084	2,055	1,854	1,715	75.6
BARBERTON.....	3,118	3,262	3,339	3,423	3,332	3,199	3,064	3,050	3,085	3,023	2,928	2,779	2,720	81.2
BELLAIRE.....	2,693	2,832	2,685	2,809	2,810	2,678	2,599	2,483	2,533	2,428	2,439	2,474	2,461	85.7
CAMBRIDGE.....	1,455	1,712	1,750	1,784	1,570	1,231	1,355	1,592	1,500	1,495	1,262	1,112	1,118	62.3
CANTON.....	12,255	12,213	12,119	12,500	12,724	12,418	12,353	11,954	12,169	12,042	12,753	11,639	11,873	91.3
CHILLICOTHE.....	1,557	1,540	1,552	1,461	1,376	1,478	1,647	1,684	1,838	1,822	1,438	1,419	1,425	74.8
CINCINNATI.....	59,861	61,805	62,782	62,567	60,516	61,169	60,737	59,882	59,349	57,566	57,139	57,199	57,594	91.0
CLEVELAND.....	108,317	105,431	107,799	108,913	107,955	103,952	103,994	101,891	101,170	100,840	101,721	98,692	98,406	90.4
COLUMBUS.....	17,236	17,140	17,800	18,056	17,807	17,774	17,610	16,951	16,875	16,838	16,697	16,580	16,094	91.8
COSHOCTON.....	1,614	1,591	1,613	1,636	1,607	1,590	1,587	1,584	1,593	1,640	1,640	1,630	1,633	96.4
DAYTON.....	24,061	25,417	25,313	25,382	25,428	25,663	25,151	24,479	23,435	22,785	22,478	22,030	21,771	82.5
EAST CLEVELAND.....	129	107	142	139	129	129	118	121	132	158	140	121	115	67.7
EAST LIVERPOOL.....	4,830	4,771	4,830	4,943	4,935	4,891	4,905	4,648	4,845	4,879	4,807	4,707	4,721	93.8
ELYRIA.....	2,735	2,670	2,774	2,941	3,024	3,061	2,775	2,609	2,616	2,618	2,655	2,482	2,580	81.1
FINLAY.....	1,737	1,646	1,764	1,700	1,729	1,770	1,782	1,781	1,791	1,729	1,700	1,714	1,730	91.9
FOSTORIA.....	1,252	1,274	1,290	1,359	1,384	1,279	1,195	1,174	1,164	1,188	1,218	1,274	1,275	81.2
FREMONT.....	2,063	1,881	2,082	2,199	2,148	2,110	2,102	1,936	2,055	2,106	2,217	2,078	1,913	84.8
HAMILTON.....	6,043	6,042	6,593	6,342	6,304	6,167	5,982	5,799	5,734	5,857	5,896	5,643	5,693	85.0

MANUFACTURES—OHIO.

Table 10—Continued.

WAGE EARNERS: 1914.  
[Month of maximum employment for each industry is indicated by boldface figures and that of minimum by *italic* figures.]

INDUSTRY AND CITY.	Average number employed during year.	Number employed on the 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.	
IRONTON.....	1,420	1,500	1,572	<b>1,671</b>	1,400	1,560	1,650	1,451	1,451	1,277	1,306	<i>1,000</i>	1,094	60.4
LAKEWOOD.....	1,774	1,744	1,718	1,751	1,760	1,806	<i>1,671</i>	1,707	1,815	1,800	1,906	1,848	87.7	
LANCASTER.....	1,683	1,473	1,515	1,524	1,504	1,613	1,657	1,693	1,652	1,636	1,583	1,544	87.0	
LIMA.....	4,876	4,407	4,787	4,801	4,961	4,953	4,987	5,007	5,150	5,330	5,202	4,574	80.4	
LORAIN.....	6,486	7,150	7,593	<b>7,674</b>	7,553	6,766	6,855	6,733	5,001	5,720	5,150	<i>4,045</i>	5,389	62.8
MANSFIELD.....	3,398	3,208	3,476	<b>3,017</b>	3,712	3,500	3,483	3,481	3,561	3,550	3,204	<i>2,623</i>	2,949	78.7
MARLETTA.....	1,401	1,448	1,408	1,443	1,550	1,523	1,635	1,407	1,444	<i>1,412</i>	1,256	1,260	1,307	79.0
MARION.....	2,577	2,684	2,814	2,846	2,814	2,801	2,497	2,400	2,560	2,423	2,370	2,370	<i>2,365</i>	83.1
MASSILLON.....	1,768	1,747	1,890	1,935	1,943	1,957	1,944	1,964	1,683	1,643	1,648	1,580	<i>1,276</i>	65.0
MIDDLETOWN.....	4,003	4,072	4,084	4,270	4,362	4,108	3,989	3,945	3,048	3,070	3,020	<i>3,594</i>	3,675	82.4
MOUNT VERNON.....	772	784	781	701	818	702	764	733	752	768	808	752	<i>721</i>	88.1
NEWARK.....	4,538	4,308	4,603	4,710	4,722	4,605	4,765	4,808	4,710	4,595	4,675	4,442	4,369	90.3
NORWOOD.....	5,808	5,740	5,695	5,380	6,015	6,042	6,047	5,901	5,787	5,850	5,710	5,544	5,478	90.5
PIQUA.....	2,777	2,701	2,897	2,948	2,933	2,724	2,590	2,700	2,700	2,733	2,740	2,706	2,677	88.1
POWERSMOUTH.....	3,697	2,006	4,456	4,072	2,300	2,507	3,740	4,016	3,015	3,075	3,774	3,751	3,809	53.0
SANDUSKY.....	2,727	<i>2,612</i>	2,625	2,671	2,610	2,757	2,734	2,760	2,727	2,727	2,707	2,817	2,669	89.8
SPRINGFIELD.....	7,868	8,830	8,727	8,752	8,372	7,852	7,747	7,770	7,500	7,500	7,148	6,759	7,064	76.3
STEUBENVILLE.....	4,990	3,915	4,520	4,375	4,945	4,991	4,424	4,563	4,403	4,440	4,440	4,228	3,400	69.0
Tiffin.....	2,177	2,202	2,215	2,211	2,298	2,226	2,232	2,207	2,077	2,104	2,047	2,104	2,143	90.2
TOLEDO.....	27,076	27,080	27,161	<b>27,847</b>	27,431	27,051	25,827	<i>25,504</i>	20,574	23,295	23,037	27,200	20,800	90.1
WARREN.....	2,862	2,992	2,980	2,935	2,801	2,777	2,844	2,790	2,843	2,800	2,790	2,816	2,816	92.5
YOUNGSTOWN.....	15,861	16,310	17,198	17,449	16,669	15,682	16,072	16,712	17,119	15,458	14,589	13,583	<i>13,401</i>	77.3
ZANESVILLE.....	3,035	<i>2,649</i>	3,185	3,289	3,280	3,106	3,106	3,245	2,772	3,017	2,881	2,915	2,979	80.5

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. 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.	Consus 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	510,435	60,975	78,201	116,027	126,640	80,552	15,815	9,591	4,025
	1909	446,934	31,977	29,290	88,915	130,852	131,853	14,484	8,714	10,843
Agricultural implements.....	1914	5,464	10	593	811	3,519	531			
	1909	5,097	195	1,294	387	2,354	1,707			
Automobiles, including bodies and parts.....	1914	18,752	476	10,138	2,674	4,963	501			
	1909	12,130	2	64	4,469	6,055	1,051	489		
Boots and shoes, including cut stock and findings.....	1914	14,074	828	103	6,121	7,364	258			
	1909	16,020	190	305	2,608	9,106	3,817			
Boxes, fancy and paper.....	1914	2,456	320	140	1,504	210	165			
	1909	2,530	112	430	339	1,208	441			
Brass, bronze, and copper products.....	1914	2,277	481	422	543	651	75	102		
	1909	2,232	30	30	831	1,114	94	127		
Bread and other bakery products.....	1914	7,605	758	328	3,787	493	1,969	243	62	25
	1909	5,972	589	140	1,007	512	3,214	209	132	40
Brick, tile, pottery, and other clay products.....	1914	27,334	2,195	2,904	7,930	3,757	10,407	132		
	1909	23,985	2,498	2,725	4,609	1,587	12,270	139		67
Canning and preserving.....	1914	2,507	90	86	870	345	1,094	5		17
	1909	2,000	208	18	79	149	1,555			
Carriages and wagons and materials.....	1914	5,997	828	589	1,115	2,013	1,452			
	1909	8,815	641	651	1,634	1,993	3,896			
Cars and general shop construction and repairs by steam-railroad companies.....	1914	21,030	8,512	3,164	5,025	730	857	3,189		162
	1909	20,728	1,718	2,660	3,057	6,273	4,094	1,509		1,417
Cars, steam-railroad, not including operations of railroad companies.....	1914	2,885		929	98	1,858				
	1909	2,282		121	270	1,830	52			
Chemicals.....	1914	2,017	380			850	266	1	508	3
	1909	1,132	2		3	164	586	13	34	330
Clothing, men's, including shirts.....	1914	10,758	3,610	4,728	2,240	142	38			
	1909	9,950	1,300	2,023	5,428	1,090	100			
Clothing, women's.....	1914	9,775	903	7,335	1,457	3	27			
	1909	8,843	459	1,146	5,242	1,952	47			

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.
Confectionery.....	1914 1909	3,149 2,403	251 322	343 342	1,899 280	532 280	114 1,200	8	3	2
Copper, tin, and sheet-iron products.....	1914 1909	7,448 0,598	1,100 549	1,018 167	2,173 1,384	2,238 1,250	824 3,000	95		248
Cutlery and tools, not elsewhere specified.....	1914 1909	3,109 2,820	73 40	1,000 11	96 118	1,347 2,007	83 044			
Electrical machinery, apparatus, and supplies.....	1914 1909	12,695 8,073	657 20	3,850 1,086	4,098 2,430	3,705 3,071	295 1,452		14	
Flour-mill and gristmill products.....	1914 1909	2,463 2,585	115 207	18 53	210 56	105 66	1,683 1,571	168 378	58 253	1
Foundry and machine-shop products.....	1914 1909	73,103 61,817	0,097 809	9,070 2,508	15,013 11,037	30,976 28,233	11,009 21,845	32 314		21
Furniture and refrigerators.....	1914 1909	7,831 8,232	624 196	1,543 345	845 1,206	2,501 2,060	2,228 3,705			
Glass.....	1914 1909	10,097 10,159	784 1,797	4,515 2,270	2,916 1,726	198 2,501	2,276 1,130	118 652	100 65	
Hosiery and knit goods.....	1914 1909	3,411 3,149	64 10	205 45	3,035 921	107 1,019	1,164			
Iron and steel, blast furnaces.....	1914 1909	5,780 7,295					918	580 606	1,577 1	2,711 0,688
Iron and steel, steel works and rolling mills.....	1914 1909	46,307 38,580	3,303 1,483	2,013 44	2,961 5,442	8,094 7,290	20,551 13,352	4,453 6,296	4,997 4,700	25
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works and rolling mills.....	1914 1909	2,365 2,797	341	7	60 270	1,957 539	1,988			
Iron and steel forgings, not made in steel works or rolling mills.....	1914 1909	2,308 2,002	440 188	234	244 168	1,174 682	41 600	166 274		
Iron and steel, wrought pipe.....	1914 1909	2,285 1,081			176	1,083 273	1,026 808			
Liquors, malt.....	1914 1909	5,340 4,356	4,287 2,300	59 1	619 1,479	143 89	232 471	7		
Lumber and timber products.....	1914 1909	11,921 13,456	855 704	806 358	3,076 2,802	3,423 2,238	3,744 7,348	2	4	17
Marble and stone work.....	1914 1909	2,523 2,012	403 341	96 61	422 478	287 19	1,314 1,001	1 44	68	
Paint and varnish.....	1914 1909	2,107 1,535	82 53	319 207	235 198	925 520	546 497			
Paper and wood pulp.....	1914 1909	5,430 4,673			829	344 468	820 1,498	2,042 1,233	1,376 1,466	19 18
Paper goods, not elsewhere specified.....	1914 1909	2,269 2,040	5 40	102 19	1,957 853	69 200	78 928	58		
Printing and publishing.....	1914 1909	18,070 15,758	12,587 6,888	1,826 1,951	2,453 4,670	1,055 1,485	149 744	18		
Rubber goods, not elsewhere specified.....	1914 1909	21,705 10,382	3,057	5,848 843	99 4,080	12,297 5,158	64 301	340		
Shipbuilding, including boat building.....	1914 1909	2,879 3,200	9 3	11 16	327 131	794 375	1,738 2,675			
Slaughtering and meat packing.....	1914 1909	3,619 3,086	111 26	27 6	635 484	528 90	2,317 2,333		67	80
Stoves and furnaces, including gas and oil stoves.....	1914 1909	8,575 7,274	2,844 330	1,000 350	893 1,639	2,400 3,116	1,432 1,933			
Tobacco manufactures.....	1914 1909	13,282 12,631	4,490 4,327	1,959 2,431	6,280 938	464 2,808	85 2,113	4 10	3	3
All other industries.....	1914 1909	95,178 83,215	7,984 3,388	9,302 4,491	30,796 16,062	22,807 29,060	18,345 24,305	4,078 2,496	823 1,382	1,043 2,031
Total for cities.....	1914	387,632	58,020	69,074	92,241	99,594	47,747	10,568	7,079	3,309
AKRON.....	1914	24,680	4,188	5,930	9,053	11,873	580	1,095	20	35
ALLIANCE.....	1914	2,333	306	11	1,136	107	711	62		
ASHTABULA.....	1914	1,868	265	25	852		615	105		6
BARBERTON.....	1914	3,118	6	19	1,201	1,215	642		1	4
BELLAIRE.....	1914	2,603	118	19	1,099	469	36		862	
CAMBRIDGE.....	1914	1,455	180	491	615	136	27		4	2
CANTON.....	1914	12,255	1,400	811	1,555	7,579	566	261		83
CHILLICOTHE.....	1914	1,557	27	59	401	637	198	5	226	4
CINCINNATI.....	1914	59,801	11,075	13,526	16,330	12,713	4,410	840	30	37
CLEVELAND.....	1914	103,317	17,103	20,680	24,581	19,409	16,556	411	2,746	1,831
COLUMBUS.....	1914	17,236	5,611	1,614	3,965	4,702	1,255	63	7	19
COSHOCTON.....	1914	1,614	57	240	1,206	49	21	3	30	8
DAYTON.....	1914	24,061	2,335	1,451	8,492	10,041	1,605	120	2	9
EAST CLEVELAND.....	1914	129	2		14	104	1		8	
EAST LIVERPOOL.....	1914	4,830	1,590	614	2,359	66	140	41		14

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.
ELYRIA.....	1914	2,735	25	988	167	702	429	361	3	.....
FINDLAY.....	1914	1,787	104	124	925	115	326	143	.....	.....
FOSTORIA.....	1914	1,252	145	269	163	321	350	4	.....	.....
FREMONT.....	1914	2,063	193	118	241	1,100	318	.....	.....	3
HAMILTON.....	1914	6,043	707	99	506	2,580	926	1,057	78	.....
IRONTON.....	1914	1,420	236	81	319	183	412	3	.....	186
LAKEWOOD.....	1914	1,774	85	1,238	13	77	404	.....	.....	7
LANCASTER.....	1914	1,583	40	3	1,190	224	59	4	.....	63
LIMA.....	1914	4,876	98	719	1,882	1,906	259	9	.....	3
LOBAIN.....	1914	6,436	287	20	43	16	1,657	4,123	290	.....
MANSFIELD.....	1914	3,398	300	469	1,456	1,006	160	.....	.....	3
MARIETTA.....	1914	1,401	58	22	623	178	608	12	.....	.....
MARION.....	1914	2,577	1,383	154	862	26	132	6	.....	5
MASSILLON.....	1914	1,768	57	354	744	599	98	6	.....	.....
MIDDLETOWN.....	1914	4,003	44	20	1,088	417	2,041	304	78	.....
MOUNT VERNON.....	1914	772	33	58	11	623	43	.....	.....	4
NEWARK.....	1914	4,583	72	892	1,638	1,778	187	8	.....	.....
NORWOOD.....	1914	5,308	1,069	1,338	2,707	556	33	5	.....	.....
PIQUA.....	1914	2,777	31	357	1,219	239	764	140	21	.....
PORTSMOUTH.....	1914	3,597	94	.....	268	2,860	343	23	.....	.....
SANDUSKY.....	1914	2,727	415	66	785	710	400	220	127	.....
SPRINGFIELD.....	1914	7,868	1,010	1,227	471	4,601	508	38	.....	.....
STUBENVILLE.....	1914	4,506	729	533	33	150	2,063	235	17	.....
TIFFIN.....	1914	2,177	31	498	331	883	404	30	.....	.....
TOLEDO.....	1914	27,076	2,258	13,645	6,399	2,675	1,300	739	54	.....
WARREN.....	1914	2,302	1,065	40	444	627	68	5	.....	.....
YOUNGSTOWN.....	1914	15,861	1,384	94	2,384	3,930	4,784	40	2,382	.....
ZANESVILLE.....	1914	3,035	264	143	670	1,213	702	41	.....	.....

The table shows, for the state as a whole and for most of the individual industries, the tendency toward a shortening of the working day of wage earners. In 1909, 165,894, 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; in 1914 but 118,983, or about one-fifth, were employed in such establishments. The proportion of wage earners employed in establishments where the prevailing hours of work were fewer than 60 per week increased from 281,040, or 62.9 per cent of the total, in 1909, to 391,452, or 76.7 per cent, in 1914. For all industries combined, and for a number of the separate industries, there was a marked increase during the five-year period in the proportion of wage earners in each of the three classes from 48 hours and under to 54 hours per week. Among the separate industries, decreases in the hours of employment are shown for automobiles, including bodies and parts; boots and shoes, including cut stock and findings; foundry and machine-shop products; and hosiery and knit goods.

Of the combined total average number of wage earners, 387,632, for the 43 cities in 1914, 318,929, or 82.3 per cent, were in establishments where the prevailing hours were less than 60 per week, while only 20,956, or 5.4 per cent, were in establishments in which the hours of labor were more than 60 per week. In both Cincinnati and Cleveland the greatest number of wage earners in any class were employed in establishments operating 54 hours a week. In only two of the cities, Marion and Warren, were the greatest number employed in establishments where the prevailing hours of labor were 48 and under a week.

**Location of establishments.**—Table 12 shows, for 1914, 1909, and 1899, the extent to which the manufactures in Ohio are centralized in the 43 cities having more than 10,000 inhabitants.

In accepting the figures in this table it must be remembered that some of the cities—Barberton, Coshocton, East Cleveland, Fostoria, Fremont, and Mount Vernon—that had a population of 10,000 and over at the census of 1914, were included in the districts outside of the cities at prior censuses. Lakewood, while having a population in 1909 of over 10,000, was also included in the districts outside of the cities, to avoid disclosure of the operations of individual establishments. In 1909 Portsmouth and Steubenville each had less than 25,000 inhabitants, but during the five-year period 1909–1914 the population of each increased, so that they are now in the group of cities having between 25,000 and 100,000 inhabitants. It is apparent, therefore, that the figures in this table are not strictly comparable. The table shows, however, that for 1914 the cities, which represented 49.1 per cent of the estimated population of the state, reported 61.2 per cent of the number of establishments, 75.9 per cent of the total average number of wage earners, 77.4 per cent of the value of products, and 79.3 per cent of the value added by manufacture. Of the total value of products shown for the state in 1914, 10.5 per cent was reported from the 27 cities having between 10,000 and 25,000 inhabitants; 21.6 per cent from the 11 cities having between 25,000 and 100,000; and 45.3 per cent from the 5 cities having more than 100,000 inhabitants. Of the total average number of wage earners, 63.7 per cent were employed in cities having a population of 25,000 and over.

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		43		27		11		5			
	1910		36		22		9		5			
	1900		28		19		5		4			
Population <sup>1</sup> .....	1914	5,026,808	2,468,149	49.1	414,314	8.3	499,742	9.9	1,554,093	30.9	2,558,749	50.9
	1910	4,767,121	2,130,013	44.7	345,893	7.2	393,371	8.3	1,390,839	29.2	2,637,108	55.3
	1900	4,157,545	1,512,007	36.4	305,089	7.4	241,866	5.8	965,052	23.2	2,645,538	63.6
Number of establishments.....	1914	15,658	9,588	61.2	1,500	10.1	1,639	10.5	6,359	40.6	6,070	38.8
	1909	15,138	8,763	57.9	1,366	9.0	1,207	8.0	6,190	40.9	6,375	42.1
	1899	13,898	6,990	50.4	1,290	9.4	1,034	7.4	4,657	33.6	6,878	49.6
Average number of wage earners	1914	510,435	387,032	75.9	62,311	12.2	93,740	18.4	231,551	45.4	122,803	24.1
	1909	446,034	323,131	72.3	53,624	12.0	67,742	15.2	201,765	45.1	123,803	27.7
	1899	308,100	220,141	71.4	40,530	13.1	42,794	13.9	136,817	44.4	87,968	28.5
Value of products.....	1914	\$1,782,808,270	\$1,380,537,440	77.4	\$187,888,018	10.5	\$365,642,109	21.6	\$307,007,322	45.3	\$402,270,890	22.6
	1909	1,437,935,817	1,074,492,138	74.7	156,321,801	10.9	283,054,022	19.7	635,116,315	44.2	363,443,079	25.3
	1899	748,670,855	540,823,420	72.2	84,434,570	11.3	108,030,809	14.5	347,768,032	46.4	207,847,435	27.8
Value added by manufacture...	1914	792,026,264	604,253,617	76.3	86,583,678	11.4	157,346,803	20.0	360,323,636	47.8	157,772,647	20.7
	1909	613,733,870	468,164,822	76.3	68,825,220	11.2	107,859,766	17.5	291,979,827	47.6	145,569,048	23.7
	1899	339,368,354	251,523,607	74.1	40,462,166	11.9	48,808,762	14.4	162,262,639	47.8	87,844,747	25.9

<sup>1</sup> Census estimate of population for 1914.

The relative importance in manufactures in each of the 43 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 less than 10,000 inhabitants in those years.

Table 13

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1914	1909	1904	1914	1909	1904
Cleveland.....	103,317	84,728	64,041	\$352,418,052	\$271,960,833	\$171,923,636
Cincinnati.....	59,861	60,182	58,584	210,800,386	1192,515,092	106,050,050
Akron.....	24,680	15,831	9,626	122,291,600	73,158,206	33,559,243
Toledo.....	27,070	18,878	15,607	115,049,429	61,229,542	44,501,292
Youngstown.....	15,861	10,498	8,095	92,111,272	81,270,747	46,853,307
Dayton.....	24,061	21,549	17,093	71,071,374	60,378,376	39,596,773
Columbus.....	17,239	16,428	14,358	57,608,084	49,031,872	39,530,132
Canton.....	12,255	9,054	5,938	43,713,440	28,582,811	10,591,143
Lorain.....	6,438	6,097	3,102	29,110,037	38,986,996	14,491,091
Springfield.....	7,868	7,405	6,258	27,721,789	19,246,141	13,381,767
Middletown.....	4,093	2,576	.....	21,787,151	10,516,785	.....
Steubenville.....	4,500	4,267	4,184	16,958,987	21,187,127	12,369,677
Hamilton.....	6,043	6,895	6,107	16,877,260	18,183,693	13,810,901
Norwood.....	5,808	3,907	.....	16,724,360	9,684,332	.....
Bellair.....	2,603	2,597	.....	12,170,206	10,091,554	.....
Lima.....	4,876	3,907	2,733	11,598,580	7,763,877	4,827,556
Warren.....	2,862	1,798	.....	10,399,737	5,988,174	.....
Mansfield.....	3,398	3,204	3,021	10,281,968	8,172,911	7,363,578
Newark.....	4,583	3,913	3,027	9,270,762	7,851,118	5,612,587
Barberton.....	3,118	.....	.....	8,843,422	.....	.....
Elyria.....	2,735	2,673	.....	8,791,734	8,064,914	.....
Zanesville.....	3,035	12,932	3,098	8,300,231	8,020,433	6,347,387
Sandusky.....	2,727	2,118	2,323	8,284,865	5,946,853	4,878,563
Piqua.....	2,777	2,683	2,044	7,088,279	6,930,672	4,035,706
Portsmouth.....	3,597	3,728	4,072	7,682,145	7,276,893	6,645,112
Alliance.....	2,333	2,624	.....	7,174,766	6,135,429	.....
East Liverpool.....	4,830	4,873	5,228	7,002,903	6,629,076	6,437,090
Marion.....	2,577	2,619	1,721	6,384,864	5,666,976	3,227,712
Fostoria.....	1,252	.....	.....	6,124,679	.....	.....
Massillon.....	1,768	1,934	1,995	5,293,124	4,787,772	3,707,013
Ashtabula.....	1,868	1,471	846	5,020,991	3,458,612	1,895,454
Tiffin.....	2,177	1,932	1,645	4,995,880	3,284,328	2,434,592
Freemont.....	2,063	.....	.....	4,779,982	.....	.....
Ironton.....	1,420	1,920	1,800	4,666,185	7,118,250	4,755,304
Findlay.....	1,737	1,376	1,343	4,662,778	3,486,793	2,925,309
Lancaster.....	1,583	1,532	.....	4,602,615	4,074,004	.....
Marietta.....	1,401	1,288	1,314	4,128,618	3,214,553	2,509,287
Chillicothe.....	1,557	1,674	1,553	4,083,486	4,345,224	3,146,800
Cambridge.....	1,455	1,230	.....	3,923,786	4,290,560	.....
Lakewood.....	1,714	(?)	.....	3,606,493	.....	.....
Coshocton.....	1,614	.....	.....	3,476,686	.....	.....
Mount Vernon.....	772	.....	.....	2,302,669	.....	.....
East Cleveland.....	129	.....	.....	295,786	.....	.....

<sup>1</sup> 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.

<sup>2</sup> Figures can not be shown without disclosing individual operations.

Of the 28 cities for which comparative figures are given for 1904, 1909, and 1914, 13 show an increase in both average number of wage earners and in value of products for each five-year period. All except Lorain, Steubenville, Hamilton, Ironton, and Chillicothe show an increase in value of products at each census. The percentages of increase, however, were generally smaller from 1909 to 1914 than from 1904 to 1909.

The principal industries in the cities having 50,000 inhabitants and over in 1914, for which statistics can be presented separately, are shown in Table 14. The industries are listed in the order of their importance as measured by value of products, and show the absolute and relative increase from 1909 to 1914, and the percentage which the value of products for each industry represents of the corresponding total for the state.

Table 14

CITY AND INDUSTRY.	VALUE OF PRODUCTS.			
	Amount.	Per cent of industry total for the state.	Increase over 1909. <sup>1</sup>	Per cent.
			Amount.	Per cent.
<b>AKRON.</b>				
Rubber goods, not elsewhere specified.....	\$92,547,406	84.4	\$43,218,261	87.6
Foundry and machine-shop products.....	3,946,859	2.2	1,698,800	75.6
Printing and publishing.....	1,938,085	3.5	-414,825	-17.6
Brick, tile, pottery, and other clay products.....	1,488,387	3.8	-2,033	-0.1
Food preparations, not elsewhere specified.....	(?)	(?)	(?)	(?)
Automobiles, including bodies and parts.....	(?)	(?)	(?)	(?)
<b>CANTON.</b>				
Foundry and machine-shop products.....	3,041,277	4.5	3,149,871	64.4
Agricultural implements.....	1,105,135	6.3	285,964	34.8
Iron and steel, steel works and rolling mills.....	(?)	(?)	(?)	(?)
Copper, tin, and sheet-iron products.....	(?)	(?)	(?)	(?)
Rubber goods, not elsewhere specified.....	(?)	(?)	(?)	(?)
Safes and vaults.....	(?)	(?)	(?)	(?)
<b>CINCINNATI.</b>				
Slaughtering and meat packing.....	23,350,037	35.0	4,029,800	20.9
Foundry and machine-shop products.....	21,121,789	11.8	2,742,131	14.9
Boots and shoes, including cut stock and findings.....	15,329,293	45.6	330,621	2.2
Clothing, men's, including shirts.....	15,104,838	54.7	-1,870,090	-11.0

(See notes at end of table.)

CITY AND INDUSTRY.	VALUE OF PRODUCTS.				CITY AND INDUSTRY.	VALUE OF PRODUCTS.			
	Amount.	Per cent of industry total for the state.	Increase over 1909. <sup>1</sup>			Amount.	Per cent of industry total for the state.	Increase over 1909. <sup>1</sup>	
			Amount.	Per cent.				Amount.	Per cent.
<b>CINCINNATI—Continued.</b>					<b>DAYTON—Continued.</b>				
Printing and publishing.....	\$13,386,881	24.1	\$1,867,763	16.2	Cash registers and calculating machines....				
Liquors, malt.....	10,352,807	32.3	1,470,300	16.7	Cars, steam-railroad, not including operations of railroad companies.....				
Bread and other bakery products.....	6,385,676	20.9	1,283,083	25.1	Electrical machinery, apparatus, and supplies.....	(2)	(2)	(2)	(2)
Copper, tin, and sheet-iron products.....	5,569,761	22.2	2,795,164	100.7	Automobiles, including bodies and parts..				
Carriages and wagons and materials.....	5,505,061	34.4	-1,269,064	-18.5	Coffee, roasting and grinding.....				
Leather, tanned, curried, and finished.....	5,425,725	46.7	360,805	7.3	Sewing machines and attachments.....				
Paint and varnish.....	4,517,386	23.4	637,576	16.4	Paint and varnish.....				
Liquors, distilled.....	(2)	(2)	(2)	(2)	Bread and other bakery products.....				
<b>CLEVELAND.</b>					<b>SPRINGFIELD.</b>				
Foundry and machine-shop products.....	50,951,012	28.5	13,507,973	36.1	Foundry and machine-shop products.....	\$5,700,250	3.2	(3)	(3)
Iron and steel, steel works and rolling mills.	33,388,829	16.3	-5,074,487	-13.2	Agricultural implements.....	5,701,511	33.0	(3)	(3)
Automobiles, including bodies and parts..	27,116,595	31.0	5,712,669	26.7	Printing and publishing.....	3,452,782	6.2	(3)	(3)
Slaughtering and meat packing.....	24,737,218	37.1	7,545,170	43.9	Automobiles, including bodies and parts..				
Clothing, women's.....	16,243,292	71.0	3,454,517	27.0	Electrical machinery, apparatus, and supplies.....	(2)	(2)	(2)	(2)
Printing and publishing.....	13,985,625	25.2	4,350,943	45.2	Flour-mill and gristmill products.....				
Electrical machinery, apparatus, and supplies.....	11,357,533	31.4	7,321,730	181.4	<b>TOLEDO.</b>				
Paint and varnish.....	10,092,979	52.2	3,954,513	64.4	Foundry and machine-shop products.....	7,855,075	4.4	\$831,091	11.8
Clothing, men's, including shirts.....	9,545,782	34.6	3,502,461	60.3	Coffee, roasting and grinding.....	5,880,320	44.2	(2)	(2)
Stoves and furnaces, including gas and oil stoves.....	8,620,301	43.1	3,043,505	73.2	Flour-mill and gristmill products.....	5,815,388	12.9	153,197	2.7
Bread and other bakery products.....	6,907,608	22.6	2,176,950	46.0	Electrical machinery, apparatus, and supplies.....	3,220,882	8.0	2,297,059	246.5
Iron and steel, blast furnaces.....	(2)	(2)	(2)	(2)	Printing and publishing.....	2,000,828	5.4	980,494	49.2
<b>COLUMBUS.</b>					<b>TOLEDO.</b>				
Foundry and machine-shop products.....	6,950,036	3.9	-784,708	-10.1	Liquors, malt.....	2,474,013	7.7	587,569	31.1
Boots and shoes.....	5,224,348	15.5	-211,361	-3.0	Clothing, women's.....	2,433,570	10.6	110,152	4.7
Printing and publishing.....	3,527,674	6.3	867,472	32.0	Bread and other bakery products.....	2,307,211	7.5	700,266	44.4
Liquors, malt.....	3,207,419	10.3	509,276	20.9	Automobiles, including bodies and parts..	2,020,350	8.1	720,113	55.7
Slaughtering and meat packing.....	3,210,921	4.8	856,474	36.4	Tobacco, cigars.....	(2)	(2)	(2)	(2)
Cars and general shop construction and repairs by steam-railroad companies.....	(2)	(2)	(2)	(2)	Iron and steel, blast furnaces.....				
<b>DAYTON.</b>					<b>YOUNGSTOWN.</b>				
Foundry and machine-shop products.....	6,859,021	3.8	\$1,198	1.2	Iron and steel, steel works and rolling mills..	48,706,464	23.8	-1,378,689	-2.7
Slaughtering and meat packing.....	4,830,647	7.2	1,659,731	52.3	Foundry and machine-shop products.....	7,235,241	4.0	2,369,936	48.7
Tobacco manufactures.....	2,055,431	7.2	162,002	8.0	Lumber and timber products.....	1,010,128	3.2	67,187	6.0
Lumber and timber products.....	1,899,216	6.0	432,172	34.0	Iron and steel, blast furnaces.....				
Printing and publishing.....	1,773,518	3.2	221,367	14.3	Iron and steel, wrought pipe.....				
					Rubber goods, not elsewhere specified.....	(2)	(2)	(2)	(2)
					Furniture.....				

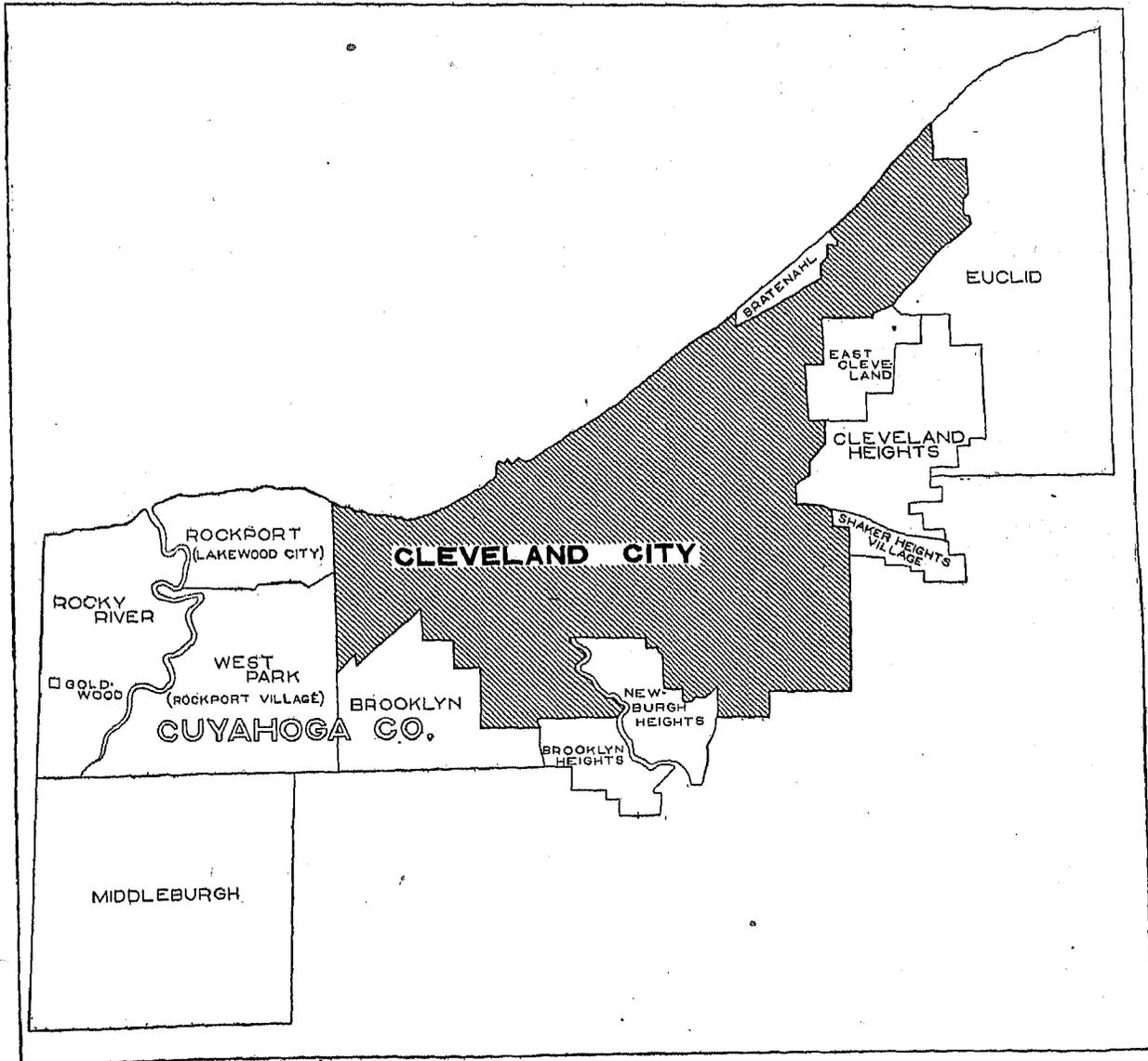
<sup>1</sup> A minus sign (-) denotes decrease.  
<sup>2</sup> Figures can not be shown separately without disclosing the operations of individual establishments.  
<sup>3</sup> Figures not available.

The following statement gives the principal industries in the cities of Ohio having from 10,000 to 50,000 inhabitants in 1914. The industries are arranged according to their rank as to value of products.

CITY.	Principal industries.	CITY.	Principal industries.	CITY.	Principal industries.
Alliance.....	Foundry and machine-shop products. Iron and steel, steel works and rolling mills.	Hamilton.....	Paper and wood pulp, paper mills exclusively. Foundry and machine-shop products. Safes and vaults.	Mount Vernon..	Foundry and machine-shop products. Flour-mill and gristmill products.
Ashtabula.....	Leather, tanned, curried, and finished. Cars and general shop construction and repairs, by steam-railroad companies.	Ironton.....	Iron and steel, blast furnaces. Wire.	Newark.....	Glass. Stoves and furnaces, including gas and oil stoves.
Barberton.....	Matches. Foundry and machine-shop products. Rubber goods, not elsewhere specified.	Lakewood.....	Electrical machinery, apparatus, and supplies. Lumber and timber products.	Norwood.....	Printing and publishing. Paper goods, not elsewhere specified. Electrical machinery, apparatus, and supplies.
Bollinger.....	Iron and steel, steel works and rolling mills. Iron and steel, blast furnaces. Glass.	Lancaster.....	Boots and shoes, including cut stock and findings.	Piquette.....	Furniture and refrigerators. Foundry and machine-shop products. Tinware, not elsewhere specified.
Cambridge.....	Iron and steel, steel works and rolling mills. Glass.	Lima.....	Locomotives, not made by railroad companies. Tobacco manufactures. Slaughtering and meat packing.	Portsmouth....	Boots and shoes.
Chillicothe.....	Paper and wood pulp. Flour-mill and gristmill products.	Lorain.....	Iron and steel, steel works and rolling mills. Iron and steel, blast furnaces. Shipbuilding.	Sandusky.....	Paper goods, not elsewhere specified. Foundry and machine-shop products.
Coshocton.....	Signs and advertising novelties. Furnishing goods, men's.	Mansfield.....	Agricultural implements. Brass, bronze, and copper products.	Steubenville....	Iron and steel, steel works and rolling mills. Iron and steel, blast furnaces. Tin plate and terneplate.
East Cleveland..	Furniture.	Marietta.....	Leather goods, not elsewhere specified. Furniture.	Tiffin.....	Foundry and machine-shop products. Brick, tile, pottery, and other clay products. Copper, tin, and sheet-iron work.
East Liverpool..	Brick, tile, pottery, and other clay products.	Marion.....	Foundry and machine-shop products. Silk goods.	Warren.....	Iron and steel, steel works and rolling mills. Foundry and machine-shop products. Electrical machinery, apparatus, and supplies. Tin plate and terneplate.
Elyria.....	Automobiles. Chemicals.	Massillon.....	Agricultural implements. Foundry and machine-shop products.	Zanesville.....	Iron and steel, wrought pipe. Brick, tile, pottery, and other clay products.
Findlay.....	Automobiles. Petroleum, refining.	Middletown....	Iron and steel, steel works and rolling mills. Tobacco manufactures. Paper and wood pulp, paper mills exclusively. Motorcycles, bicycles, and parts.		
Fostoria.....	Flour-mill and gristmill products. Automobiles, including bodies and parts.				
Fremont.....	Electrical machinery, apparatus, and supplies. Cutlery and tools, not elsewhere specified.				

**Cleveland metropolitan district.**—The metropolitan district of Cleveland, which was eighth in the United States in importance of manufactures in 1914, embraces 103,174 acres of territory, of which 33,004 acres constituted the area of Cleveland. The area of the metropolitan district was the same in 1914 as in 1909. It includes, in addition to Cleveland, Bratenahl, Brooklyn, Brooklyn Heights, Cleveland Heights, East Cleveland, Euclid, Goldwood, Middleburgh, Newburgh city (annexed to Cleveland in 1915), Newburgh Heights,

Rockport, Rocky River, Shaker Heights Village (organized from a part of Cleveland Heights Village in 1911), and West Park townships in Cuyahoga County. The incorporated places of over 10,000 inhabitants within the district besides Cleveland are East Cleveland, which is coextensive with East Cleveland township, and Lakewood, which is coextensive with Rockport township. The estimated population of Cleveland in 1914 was 639,431, and that of the outside territory 56,192, the total for the district being 695,623.



The above outline map shows, for 1914, the territory and the cities and towns that are included in the metropolitan district of Cleveland.

*Summary for the district.*—Table 15 is a summary for 1914 of the statistics of manufacturing industries, with a statement of the estimated population for 1914, of the cities of Cleveland, East Cleveland, and Lakewood, and of the remainder of the district. The percentages which the figures for Cleveland represent of the total for the district are shown for each item.

In 1914 there were 2,432 manufacturing establishments in the Cleveland metropolitan district, which gave employment to 127,702 persons during the year and paid out \$96,590,837 in salaries and wages. Of the persons employed, 107,420 were wage earners. Products valued at \$363,664,188 were reported, to produce which materials costing \$204,039,634 were used. The value added by manufacture was thus \$159,624,554.

Table 15

	CLEVELAND METROPOLITAN DISTRICT, 1914.							Per cent Cleveland is of total for district.
	The district.	Cleveland.	District exclusive of Cleveland.					
			Total.	East Cleveland.	Lakewood.	Remainder.		
Population	695,023	639,431	50,192	11,014	20,210	24,059	91.9	
Number of establishments	2,432	2,345	87	7	22	58	96.4	
Persons engaged	127,702	122,758	4,944	153	2,217	2,574	96.1	
Proprietors and firm members	1,753	1,093	60	7	16	37	96.6	
Salaried employees	18,520	17,748	771	17	427	337	95.8	
Wage earners (average number)	107,420	103,317	4,103	120	1,774	2,200	96.2	
Primary horsepower	296,737	277,000	19,717	397	2,000	16,305	93.4	
Capital	\$320,587,830	\$312,008,050	\$13,078,883	\$288,864	\$4,403,050	\$8,021,060	95.8	
Salaries and wages	96,590,837	92,808,805	3,721,072	90,766	1,561,404	2,000,742	96.1	
Salaries	26,641,084	25,518,080	1,123,008	18,373	530,470	566,055	95.8	
Wages	69,948,853	67,350,770	2,598,074	81,393	1,021,904	1,494,487	96.3	
Paid for contract work	1,764,923	1,748,342	16,581	.....	420	16,161	99.1	
Rent and taxes	0,827,391	0,070,740	147,642	3,545	97,618	46,440	97.8	
Cost of materials	204,030,634	198,492,504	5,547,070	147,190	1,603,930	3,795,944	97.3	
Value of products	363,664,188	352,418,052	11,246,136	295,786	3,006,498	7,343,852	96.9	
Value added by manufacture (value of products less cost of materials)	159,624,554	153,925,488	5,699,066	148,596	2,002,562	3,547,908	96.4	

<sup>1</sup> Estimated population, July 1, 1914.

The great bulk of the value of the manufactured products was reported by the factories within the central city. Cleveland contained 91.9 per cent of the population of the district and contributed 96.9 per cent of the value of products. The proportions which each of the items relating to manufactures forms of the corresponding totals for the district range from 93.4 per cent for primary horsepower to 97.3 per cent for cost of materials.

*Comparison with earlier censuses.*—Table 16 is a comparative summary of the statistics of the Cleveland metropolitan district as a whole, for 1914, 1909, and 1904, together with the per cent of increase for the decade and for each five-year period.

The table shows an increase in every item, except proprietors and firm members, during the five-year period 1909–1914; the percentages of increase were smaller, however, than for the five-year period 1904–1909. For the decade, and for each five-year period, the largest increases appear for salaries and number of salaried employees. During the period 1909 to 1914 the population of the district increased by 13.4

per cent, while value of products increased by 29 per cent.

Table 16

	CLEVELAND METROPOLITAN DISTRICT.			PER CENT OF INCREASE. <sup>1</sup>		
	1914	1909	1904	1904-1914	1909-1914	1904-1909
Population	695,023	613,270	( <sup>2</sup> )	.....	13.4	.....
Number of establishments	2,432	2,230	1,720	41.4	9.1	20.7
Persons engaged	127,702	103,709	76,071	66.6	23.1	35.3
Proprietors and firm members	1,753	1,771	1,520	14.7	-1.0	15.8
Salaried employees	18,520	12,850	7,341	152.4	44.2	75.0
Wage earners (average number)	107,420	89,088	67,801	58.4	20.6	31.4
Primary horsepower	296,737	216,106	159,207	86.3	37.3	35.7
Capital	\$320,587,830	\$230,911,140	\$104,091,287	98.3	37.9	43.8
Salaries and wages	96,590,837	66,805,430	44,216,685	118.4	44.6	51.1
Salaries	26,641,084	16,150,153	8,850,767	200.7	65.0	82.3
Wages	69,948,853	50,655,277	35,350,918	97.8	38.1	43.3
Cost of materials	204,030,634	159,806,454	100,783,886	102.5	27.6	58.7
Value of products	363,664,188	281,992,131	170,184,277	103.0	29.0	57.4
Value added by manufacture (value of products less cost of materials)	159,624,554	122,005,677	78,400,391	103.6	30.7	55.7

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Estimated, July 1, 1914.

<sup>3</sup> Apr. 15, 1910.

<sup>4</sup> No population census.

*Comparative summary, by industries.*—Table 17 gives statistics for 1914 and 1909 for certain selected industries so far as separate figures can be presented.

Table 17

INDUSTRY.	Census year.	CLEVELAND METROPOLITAN DISTRICT.											
		Number of establishments.	Persons engaged in industry.				Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
All industries	1914	2,432	127,582	1,633	18,520	107,420	296,737	\$320,587,830	\$26,641,084	\$69,948,853	\$204,030,634	\$363,664,188	\$159,624,554
	1909	2,230	103,709	1,771	12,850	89,088	216,106	230,911,140	16,150,153	50,655,277	159,806,454	281,992,131	122,005,677
Automobiles, including bodies and parts.	1914	36	7,077	15	956	7,006	10,887	23,633,040	1,741,395	5,371,159	14,731,674	27,116,595	12,384,921
	1909	32	7,115	20	687	6,408	9,185	16,000,172	875,471	4,022,846	10,417,034	21,403,126	10,086,802
Bread and other bakery products.	1914	232	2,305	233	444	1,028	1,803	2,954,338	530,776	1,235,596	2,766,208	4,812,449	3,025,361
	1909	210	1,782	213	267	1,252	14	2,619,019	312,142	820,767	2,766,208	4,812,449	2,046,181
Clothing, men's and women's.	1914	174	12,102	191	1,366	10,545	1,720	11,767,832	2,219,229	5,413,193	12,782,471	25,789,274	13,006,803
	1909	180	9,392	210	1,019	8,163	1,117	8,259,271	1,493,768	3,993,818	9,609,257	18,742,066	9,042,839
Electrical machinery, apparatus, and supplies.	1914	140	4,016	18	672	3,323	4,831	11,330,102	878,805	1,948,238	5,891,571	11,357,538	5,465,967
	1909	140	1,899	20	301	1,578	1,980	3,308,386	346,012	760,150	1,780,067	4,035,808	2,255,741
Foundry and machine-shop products.	1914	270	25,718	106	3,185	22,427	39,338	59,549,161	5,141,308	15,272,872	21,103,305	51,418,818	30,315,513
	1909	239	20,022	125	2,357	18,140	24,759	42,445,280	3,187,777	10,624,367	15,569,650	37,920,051	22,369,401
Iron and steel, steel works and rolling mills.	1914	15	9,086	2	935	8,149	70,844	38,988,491	1,508,773	6,049,623	24,552,310	33,388,829	8,836,519
	1909	14	8,278	2	738	7,538	60,575	25,989,577	848,567	5,149,604	28,039,016	38,463,316	10,424,300

<sup>1</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.

<sup>2</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.

Table 17—Continued.

INDUSTRY.	Census year.	CLEVELAND METROPOLITAN DISTRICT.											
		Number of establishments.	Persons engaged in industry.				Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Liquors, malt.....	1914	12	1,240	5	179	1,056	6,554	\$10,541,169	\$421,063	\$304,651	\$1,858,339	\$6,528,168	\$4,609,829
	1909	11	004	5	155	744	3,395	9,887,715	357,945	593,579	1,484,143	5,124,478	3,640,335
Lumber and timber products.	1914	53	2,106	19	178	1,909	6,139	2,429,374	240,647	1,203,660	3,346,590	5,410,562	2,063,966
	1909	56	1,528	20	155	1,347	5,959	2,647,529	177,296	799,965	2,869,205	4,299,586	1,430,361
Printing and publishing.....	1914	279	5,701	190	1,496	4,015	5,166	8,154,848	2,032,907	3,447,881	4,163,414	14,014,686	9,851,272
	1909	250	4,688	176	1,398	3,114	3,334	6,957,828	1,505,926	2,013,158	2,782,781	9,648,012	6,865,231
Slaughtering and meat packing.	1914	46	1,661	45	242	1,404	3,229	6,491,772	300,562	950,552	22,522,306	24,977,759	2,455,453
	1909	35	1,330	28	232	1,076	2,570	3,555,435	259,535	599,489	15,398,652	17,192,048	1,793,386
Stoves and furnaces, including gas and oil stoves.	1914	27	3,327	8	408	2,911	2,981	5,012,387	602,248	1,870,597	4,260,943	8,620,601	4,359,658
	1909	20	2,097	7	247	1,843	1,899	4,092,596	281,126	1,155,072	2,286,206	4,977,096	2,690,890
All other industries.....	1914	1,248	52,313	801	8,468	43,044	143,265	145,735,235	11,018,271	26,366,921	84,864,018	148,054,210	63,189,292
	1909	1,134	44,118	939	5,294	37,885	101,429	111,451,342	6,498,588	20,117,453	66,814,105	115,364,265	48,550,100

<sup>1</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.

There were 202 more establishments in the district in 1914 than in 1909, an increase of 9.1 per cent. The number of wage earners increased 18,332, or 20.6 per cent; value of products, \$81,672,057, or 29 per cent; and value added by manufacture, \$37,528,877, or 30.7 per cent.

In 1914 of the 11 industries shown separately in the table, foundries and machine shops ranked highest in value of products, with 14.1 per cent of the total reported for all industries in the district, followed by steel works and rolling mills, automobiles, including bodies and parts, and men's and women's clothing, with 9.2 per cent, 7.5 per cent, and 7.1 per cent, respectively.

The greatest relative gain in value of products during the period 1909-1914 was in the manufacture of electrical machinery, apparatus, and supplies, 181.4 per cent.

Cincinnati metropolitan district.—The metropolitan district of Cincinnati, which was eleventh in the United States in importance of manufactures in 1914, embraces 113,193 acres of territory, of which 44,615 acres constitute the area of Cincinnati. The changes in the area of Cincinnati city and of the metropolitan district since 1909 are due to annexation. The esti-

mated population of Cincinnati in 1914 was 402,175, and that of the outside territory 191,600, the total for the district being 593,775.

The metropolitan district comprises, in addition to Cincinnati, seven townships in Hamilton County, Ohio—Columbia, Delhi, Green, Miami, Millcreek, Springfield, and Sycamore, and seven magisterial districts in Kentucky, the first, second, third, and fourth in Campbell County and the first, second, and third in Kenton County.

The incorporated places of 10,000 inhabitants or over within the district besides Cincinnati are Norwood, Ohio; Newport, Ky., which comprises district 2 and part of district 1 in Campbell County; and Covington, Ky., which comprises district 1 and parts of districts 2 and 3 in Kenton County.

Summary for the district.—Table 18 is a summary for 1914 of the statistics of manufacturing industries, with a statement of the estimated population for 1914 of the cities of Cincinnati and Norwood in Ohio, and Covington and Newport cities, in Kentucky, and for the remainder of the district. The percentages which the figures for Cincinnati represent of the total for the district are shown for each item.

Table 18

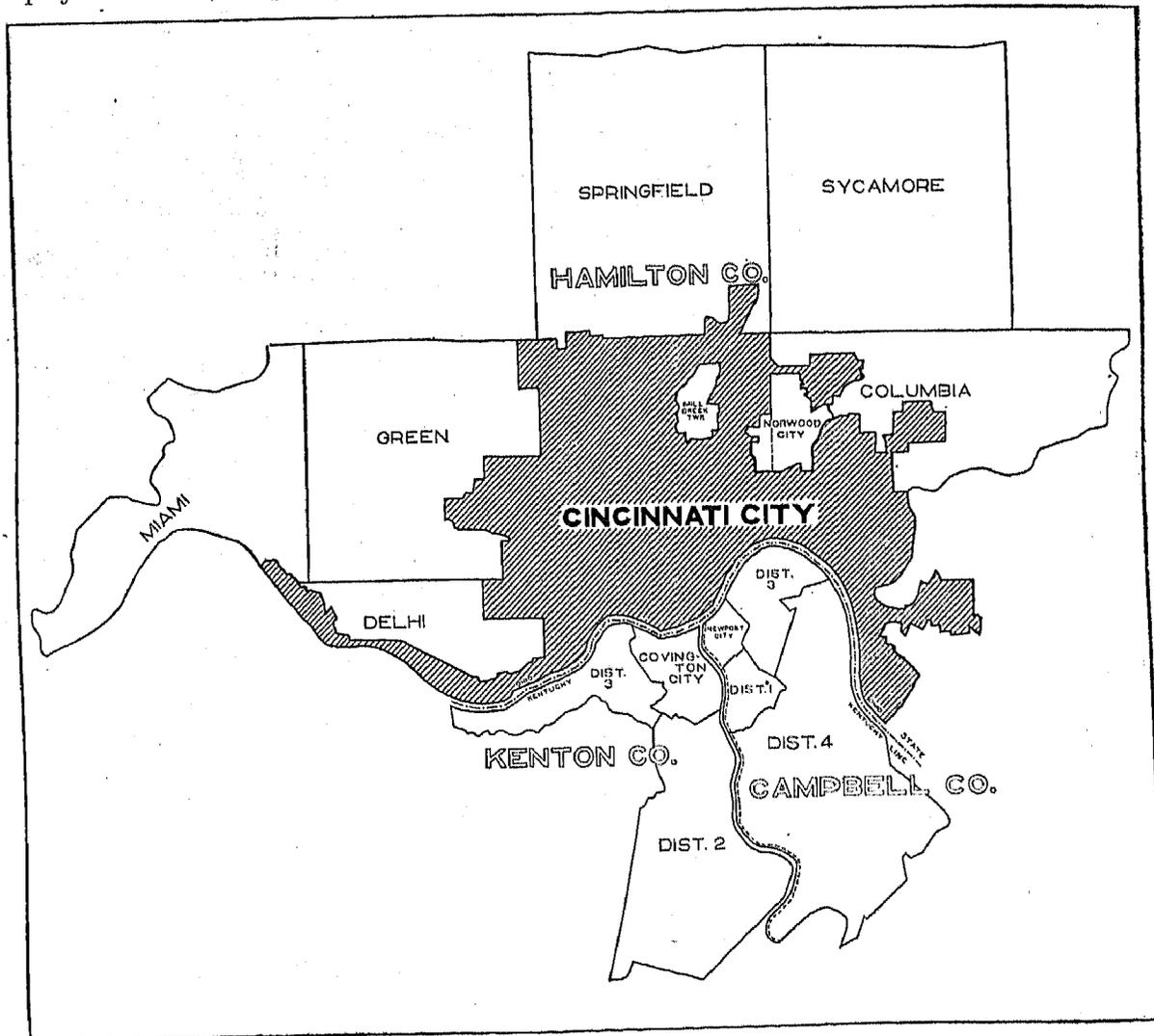
	CINCINNATI METROPOLITAN DISTRICT: 1914.								Per cent Cincinnati is of total for district.
	The district.	Cincinnati.	District exclusive of Cincinnati.						
			Total.	Covington.	Newport.	Norwood.	Remainder.		
Population <sup>1</sup> .....	593,775	402,175	191,600	55,896	31,517	20,320	83,867	67.7	
Number of establishments.....	2,629	2,135	494	161	100	58	175	81.2	
Persons engaged.....	94,240	72,858	21,382	3,736	2,216	6,853	8,577	77.3	
Proprietors and firm members.....	2,302	1,898	404	139	92	36	137	82.5	
Salaried employees.....	13,759	11,099	2,660	398	244	1,009	1,009	80.7	
Wage earners (average number).....	78,179	59,861	18,318	3,199	1,880	5,808	7,431	76.6	
Primary horsepower.....	173,043	106,689	66,354	7,095	6,731	9,865	42,663	61.7	
Capital.....	\$224,325,892	\$157,408,156	\$66,857,706	\$7,777,518	\$5,502,518	\$21,102,363	\$32,475,307	70.2	
Salaries and wages.....	63,164,396	48,411,150	14,753,237	2,298,787	1,622,202	4,867,844	5,994,404	76.6	
Salaries.....	18,679,661	15,252,076	3,427,585	453,604	334,633	1,253,862	1,385,480	81.7	
Wages.....	44,484,735	33,159,083	11,325,652	1,815,183	1,287,569	3,613,982	4,608,918	74.5	
Paid for contract work.....	1,928,176	1,859,195	68,981	31,057	11,381	13,328	13,215	96.4	
Rent and taxes.....	12,113,790	10,022,600	2,091,200	932,993	298,724	666,354	223,129	82.7	
Cost of materials.....	161,551,784	114,106,634	47,445,150	3,729,637	4,852,509	7,216,950	31,646,054	70.6	
Value of products.....	287,816,191	210,860,386	76,955,895	8,265,496	8,305,609	16,724,360	43,660,340	73.3	
Value added by manufacture (value of products less cost of materials).....	126,264,407	96,753,752	29,510,655	4,535,859	3,453,100	9,507,410	12,014,286	76.6	

<sup>1</sup> Estimated population, July 1, 1914.

The accompanying outline map shows, for 1914, the territory and the cities and towns that are included in the metropolitan district of Cincinnati.

In 1914 there were 2,629 manufacturing establishments in the Cincinnati metropolitan district, which gave employment to 94,240 persons during the year

and paid out \$63,164,396 in salaries and wages. Of the persons employed, 78,179 were wage earners. These establishments manufactured products valued at \$287,816,191, to produce which materials were used costing \$161,551,784. The value added by manufacture was thus \$126,264,407.



The greater part of the value of manufactured products for the Cincinnati district was reported by the establishments within the central city. Cincinnati contained over 67.7 per cent of the population of the district and contributed 73.3 per cent of the value of products. Its manufacturing establishments constituted 81.2 per cent of the total number in the district and gave employment to 76.6 per cent of the wage earners. Of the places outside Cincinnati for which separate statistics are given, Norwood had the largest value of products, representing 5.8 per cent of the total for the district. The districts outside of incorporated places having 10,000 or more inhabitants had a combined population equal to 14.1 per cent of the total for the district and contributed 15.2 per cent of the value of its products.

*Comparison with earlier censuses.*—Table 19 is a comparative summary of the statistics of the Cincinnati metropolitan district as a whole, for 1914, 1909,

and 1904, together with the per cent of increase for the decade and for each five-year period.

	CINCINNATI METROPOLITAN DISTRICT.			PER CENT OF INCREASE. <sup>1</sup>		
	1914	1909	1904	1904-1914	1909-1914	1904-1909
Population.....	2 563,775	2 563,804	(4)	.....	5.3	.....
Number of establishments.....	2,629	2,827	2,600	1.1	-7.0	8.7
Persons engaged.....	94,240	95,571	85,147	10.7	-1.4	12.2
Proprietors and firm members.....	2,302	2,593	2,587	-11.0	-11.2	0.2
Salaried employees.....	13,759	12,040	9,825	40.0	8.8	28.7
Wage earners (average number).....	78,179	80,332	72,735	7.5	-2.7	10.4
Primary horsepower.....	173,013	140,254	91,798	88.5	23.4	62.8
Capital.....	\$224,325,862	\$212,555,400	\$170,769,228	31.4	5.5	24.5
Salaries and wages.....	63,164,396	57,337,552	44,862,069	40.8	10.2	27.8
Salaries.....	18,679,661	15,601,542	10,929,512	70.9	19.7	42.7
Wages.....	44,484,735	41,736,010	33,932,557	31.1	6.0	23.0
Cost of materials.....	161,551,784	139,107,061	102,721,628	67.3	15.1	35.4
Value of products.....	287,816,191	260,399,619	203,095,605	41.7	10.5	28.2
Value added by manufacture (value of products less cost of materials)....	126,264,407	121,292,558	100,373,977	25.8	4.1	20.8

<sup>1</sup> A minus sign (-) denotes decrease.  
<sup>2</sup> Estimated, July 1, 1914.

<sup>3</sup> Apr. 15, 1910.  
<sup>4</sup> No population census.

In all items shown, except number of establishments, proprietors and firm members, and average number of wage earners, there were increases between 1909 and 1914, although the percentages of increase were smaller than for the five-year period 1904-1909. For the decade and for each five-year period the relative increase was greater for primary horsepower and for salaries

than for any other item. During the period 1909 to 1914 the population of the district increased 5.3 per cent, while value of products increased 10.5 per cent.

*Comparative summary, by industries.*—Table 20 gives statistics for 1914 and 1909 for certain selected industries so far as separate figures can be presented.

Table 20

CINCINNATI METROPOLITAN DISTRICT.

INDUSTRY.	Census year.	Number of establishments.	Persons engaged in industry.				Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
All Industries.....	1914 1909	2,620 2,827	94,240 95,571	2,302 2,593	13,759 12,646	78,179 80,332	173,043 140,254	\$224,325,862 212,555,469	\$18,679,661 15,601,542	\$44,484,735 41,736,010	\$161,551,784 139,107,061	\$287,816,191 260,399,619	\$126,264,407 121,292,558
Boots and shoes, including cut stock and findings.	1914 1909	134 132	8,062 8,702	14 21	753 692	7,295 7,989	4,195 4,631	9,374,418 7,056,352	1,121,627 1,015,789	3,715,710 3,617,086	8,322,420 8,583,670	15,329,293 14,998,672	7,006,873 6,415,002
Bread and other bakery products.	1914 1909	239 264	2,430 2,017	252 268	349 252	1,829 1,407	1,633 955	4,334,029 2,865,239	376,256 240,612	1,028,185 817,761	4,079,788 3,395,179	7,003,550 5,601,232	2,923,762 2,296,053
Carriages and wagons and materials.	1914 1909	89 99	2,193 3,370	92 85	313 433	1,788 2,851	2,893 3,325	4,771,707 6,020,606	405,372 455,415	1,220,153 1,621,880	3,147,252 4,367,976	5,524,566 8,157,665	2,477,314 3,789,689
Clothing, men's and women's.	1914 1909	200 227	8,699 10,933	239 412	1,084 1,176	7,376 8,445	1,939 952	9,599,016 11,660,797	1,492,730 1,428,600	3,529,320 3,590,197	8,810,601 10,229,186	18,005,884 20,559,186	9,195,233 10,335,897
Cooperage and wooden goods, not elsewhere specified.	1914 1909	23 20	643 697	23 17	41 48	579 632	1,561 1,269	1,139,059 1,445,850	62,647 75,438	344,932 291,804	868,003 760,016	1,472,116 1,232,289	604,113 469,273
Copper, tin, and sheet-iron products.	1914 1909	71 65	1,989 1,390	65 61	324 203	1,600 1,126	1,784 1,409	5,588,204 2,862,111	444,290 283,115	975,699 548,651	5,952,598 2,969,183	8,599,456 4,470,038	2,646,858 1,500,940
Fertilizers.....	1914 1909	5 5	561 442	.....	104 96	457 346	2,664 1,314	3,752,357 1,551,162	159,592 70,217	279,947 160,346	1,878,678 1,003,766	3,057,798 1,675,079	1,170,120 671,913
Flags, banners, regalia, society badges and emblems.	1914 1909	9 8	524 498	4 3	84 92	436 403	287 317	659,910 668,178	85,935 88,122	204,751 162,418	505,050 503,151	947,421 888,361	442,371 385,210
Flour-mill and gristmill products.	1914 1909	12 11	108 124	9 8	35 38	64 78	1,272 1,062	798,589 570,850	42,162 42,339	45,479 53,614	1,290,760 1,432,174	1,483,538 1,635,493	189,778 293,319
Foundry and machine-shop products.	1914 1909	264 238	13,086 13,716	180 130	2,078 1,880	10,828 11,706	24,317 18,372	34,151,282 29,642,095	2,975,539 2,378,730	6,953,498 6,793,105	10,213,799 11,127,047	29,222,485 26,186,408	16,003,686 15,059,421
Furnishing goods, men's.....	1914 1909	10 10	306 302	11 13	49 45	246 244	72 14	183,007 283,740	59,738 50,618	91,689 76,599	393,830 509,649	672,434 760,348	278,004 250,699
Furniture and refrigerators....	1914 1909	55 63	3,151 3,059	66 68	351 237	2,734 2,754	5,300 5,079	5,691,108 4,953,600	460,148 291,900	1,451,417 1,422,175	2,539,873 2,388,774	5,643,267 5,646,080	3,303,394 3,307,306
Ice, manufactured.....	1914 1909	24 15	369 243	3 5	76 58	290 180	7,242 4,471	2,790,427 2,343,548	95,740 73,093	188,820 115,427	225,503 161,161	652,204 567,814	426,701 406,653
Leather goods.....	1914 1909	17 19	673 664	17 23	127 109	529 535	386 252	1,887,750 1,690,970	180,411 100,886	258,785 278,188	1,043,641 799,653	1,801,207 1,618,778	757,566 719,125
Lumber and timber products.	1914 1909	68 80	2,452 2,809	56 66	319 330	2,077 2,413	7,024 9,318	5,135,332 8,398,650	400,791 412,386	1,331,419 1,306,785	3,327,343 4,345,585	6,056,740 7,401,558	2,720,397 3,055,973
Marble and stone work.....	1914 1909	36 39	447 396	37 47	57 43	353 306	1,290 1,012	799,076 639,390	67,400 59,846	233,016 208,549	294,137 731,091	818,816 731,091	524,679 441,587
Printing and publishing.....	1914 1909	340 318	7,167 6,800	286 281	1,606 1,525	5,275 5,000	7,244 6,058	13,606,026 13,183,475	1,829,329 1,638,634	3,803,956 3,236,020	5,423,011 4,220,553	16,063,824 18,998,011	11,240,813 9,778,083
Slaughtering and meat packing	1914 1909	56 61	1,456 1,400	75 78	223 183	1,158 1,139	5,029 3,745	4,518,282 4,701,132	286,426 204,399	785,146 683,196	22,164,010 17,497,119	23,901,092 19,922,613	1,787,082 2,425,464
Tobacco manufactures.....	1914 1909	218 300	2,972 3,462	237 321	236 243	2,409 2,898	560 634	2,793,857 3,009,283	258,803 257,593	1,101,157 1,126,640	2,287,039 2,421,365	5,271,810 5,496,839	3,034,171 3,075,474
All other industries.....	1914 1909	859 853	36,952 35,441	636 685	5,550 4,966	30,766 29,700	96,390 76,065	113,000,175 108,918,435	7,391,725 6,522,253	16,941,056 15,728,669	79,022,848 62,151,672	138,583,690 118,860,149	59,565,842 56,798,477

<sup>1</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.

While there were decreases in the total number of establishments, proprietors, and firm members, and wage earners reported for the district during the census period 1909-1914, increases are shown for every other item. The principal industry of the district is foundry and machine-shop products, with slaughtering and meat packing, men's and women's clothing, printing and publishing, and boots and shoes

ranking next in the order named. Of these five leading groups, slaughtering and meat packing shows the greatest relative gain in value of products, there being an increase of 20 per cent since 1909. Printing and publishing follows with 19 per cent increase. The relative gains for the foundry and machine-shop and boot and shoe industries were very small, while there was a decrease of 12.4 per cent in the clothing industry.

Character of ownership.—Table 21 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 the table.

INDUSTRY AND CITY.	Census year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.					
		Individuals.	Corporations.	All others.	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.	
All industries.....	1914	6,959	5,775	2,024	510,435	32,028	449,244	28,563	6.4	88.0	5.0	\$1,782,808,270	\$80,037,502	\$1,901,706,770	\$91,074,001	5.0	89.8	5.2	
	1909	6,978	5,123	3,037	446,034	34,345	378,473	34,116	7.7	81.7	7.0	1,437,935,817	88,075,465	1,249,778,444	100,081,908	8.1	80.0	7.0	
	1904	6,590	4,098	3,187	304,208	30,980	288,691	38,727	10.2	70.2	10.0	960,811,857	80,034,351	777,302,410	103,385,087	8.3	80.9	10.8	
Agricultural implements	1914	14	41	4	5,464	50	5,232	173	1.1	95.8	3.2	17,484,615	108,020	10,335,078	970,717	1.0	93.4	5.6	
	1909	10	41	4	5,997	51	5,708	148	0.8	96.7	2.5	14,440,461	122,107	13,792,458	525,890	0.8	95.5	3.6	
Automobiles, including bodies and parts.	1914	18	77	7	18,752	188	18,521	43	1.0	98.8	0.2	85,710,585	846,119	84,747,433	117,033	1.0	98.0	0.1	
	1909	10	52	13	12,130	147	11,755	228	1.2	96.0	1.9	88,838,754	227,816	37,002,042	1,008,890	0.0	95.3	4.1	
Boots and shoes, including cut stock and findings.	1914	7	58	8	14,674	381	14,072	221	2.0	95.9	1.5	38,641,705	604,045	32,280,752	756,008	1.8	96.0	2.2	
	1909	8	51	13	16,020	307	13,897	1,852	1.9	88.5	11.0	31,550,957	514,020	27,076,480	3,390,551	1.0	87.7	10.7	
Bread and other bakery products.	1914	1,318	81	235	7,665	3,246	3,500	853	42.3	46.5	11.1	30,500,881	12,755,385	14,270,550	3,525,046	41.7	46.7	11.5	
	1909	1,232	70	165	5,972	2,824	2,542	600	47.3	42.0	11.1	23,007,131	10,391,455	10,201,221	2,331,455	45.1	44.7	10.1	
Brick, tile, pottery, and other clay products.	1914	135	290	115	27,334	1,231	24,993	1,110	4.5	91.4	4.1	38,607,374	1,568,078	35,528,820	1,509,597	4.1	91.0	4.1	
	1909	228	304	171	23,085	1,720	20,845	1,411	7.2	86.9	5.9	30,531,002	2,000,316	20,590,043	2,888,841	10.7	76.1	6.2	
Butter, cheese, and condensed milk.	1914	70	102	114	1,480	125	1,183	172	8.4	70.9	11.0	10,325,077	1,352,410	10,076,021	1,806,637	7.0	83.2	9.8	
	1909	87	72	169	1,067	193	701	203	15.3	65.7	10.0	9,680,070	1,592,131	5,874,514	2,223,025	16.4	60.0	22.9	
Carriages and wagons and materials.	1914	140	105	90	5,997	817	4,516	664	13.0	75.3	11.1	10,102,440	1,739,475	12,454,604	1,908,280	10.7	76.9	12.3	
	1909	183	127	97	8,815	1,250	6,395	1,104	14.2	72.5	13.2	21,910,450	2,345,705	10,744,853	1,908,280	10.7	76.3	13.0	
Clothing, men's, including shirts.	1914	131	68	63	10,758	2,140	5,484	3,128	19.9	51.0	20.1	27,021,820	3,372,090	14,071,510	10,178,220	12.2	50.0	36.9	
	1909	227	46	70	9,950	2,873	2,823	4,254	28.9	28.4	42.8	24,809,437	4,235,936	7,246,115	13,387,350	17.0	20.1	53.8	
Clothing, women's.....	1914	67	66	37	0,775	692	7,293	1,700	7.1	74.0	18.3	22,881,753	1,336,251	10,863,882	4,691,020	5.8	73.7	20.5	
	1909	92	47	44	8,843	580	5,810	2,444	6.7	65.7	27.6	19,493,060	5,709,916	13,530,048	3,970,048	3.9	69.4	26.7	
Coffee and spice, roasting and grinding.	1914	5	26	4	822	13	798	41	1.6	93.4	5.0	13,312,493	285,284	12,274,339	752,870	2.1	92.2	5.7	
	1909	5	27	7	792	23	618	121	3.0	81.1	15.9	11,224,437	302,030	9,911,009	1,010,768	2.7	88.3	9.0	
Confectionery.....	1914	44	60	28	3,140	270	2,514	365	8.6	70.8	11.0	10,131,002	592,041	8,746,200	825,355	5.5	86.3	8.1	
	1909	41	47	26	2,493	380	1,725	387	15.2	60.2	15.5	7,300,574	909,901	5,740,072	917,511	12.5	75.0	12.0	
Electrical machinery, apparatus, and supplies.	1914	20	87	12	12,695	88	12,482	125	0.7	98.3	1.0	36,120,078	257,038	35,520,772	343,168	0.7	98.3	1.0	
	1909	18	84	13	8,078	109	7,855	109	1.4	97.3	1.4	18,776,769	231,352	18,204,470	340,941	1.2	97.0	1.8	
Flour-mill and gristmill products.	1914	293	137	249	2,363	478	1,294	501	20.2	54.8	25.0	45,171,200	6,438,027	28,824,681	0,907,592	14.3	63.8	21.9	
	1909	280	121	272	2,585	604	1,310	071	23.4	50.7	20.0	8,472,560	8,472,560	27,975,576	11,645,211	17.0	58.2	24.2	
Foundry and machine-shop products.	1914	336	849	194	73,193	1,000	98,430	2,758	2.6	93.0	3.8	178,855,069	4,531,336	107,474,030	6,849,703	2.5	93.8	3.8	
	1909	283	702	173	64,817	2,108	69,338	2,871	3.3	92.3	4.4	146,830,948	4,727,124	134,750,000	6,350,524	3.2	92.4	4.4	
Furniture and refrigerators.	1914	61	112	40	7,831	777	6,507	547	9.0	83.1	6.9	16,687,466	1,358,558	11,213,038	1,115,870	8.1	85.2	6.7	
	1909	66	122	40	8,232	895	6,900	537	10.9	82.0	6.0	1,698,026	1,698,026	13,400,057	1,070,074	10.4	83.0	6.0	
Liquors, malt.....	1914	7	83	11	5,340	49	5,200	91	0.9	97.4	1.7	31,990,274	219,265	31,429,717	341,292	0.7	98.2	1.1	
	1909	12	83	10	4,356	141	4,010	205	3.2	92.1	4.7	25,332,059	644,346	23,130,512	1,557,171	2.5	91.3	6.1	
Lumber and timber products.	1914	614	285	280	11,921	3,181	6,583	2,157	20.7	55.2	18.1	31,852,008	6,458,908	19,651,114	5,742,612	20.3	61.7	18.0	
	1909	753	285	352	13,456	3,707	7,036	2,623	28.2	52.3	19.5	34,597,009	7,708,569	29,765,660	6,122,840	22.3	60.0	17.7	
Printing and publishing.	1914	845	502	336	18,070	2,805	13,426	1,740	16.0	74.3	9.7	55,608,024	7,323,315	43,308,700	4,076,870	13.2	77.9	8.9	
	1909	829	438	343	15,750	2,745	10,832	2,170	17.4	68.7	13.8	41,657,306	6,510,373	29,073,914	5,473,019	15.0	71.2	13.2	
Slaughtering and meat packing.	1914	84	51	34	3,010	350	3,108	161	9.7	85.0	4.4	60,074,379	6,758,739	54,632,018	5,283,625	10.1	81.9	7.9	
	1909	80	47	31	3,080	463	2,475	148	15.0	80.2	4.8	50,804,100	7,690,040	39,009,555	4,044,496	15.1	76.9	8.0	
Tobacco manufactures...	1914	780	57	115	13,282	3,133	7,155	2,094	23.6	63.9	22.5	28,467,079	5,385,866	19,175,244	3,995,969	18.9	67.4	13.7	
	1909	963	46	137	12,031	3,259	6,021	2,751	25.8	62.4	21.8	28,907,269	5,121,142	10,270,332	5,715,795	17.7	69.4	12.9	
Total for cities.....	1914	4,029	4,004	1,555	387,032	23,040	343,180	21,412	5.9	88.5	5.5	1,380,537,440	61,014,475	1,251,814,230	60,808,738	4.5	90.7	4.8	
AKRON.....	1914	115	144	46	24,080	424	24,141	115	1.7	97.8	0.5	122,291,600	1,249,620	120,416,724	625,250	1.0	98.6	0.5	
ALLIANCE.....	1914	24	19	9	2,333	53	2,220	60	2.3	95.2	2.5	7,174,708	180,478	6,714,898	270,390	2.6	93.0	3.8	
ASHTABULA.....	1914	25	26	6	1,868	133	1,093	42	7.1	90.0	2.2	5,020,001	481,578	4,440,431	98,982	0.9	88.4	2.0	
BARBERTON.....	1914	17	10	7	3,118	50	3,050	18	1.6	97.8	0.6	8,845,422	188,073	8,530,823	115,726	2.1	96.0	1.3	
BELLARE.....	1914	21	18	6	2,003	303	2,281	19	11.0	87.0	0.7	12,170,200	401,225	11,008,030	160,951	3.3	95.4	1.3	
CAMBRIDGE.....	1914	12	18	9	1,455	36	1,394	25	2.5	95.8	1.7	3,923,786	107,104	3,923,907	146,775	2.7	93.5	3.7	
CANTON.....	1914	107	140	29	12,255	610	11,545	200	4.2	94.2	1.0	43,713,446	1,141,757	42,005,773	505,016	2.0	96.1	1.3	
CHILLICOTHE.....	1914	21	18	7	1,557	90	1,316	152	5.7	84.5	9.8	4,083,480	409,470	3,390,200	274,816	10.0	83.2	6.7	
CINCINNATI.....	1914	935	788	414	50,891	6,902	45,979	7,280	11.7	76.3	12.2	210,890,380	20,172,013	108,157,011	22,531,302	6.6	79.7	10.7	
CLEVELAND.....	1914	1,005	1,032	308	103,317	6,421	91,218	5,878	6.2	83.3	5.5	352,418,052	14,847,376	318,827,846	18,742,830	4.2	90.5	5.3	
COLUMBUS.....	1914	206	208	109	17,236	1,232	15,108	800	7.1	87.7	5.2	57,608,084	3,781,953	50,521,905	3,304,226	6.6	87.7	5.7	
COSHOCTON.....	1914	21	24	2	1,614	54	1,529	31	3.3										

**Table 21—Continued.**

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		Indi- vidu- als.	Cor- pora- tions.	All oth- ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
						Indi- vidu- als.	Cor- pora- tions.	All oth- ers.	Indi- vidu- als.	Cor- pora- tions.	All oth- ers.		Indi- vidu- als.	Cor- pora- tions.	All oth- ers.	Indi- vidu- als.	Cor- pora- tions.	All oth- ers.				
IRONTON.....	1914	14	31	14	1,420	94	1,143	183	6.6	80.5	12.9	\$4,666,185	\$143,954	\$4,307,442	\$214,789	3.1	92.3	4.6				
LAKEWOOD.....	1914	14	7	1	1,774	1,434	1,340	.....	24.5	75.5	.....	3,606,498	1,504,784	3,011,714	.....	116.5	83.5	.....				
LANCASTER.....	1914	23	19	11	1,583	87	1,436	60	5.5	90.7	3.8	4,602,615	251,656	3,804,283	456,676	5.5	84.6	9.9				
LIMA.....	1914	41	42	14	4,876	120	4,619	137	2.5	94.7	2.8	11,698,580	508,718	10,826,368	265,494	4.4	93.3	2.3				
LORAIN.....	1914	28	32	6	6,436	40	6,336	60	0.6	98.4	0.9	29,110,037	144,226	28,905,193	60,618	0.6	99.3	0.2				
MANSFIELD.....	1914	40	37	20	3,398	208	2,862	328	6.1	84.2	9.7	10,281,968	455,634	8,857,109	969,325	4.4	86.1	9.4				
MARIETTA.....	1914	24	33	14	1,401	90	1,153	158	6.4	84.2	11.3	4,128,618	204,425	3,645,653	278,540	5.0	84.7	6.7				
MARION.....	1914	27	27	12	2,577	74	2,479	24	2.9	96.2	0.9	6,384,864	212,432	6,082,327	90,105	3.3	95.3	1.4				
MASSILLON.....	1914	37	30	3	1,768	177	1,580	11	10.0	80.4	0.6	5,293,124	374,673	4,882,357	36,094	7.1	92.2	0.7				
MIDDLETOWN.....	1914	24	29	10	4,003	87	3,883	33	2.2	97.0	0.8	21,787,151	213,240	21,497,753	76,158	1.0	98.7	0.3				
MOUNT VERNON.....	1914	14	9	4	772	50	709	13	6.5	91.8	1.7	2,302,609	93,895	2,073,283	135,491	4.1	90.0	5.9				
NEWARK.....	1914	34	25	20	4,583	220	3,858	505	4.8	89.0	5.4	9,276,762	465,720	7,857,081	953,952	5.0	84.7	10.3				
NORWOOD.....	1914	23	30	5	5,808	75	5,691	42	1.3	98.0	0.7	15,724,300	180,651	16,456,088	87,621	1.1	98.4	0.5				
PIQUA.....	1914	34	30	14	2,777	122	2,544	111	4.4	91.6	4.0	7,988,276	501,810	7,229,095	257,374	6.3	90.5	3.2				
PORTSMOUTH.....	1914	31	33	12	3,597	77	3,468	52	2.1	96.4	1.4	7,682,145	411,158	7,119,608	151,379	5.4	92.7	2.0				
SANDUSKY.....	1914	41	53	13	2,727	157	2,415	155	5.8	88.6	5.7	8,284,865	504,681	7,273,361	506,823	6.1	87.8	6.1				
SPRINGFIELD.....	1914	111	91	51	7,865	489	7,003	426	5.6	89.0	5.4	27,721,789	1,390,218	24,688,487	1,634,084	5.0	89.1	5.9				
STEUBENVILLE.....	1914	23	22	15	4,506	78	4,375	53	1.7	97.1	1.2	16,958,987	220,600	16,510,323	228,004	1.3	97.4	1.3				
Tiffin.....	1914	33	22	21	2,177	317	1,757	108	14.6	80.7	4.7	4,905,880	932,100	3,821,406	242,374	18.7	76.5	4.8				
TOLEDO.....	1914	290	303	120	27,076	1,041	24,632	1,403	3.8	91.0	5.2	115,049,426	3,246,273	107,234,068	4,569,085	2.8	93.2	4.0				
WARREN.....	1914	33	39	10	2,862	88	2,697	70	3.0	94.2	2.8	10,899,737	208,895	9,964,379	226,463	2.0	95.8	2.2				
YOUNGSTOWN.....	1914	80	82	33	15,861	278	15,439	144	1.8	97.3	0.9	92,111,272	771,844	90,776,424	563,004	0.8	98.6	0.6				
ZANESVILLE.....	1914	44	40	13	3,035	558	1,939	838	18.4	54.0	27.6	8,300,231	875,880	4,205,411	3,218,940	10.6	60.7	38.8				

\* Includes the group "all others."

For all industries combined, there was a considerable increase during the decade in number of establishments under corporate ownership. Although corporations show a smaller proportion of the establishments than the other two classes combined, in value of products and average number of wage earners they largely predominate. In 1914, with 36.9 per cent of the total number of establishments in the state, they reported 89.8 per cent of the total value of products and 88 per cent of the total average number of wage earners. In 1909 and 1904 the corresponding proportions were somewhat less. In 1914 there was only one industry among those mentioned in the table—bread and other bakery products—where the establishments under other forms of ownership exceeded

the corporations in value of products and average number of wage earners. In the cities, taken as a group, 41.8 per cent of the number of establishments were reported as under corporate ownership, while 88.5 per cent of the total number of wage earners and 90.7 per cent of the total value of products were reported from this class of establishments. Among the individual cities, the greatest proportion of value of products reported by establishments under corporate ownership, 99.3 per cent, is shown for Lorain, while the smallest proportion, 50.7 per cent, appears for Zanesville.

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is indicated by the statistics given in Table 22.

**Table 22**

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.....	15,058	15,138	13,785	510,435	446,034	364,298	\$1,782,808,279	\$1,437,935,817	\$960,811,857	\$702,026,264	\$613,733,370	\$433,175,272
Less than \$5,000.....	5,105	5,095	4,857	6,151	7,021	7,831	12,447,953	12,198,229	11,864,202	7,755,331	7,811,667	7,737,680
\$5,000 to \$20,000.....	4,614	4,474	4,147	20,996	23,571	24,003	47,806,840	46,028,999	42,532,939	27,043,837	26,309,694	24,242,565
\$20,000 to \$100,000.....	3,464	3,405	3,083	61,756	64,853	66,880	159,828,466	156,080,099	139,906,296	79,804,644	76,806,053	71,518,400
\$100,000 to \$1,000,000.....	2,175	1,919	1,562	229,226	208,650	181,411	655,779,382	557,384,719	434,781,943	308,732,635	258,737,951	202,893,808
\$1,000,000 and over.....	300	245	136	192,306	142,833	84,173	906,945,038	666,243,771	331,726,477	338,689,717	244,068,505	126,782,819
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.....	32.6	33.7	35.2	1.2	1.6	2.1	0.7	0.8	1.2	1.0	1.3	1.8
\$5,000 to \$20,000.....	29.5	29.6	30.1	4.1	5.3	6.6	2.7	3.2	4.4	3.5	4.3	5.6
\$20,000 to \$100,000.....	22.1	22.5	22.4	12.1	14.5	18.4	9.0	10.9	14.6	10.5	12.5	16.5
\$100,000 to \$1,000,000.....	13.9	12.7	11.3	44.9	46.6	49.8	36.8	38.8	45.3	40.5	42.2	46.8
\$1,000,000 and over.....	1.9	1.6	1.0	37.7	32.0	23.1	50.9	46.3	34.5	44.4	30.8	29.3

For 1914, 300 establishments, or 1.9 per cent of the total number in the state, each reported products exceeding \$1,000,000 in value, as compared with 245, or 1.6 per cent, in 1909, and 136, or 1 per cent, in 1904. For 1914 these establishments reported an average of 192,306 wage earners, or 37.7 per cent of the total for the state, 50.9 per cent of the total value of products, and 44.4 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 in value—represented 32.6 per cent of the total number of establishments, but reported only 1.2 per

cent of the total average number of wage earners, seven-tenths of 1 per cent of the total value of products, and 1 per cent of the total value added by manufacture. For the establishments having products valued at \$100,000 and over, the proportion of the total shows an increase at each successive census—79.8 per cent in 1904 to 85.1 per cent in 1909 and 87.7 per cent in 1914.

Table 23 gives, for 1914 and 1909, for 20 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 22.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1914		1909		1914		1909		1914		1909		1914		1909	
	1914	1909	Per cent distribution.	Per cent distribution.	1914	1909	Per cent distribution.	Per cent distribution.	1914	1909	Per cent distribution.	Per cent distribution.	1914	1909	Per cent distribution.	Per cent distribution.
<b>AGRICULTURAL IMPLEMENTS.....</b>	59	55	100.0	100.0	5,464	5,997	100.0	100.0	\$17,484,015	\$14,440,461	100.0	100.0	\$9,674,830	\$8,121,942	100.0	100.0
Less than \$5,000.....	10	8	16.9	14.5	8	12	0.1	0.2	17,421	19,452	0.1	0.1	11,353	12,550	0.1	0.2
\$5,000 to \$20,000.....	15	19	25.4	18.2	75	50	1.4	0.8	129,534	117,250	0.7	0.8	76,840	69,183	0.8	0.8
\$20,000 to \$100,000.....	11	12	18.6	21.8	287	291	5.3	4.9	688,360	662,373	3.7	4.5	344,419	301,332	3.6	4.8
\$100,000 to \$1,000,000.....	19	22	32.2	40.0	3,024	3,340	55.3	55.7	9,171,804	8,389,739	52.5	58.1	4,723,398	4,690,385	48.8	57.8
\$1,000,000 and over.....	4	3	6.8	6.5	2,070	2,304	37.9	38.4	7,627,496	5,261,656	43.1	36.4	4,518,820	2,952,542	46.7	36.4
<b>AUTOMOBILES, INCLUDING BODIES AND PARTS.....</b>	102	75	100.0	100.0	18,752	12,130	100.0	100.0	85,710,585	38,838,754	100.0	100.0	30,380,088	20,310,756	100.0	100.0
Less than \$5,000.....	9	7	8.8	9.3	13	8	0.1	0.1	31,469	20,426	(1)	0.1	23,279	13,391	0.1	0.1
\$5,000 to \$20,000.....	22	12	21.6	16.0	123	73	0.7	0.6	228,633	148,768	0.3	0.4	139,509	93,543	0.5	0.5
\$20,000 to \$100,000.....	25	21	24.5	28.0	408	549	2.2	4.5	1,251,485	941,203	1.5	2.4	602,442	555,530	2.0	2.7
\$100,000 to \$1,000,000.....	31	22	30.4	29.3	2,893	2,714	14.9	22.4	10,040,115	7,244,613	12.8	18.7	4,269,205	3,586,193	14.1	17.6
\$1,000,000 and over.....	15	13	14.7	17.3	15,405	8,786	82.2	72.4	73,252,883	30,483,684	85.5	78.5	26,345,653	10,068,090	83.4	79.1
<b>BOOTS AND SHOES, INCLUDING CUT STOCK AND FINDINGS.....</b>	73	72	100.0	100.0	14,674	16,026	100.0	100.0	33,641,705	31,550,957	100.0	100.0	13,758,680	12,678,950	100.0	100.0
Less than \$5,000.....	5	4	6.8	5.0	5	17	(1)	0.1	14,602	9,827	(1)	(1)	7,920	5,272	0.1	(1)
\$5,000 to \$20,000.....	4	9	5.5	12.5	50	75	0.3	0.5	32,406	94,077	0.1	0.3	22,932	54,113	0.2	0.4
\$20,000 to \$100,000.....	17	9	23.3	12.5	407	334	2.8	2.1	663,480	494,621	2.0	1.3	321,430	190,611	2.3	1.6
\$100,000 to \$1,000,000.....	37	40	50.7	55.6	9,516	7,398	44.4	46.0	14,994,171	14,136,417	44.6	44.8	6,412,068	5,555,195	46.6	43.8
\$1,000,000 and over.....	10	10	13.7	13.9	7,696	8,232	52.4	51.4	17,936,980	16,964,985	53.3	53.6	6,994,330	6,864,759	50.8	54.2
<b>BREAD AND OTHER BAKERY PRODUCTS.....</b>	1,634	1,407	100.0	100.0	7,665	5,972	100.0	100.0	30,500,881	23,007,131	100.0	100.0	13,265,708	9,340,898	100.0	100.0
Less than \$5,000.....	008	557	37.2	38.0	444	397	5.8	6.9	1,800,731	1,018,993	5.9	7.0	813,222	715,540	6.1	7.7
\$5,000 to \$20,000.....	781	726	47.8	49.5	1,933	1,884	25.2	31.0	7,490,783	6,087,277	24.5	26.1	3,357,491	2,750,564	25.3	29.5
\$20,000 to \$100,000.....	192	151	11.8	10.3	1,806	1,458	23.6	24.4	6,997,095	5,521,220	22.9	24.0	2,777,910	2,058,702	20.9	22.0
\$100,000 to \$1,000,000.....	53	33	3.2	2.2	3,482	2,203	45.4	37.9	14,263,302	9,179,611	46.7	39.0	6,317,085	3,810,932	47.0	40.8
<b>BRICK, TILE, POTTERY, AND OTHER CLAY PRODUCTS.....</b>	549	703	100.0	100.0	27,334	23,985	100.0	100.0	38,667,374	30,531,002	100.0	100.0	26,491,419	21,865,179	100.0	100.0
Less than \$5,000.....	157	261	28.0	37.1	363	677	1.3	2.8	423,500	709,168	1.1	2.3	319,637	559,824	1.2	2.9
\$5,000 to \$20,000.....	134	182	24.4	25.9	1,207	1,700	4.4	7.1	1,434,741	1,922,171	3.7	6.3	1,112,396	1,481,596	4.2	6.8
\$20,000 to \$100,000.....	141	177	25.7	25.2	5,874	7,426	21.5	31.0	7,490,793	8,981,173	19.4	29.4	5,203,049	6,632,734	19.6	30.3
\$100,000 to \$1,000,000.....	117	83	21.3	11.8	19,890	14,173	72.8	59.1	20,318,340	15,921,490	75.8	62.0	19,856,337	13,191,025	75.0	60.3
<b>BUTTER, CHEESE, AND CONDENSED MILK.....</b>	286	325	100.0	100.0	1,480	1,067	100.0	100.0	19,325,977	9,689,670	100.0	100.0	3,357,766	2,004,234	100.0	100.0
Less than \$5,000.....	78	123	27.3	37.8	32	54	2.2	5.1	224,993	333,801	1.2	3.4	38,586	71,210	1.1	3.6
\$5,000 to \$20,000.....	78	104	27.3	32.0	85	112	5.7	10.5	876,869	1,039,718	4.5	10.9	553,231	195,725	4.6	9.8
\$20,000 to \$100,000.....	89	77	31.1	23.7	301	282	20.3	26.4	3,970,952	2,890,024	20.5	29.8	679,270	512,951	17.3	25.6
\$100,000 and over.....	41	21	14.3	6.5	1,062	619	71.8	58.0	14,254,063	5,466,067	73.8	55.8	2,586,679	1,224,348	77.0	61.1
<b>CARRIAGES AND WAGONS AND MATERIALS.....</b>	341	407	100.0	100.0	5,997	8,815	100.0	100.0	10,192,449	21,949,459	100.0	100.0	7,631,487	10,535,458	100.0	100.0
Less than \$5,000.....	80	84	23.5	20.6	120	155	2.2	1.8	220,067	227,147	1.4	1.0	149,703	154,619	2.0	1.5
\$5,000 to \$20,000.....	137	172	40.2	42.3	761	1,073	12.5	12.2	1,459,998	1,788,714	9.0	8.1	949,809	1,118,304	12.4	10.6
\$20,000 to \$100,000.....	80	89	23.5	21.9	1,591	1,968	23.5	22.3	3,698,094	4,250,008	22.8	19.4	1,877,851	2,092,599	24.6	19.9
\$100,000 to \$1,000,000.....	44	62	12.9	15.2	3,526	5,619	58.8	63.7	10,814,200	15,683,590	66.8	71.5	4,654,124	7,170,026	61.0	68.1
<b>CLOTHING, MEN'S, INCLUDING SHIRTS.....</b>	257	342	100.0	100.0	10,758	9,050	100.0	100.0	27,021,820	24,869,437	100.0	100.0	13,865,495	11,949,357	100.0	100.0
Less than \$5,000.....	75	119	29.2	34.8	372	519	3.5	5.5	177,731	206,605	0.6	1.2	159,608	284,219	1.2	2.4
\$5,000 to \$20,000.....	63	116	24.5	33.9	999	1,781	9.3	17.9	625,132	1,084,327	2.3	4.4	512,154	945,399	3.7	7.9
\$20,000 to \$100,000.....	61	53	23.7	15.5	1,880	1,537	17.5	15.4	3,121,828	2,701,557	11.3	10.9	1,661,058	1,392,380	12.0	10.9
\$100,000 and over.....	58	54	22.6	15.8	7,507	6,080	69.8	61.1	23,697,138	20,786,948	85.8	83.6	11,531,775	9,417,359	83.2	78.8
<b>CLOTHING, WOMEN'S.....</b>	170	153	100.0	100.0	9,775	8,843	100.0	100.0	22,881,753	19,493,960	100.0	100.0	10,791,914	9,202,477	100.0	100.0
Less than \$5,000.....	38	42	22.4	27.4	121	154	1.2	1.7	87,497	103,484	0.4	0.5	70,978	88,862	0.7	1.0
\$5,000 to \$20,000.....	29	27	17.1	17.6	211	316	2.2	3.6	310,333	286,802	1.4	1.5	193,533	209,521	1.8	2.3
\$20,000 to \$100,000.....	56	42	32.9	27.4	1,413	1,234	14.5	14.0	3,063,293	2,162,514	13.4	11.1	1,412,576	969,594	13.1	10.5
\$100,000 to \$1,000,000.....	43	39	25.3	25.5	5,058	5,095	57.9	57.6	11,997,974	11,562,057	52.4	59.3	5,528,331	5,277,791	51.2	57.3
\$1,000,000 and over.....	4	3	2.4	2.0	2,372	2,044	24.3	23.1	7,422,656	5,378,173	32.4	27.6	3,580,496	2,656,709	33.2	28.9

<sup>1</sup> Less than one-tenth of 1 per cent.

<sup>2</sup> Includes the group "\$1,000,000 and over."

Table 23—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	1909	Per cent distribution.		1914	1909	Per cent distribution.		1914	1909	Per cent distribution.	
			1914	1909			1914	1909			1914	1909			1914	1909
COFFEE AND SPICE, ROASTING AND GRINDING.....	35	39	100.0	100.0	822	762	100.0	100.0	\$13,312,493	\$11,224,437	100.0	100.0	\$3,128,109	\$2,947,093	100.0	100.0
Less than \$5,000.....	17	3	20.0	7.7	14	2	1.7	0.3	58,351	9,465	0.4	0.1	18,735	3,845	0.6	0.1
\$5,000 to \$20,000.....	10	10	28.6	25.0	45	45	6.3	5.9	559,877	45,975	4.2	4.0	162,226	11,485	5.2	0.4
\$20,000 to \$100,000.....	14	18	40.0	46.2	431	407	52.4	53.4	5,195,542	4,819,723	39.0	42.9	1,096,610	1,354,030	35.1	3.8
\$100,000 to \$1,000,000.....	4	4	11.4	10.3	325	298	39.5	39.1	7,498,723	5,902,521	56.3	52.6	1,850,538	1,484,564	59.2	45.0
\$1,000,000 and over.....																
CONFECTIONERY.....	132	114	100.0	100.0	3,149	2,493	100.0	100.0	10,133,602	7,366,574	100.0	100.0	4,053,003	3,217,650	100.0	100.0
Less than \$5,000.....	26	27	19.7	23.7	40	31	1.3	1.2	60,168	60,400	0.7	0.8	39,650	29,231	1.0	0.9
\$5,000 to \$20,000.....	40	36	30.3	31.6	158	178	5.0	7.1	494,856	378,643	4.0	5.2	197,877	181,430	4.9	5.6
\$20,000 to \$100,000.....	40	32	30.3	28.1	715	540	22.7	21.7	1,920,905	1,568,573	19.0	21.5	773,817	671,091	19.1	20.9
\$100,000 and over.....	26	19	19.7	16.7	2,236	1,744	71.0	70.0	7,739,173	5,298,958	76.4	72.5	3,041,749	2,335,904	75.0	72.6
ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES.....	119	115	100.0	100.0	12,695	8,073	100.0	100.0	36,120,978	18,776,769	100.0	100.0	18,638,730	11,550,891	100.0	100.0
Less than \$5,000.....	22	19	18.5	16.5	35	32	0.3	0.4	60,755	57,374	0.2	0.3	29,286	35,838	0.2	0.3
\$5,000 to \$20,000.....	22	20	18.5	22.6	101	138	0.8	1.7	231,162	259,524	0.6	1.4	139,649	155,021	0.7	1.3
\$20,000 to \$100,000.....	32	33	28.9	28.7	572	695	4.5	8.6	1,604,114	1,592,979	4.4	8.5	865,200	925,848	4.6	8.0
\$100,000 to \$1,000,000.....	33	37	27.7	32.2	3,905	7,208	31.5	80.3	9,993,597	16,896,892	26.8	89.8	5,578,597	10,434,184	29.9	90.3
\$1,000,000 and over.....	10		8.4		7,992		63.0		24,531,350		67.9		12,025,998		64.5	
FLOUR-MILL AND CRISTALL PRODUCTS.....	649	673	100.0	100.0	2,363	2,585	100.0	100.0	45,171,200	48,093,353	100.0	100.0	6,213,814	6,740,746	100.0	100.0
Less than \$5,000.....	41	41	0.4	6.1	32	33	1.4	1.3	178,668	125,064	0.4	0.3	39,578	30,114	0.6	0.4
\$5,000 to \$20,000.....	239	101	36.8	28.4	200	207	12.3	8.0	3,712,800	2,308,342	6.5	4.8	343,354	460,476	5.6	6.8
\$20,000 to \$100,000.....	279	368	43.0	54.7	870	1,051	39.8	40.7	12,458,066	15,827,039	27.0	32.9	2,125,991	2,719,774	34.2	40.4
\$100,000 to \$1,000,000.....	61	64	9.4	9.5	650	750	29.9	29.0	14,522,437	16,641,167	32.1	34.0	1,900,130	1,954,400	30.6	29.0
\$1,000,000 and over.....	9	9	1.4	1.3	512	544	21.7	21.0	15,091,899	13,191,741	33.4	27.4	1,616,661	1,575,982	26.0	23.4
FOUNDRY AND MACHINE-SHOP PRODUCTS.....	1,370	1,218	100.0	100.0	73,103	64,817	100.0	100.0	178,855,069	145,836,648	100.0	100.0	101,352,054	81,276,753	100.0	100.0
Less than \$5,000.....	261	198	18.9	16.3	333	280	0.5	0.4	604,663	481,119	0.4	0.3	458,262	317,218	0.5	0.4
\$5,000 to \$20,000.....	337	303	24.4	24.9	1,716	1,830	2.3	2.8	3,712,800	3,347,103	2.1	2.3	2,443,032	2,172,448	2.4	2.7
\$20,000 to \$100,000.....	402	401	29.2	32.0	8,956	9,752	12.3	15.0	10,493,556	10,927,491	10.9	13.5	11,375,551	11,223,823	11.2	13.8
\$100,000 to \$1,000,000.....	355	293	25.7	24.1	45,375	38,563	62.1	59.5	109,442,622	89,934,104	61.2	59.6	60,651,839	47,427,402	59.8	58.3
\$1,000,000 and over.....	24	23	1.7	1.9	16,723	14,392	22.9	22.2	45,541,410	35,446,831	25.5	24.3	26,423,340	20,135,862	26.1	24.8
FURNITURE AND REFRIGERATORS.....	213	228	100.0	100.0	7,831	8,232	100.0	100.0	16,687,466	16,258,757	100.0	100.0	9,258,295	9,016,312	100.0	100.0
Less than \$5,000.....	37	35	17.4	15.4	39	43	0.5	0.5	87,011	91,623	0.5	0.6	59,142	62,003	0.6	0.7
\$5,000 to \$20,000.....	52	54	24.4	23.7	316	357	4.0	4.3	573,661	599,079	3.4	3.7	343,900	369,452	3.7	4.1
\$20,000 to \$100,000.....	79	101	37.1	44.3	2,017	3,080	25.8	37.5	3,850,281	5,341,808	23.1	32.9	2,106,602	2,851,220	22.8	31.6
\$100,000 and over.....	45	38	21.1	16.7	5,459	4,746	69.7	57.7	12,176,513	10,226,247	73.0	62.9	6,748,651	5,733,637	72.9	63.6
LIQUORS, MALT.....	101	105	100.0	100.0	5,340	4,356	100.0	100.0	31,990,274	25,332,059	100.0	100.0	22,790,792	18,768,959	100.0	100.0
Less than \$5,000.....	3	4	3.0	3.8	2	5	(*)	0.1	5,047	8,855	(*)	(*)	3,299	5,915	(*)	(*)
\$5,000 to \$20,000.....	4	7	4.0	6.7	17	30	0.3	0.7	49,065	75,779	0.2	0.3	35,023	46,192	0.1	0.2
\$20,000 to \$100,000.....	20	36	25.7	34.3	344	467	6.4	10.7	1,300,076	2,126,651	4.3	8.4	895,955	1,485,898	3.9	7.9
\$100,000 to \$1,000,000.....	61	52	60.4	49.5	3,132	2,370	58.7	54.4	18,316,357	13,794,286	57.3	54.5	13,189,816	10,313,489	57.9	55.0
\$1,000,000 and over.....	7	6	6.9	5.7	1,845	1,484	34.6	34.1	12,229,129	9,326,488	38.2	36.8	8,675,699	6,912,465	38.1	36.8
LUMBER AND TIMBER PRODUCTS.....	1,188	1,300	100.0	100.0	11,921	13,456	100.0	100.0	31,852,694	34,597,069	100.0	100.0	13,835,983	14,624,706	100.0	100.0
Less than \$5,000.....	475	574	40.0	41.3	767	1,121	6.4	8.3	1,085,251	1,370,723	3.4	4.0	648,812	868,599	4.7	5.9
\$5,000 to \$20,000.....	388	453	32.6	32.0	2,009	2,561	16.9	19.0	3,875,798	4,565,738	12.2	13.2	2,115,537	2,594,681	15.3	17.1
\$20,000 to \$100,000.....	240	284	20.2	20.4	3,930	4,901	33.0	36.4	10,593,342	12,920,125	33.2	37.3	4,677,314	6,425,620	33.8	37.1
\$100,000 to \$1,000,000.....	85	79	7.2	5.7	5,215	4,873	43.7	36.2	16,328,333	15,740,483	51.3	45.5	6,394,320	5,826,906	46.2	39.8
PRINTING AND PUBLISHING.....	1,783	1,655	100.0	100.0	18,070	15,756	100.0	100.0	55,608,924	41,657,306	100.0	100.0	38,538,944	29,752,952	100.0	100.0
Less than \$5,000.....	832	795	46.7	48.0	1,021	1,095	5.7	6.9	2,103,822	1,930,089	3.8	4.7	1,647,070	1,496,403	4.3	5.0
\$5,000 to \$20,000.....	539	524	30.2	31.7	2,524	2,823	14.0	17.9	5,257,186	5,208,241	9.5	12.5	4,021,980	4,044,730	10.4	13.0
\$20,000 to \$100,000.....	319	360	17.9	15.7	5,159	4,713	28.0	29.9	13,869,214	10,754,812	24.0	25.8	9,581,787	7,765,373	24.9	26.1
\$100,000 to \$1,000,000.....	85	72	4.8	4.4	6,882	5,024	38.1	35.7	22,557,184	18,731,793	40.6	45.0	15,169,785	13,187,171	39.4	44.3
\$1,000,000 and over.....	8	4	0.4	0.2	2,494	1,301	13.7	9.5	12,321,518	5,023,371	22.2	12.1	8,118,322	3,259,219	21.1	11.0
SLAUGHTERING AND MEAT PACKING.....	169	158	100.0	100.0	3,619	3,086	100.0	100.0	66,674,370	50,804,100	100.0	100.0	6,993,279	6,456,938	100.0	100.0
Less than \$5,000.....	6	7	3.6	4.4	1	11	(*)	0.4	15,467	26,156	(*)	0.1	3,931	13,062	0.1	0.2
\$5,000 to \$20,000.....	24	18	14.2	11.4	25	19	0.7	0.6	298,500	199,283	0.4	0.4	53,483	35,274	0.8	0.5
\$20,000 to \$100,000.....	59	60	34.9	38.0	179	224	4.9	7.3	2,904,473	3,277,687	4.4	6.5	442,751	568,803	6.3	8.8
\$100,000 to \$1,000,000.....	62	61	36.7	38.6	1,017	1,088	28.1	35.3	29,771,962	20,274,934	31.2	39.9	2,523,648	2,437,572	36.1	38.5
\$1,000,000 and over.....	18	12	10.7	7.6	2,397	1,744	66.2	56.5	42,084,877	27,029,140	64.0	53.2	3,908,436	3,352,237	56.8	51.9
TOBACCO MANUFACTURES.....	961	1,146	100.0	100.0	13,282	12,631	100.0	100.0	28,467,079	28,907,269	100.0	100.0	16,550,307	16,832,446	100.0	100.0
Less than \$5,000.....	679	860	70.7	75.0	579	808	4.4	6.4	1,320,523	1,058,381	4.6	5.7	843,777	1,104,749	5.1	6.6
\$5,000 to \$20,000.....	175	184	18.2	16.1	1,087	1,263	8.2	10.0	1,559,838	1,702,071	5.5	5.9	1,010,152	1,120,261	6.1	6.7
\$20,000 to \$100,000.....	61	64	6.3</													

In 1914 and in 1909, as in the totals for all industries combined, this table shows that for each of the 20 industries the great bulk of the manufacturing was done in establishments having products valued at \$100,000 and over. Among the 20 industries presented in this table for 1914, as compared with 1909, 15 show increases in the number of establishments having products valued at \$100,000 and over and 5 show decreases. All but 5 industries in this group show increases in value of products and number of wage earners, while 16 show increases in value added by manufacture.

In the automobile, boot and shoe, electrical machinery, and slaughtering and meat-packing industries the establishments reporting products to the value of

\$1,000,000 and over in 1914 reported a much larger proportion of the total average number of wage earners and total value of products than all other establishments combined. For automobiles, including bodies and parts, such establishments reported more than four-fifths of the total average number of wage earners and total value of products, while for both electrical machinery, apparatus, and supplies, and slaughtering and meat packing, about two-thirds of the wage earners and value of products were reported by such establishments.

Table 24 presents, for 1914, for all industries combined in each of the 43 cities having more than 10,000 inhabitants, statistics similar to those given in Table 22 for the state as a whole.

Table 21					Table 24										
CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
AKRON.....	305	24,680	100.0	\$122,291,600	100.0	\$50,220,208	100.0	COLUMBUS.....	643	17,236	100.0	\$57,008,084	100.0	\$26,971,586	100.0
Less than \$5,000.....	86	84	0.3	217,777	0.2	137,200	0.2	Less than \$5,000.....	193	193	1.1	501,149	0.9	325,075	1.2
\$5,000 to \$20,000.....	92	318	1.3	831,108	0.7	507,874	0.9	\$5,000 to \$20,000.....	180	805	4.7	1,972,642	3.4	1,184,976	4.4
\$20,000 to \$100,000.....	69	1,304	5.3	3,090,328	2.5	1,723,091	3.1	\$20,000 to \$100,000.....	104	3,070	17.8	7,821,065	13.6	4,357,325	16.2
\$100,000 to \$1,000,000.....	49	4,592	18.9	13,940,024	11.4	7,230,040	13.0	\$100,000 to \$1,000,000.....	91	7,798	45.2	25,838,753	44.9	12,020,113	46.5
\$1,000,000 and over.....	9	13,332	74.5	104,102,393	85.2	40,570,233	82.8	\$1,000,000 and over.....	9	5,370	31.2	21,470,875	37.3	8,478,007	31.4
ALLIANCE.....	52	2,333	100.0	7,174,796	100.0	3,518,380	100.0	COSHOCTON.....	47	1,614	100.0	3,476,680	100.0	1,668,032	100.0
Less than \$5,000.....	14	11	0.5	35,346	0.5	19,738	0.6	Less than \$5,000.....	12	10	0.6	28,131	0.8	15,350	0.9
\$5,000 to \$20,000.....	17	82	3.5	164,015	2.3	100,683	2.9	\$5,000 to \$20,000.....	15	81	5.2	170,000	5.1	103,970	6.3
\$20,000 to \$100,000.....	14	293	11.3	701,053	9.8	350,015	9.9	\$20,000 to \$100,000.....	13	266	16.5	602,303	10.0	285,748	17.2
\$100,000 to \$1,000,000.....	4	587	25.2	1,684,379	23.5	634,463	18.0	\$100,000 to \$1,000,000.....	7	1,254	77.7	2,609,643	75.1	1,267,964	75.6
\$1,000,000 and over.....	3	1,300	60.0	4,589,373	64.0	2,413,491	68.6	DAYTON.....	523	24,001	100.0	71,071,374	100.0	38,117,053	100.0
ASHTABULA.....	57	1,868	100.0	5,020,991	100.0	2,195,930	100.0	Less than \$5,000.....	146	104	0.7	300,985	0.5	230,094	0.6
Less than \$5,000.....	15	28	1.5	35,886	0.7	19,124	0.9	\$5,000 to \$20,000.....	143	670	2.8	1,525,601	2.1	927,119	2.4
\$5,000 to \$20,000.....	22	97	5.2	195,514	3.9	99,992	4.6	\$20,000 to \$100,000.....	120	2,015	8.4	5,724,705	8.1	2,835,087	7.4
\$20,000 to \$100,000.....	11	250	13.4	599,420	11.9	237,509	10.8	\$100,000 to \$1,000,000.....	93	9,710	40.4	21,148,937	31.0	12,448,359	32.7
\$100,000 to \$1,000,000.....	9	1,403	70.9	4,190,171	83.5	1,830,245	83.8	\$1,000,000 and over.....	12	11,493	47.8	39,306,043	55.3	21,070,994	55.9
BARBERTON.....	34	3,118	100.0	8,843,422	100.0	4,737,847	100.0	EAST LIVERPOOL.....	80	4,830	100.0	7,092,003	100.0	4,250,822	100.0
Less than \$5,000.....	8	9	0.3	18,445	0.2	12,207	0.3	Less than \$5,000.....	17	16	0.3	33,165	0.6	20,289	0.5
\$5,000 to \$20,000.....	14	47	1.5	155,354	1.8	81,993	1.7	\$5,000 to \$20,000.....	22	98	2.0	223,054	3.2	125,877	3.0
\$20,000 to \$100,000.....	4	21	0.7	207,070	2.3	47,526	1.0	\$20,000 to \$100,000.....	20	430	8.9	910,230	12.8	450,712	10.8
\$100,000 and over.....	8	3,041	97.5	8,402,547	95.7	4,596,031	97.0	\$100,000 to \$1,000,000.....	21	4,288	88.8	5,919,554	83.5	3,644,944	85.7
BELLAIRE.....	40	2,093	100.0	12,170,206	100.0	2,891,736	100.0	ELYRIA.....	63	2,735	100.0	8,791,734	100.0	3,775,398	100.0
Less than \$5,000.....	11	13	0.5	27,430	0.2	15,632	0.5	Less than \$5,000.....	17	19	0.7	47,555	0.5	30,292	0.8
\$5,000 to \$20,000.....	16	83	3.2	132,002	1.1	75,127	2.6	\$5,000 to \$20,000.....	17	92	3.0	191,874	2.2	123,374	3.3
\$20,000 to \$100,000.....	5	83	3.2	102,466	0.9	96,169	3.4	\$20,000 to \$100,000.....	14	257	9.4	594,107	6.8	308,087	8.2
\$100,000 and over.....	8	2,424	93.1	11,817,708	97.1	2,704,838	93.6	\$100,000 and over.....	15	2,377	86.9	7,958,198	90.5	3,313,645	87.8
CAMBRIDGE.....	39	1,455	100.0	3,923,736	100.0	1,533,832	100.0	FINDLAY.....	78	1,737	100.0	4,662,778	100.0	1,871,685	100.0
Less than \$5,000.....	10	10	0.7	20,156	0.7	13,796	0.9	Less than \$5,000.....	27	23	1.3	63,286	1.4	40,907	2.2
\$5,000 to \$20,000.....	14	66	4.5	144,346	3.7	70,074	4.8	\$5,000 to \$20,000.....	23	123	7.1	230,837	5.0	133,936	7.2
\$20,000 to \$100,000.....	15	1,379	94.8	3,753,234	95.7	1,493,922	94.3	\$20,000 to \$100,000.....	17	274	15.8	850,401	18.4	397,457	21.2
CANTON.....	276	12,255	100.0	43,713,446	100.0	21,905,300	100.0	\$100,000 to \$1,000,000.....	11	1,317	75.8	3,512,254	75.3	1,290,386	69.4
Less than \$5,000.....	89	99	0.8	188,789	0.4	130,420	0.6	POSTORIA.....	47	1,252	100.0	6,124,679	100.0	1,755,714	100.0
\$5,000 to \$20,000.....	91	440	3.6	1,071,615	2.5	612,293	2.8	Less than \$5,000.....	15	10	0.8	31,325	0.5	18,783	1.1
\$20,000 to \$100,000.....	59	980	8.0	2,538,082	5.8	1,533,615	7.0	\$5,000 to \$20,000.....	9	35	2.8	80,971	1.5	40,401	2.6
\$100,000 to \$1,000,000.....	52	5,957	48.0	16,807,475	38.4	8,075,056	36.9	\$20,000 to \$100,000.....	14	268	21.4	597,003	9.8	317,302	18.1
\$1,000,000 and over.....	8	4,773	38.9	23,107,404	52.9	11,563,976	52.7	\$100,000 and over.....	9	930	75.0	5,408,780	88.3	1,373,108	78.2
CHILlicoTHE.....	46	1,557	100.0	4,083,480	100.0	1,512,485	100.0	FREMONT.....	65	2,063	100.0	4,779,982	100.0	2,483,486	100.0
Less than \$5,000.....	10	15	1.0	28,708	0.7	15,570	1.0	Less than \$5,000.....	14	17	0.8	35,065	0.7	22,942	0.9
\$5,000 to \$20,000.....	13	54	3.5	131,192	3.2	70,777	5.0	\$5,000 to \$20,000.....	21	136	6.6	270,528	5.7	153,967	6.2
\$20,000 to \$100,000.....	16	292	18.8	632,403	15.5	347,406	23.0	\$20,000 to \$100,000.....	17	208	10.1	727,002	15.2	379,020	15.3
\$100,000 and over.....	7	1,196	76.8	3,201,123	80.6	1,072,732	70.9	\$100,000 and over.....	10	1,702	82.5	3,747,347	78.4	1,927,557	77.6
CINCINNATI.....	2,135	59,861	100.0	210,800,336	100.0	96,763,752	100.0	HAMILTON.....	129	6,043	100.0	10,877,200	100.0	7,862,268	100.0
Less than \$5,000.....	569	874	1.1	1,350,835	0.6	932,906	1.0	Less than \$5,000.....	40	26	0.4	83,887	0.8	49,092	0.6
\$5,000 to \$20,000.....	585	3,211	5.4	6,143,833	2.9	4,014,876	4.1	\$5,000 to \$20,000.....	34	176	2.9	413,607	2.5	235,515	3.0
\$20,000 to \$100,000.....	551	19,596	17.6	26,294,083	12.5	13,949,700	14.4	\$20,000 to \$100,000.....	25	571	9.4	1,190,690	6.7	604,935	8.5
\$100,000 to \$1,000,000.....	400	35,599	59.3	115,882,154	55.0	54,286,470	56.1	\$100,000 to \$1,000,000.....	27	3,420	56.6	8,100,510	48.4	4,009,563	51.0
\$1,000,000 and over.....	30	9,970	16.7	61,139,031	29.0	23,509,800	24.4	\$1,000,000 and over.....	3	1,580	30.6	7,070,556	41.9	2,895,063	36.9
CLEVELAND.....	2,345	103,317	100.0	352,418,052	100.0	153,925,488	100.0	IRONTON.....	50	1,420	100.0	4,666,185	100.0	1,372,082	100.0
Less than \$5,000.....	634	673	0.7	1,558,724	0.4	1,045,232	0.7	Less than \$5,000.....	14	22	1.5	37,686	0.8	19,230	1.4
\$5,000 to \$20,000.....	661	3,022	2.9	6,998,818	2.0	4,346,301	2.8	\$5,000 to \$20,000.....	16	78	5.5	142,718	3.1	85,614	6.2
\$20,000 to \$100,000.....	569	9,523	9.2	27,598,348	7.8	14,023,063	9.5	\$20,000 to \$100,000.....	17	367	25.8	711,830	15.3	367,896	26.8
\$100,000 to \$1,000,000.....	410	43,475	42.1	129,166,024	36.7	62,094,444	40.7	\$100,000 to \$1,000,000.....	12	953	67.1	3,773,951	80.9	893,337	65.5
\$1,000,000 and over.....	77	46,624	45.1	137,101,140	38.1	71,215,808	46.3								

<sup>1</sup> Includes the group "\$1,000,000 and over."

<sup>2</sup> Includes the groups "\$100,000 to \$1,000,000" and "\$1,000,000 and over."

Table 2-1—Continued.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
LANCASTER.....	53	1,583	100.0	\$1,002,615	100.0	\$1,315,182	100.0	PIQUA.....	78	2,777	100.0	\$7,988,279	100.0	\$3,434,720	100.0
Less than \$5,000.....	16	24	1.5	30,093	0.8	22,608	1.7	Less than \$5,000.....	16	16	0.6	38,461	0.5	24,789	0.7
\$5,000 to \$20,000.....	16	66	4.2	158,809	3.5	102,382	7.9	\$5,000 to \$20,000.....	27	123	4.4	270,061	3.4	153,597	4.5
\$20,000 to \$100,000.....	12	185	11.7	513,874	11.2	235,030	17.9	\$20,000 to \$100,000.....	16	222	8.0	726,613	9.1	310,802	9.1
\$100,000 and over.....	9	1,308	82.6	3,890,839	84.5	951,362	72.5	\$100,000 to \$1,000,000.....	19	2,416	87.0	6,953,144	87.0	2,945,532	85.8
LIMA.....	97	4,876	100.0	11,593,580	100.0	5,229,472	100.0	PORTSMOUTH.....	76	3,597	100.0	7,082,145	100.0	3,603,031	100.0
Less than \$5,000.....	28	28	0.6	58,538	0.5	30,220	0.6	Less than \$5,000.....	20	14	0.4	38,351	0.5	19,060	0.5
\$5,000 to \$20,000.....	24	91	1.9	259,056	2.2	153,304	3.0	\$5,000 to \$20,000.....	27	108	3.0	266,705	3.5	131,708	3.7
\$20,000 to \$100,000.....	30	580	12.0	1,393,157	12.0	759,380	14.5	\$20,000 to \$100,000.....	19	479	13.3	995,952	13.0	542,860	15.1
\$100,000 to \$1,000,000.....	12	1,033	21.2	2,977,661	25.7	1,123,135	21.5	\$100,000 to \$1,000,000.....	7	439	12.2	956,594	12.5	526,858	14.6
\$1,000,000 and over.....	3	3,138	64.4	6,919,168	59.7	3,158,433	60.4	\$1,000,000 and over.....	3	2,557	71.1	5,426,543	70.6	2,331,936	66.1
LORAIN.....	66	6,430	100.0	29,110,037	100.0	11,180,653	100.0	SANDUSKY.....	107	2,727	100.0	8,284,865	100.0	4,226,069	100.0
Less than \$5,000.....	26	21	0.3	50,949	0.2	28,581	0.3	Less than \$5,000.....	26	25	0.9	50,297	0.7	35,338	0.8
\$5,000 to \$20,000.....	17	48	0.7	170,571	0.6	79,523	0.7	\$5,000 to \$20,000.....	20	68	2.5	200,835	2.4	136,036	3.2
\$20,000 to \$100,000.....	16	245	3.8	583,829	2.0	305,794	2.7	\$20,000 to \$100,000.....	43	888	32.5	2,156,001	26.0	1,305,369	30.9
\$100,000 and over.....	7	6,122	95.1	28,295,688	97.2	10,760,755	96.3	\$100,000 and over.....	18	1,746	64.0	5,870,832	70.9	2,749,326	65.1
MANSFIELD.....	103	3,398	100.0	10,281,058	100.0	5,510,169	100.0	SPRINGFIELD.....	253	7,868	100.0	27,721,789	100.0	14,018,281	100.0
Less than \$5,000.....	28	42	1.2	70,103	0.7	40,524	0.7	Less than \$5,000.....	86	82	1.0	105,050	0.7	132,201	0.9
\$5,000 to \$20,000.....	30	117	3.4	279,890	2.7	183,148	3.1	\$5,000 to \$20,000.....	70	300	3.8	705,021	2.5	442,949	3.2
\$20,000 to \$100,000.....	21	288	8.5	1,070,098	10.5	431,773	7.8	\$20,000 to \$100,000.....	47	681	8.7	2,204,080	8.2	1,130,104	8.1
\$100,000 and over.....	24	2,051	86.8	8,851,977	86.1	4,869,724	88.4	\$100,000 to \$1,000,000.....	44	3,842	48.8	11,537,667	41.6	5,942,102	42.4
MARIETTA.....	71	1,401	100.0	4,128,618	100.0	1,745,829	100.0	\$1,000,000 and over.....	6	2,963	37.7	13,010,971	47.0	6,370,925	45.4
Less than \$5,000.....	14	24	1.7	34,200	0.8	10,780	1.1	STUBENVILLE.....	60	4,506	100.0	16,958,987	100.0	5,526,731	100.0
\$5,000 to \$20,000.....	29	153	10.9	313,857	7.6	165,399	9.5	Less than \$5,000.....	17	17	0.4	43,182	0.3	24,659	0.4
\$20,000 to \$100,000.....	19	416	29.7	878,210	21.3	463,365	26.5	\$5,000 to \$20,000.....	20	81	1.8	245,418	1.4	144,269	2.6
\$100,000 to \$1,000,000.....	9	808	57.7	2,902,255	70.3	1,097,285	62.0	\$20,000 to \$100,000.....	12	128	2.8	436,717	2.6	190,572	3.6
MARION.....	66	2,577	100.0	6,384,864	100.0	3,823,226	100.0	\$100,000 and over.....	11	4,280	95.0	16,233,670	95.7	5,161,231	93.4
Less than \$5,000.....	28	20	1.0	74,924	1.2	46,808	1.2	TIPPIN.....	76	2,177	100.0	4,995,880	100.0	2,604,215	100.0
\$5,000 to \$20,000.....	13	48	1.9	124,605	2.0	66,212	1.7	Less than \$5,000.....	17	17	0.8	46,678	0.9	34,413	1.3
\$20,000 to \$100,000.....	18	279	10.8	912,774	14.3	480,114	12.5	\$5,000 to \$20,000.....	30	144	6.6	293,617	5.9	186,688	7.2
\$100,000 and over.....	7	2,224	86.3	5,272,061	82.6	3,280,992	84.5	\$20,000 to \$100,000.....	17	343	15.8	799,672	16.0	460,155	17.7
MASSILLON.....	70	1,768	100.0	5,293,124	100.0	2,674,251	100.0	\$100,000 to \$1,000,000.....	12	1,073	76.8	3,852,613	77.1	1,922,959	73.8
Less than \$5,000.....	24	38	2.1	60,798	1.1	42,357	1.6	TOLEDO.....	713	27,076	100.0	115,049,426	100.0	44,555,157	100.0
\$5,000 to \$20,000.....	13	90	5.0	200,777	3.8	130,501	5.1	Less than \$5,000.....	209	196	0.7	613,970	0.4	338,770	0.5
\$20,000 to \$100,000.....	13	211	11.9	559,907	10.6	223,330	8.7	\$5,000 to \$20,000.....	206	810	3.0	2,180,052	1.9	1,364,189	3.1
\$100,000 and over.....	14	1,420	80.3	4,471,552	84.5	2,178,003	84.0	\$20,000 to \$100,000.....	169	3,092	11.4	7,684,887	6.6	4,135,588	9.3
MIDDLETOWN.....	63	4,003	100.0	21,787,151	100.0	11,207,157	100.0	\$100,000 to \$1,000,000.....	108	10,555	39.0	32,296,532	28.1	15,278,704	34.2
Less than \$5,000.....	10	31	0.8	51,524	0.2	28,239	0.3	\$1,000,000 and over.....	21	12,417	45.9	72,464,985	63.0	23,437,966	52.6
\$5,000 to \$20,000.....	13	52	1.3	122,880	0.6	70,544	0.6	WARREN.....	82	2,862	100.0	10,399,737	100.0	4,045,232	100.0
\$20,000 to \$100,000.....	16	208	5.2	732,030	3.4	335,229	3.0	Less than \$5,000.....	23	36	1.3	64,677	0.6	35,014	0.9
\$100,000 to \$1,000,000.....	11	891	21.5	5,304,778	24.6	1,938,256	15.2	\$5,000 to \$20,000.....	24	74	2.6	231,051	2.2	121,328	3.0
\$1,000,000 and over.....	4	2,851	71.2	15,515,339	71.2	9,070,889	81.0	\$20,000 to \$100,000.....	20	251	8.8	760,115	7.3	348,910	8.6
MOUNT VERNON.....	27	772	100.0	2,302,609	100.0	826,681	100.0	\$100,000 and over.....	15	2,501	87.4	9,843,864	89.8	3,539,980	87.5
Less than \$5,000.....	8	0	0.0	15,619	0.7	9,422	1.1	YOUNGSTOWN.....	201	15,861	100.0	92,111,272	100.0	23,084,468	100.0
\$5,000 to \$20,000.....	12	61	7.9	140,698	0.1	75,114	0.1	Less than \$5,000.....	50	46	0.3	123,688	0.1	83,409	0.4
\$20,000 to \$100,000.....	4	69	8.9	202,589	8.8	62,943	7.6	\$5,000 to \$20,000.....	69	242	1.5	672,376	0.7	380,665	1.7
\$100,000 to \$1,000,000.....	3	636	82.4	1,943,798	84.4	679,099	82.2	\$20,000 to \$100,000.....	38	708	4.5	1,874,262	2.0	1,004,068	4.4
NEWARK.....	70	4,583	100.0	9,270,762	100.0	5,702,715	100.0	\$100,000 to \$1,000,000.....	28	2,348	14.8	8,536,145	9.3	3,766,749	16.3
Less than \$5,000.....	19	18	0.4	50,071	0.5	30,687	0.5	\$1,000,000 and over.....	16	12,517	78.9	80,904,802	87.8	17,799,577	77.3
\$5,000 to \$20,000.....	25	97	2.1	236,933	2.6	141,101	2.5	ZANESVILLE.....	97	3,035	100.0	8,300,231	100.0	3,054,116	100.0
\$20,000 to \$100,000.....	22	390	8.5	971,202	10.5	404,924	8.2	Less than \$5,000.....	30	34	1.1	78,943	1.0	41,113	1.3
\$100,000 and over.....	13	4,078	89.0	8,018,550	86.4	5,066,003	88.8	\$5,000 to \$20,000.....	24	92	3.0	229,972	2.8	126,555	4.1
NORWOOD.....	58	5,808	100.0	16,724,360	100.0	9,507,410	100.0	\$20,000 to \$100,000.....	31	930	30.6	1,078,770	20.2	958,674	31.4
Less than \$5,000.....	11	15	0.3	31,610	0.2	17,152	0.1	\$100,000 to \$1,000,000.....	12	1,979	65.2	6,312,546	76.0	1,927,774	63.1
\$5,000 to \$20,000.....	16	55	0.9	150,085	0.9	101,410	1.1	ALL OTHER CITIES.....	29	1,903	100.0	3,902,284	100.0	2,151,158	100.0
\$20,000 to \$100,000.....	10	148	2.4	364,645	2.2	205,954	2.2	Less than \$5,000.....	9	6	0.3	16,299	0.4	10,740	0.5
\$100,000 to \$1,000,000.....	10	2,084	35.9	6,309,406	37.7	3,651,945	38.4	\$5,000 to \$20,000.....	12	44	2.3	135,125	3.5	66,272	3.0
\$1,000,000 and over.....	5	3,500	60.4	9,862,114	59.0	5,531,840	58.2	\$20,000 to \$100,000.....	4	38	2.0	130,209	3.9	99,637	4.4
								\$100,000 and over.....	4	1,815	95.4	3,600,591	92.3	1,881,209	92.1

<sup>1</sup> Includes the group "\$1,000,000 and over."

<sup>2</sup> "All other cities" embrace East Cleveland and Lakewood.

In the cities the same condition prevails as that found 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 or over. The highest percentage of the total value of products for establishments in this class, 97.2 per cent, appears for Lorain, followed closely by Bellaire and Youngstown, with 97.1 per cent each, while the lowest, 70.3 per cent, is shown

for Marietta. In each of the cities a considerable proportion of the total number of establishments is shown for those having products valued at less than \$20,000, but the combined value of their products is relatively small. Of the total number of establishments in the five principal cities, as measured by value of products, those in this class formed, in Cleveland, 55.2 per cent; in Cincinnati, 54 per cent; in Akron, 58.4 per cent; in Toledo, 58.2 per cent; and in Youngstown, 59.2 per

cent, whereas the value of their products formed only 2.4 per cent, 3.5 per cent, nine-tenths of 1 per cent, 2.3 per cent, and nine-tenths of 1 per cent, respectively.

measured by the number of wage earners employed, for all industries combined, for 40 of the more important industries, and for each of the 43 cities having more than 10,000 inhabitants.

Table 25 shows the size of establishment in 1914, as

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																											
	Establishments.	Wage earners (average number).	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.	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.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries.....	15,658	510,485	1,720	7,557	17,220	3,048	34,145	1,470	47,766	801	56,044	663	104,245	240	84,005	103	72,823	47	92,378											
Agricultural implements.....	59	5,404	2	10	38	10	131	7	237	0	460	13	2,140	3	1,138	2	1,302													
Automobiles, including bodies and parts.....	102	18,752	2	20	53	31	371	14	487	8	505	14	2,170	7	2,570	3	2,473	3	10,117											
Boots and shoes, including out stock and findings.....	73	14,074	1	7	16	9	193	0	240	7	574	25	4,342	7	2,335	0	4,402	2	2,033											
Boxes, paper and fancy.....	40	2,456		4	12	13	175	17	927	6	450	0	1,133																	
Brass, bronze, and copper products.....	34	2,277	1	35	94	20	305	10	287	7	500	3	472	2	610															
Bread and other bakery products.....	1,634	7,665	258	1,144	2,354	170	1,580	37	1,170	15	1,088	10	1,473																	
Brick, tile, pottery, and other clay products.....	540	27,334	5	195	515	108	1,314	70	2,754	77	5,227	07	10,028	15	4,718	3	2,178													
Canning and preserving.....	135	2,507	3	44	125	59	648	19	610	5	343	5	732																	
Carriages and wagons and materials.....	341	5,997	16	140	451	100	1,153	40	1,300	21	1,515	8	1,313	1	250															
Cars and general shop construction and repairs by steam-railroad companies.....	88	21,030				0	95	12	452	18	1,240	22	3,745	22	7,017	5	3,518	3	4,972											
Cars, steam-railroad, not including operations of railroad companies.....	5	2,885				0	114	1	36	2	102					1	920	1	1,758											
Chemicals.....	29	2,017		10	19	0	114	3	101	3	182	1	104	2	843	1	504													
Clothing, men's, including shirts.....	267	10,758	6	62	189	82	948	53	1,743	35	2,365	12	1,920	5	1,805	1	562	1	1,130											
Clothing, women's.....	170	9,775	1	44	115	44	485	40	1,331	20	1,320	13	1,746	5	1,718	2	1,561	1	1,403											
Confectionery.....	132	3,140	2	64	158	20	201	22	735	8	590	0	1,101	1	268															
Copper, tin, and sheet-iron products.....	288	7,448	12	141	339	80	895	27	708	10	698	10	1,818	3	2,900															
Cutlery and tools, not elsewhere specified.....	81	3,100	5	31	72	10	170	12	380	8	577	3	382	1	271	2	1,338													
Electrical machinery, apparatus, and supplies.....	119	12,095	4	40	116	24	284	16	583	10	662	11	1,827	0	2,121	4	2,482	4	4,620											
Flour-mill and gristmill products.....	649	2,363	78	487	1,053	59	628	8	215	7	467																			
Foundry and machine-shop products.....	1,379	73,103	57	455	1,153	332	3,933	217	7,305	147	10,927	104	17,109	47	10,314	15	10,153	5	6,149											
Furniture and refrigerators.....	213	7,831	13	54	147	50	760	45	1,511	26	1,004	14	2,050			2	1,450													
Glass.....	39	10,997							113	3	211	16	2,561	0	3,082	7	5,030													
Hosiery and knit goods.....	38	3,411		4	10	6	71	9	305	5	432	11	1,763	3	830															
Iron and steel blast furnaces.....	33	5,780							57																					
Iron and steel, steel works and rolling mills.....	70	46,397		1	3	2	25	3	101	6	455	13	2,300	12	4,481	23	16,743	10	22,280											
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works and rolling mills.....	15	2,365				4	53	3	115	3	188	1	148	3	922	1	930													
Iron and steel forgings, not made in steel works or rolling mills.....	29	2,308		3	0	6	82	7	251	4	290	8	1,218	1	452															
Iron and steel, wrought pipe.....	5	2,235		0	4							1	170	1	284	1	795	1	1,026											
Liquors, malt.....	101	5,340		0	12	34	433	29	972	10	1,324	9	1,279	4	1,320															
Lumber and timber products.....	1,188	11,921	41	721	1,717	288	3,103	90	3,094	26	1,710	11	1,548	2	743															
Marble and stone work.....	213	2,523	24	132	274	32	355	17	587	4	306	2	327	2	674															
Paint and varnish.....	95	2,107	4	44	103	26	282	13	423	3	244	3	480	2	566															
Paper and wood pulp.....	48	5,430		1	3	3	47	12	398	10	1,142	12	1,810	3	977															
Paper goods, not elsewhere specified.....	20	2,260		1	10	26	6	74	4	114	4	231	1	159	2	781	1	884												
Printing and publishing.....	1,783	15,070	305	890	2,152	346	3,831	117	3,504	34	2,350	26	4,175	4	1,476	1	573													
Rubber goods, not elsewhere specified.....	54	21,705	1	3	16	14	162	7	230	6	453	9	1,376	1	340	4	2,774	4	10,354											
Shipbuilding, including boat building.....	29	2,870	3	13	27	4	42	2	59	2	128	1	232	2	663	2	1,728													
Slaughtering and meat packing.....	160	3,010	27	69	157	36	412	18	500	12	870	5	697	1	302	1	603													
Stoves and furnaces, including gas and oil stoves.....	105	8,575	2	17	55	29	336	10	601	15	1,321	13	1,691	4	1,298	1	564	2	2,709											
Tobacco manufactures.....	961	13,282	312	474	910	86	937	34	1,084	21	1,469	21	3,577	12	3,884															
All other industries.....	4,218	95,178	444	2,101	4,724	840	9,431	385	12,257	159	11,215	136	20,616	44	14,717	11	7,553	8	14,665											
Total for cities.....	9,588	387,632	1,030	3,900	9,700	2,104	23,804	1,087	34,373	573	30,702	477	75,170	103	63,173	81	57,897	44	83,624											
AKRON.....	305	24,650	32	130	294	57	636	31	1,023	20	1,410	14	1,974	5	1,403	4	2,628	3	15,252											
ALLIANCE.....	52	2,333	4	24	48	11	110	7	210	1	55	1	206	3	1,048	1	638													
ASHTABULA.....	57	1,868		32	88	9	103	8	189			7	1,149	1	339															
BARBERTON.....	34	3,118	1	22	48	3	30					3	533	3	701	1	609	1	1,197											
BELLAIRE.....	40	2,603	4	18	48	10	103	2	59			1	230	3	1,019	2	1,144													
CAMBRIDGE.....	39	1,455	3	15	40	14	130	2	72	1	92	2	384	2	737															
CANTON.....	270	12,255	2	104	338	04	660	38	925	29	1,586	19	2,270	16	3,200	3	1,266	1	2,010											
CHILLICOTHE.....	46	1,537	1	22	56	12	100	5	161	2	178	3	467			1	596													

Table 25—Continued.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																
	Estab-lish-ments.	Wage earners (average number).	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.	
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
ELYRIA.....	63	2,735	6	26	62	14	191	4	125	4	318	5	737	4	1,302	.....	.....	.....	.....
FINDLAY.....	78	1,737	11	32	75	21	219	7	223	2	176	3	309	2	645	.....	.....	.....	.....
FOSTORIA.....	47	1,252	5	21	47	9	91	4	140	4	287	3	418	1	269	.....	.....	.....	.....
FREMONT.....	65	2,003	4	31	61	16	219	5	106	2	140	5	745	1	271	1	524	.....	.....
HAMILTON.....	129	6,043	18	48	110	30	309	10	289	0	628	8	1,518	4	1,565	1	504	1	1,054
IRONTON.....	59	1,420	2	25	57	10	187	8	262	4	297	4	617	.....	.....	.....	.....	.....	.....
LAKEWOOD.....	22	1,774	5	11	29	3	34	.....	.....	1	77	.....	.....	1	404	.....	.....	1	1,230
LANCASTER.....	53	1,583	.....	32	78	10	97	3	58	3	210	4	721	1	419	.....	.....	.....	.....
LIMA.....	97	4,870	6	45	93	21	225	17	588	3	113	1	114	2	957	.....	.....	2	3,086
LORAIN.....	66	6,436	0	34	60	14	153	3	60	3	51	2	385	2	732	1	876	1	4,113
MANSFIELD.....	103	3,398	7	52	157	18	223	10	340	5	360	8	1,094	2	647	1	577	.....	.....
MARIETTA.....	71	1,401	4	37	93	17	222	7	214	4	378	2	404	.....	.....	.....	.....	.....	.....
MARION.....	66	2,577	11	30	50	14	158	6	183	.....	.....	2	220	2	765	.....	.....	1	1,189
MASSILON.....	70	1,768	1	38	85	16	201	6	183	4	292	3	424	2	583	.....	.....	.....	.....
MIDDLETOWN.....	63	4,003	3	30	71	15	204	3	112	4	304	4	462	3	1,100	.....	.....	1	1,750
MOUNT VERNON.....	27	772	5	14	33	4	57	2	60	.....	.....	1	218	1	398	.....	.....	.....	.....
NEWARK.....	79	4,583	0	36	102	15	183	12	401	.....	.....	3	473	1	411	2	1,505	1	1,448
NEWWOOD.....	58	5,808	2	24	62	11	140	3	87	3	215	10	1,790	1	284	4	3,221	1	1,448
PIQUA.....	78	2,777	5	30	89	13	175	11	277	4	259	3	782	3	1,195	.....	.....	.....	.....
PORTSMOUTH.....	70	3,597	0	30	91	10	185	0	225	5	379	1	160	.....	.....	2	1,249	1	1,308
SANDUSKY.....	107	2,727	11	34	74	30	301	16	500	0	608	5	624	2	560	.....	.....	.....	.....
SPRINGFIELD.....	253	7,868	35	110	280	45	525	21	602	11	740	16	2,457	4	1,418	1	725	1	1,052
STEUBENVILLE.....	60	4,500	7	28	60	14	156	2	67	.....	.....	6	1,019	2	731	.....	.....	1	2,464
Tiffin.....	76	2,177	3	38	87	17	178	9	288	4	243	3	462	2	919	.....	.....	.....	.....
TOLEDO.....	713	27,076	105	276	650	157	1,753	88	2,900	41	2,870	28	4,590	12	3,993	5	3,824	1	6,394
WARREN.....	82	2,862	.....	51	118	14	160	6	106	6	473	3	577	.....	.....	2	1,338	.....	.....
YOUNGSTOWN.....	201	15,861	15	95	197	41	439	17	576	9	537	7	1,116	2	617	12	8,478	3	3,901
ZANESVILLE.....	97	3,035	8	46	110	17	137	13	442	7	503	3	468	2	530	1	795	.....	.....

Table 26 presents, for 1914, the percentages based on the figures in Table 25, and for 1909, similar percentages for all industries combined and for individual industries in the state as a whole.

Table 26

INDUSTRY AND CITY.	Cen-sus year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER.								INDUSTRY AND CITY.	Cen-sus 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			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	3.4	6.7	0.4	11.2	20.4	16.0	14.3	18.1	Confectionery.....	1914	5.0	0.2	23.3	18.9	35.0	8.5	.....	.....	.....	.....
	1909	3.8	7.9	10.5	11.7	22.1	15.6	15.9	12.5	1909	4.4	12.2	18.3	25.9	30.2	.....	.....	.....	.....	.....	
Agricultural Implements.....	1914	0.7	2.4	4.3	8.0	30.3	20.8	23.8	.....	Copper, tin, and sheet-iron products.	1914	4.6	12.0	10.7	9.4	24.4	35.9	.....	.....	.....	.....
	1909	0.6	1.5	5.3	3.8	36.2	21.5	8.8	22.4	1909	4.3	8.5	13.6	9.6	31.9	32.1	.....	.....	.....	.....	
Automobiles, including bodies and parts.	1914	0.3	2.0	2.0	2.7	11.0	13.7	13.2	54.0	Cutlery and tools, not elsewhere specified.	1914	2.3	5.6	11.9	18.0	11.9	8.5	41.8	.....	.....	.....
	1909	0.3	1.7	3.2	4.8	11.7	28.8	11.1	40.4	1909	1.8	9.4	9.8	21.0	4.4	9.1	44.5	.....	.....	.....	
Boots and shoes, including cut stock and findings.	1914	0.1	0.8	1.7	3.9	29.6	15.9	30.0	17.9	Electrical machinery, apparatus, and supplies.	1914	0.9	2.2	4.6	5.2	14.4	16.7	19.6	36.4	.....	.....
	1909	0.1	0.7	1.0	4.0	24.2	20.6	30.6	18.1	1909	1.0	4.2	5.5	10.3	30.3	24.1	10.0	14.6	.....	.....	
Boxes, fancy and paper.....	1914	0.5	7.1	25.5	18.7	48.2	.....	.....	.....	Flour-mill and gristmill products.	1914	44.6	20.6	9.1	19.8	.....	.....	.....	.....	.....	
	1909	0.4	4.5	22.5	24.2	48.5	.....	.....	.....	1909	45.7	25.0	16.5	7.0	5.8	.....	.....	.....	.....		
Brass, bronze, and copper products.	1914	4.1	13.4	12.6	22.4	20.7	20.8	.....	.....	Foundry and machine-shop products.	1914	1.6	5.4	10.1	14.9	23.4	22.3	13.9	8.4	.....	.....
	1909	4.0	15.9	12.8	15.2	13.3	38.8	.....	.....	1909	1.6	5.9	11.1	14.2	25.4	18.4	16.3	6.1	.....	.....	
Bread and other bakery products.	1914	30.7	20.6	15.3	14.2	19.2	.....	.....	.....	Furniture and refrigerators.....	1914	1.9	9.7	19.3	24.3	26.3	.....	18.5	.....	.....	
	1909	35.5	23.3	12.1	15.4	13.7	.....	.....	.....	1909	1.5	9.0	28.0	20.3	24.7	8.2	8.2	.....	.....		
Brick, tile, pottery, and other clay products.	1914	1.9	4.8	10.1	19.1	38.9	17.3	8.0	.....	Glass.....	1914	.....	.....	1.0	1.9	23.3	28.0	45.7	.....	.....	
	1909	3.3	7.3	16.0	20.3	35.9	9.6	7.6	.....	1909	.....	0.5	1.6	5.4	26.2	22.2	33.9	10.2	.....	.....	
Canning and preserving.....	1914	5.0	25.8	24.7	15.3	29.2	.....	.....	.....	Hosiery and knit goods.....	1914	0.3	2.1	8.9	12.7	51.7	24.3	.....	.....	.....	
	1909	6.8	21.8	29.7	15.1	13.5	13.1	.....	.....	1909	0.8	0.9	7.3	21.3	49.2	20.5	.....	.....	.....		
Carriages and wagons and materials.	1914	7.5	19.2	21.8	25.3	21.9	4.3	.....	.....	Iron and steel, blast furnaces.....	1914	.....	.....	1.0	.....	12.8	29.9	26.5	29.8	.....	
	1909	5.8	16.4	10.4	22.5	35.9	.....	.....	.....	1909	(1)	.....	1.5	8.7	43.2	30.1	16.4	.....	.....		
Cars and general shop construction and repairs by steam-railroad companies.	1914	.....	0.4	2.1	5.7	17.3	35.2	16.3	23.0	Iron and steel, steel works and rolling mills.	1914	(1)	.....	0.2	1.0	5.0	9.7	36.1	48.0	.....	
	1909	(1)	0.4	0.8	2.7	9.4	36.5	40.6	9.6	1909	.....	0.2	0.4	1.4	7.4	17.6	31.5	41.6	.....		
Cars, steam-railroad, not including operations of railroad companies.	1914	.....	.....	1.2	5.6	.....	32.2	60.9	.....	Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	1914	.....	2.2	4.9	7.9	6.2	39.0	39.7	.....	.....	
	1909	.....	.....	2.1	2.3	5.3	11.0	79.3	.....	1909	.....	1.8	4.4	4.5	18.5	11.1	59.6	.....	.....		
Chemicals.....	1914	0.9	5.7	5.0	9.0	9.6	41.8	28.0	.....	Iron and steel forgings, not made in steel works or rolling mills.	1914	0.4	3.6	10.9	12.8	52.8	19.6	.....	.....	.....	
	1909	2.4	14.1	5.0	5.1	11.1	62.2	.....	.....	1909	1.2	3.6	4.8	18.4	72.0	.....	.....	.....	.....		
Clothing, men's, including shirts.	1914	1.8	8.8	16.2	22.0	17.8	17.6	5.2	10.6	Iron and steel, wrought pipe.....	1914	0.2	.....	.....	.....	7.7	12.4	34.8	44.0	.....	
	1909	3.1	17.1	19.5	17.2	20.5	6.2	5.5	10.8	1909	0.5	.....	3.1	.....	25.3	.....	71.2	.....	.....		
Clothing, women's.....	1914	1.2	4.9	13.6	13.6	17.9	17.6	16.0	15.3	Liquors, malt.....	1914	0.2	8.1	18.2	24.8	24.0	24.7	.....	.....	.....	
	1909	1.5	5.5	11.7	15.9	30.2	17.6	5.7	12.0	1909	0.3	11.4	25.0	19.1	21.0	22.3	.....	.....	.....		

(1) Less than one-tenth of 1 per cent.



Table 27

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1914	1909	1904	Amount.			Per cent distribution.		
				1914	1909	1904	1914	1909	1904
Primary power, total.....	46,288	25,970	11,598	2,002,780	1,583,155	1,116,932	100.0	100.0	100.0
Owned.....	12,738	13,012	11,598	1,712,136	1,483,628	1,083,030	85.5	93.7	97.4
Steam engines and turbines.....	8,346	9,246	9,063	1,541,212	1,358,720	1,034,780	77.0	86.1	92.6
Internal-combustion engines.....	4,059	3,364	2,004	150,481	103,801	35,101	7.8	6.6	3.1
Water wheels, turbines, and motors.....	333	412	531	14,443	16,107	18,149	0.7	1.0	1.6
Rented.....	32,550	12,958	(*)	290,644	99,527	28,902	14.5	6.3	2.6
Electric.....	32,550	12,958	(*)	283,514	93,592	23,159	14.2	5.9	2.1
Other.....				7,130	5,935	5,743	0.4	0.4	0.5
Electric.....	66,137	34,237	8,668	823,000	417,844	144,467	100.0	100.0	100.0
Rented.....	32,550	12,958		283,514	93,592	23,159	34.4	22.4	16.0
Generated by establishments reporting.....	33,587	21,279	8,668	539,486	324,252	121,308	65.6	77.6	84.0

\* Figures for horsepower include for 1909 and 1904 the amounts reported under the head of "other" owned power.

\* 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 28 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 city.

Table 28

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 lbs.).	Oil, including gaso-line (barrels).	Gas (1,000 cubic feet).	INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 lbs.).	Oil, including gaso-line (barrels).	Gas (1,000 cubic feet).
	An-thra-cite (tons, 2,240 lbs.).	Bitu-minous (tons, 2,000 lbs.).					An-thra-cite (tons, 2,240 lbs.).	Bitu-minous (tons, 2,000 lbs.).			
All industries.....	43,108	13,927,612	6,267,733	678,289	50,092,157	Total for cities.....	33,128	8,212,648	4,176,553	519,818	36,157,096
Agricultural implements.....		44,408	0,089	9,568	193,264	AKRON.....	410	537,937	7,411	7,291	1,125,596
Automobiles, including bodies and parts.....	7,640	97,177	1,411	71,411	522,727	ALLIANCE.....	62	88,333	2,595	3,260	8,549
Boots and shoes, including cut stock and findings.....	100	32,201	1,963	431	101,855	ASHTABULA.....	153	28,312	770	2,115	73,984
Brass, bronze, and copper products.....	47	14,612	6,568	6,018	207,507	BARBERTON.....		106,763	3,493	648	134,288
Bread and other bakery products.....	3,774	32,516	19,827	727	1,207,877	BELLAIRE.....		77,400	270,646	24	972,567
Brick, tile, pottery, and other clay products.....	4,933	2,280,876	10,748	3,969	9,213,177	CAMBRIDGE.....		68,304	20	9	200,842
Butter, cheese, and condensed milk		58,470		159	87,634	CANTON.....	226	447,721	12,744	37,107	2,057,927
Carriages and wagons and materials.....	306	57,663	1,238	11,521	62,467	CHILLICOTHE.....	21	57,260	44	2,083	90,460
Cars and general shop construction and repairs by steam-railroad companies.....	449	463,470	3,640	24,309	162,938	CINCINNATI.....	2,015	590,349	20,658	15,239	1,702,631
Cars, steam-railroad, not including operations of railroad companies.....	53	34,153	1,375	22,361	120,309	CLEVELAND.....	16,657	1,863,423	1,138,216	169,746	10,474,393
Chemicals.....		381,767	56,168	502	1,525,141	COLUMBUS.....	1,316	260,552	10,281	14,866	970,783
Clothing, men's, including shirts.....	13	6,539		83	54,169	COSHOCOTON.....		25,001	322	27	79,409
Clothing, women's.....	27	5,427	6		29,205	DAYTON.....	2,014	343,562	18,062	32,341	207,326
Coffee and spice, roasting and grinding.....	688	2,817	147	10	38,199	EAST CLEVELAND.....		4,691			604
Confectionery.....	1,332	23,561	527	232	333,780	EAST LIVERPOOL.....	3,170	43,108	318	286	3,515,944
Copper, tin, and sheet-iron products	763	105,570	1,170	1,157	557,823	ELYRIA.....		41,078	2,118	5,109	160,969
Electrical machinery, apparatus, and supplies.....	81	59,496	1,257	5,407	1,094,336	FINDLAY.....	72	51,685	174	494	27,893
Flour-mill and gristmill products.....	890	148,071	330	3,082	238,027	FOSTORIA.....	200	22,317	759	2,773	334,255
Foundry and machine-shop products.....	6,227	745,193	189,993	102,053	4,481,118	FREMONT.....	629	9,010	1,085	2,885	255,565
Furniture and refrigerators.....	542	72,747	1,132	243	58,033	HAMILTON.....	13	173,469	10,230	541	795,296
Glass.....		271,397	675	6,480	7,251,445	IRONTON.....	14	14,213	183,362	20	312,127
Ice, manufactured.....	309	230,011	4	315	828,456	LAKEWOOD.....		3,540	241		572,953
Iron and steel, blast furnaces.....		195,662	5,736,226	9,588	11,775	LANCASTER.....	10	5,187	550	159	82,980
Iron and steel, steel works and rolling mills.....	574	4,209,990	134,533	132,124	12,067,011	LIMA.....	6	55,583	2,766	17,536	63,399
Liquors, malt.....	268	327,531	1,246	388	1,595,729	LORAIN.....	86	569,320	575,917	4,271	231,764
Lumber and timber products.....	1,551	66,910	131	2,082	153,961	MANSFIELD.....	282	11,673	2,707	973	733,160
Paint and varnish.....	13	18,026	3,540	9	223,179	MARIETTA.....	201	7,862	695	14	352,035
Paper and wood pulp.....		625,807	12,051	179	210,388	MARION.....	84	38,895	2,900	4,682	122,076
Paving materials.....		105,277		799	36,511	MASSILLON.....	25	41,966	5,954	2,045	19,652
Petroleum, refining.....		244,738	3,433	15,989	188,311	MIDDLETOWN.....	31	220,050	17,132	21,985	1,626,683
Printing and publishing.....	895	40,519	714	889	409,463	MOUNT VERNON.....		5,609	550	1	170,074
Rubber goods, not elsewhere specified.....		465,184		49	361,961	NEWARK.....	270	50,105	4,513	418	4,044,936
Slaughtering and meat packing.....	5	92,395	200	75	306,637	NORWOOD.....		50,477	1,477	1,437	108,050
Stoves and furnaces, including gas and oil stoves.....	2,545	42,026	19,581	192	177,313	PIQUA.....	26	28,276	2,518	2,018	27,188
Tin plate and tinplate.....		22,130			123,423	PORTSMOUTH.....	3	30,002	973	57	809,740
All other industries.....	9,183	2,204,360	48,810	245,748	5,671,068	SANDUSKY.....	18	63,531	1,776	295	315,069
						SPRINGFIELD.....	1,180	95,676	13,086	11,922	162,479
						STUBENVILLE.....	2	468,522	204,200	153	907,005
						TEPAIN.....	32	18,278	3,440	303	732,813
						TOLEDO.....	3,583	343,924	224,668	110,223	750,631
						WARREN.....		72,911	656	680	12,977
						YOUNGSTOWN.....	317	1,096,744	1,470,823	43,680	1,069,737
						ZANESVILLE.....		110,020	514	44	239,747

## 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 19 important industries and for power laundries in Ohio are here presented.

**Iron and steel.**—A large proportion of the pig-iron product of the blast furnaces is used in cooperating steel plants, more than 70 per cent being made for consumption by the producing companies; and all of the tin-plate and terneplate product of the state is made by companies that roll the black plates. Hence there is considerable duplication in cost of materials and in value of products between these separately classified industries. Considered as a combined industry, the blast furnaces, steel works and rolling mills, and tin and terne dipping plants gave employment to 53,136 wage earners, represent a capital investment of \$330,896,624, and show in added value the sum of \$78,961,099. The figures for 1909 for the combined industries are: Wage earners, 46,557; capital, \$258,980,157; and value added by manufacture, \$74,545,627. The increases in these items, 1909-1914, were 14.1 per cent, 27.8 per cent, and 5.9 per cent, respectively.

Ohio ranks second among the states as to the combined industries and the first two branches, and third in the production of tin plate and terneplate.

The industrial depression of 1914 accounts for the decrease in many of the items. The pig-iron tonnage in 1914 was 3.2 per cent less than in 1909 and was more than 1,800,000 tons below the output of 1913. Practically all the product is coke iron; that made with other fuels—some with mixed bituminous coal and coke, and some with charcoal—forming but 1.1 per cent of the total. There is a marked increase in the proportion of machine-cast pig iron. In 1914, 53 per cent was delivered molten, 31 per cent was machine cast, and but 12.1 per cent sand cast. In 1909, 50 per cent was delivered molten, 17.3 per cent was machine cast, and 29.8 per cent sand cast. There was a marked increase in the proportion of iron of basic grade. In 1914, 54.6 per cent of the product was Bessemer, 28.7 per cent basic, and 10.3 per cent foundry. In 1909, 63.5 per cent was Bessemer, 14.7 per cent basic, and 13.1 per cent foundry.

The statistics given in the table with respect to equipment refer only to that of establishments that were active at some time during the year. At the close of the year 1914, there were 74 blast furnaces in the state in active and idle establishments of 8,828,000 tons annual capacity, according to the annual statistical report of the American Iron and Steel Institute. It thus appears that the output for

the year was a little less than 60 per cent of the possible output. Since 1909 the power capacity of internal-combustion engines operated with blast-furnace gas has more than doubled.

**Blast furnaces.**—The following table gives the statistics for materials, products, and equipment for the blast furnaces for 1914, 1909, and 1904.

Table 29	1914	1909	1904
<b>MATERIALS.</b> (Tons, 2,240 lbs.)			
Total cost.....	\$60,738,524	\$68,424,722	\$32,476,727
Iron ore:			
Tons.....	9,624,750	9,884,358	5,206,473
Cost.....	\$36,348,002	\$41,830,045	\$18,881,573
Millinder, scale, scrap, slag, etc.:			
Tons.....	353,518	308,931	328,841
Cost.....	\$806,730	\$1,041,884	\$604,526
Fluxes:			
Tons.....	2,752,391	2,603,423	1,464,057
Cost.....	\$2,706,342	\$2,507,107	\$1,348,409
Fuel for smelting, total cost.....	\$18,852,678	\$20,503,130	.....
Coke—			
Tons (2,000 lbs.).....	5,816,200	6,050,401	3,432,965
Cost.....	\$18,750,140	\$20,433,086	\$10,548,220
Bituminous coal and charcoal.....	\$102,538	\$169,444	.....
All other fuel and rent of power.....	\$506,082	\$2,362,450	\$1,093,009
All other materials.....	\$1,428,081	.....	.....
<b>PRODUCTS.</b> (Tons, 2,240 lbs.)			
Total value.....	\$72,060,368	\$83,600,238	\$40,862,461
Pig iron:			
Tons.....	5,279,045	5,446,971	2,987,787
Value.....	\$71,086,701	\$82,048,712	\$40,705,777
For consumption in works of company producing—			
Tons.....	3,877,188	3,564,358	1,751,730
Assigned value.....	\$52,469,007	\$53,108,580	\$23,624,236
For sale—			
Tons.....	1,401,857	1,882,613	1,236,057
Value.....	\$19,217,694	\$28,940,123	\$17,081,541
All other products.....	\$1,282,667	\$1,650,526	\$166,674
Pig iron, classified according to fuel used:			
Coke—			
Tons.....	5,210,564	5,376,308	2,987,140
Value.....	\$70,759,573	\$80,813,570	\$40,686,717
All other, bituminous coal and coke mixed, and charcoal—			
Tons.....	50,481	70,573	638
Value.....	\$927,128	\$1,235,142	\$16,000
Pig iron, classified according to grades, tons:			
Bessemer.....	2,880,750	3,456,131	2,120,643
Basic.....	1,516,905	708,173	206,458
Foundry.....	541,354	714,322	441,227
Malleable.....	194,006	364,067	127,330
Forgo or mill.....	75,095	60,805	66,729
Ferrosilicon.....	65,778	47,352	10,404
All other.....	4,548	6,121	8,906
Pig iron, classified by method of delivery or casting, tons:			
Delivered in molten condition to steel works, etc.....	2,707,254	2,723,700	1,105,159
Machine cast.....	1,635,242	945,036	516,338
Sand cast.....	636,639	1,625,073	1,361,161
Chill cast and direct castings.....	209,010	153,162	5,121
<b>EQUIPMENT.</b>			
Furnaces in active establishments:			
Completed stacks at end of year—			
Number.....	61	67	53
Daily capacity, tons.....	21,524	21,017	15,837
Active during the year—			
Number.....	59	65	53
Daily capacity, tons.....	21,096	20,677	15,837
In course of construction at end of year—			
Number.....	1	1	1
Daily capacity, tons.....	350	325	75
Pig casting machines, number.....	21	20	(1)
Gas engines operated with blast-furnace gas:			
Number.....	16	10	(1)
Horsepower.....	43,500	20,140	.....

<sup>1</sup> Figures not available.

**Steel works and rolling mill.**—The following table shows, for 1914, 1909, and 1904, the quantity and cost of the principal materials used by steel works and

rolling mills, the quantity and value of the leading products, and the main features of equipment:

Table 30	1914	1909	1904
<b>MATERIALS.</b> (Tons, 2,240 lbs.)			
Total cost.....	\$139,076,491	\$139,243,155	\$78,209,770
<b>Iron and steel:<sup>1</sup></b>			
For furnaces and hot-rolls—			
Pig iron and ferroalloys—			
Tons.....	4,338,023	4,209,149	2,393,614
Cost.....	\$62,109,373	\$64,441,978	\$33,040,901
Pig iron—			
Tons.....	4,341,857	4,172,114	( <sup>2</sup> )
Cost.....	\$69,180,555	\$62,747,851	
Ferroalloys—spiegel-eisen, ferromanganese, ferrosilic- on, etc.—			
Tons.....	46,166	37,035	( <sup>2</sup> )
Cost.....	\$2,928,818	\$1,694,127	
Scrap—			
Tons.....	855,163	530,408	635,967
Cost.....	\$9,452,349	\$8,093,044	\$8,097,895
Scrap made and consumed in same works, tons.....	1,076,839	872,314	( <sup>2</sup> )
Ingots, blooms, billets, slabs, muck and scrap bar, rails for re-rolling, and sheet and tin- plate bars—			
Tons.....	1,902,828	1,858,171	1,050,744
Cost.....	\$38,370,551	\$40,358,397	\$23,607,315
Rolled forms for further manu- facture—			
Skelp—			
Tons.....	20,936	57,144	10,192
Cost.....	\$888,978	\$1,730,190	\$315,343
Wire rods—			
Tons.....	76,045	97,530	92,246
Cost.....	\$1,843,093	\$2,708,015	\$2,563,171
Iron ore:			
Tons.....	147,404	75,857	48,230
Cost.....	\$455,440	\$384,303	\$211,533
Fuel and rent of power.....	\$9,840,609	\$7,672,641	\$4,990,801
All other materials.....	\$16,716,098	\$13,854,617	\$5,412,721
<b>PRODUCTS.</b> (Tons, 2,240 lbs.)			
Total value.....	\$205,023,301	\$197,780,043	\$111,996,673
<b>Rolled, forged, and other classified iron and steel products:</b>			
Tons.....	6,303,890	5,808,690	3,533,426
Value.....	\$174,638,132	\$172,105,247	\$101,233,039
<b>Finished products and forgings—</b>			
Tons.....	3,449,352	3,100,954	1,659,272
Value.....	\$113,348,425	\$106,819,238	\$57,600,778
<b>Plates and sheets—</b>			
Tons.....	988,997	755,010	460,131
Value.....	\$38,892,399	\$33,800,603	\$20,700,386
<b>Black plates or sheets for tin- ning—</b>			
Tons.....	176,835	111,156	
Value.....	\$7,424,689	\$5,808,639	
<b>Skelp—</b>			
Tons.....	955,597	739,761	314,447
Value.....	\$24,478,568	\$22,198,305	\$9,707,170
<b>Merchant bars—</b>			
Tons.....	299,957		
Value.....	\$10,784,383		
<b>Spike and chain rods, bolt and nut rods, horseshoe bars, strips, etc.—</b>			
Tons.....	61,838	704,168	274,191
Value.....	\$2,218,108	\$21,168,583	\$8,672,028
<b>Bars for reinforced concrete—</b>			
Tons.....	77,309	70,978	
Value.....	\$2,233,658	\$2,063,084	
<b>Wire rods, hoops, bands, and cotton ties, rails, structural shapes and other finished rolled forms or forgings—</b>			
Tons.....	885,819	719,881	610,503
Value.....	\$27,316,620	\$21,719,984	\$18,420,294
<b>Partly finished rolled products—</b>			
<b>Blooms, billets, and slabs—</b>			
Tons.....	1,708,862	1,975,730	1,803,873
Value.....	\$33,187,270	\$42,301,868	\$40,350,466
<b>Sheet and tin-plate bars—</b>			
Tons.....	1,033,972	679,082	
Value.....	\$20,877,350	\$15,011,744	
<b>Muck and scrap bar—</b>			
Tons.....		15,875	32,464
Value.....		\$115,651	\$1,008,781
<b>Unrolled steel:</b>			
<b>Ingots—</b>			
Tons.....	8,369	32,223	2,661
Value.....	\$146,679	\$613,540	\$94,836
<b>Castings—</b>			
Tons.....	103,335	93,920	35,156
Value.....	\$7,078,409	\$6,343,180	\$2,308,178

<sup>1</sup> Includes material purchased and the quantity and assigned value of that transferred to the establishment reporting from other works of the same company.  
<sup>2</sup> Figures not available.  
<sup>3</sup> Includes hoops, bands, and cotton ties.

Table 30—Continued.	1914	1909	1904
<b>PRODUCTS—continued.</b> (Tons, 2,240 lbs.)			
All other products, including value added to steel or iron rolling-mill prod- ucts by further manufacture.....	\$30,385,259	\$25,674,796	\$10,763,634
<b>Steel production, tons.</b>			
<b>Total.....</b>	5,449,981	4,705,337	2,529,997
Bessemer.....	2,880,129	3,327,351	2,049,153
Open-hearth.....	2,569,852	1,377,216	480,844
Basic.....	2,554,956	1,306,694	425,007
Acid.....	34,870	70,522	55,837
Crucible and electric.....	317	770	
<b>EQUIPMENT.<sup>1</sup></b>			
<b>Steel plants: Daily capacity of steel furnaces and converters, tons of steel, double turn:</b>			
Open-hearth furnaces.....	27,661	21,684	13,752
Number.....	111	66	42
Basic.....	103	58	33
Acid.....	8	8	0
Daily capacity, tons of steel, double turn.....	13,062	6,329	2,922
Converters—			
Number.....	24	19	12
Daily capacity, tons of steel, double turn.....	14,572	15,340	10,830
All other—			
Number.....	8	12	
Crucible.....	7	12	
Electric.....	1		
Daily capacity, tons of steel, double turn.....	27	15	
Metal mixers—			
Number.....	15	13	( <sup>2</sup> )
Capacity, tons.....	4,300	3,350	

<sup>1</sup> Statistics are for the equipment of active establishments. The annual capacity of the steel furnaces of all plants, active and idle, on December 31, 1914 (Statistical report of American Iron and Steel Institute), was as follows: Open-hearth furnaces, 3,982,250 tons; Bessemer, 4,572,600 tons; crucible, 5,150 tons; electric, 9,000 tons; and miscellaneous, 2,500 tons; total, 8,571,500 gross tons.  
<sup>2</sup> Figures not available.

In the preceding table manufactures from rolled stock made in the rolling mill, such as wire, wrought welded pipes and tubes, and horseshoes, are not shown, but the rolled stock used for such manufactures is included along with that made for sale, and the enhanced value secured through their manufacture beyond the rolling-mill product stage has been included under the head of "All other products." The output of partly finished rolled products by some establishments results in a large amount of duplication in the figures for cost of materials and value of products. Two plants of the same company frequently constitute different establishments, and nearly 30 per cent of the cost of materials is represented by ingots, blooms, billets, slabs, and bars that were products of establishments other than those that did the final rolling.

A comparison of the total steel production, 5,449,981 tons, with the capacity of the steel furnaces of all plants, active and idle, at the close of the year 1914, given as 8,571,500 tons for the year in the statistical report of the American Iron and Steel Institute, shows that the equipment was utilized to a little over 60 per cent of its capacity.

*Tin plate and terneplate.*—The special statistics for this industry for 1914 and 1909 are given in Table 31.

Ohio ranks third among the states in this industry, reporting 15.8 per cent of the total value of products for the United States in 1914 and 16.4 per cent in 1909.

	1914	1909
<b>MATERIALS.</b>		
Total cost.....	\$9,442,743	\$7,155,144
Black plates or sheets:		
Pounds.....	349,217,545	213,764,015
Cost.....	\$6,517,520	\$5,143,579
Pig tin:		
Pounds.....	6,136,884	3,872,221
Cost.....	\$2,365,000	\$1,142,704
Pig lead:		
Pounds.....	469,630	249,000
Cost.....	\$20,069	\$10,612
Terre mixture, purchased:		
Pounds.....	812,471	3,943,767
Cost.....	\$101,896	\$434,482
All other materials.....	\$437,349	\$423,707
<b>PRODUCTS.</b>		
Total value.....	\$10,826,068	\$7,839,307
Tin plate and terneplate:		
Pounds.....	325,180,210	212,737,039
Value.....	\$10,389,051	\$7,099,423
All other products.....	\$437,047	\$219,944

Automobiles, including bodies and parts.—Table 32 shows the number and value of the different classes of automobiles manufactured, as reported at the censuses of 1914, 1909, and 1904.

PRODUCT.	1914		1909		1904	
	Num-ber.	Value.	Num-ber.	Value.	Num-ber.	Value.
Total value.....		\$85,710,585		\$38,838,754		\$9,358,104
Automobiles.....	67,483	40,405,370	14,299	23,550,112	2,808	5,197,300
Passenger vehicles.....	58,850	55,097,720	13,628	22,921,062	2,808	5,197,300
Runabouts and bug-gies.....	7,117	4,733,840				
Touring cars.....	49,421	44,800,434	11,539	18,256,985	2,808	5,197,300
Closed (limousines, cabs, etc.).....	2,010	4,251,172	1,185	2,775,891		
All other (omnibuses, ambulances, gov-ernment and munici-pal, etc.).....	302	1,202,283	904	1,788,186		
Business vehicles (mer-chandise).....	8,633	14,367,041	671	620,050		
Delivery wagons.....	( <sup>1</sup> )	( <sup>1</sup> )	469	242,105		
Trucks and all other.....	( <sup>2</sup> )	( <sup>2</sup> )	202	380,945		
All other products, in-cluding repair work.....		16,245,215		15,288,642		1,100,804

<sup>1</sup> In addition, 102 automobiles, valued at \$159,850, were manufactured in 1914 by establishments engaged primarily in other industries.  
<sup>2</sup> Includes "business vehicles," to avoid disclosure of individual operations.  
<sup>3</sup> Separate figures can not be shown without disclosing individual operations.

The total value of the output of automobiles, including bodies and parts, by establishments engaged in the industry in Ohio in 1914 was an increase of \$46,871,831, or 120.7 per cent, over the amount reported for 1909, while for the preceding five-year period 1904-1909 the increase was \$32,480,590, or 510.9 per cent. The number of automobiles of all kinds turned out in 1914 was an increase of 53,184, or 371.9 per cent, over the number reported in 1909, while from 1904 to 1909 the increase was 11,491, or 409.2 per cent.

Of the different kinds of automobiles manufactured in the state in 1914, passenger vehicles comprised the largest proportion of the output, with 87.2 per cent of the number and 79.3 per cent of the value reported. More than four times as many passenger vehicles were manufactured in 1914 as in 1909, and 84 per cent were touring cars.

There was a marked gain in the manufacture of business vehicles, the number of which formed 12.8 per cent of the entire output of automobiles in the state in 1914 as compared with 4.7 per cent in 1909. Most of the business vehicles were trucks, but separate figures for delivery wagons and trucks could not be shown without disclosing individual operations.

The horsepower rating of the total number of machines reported in 1914 shows the greatest increase in those rated at 30 to 50 horsepower when compared with the corresponding figures for 1909. There were 3,235 machines reported as having less than 20 horsepower in 1914 as compared with 5,258 in 1909. Those having 20 to 30 horsepower numbered 9,940 in 1914 against 3,825 in 1909. The largest class, those rated at 30 to 50 horsepower, numbered 54,029 in 1914 against 4,742 in 1909, an increase of more than eleven-fold. Those rated at more than 50 horsepower decreased from 474 in 1909 to 279 in 1914.

"All other products," comprising chiefly automobile bodies and parts, amounted to \$16,245,215 in 1914. A number of these products, however, are used in the manufacture of the completed automobiles, and to that extent are responsible for a duplication in the cost of materials and value of products shown for the industry.

Ohio held second place in value of automobiles manufactured in 1909 and 1914. Of the total number of automobiles manufactured by establishments primarily engaged in the industry in the United States in 1914, establishments located in Ohio produced 11.9 per cent as compared with 11.3 per cent in 1909 and 12.9 per cent in 1904.

Flour-mill and gristmill products.—Table 23 gives the quantities and values of flour-mill and gristmill products for 1914, 1909, and 1904.

	1914	1909	1904
Products, total value.....	\$15,171,200	\$48,063,353	\$40,855,566
Wheat flour:			
Barrels.....	5,707,781	5,723,536	5,628,179
Value.....	\$27,852,222	\$30,508,109	\$27,856,063
Rye flour:			
Barrels.....	43,674	33,215	43,601
Value.....	\$220,344	\$146,785	\$181,105
Buckwheat flour:			
Pounds.....	5,848,216	7,436,813	3,599,618
Value.....	\$171,350	\$180,267	\$83,967
Barley meal:			
Pounds.....	72,360		
Value.....	\$1,180		
Corn meal and corn flour:			
Barrels.....	524,941	865,250	1,006,703
Value.....	\$1,606,817	\$2,528,843	\$2,432,026
Hominy and grits:			
Pounds.....	83,822,260	80,855,375	69,360,258
Value.....	\$1,380,005	\$1,247,005	\$900,171
Oatmeal:			
Pounds.....	206,000		
Value.....	\$4,500		
Bran and middlings:			
Tons.....	255,720	( <sup>1</sup> )	( <sup>1</sup> )
Value.....	\$9,880,947		
Feed and offal:			
Tons.....	249,551	502,301	470,004
Value.....	\$7,536,048	\$12,406,370	\$8,972,972
Breakfast foods:			
Pounds.....	3,460,011		
Value.....	\$90,369		
All other cereal products.....	\$16,622	\$931,283	
All other products.....	\$337,867	\$144,090	\$619,722

<sup>1</sup> Included in "feed and offal."

Ohio was fifth among the states in 1914, as in 1909, in the value of products for this industry, notwithstanding a decrease of \$2,922,153, or 6.1 per cent, during the five-year period. Wheat flour was the principal product and represented 61.7 per cent of the total value in 1914, 63.4 per cent in 1909, and 68.2 per cent in 1904. Of the 649 establishments reported for the industry at the census of 1914, 549 manufactured wheat flour to some extent, as compared with 593 in 1909. In 1914 the value of wheat flour, bran and middlings, and feed and offal combined formed 91.4 per cent of the total value of products, the corresponding proportion in 1909 being 89.2 per cent. Corn meal and corn flour constitute the next most important product, although in 1914 as compared with 1909 there was a decrease of 340,309, or 39.3 per cent, in the number of barrels produced, while the value decreased 32.9 per cent. The equipment reported for 1914 consisted of 3,222 stands of rolls, 315 runs of stone, and 529 attrition mills.

**Slaughtering and meat packing.**—Table 34 shows for the slaughtering and meat-packing industry for 1914, 1909, and 1904 the kind, number, and cost of the animals slaughtered; the cost of dressed meat purchased for curing and making lard compounds and substitutes; and the cost of all other materials, which includes curing materials, seasoning, cottonseed oil, ice, containers, mill supplies, fuel, rent of power, and freight; and the quantities and values of the various products manufactured, except canned goods, canned sausage, hoofs, horns, glue, goat and kid skins, oleo and other oils, and wool, which are included in "all other products," to avoid disclosure of individual operations. The figures do not include establishments engaged exclusively in the manufacture of sausage.

The total cost of materials shows an increase in 1914 as compared with 1909 of 33.6 per cent, which was approximately the same as the increase in the total value of products. With the exception of calves, for which there was a decrease in number of 8,865, or 5.9 per cent, the number and cost of each of the different kinds of animals slaughtered show increases for the five-year period. The cost of hogs slaughtered constituted the greatest proportion of the total cost of materials at each census, representing 56.3 per cent of the total in 1914 and 1909, and 59.8 per cent in 1904.

The total value of products for the industry increased at each successive census, although the absolute and relative increase was greater for the period 1904-1909 than for the later period, 1909 to 1914. The most important products were fresh and cured pork, their combined value in 1914 representing 45.1 per cent of the total value of products for the industry, as compared with 46.5 per cent in 1909. All the other products presented separately in the table, except cured beef, show increases in value for the five-year period 1909-1914.

Table 34	1914	1909	1904
<b>MATERIALS.</b>			
Total cost.....	\$58,296,970	\$43,639,913	\$25,022,324
<b>Animals slaughtered:</b>			
Beefes—			
Number.....	269,719	265,191	180,613
Cost.....	\$16,375,682	\$11,613,314	\$6,490,507
Calves—			
Number.....	141,358	150,223	86,906
Cost.....	\$1,931,710	\$1,509,585	\$665,395
Sheep and lambs—			
Number.....	300,337	229,985	148,418
Cost.....	\$1,418,726	\$872,989	\$502,029
Hogs—			
Number.....	1,911,608	1,725,285	1,447,778
Cost.....	\$32,802,989	\$24,547,970	\$14,954,587
Dressed meat purchased for curing..	\$3,012,778	\$2,415,702	\$1,522,516
All other materials.....	\$2,755,089	\$2,590,353	\$887,800
<b>PRODUCTS.</b>			
Total value.....	\$64,960,396	\$49,795,368	\$28,720,044
<b>Fresh meat:</b>			
Beef—			
Pounds.....	118,027,111	119,597,666	89,925,370
Value.....	\$13,009,368	\$10,047,217	\$5,967,126
Veal—			
Pounds.....	11,157,758	12,921,896	6,680,682
Value.....	\$1,569,471	\$1,493,687	\$619,883
Mutton and lamb—			
Pounds.....	9,245,870	7,733,777	5,406,034
Value.....	\$1,169,054	\$763,364	\$472,931
Pork—			
Pounds.....	101,775,391	60,320,250	49,033,932
Value.....	\$12,969,369	\$6,950,354	\$4,514,690
Edible offal and all other fresh meat—			
Pounds.....	11,432,187	6,728,083	4,155,474
Value.....	\$337,898	\$403,467	\$241,956
<b>Cured meat:</b>			
Beef, pickled and other cured—			
Pounds.....	1,095,084	4,450,976	2,434,645
Value.....	\$245,076	\$328,334	\$175,972
Pork, pickled and other cured—			
Pounds.....	121,188,242	121,988,353	116,433,401
Value.....	\$16,632,373	\$16,202,666	\$10,182,724
Sausage:			
Pounds.....	31,047,288	24,240,181	17,402,744
Value.....	\$3,692,691	\$2,337,761	\$1,285,769
Meat puddings, scrapple, etc.:			
Pounds.....	3,592,848	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$328,866	( <sup>2</sup> )	( <sup>2</sup> )
Lard:			
Pounds.....	67,135,365	58,518,712	49,180,666
Value.....	\$7,147,093	\$6,566,768	\$3,427,690
Lard compounds and substitutes:			
Pounds.....	1,459,793	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$126,093	( <sup>2</sup> )	( <sup>2</sup> )
Tallow, oleo stock, and stearin:			
Pounds.....	24,345,291	11,088,893	( <sup>2</sup> )
Value.....	\$1,683,720	\$640,001	( <sup>2</sup> )
Soap stock:			
Pounds.....	4,821,543	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$244,193	( <sup>2</sup> )	( <sup>2</sup> )
Sausage casings:			
Pounds.....	855,544	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$90,136	( <sup>2</sup> )	( <sup>2</sup> )
Fertilizers and fertilizer materials:			
Tons.....	6,002	9,103	7,517
Value.....	\$170,422	\$166,354	\$104,092
<b>Hides and pelts:</b>			
Cattle—			
Number.....	269,719		
Pounds.....	16,146,170		
Value.....	\$2,391,107	410,573	254,572
Calf—			
Number.....	140,608	16,900,033	11,638,687
Pounds.....	1,080,454	\$1,970,069	\$1,037,296
Value.....	\$290,575		
Sheep—			
Number.....	300,259	232,775	148,118
Value.....	\$292,851	\$194,720	\$101,427
All other products.....	\$2,370,036	\$1,635,006	\$606,560

<sup>1</sup> Includes cost of "all other animals."

<sup>2</sup> Not reported separately.

**Printing and publishing.**—Table 35 gives the number of the different classes of newspapers and periodicals published in the state and their aggregate circulation per issue for 1914, 1909, and 1904.

In number of publications there was a net decrease of 8 during the period 1909 to 1914. The daily newspapers decreased by 3, the weeklies by 58, and the semiweeklies and triweeklies combined, 7. There was an increase of 3 Sunday newspapers, 31 monthly publications, and 20 quarterlies.

**Table 35**

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1914	1909	1904	1914	1909	1904
Total.....	1,173	1,181	1,250	15,707,507	10,753,143	9,321,545
Daily.....	181	184	190	2,484,548	1,542,855	1,357,135
Sunday.....	28	25	23	830,210	645,800	544,416
Semiweekly and triweekly.....	53	60	53	185,140	131,806	113,740
Weekly.....	641	609	781	3,110,883	2,913,730	2,747,511
Monthly.....	183	152	143	5,501,906	2,685,470	2,006,287
Quarterly.....	57	37	40	2,874,657	2,288,134	2,100,200
All other classes.....	30	24	20	720,244	545,270	333,247

In circulation of all publications there was for the later five-year period an increase of 4,954,454, or 46.1 per cent. The circulation of the dailies increased 941,693, or 61 per cent; the Sundays, 184,350, or 28.5 per cent; the weeklies, 197,153, or 6.8 per cent; the monthlies, 2,816,436, or 104.9 per cent; the quarterlies, 586,523, or 25.7 per cent. Of the daily newspapers, 137, with a circulation of 1,488,549, were evening editions. The great increase in the circulation of the monthly publications was due to the growth of magazines classed as general literature.

Table 36 gives the number and the circulation per issue of the various classes of publications in English and in foreign languages reported in 1914 and 1909.

**Table 36**

PERIOD OF ISSUE.	Cen- sus year.	TOTAL.		IN ENGLISH.		IN FOREIGN LANGUAGES. <sup>1</sup>	
		Num- ber.	Aggregate circulation per issue.	Num- ber.	Aggregate circulation per issue.	Num- ber.	Aggregate circulation per issue.
Total.....	1914 1909	1,173 1,181	15,707,507 10,753,143	1,055 1,052	14,879,708 9,919,905	118 120	827,889 834,080
Daily.....	1914 1909	181 184	2,484,548 1,542,855	109 173	2,359,583 1,459,190	12 11	130,965 89,695
Sunday.....	1914 1909	28 25	830,210 645,800	23 18	742,610 588,729	5 7	87,700 57,140
Semiweekly and tri- weekly.....	1914 1909	53 60	185,140 131,806	45 52	104,144 111,438	8 8	20,996 20,398
Weekly.....	1914 1909	641 609	3,110,883 2,913,730	579 630	2,783,531 2,543,016	62 69	327,352 369,814
Monthly.....	1914 1909	183 152	5,501,906 2,685,470	167 133	5,391,458 2,550,482	16 19	110,448 134,988
Quarterly.....	1914 1909	57 37	2,874,657 2,288,134	47 29	2,738,119 2,451,180	10 8	136,538 136,954
All other classes.....	1914 1909	30 24	720,244 545,270	25 17	706,354 520,128	5 7	13,800 25,151

<sup>1</sup> Includes those printed in English and a foreign language.

Eighty-one of the publications were in the German language, 6 in English and German, and 1 in English, German, and French. The circulation of the purely German was 529,400 copies per issue, or 63.9 per cent of the total circulation of foreign publications. Of these German publications, 7 were daily and 3 were Sunday newspapers, 40 were weeklies, 2 were semi-weeklies, and 2 triweeklies, 2 semimonthlies, 15 monthlies, 1 bimonthly, and 9 quarterlies.

Of the foreign-language dailies other than German, 2 each were in Bohemian and Hungarian and 1 in Yiddish. There were also 2 Sunday papers—1 in Bohemian and 1 in Polish—and 22 weeklies—3 in

Bohemian, 3 in English and German, 4 in Hungarian, 4 in Italian, 5 in Polish, 2 in Slovak, and 1 in English, German, and French. Of the foreign semiweeklies other than German, 1 was in Croatian and Servian, 1 in Roumanian, and 1 in Slovenian; the only tri-weekly was in Roumanian. There was 1 monthly publication, 1 bimonthly, and 1 quarterly in English and German, and 1 semimonthly in Hungarian.

Brick, tile, pottery, and other clay products.—Table 37 presents statistics of the products of this industry, classified by kind, quantity, and value, for 1914, 1909, and 1904. The quantities and values for 1914 are taken from the reports of the United States Geological Survey and represent sales during the year.

**Table 37**

	1914	1909	1904
Products, total value.....	\$38,067,374	\$30,531,002	\$25,086,870
Brick:			
Common—			
Thousands.....	436,117	420,009	459,293
Value.....	\$2,862,109	\$2,429,879	\$2,046,120
Vitrified, paving, etc.—			
Thousands.....	263,381	321,530	189,734
Value.....	\$3,682,230	\$3,113,123	\$1,915,139
Front—			
Thousands.....	188,074	130,084	82,552
Value.....	\$1,944,486	\$1,393,787	\$856,431
Fire—			
Thousands.....	102,735	103,148	87,026
Value.....	\$1,833,740	\$1,730,401	\$1,288,872
Fancy or ornamental.....	\$14,727	\$21,307	\$149,142
Sewer pipe.....	\$4,691,710	\$3,000,798	\$2,939,772
Fireproofing.....	\$2,200,544	\$801,637	\$577,014
Tile, not drain.....	\$2,331,079	\$1,912,343	\$971,785
Drain tile.....	\$1,580,505	\$2,032,528	\$1,174,290
Stove lining.....	\$51,192	\$23,803	(5)
Pottery:			
Red earthenware.....	\$300,453	\$145,137	\$181,736
Stoneware and yellow and Rock- ingham ware.....	\$1,592,102	\$1,806,798	\$1,146,718
White ware, including C. C. ware, white granite ware, semiporcel- lain ware, and semivitreous porcelain ware.....	\$10,227,806	\$8,884,189	\$8,446,808
Sanitary ware, including solid porcelain bath tubs, laundry tubs, etc.....	\$619,031	\$310,254	\$197,225
Porcelain electrical supplies.....	\$1,472,359	\$1,146,694	\$884,243
All other products.....	\$9,253,332	\$1,703,250	\$2,611,509

<sup>1</sup> Includes enameled brick, \$3,000, and sand-blue brick, \$8,750.  
<sup>2</sup> Includes refractory block or tile, boiler and locomotive tile and tank blocks, and other refractory products (0-inch equivalent).  
<sup>3</sup> Not reported separately.

Ohio was first among the states in the manufacture of clay products at each census. The total value of products increased 26.6 per cent from 1909 to 1914, as compared with an increase of 18.9 per cent for the earlier five-year period, while the increase for the decade was 50.5 per cent.

White ware, including C. C. (cream-colored) ware, semiporcelain ware, and semivitreous ware, was the leading product at each census and formed 26.5 per cent of the total value of products of the combined industries in 1914, 29.1 per cent in 1909, and 32.9 per cent in 1904, the increase in value being 15.1 per cent for 1909 to 1914, as compared with an increase of 5.2 per cent for the earlier five-year period. The value of stoneware, while showing an increase of 38.8 per cent for the decade, decreased 11.9 per cent from 1909 to 1914. From 1909 to 1914 common brick increased 3.6 per cent in quantity and 17.8 per cent in value, while for vitrified paving, etc., brick there

was a decrease of 9.6 per cent in quantity, accompanied by an increase of 18.3 per cent in value. The greatest absolute increase, \$1,681,921, or 55.9 per cent, is shown for sewer pipe, while the greatest relative increase, \$1,395,907, or 173.5 per cent, appears for fireproofing.

**Paper and wood pulp.**—Table 38 gives the quantities and cost of materials used, the quantities and values of the principal products, and detailed information regarding equipment for the years 1914, 1909, and 1904.

Table 38	1914	1909	1904
<b>MATERIALS.</b>			
Total cost.....	\$10,100,274	\$10,898,285	\$0,153,761
Pulp wood.....	\$187,090	\$443,206	\$180,724
Wood pulp, purchased:			
Tons.....	130,451	80,201	40,400
Cost.....	\$6,392,759	\$3,743,972	\$1,585,550
Ground—			
Tons.....	19,504	4,778	2,782
Cost.....	\$200,254	\$110,372	\$97,820
Sulphite fiber—			
Tons.....	86,550	47,167	27,344
Cost.....	\$4,335,536	\$2,292,178	\$1,109,884
Soda fiber—			
Tons.....	33,855	27,320	9,631
Cost.....	\$1,499,053	\$1,303,292	\$400,933
Other chemical fiber—			
Tons.....	9,533	930	283
Cost.....	\$367,916	\$38,130	\$10,013
Rags, including cotton and flax waste and sweepings:			
Tons.....	37,303	33,744	22,877
Cost.....	\$978,771	\$893,509	\$559,545
Old and waste paper:			
Tons.....	200,996	93,239	55,475
Cost.....	\$2,307,643	\$1,280,182	\$903,328
Manila stock, including jute bagging, rope, waste, threads, etc.:			
Tons.....	39,230	25,949	12,298
Cost.....	\$850,851	\$856,420	\$354,112
Straw:			
Tons.....	97,007	70,322	71,936
Cost.....	\$473,599	\$335,951	\$327,355
Fuel and rent of power.....	\$1,280,584	\$1,049,007	\$709,028
All other materials.....	\$3,037,977	\$2,289,858	\$1,825,110
<b>PRODUCTS.</b>			
Total value.....	\$23,284,102	\$16,965,260	\$10,961,527
Book, cover, plate, and coated paper:			
Tons.....	80,006	75,007	45,004
Value.....	\$7,712,459	\$6,762,103	\$4,019,447
Writing and other fine paper:			
Tons.....	24,155	19,579	8,722
Value.....	\$2,597,349	\$2,306,016	\$1,057,920
Wrapping paper:			
Tons.....	34,837	42,548	44,037
Value.....	\$1,954,706	\$2,380,232	\$1,786,172
Manila (rope, jute, etc.)—			
Tons.....	8,800	12,393	10,056
Value.....	\$810,247	\$1,204,635	\$777,055
Heavy (mill wrappers, etc.)—			
Tons.....	5,179	5,725	6,314
Value.....	\$158,715	\$147,809	\$164,873
Straw—			
Tons.....	6,395	8,682	9,078
Value.....	\$172,156	\$217,050	\$207,610
All other—			
Tons.....	14,463	15,748	18,589
Value.....	\$807,048	\$759,678	\$636,634
Boards:			
Tons.....	171,726	106,016	60,269
Value.....	\$5,537,694	\$3,159,290	\$1,716,740
Strawboard—			
Tons.....	39,496	37,710	33,953
Value.....	\$1,075,535	\$853,100	\$898,879
All other boards—			
Tons.....	132,230	68,306	26,316
Value.....	\$4,462,159	\$2,306,190	\$819,861
Building, roofing, and sheathing paper:			
Tons.....	28,172	18,974	15,400
Value.....	\$1,086,265	\$598,680	\$499,692
All other products.....	\$4,395,659	\$1,759,939	\$1,881,556
Wood pulp produced (including that used in mills where manufactured), tons.....	14,399	25,935	29,274

<sup>1</sup> Includes 121 tons of mechanical screenings, costing \$3,807.

Table 38—Continued.	1914	1909	1904
<b>EQUIPMENT.</b>			
Paper machines:			
Total number.....	90	113	96
Capacity, yearly, tons.....	478,244	414,650	281,075
Fourdriner—			
Number.....	44	63	37
Capacity per 24 hours, tons.....	659	575	299
Cylinder—			
Number.....	55	55	59
Capacity per 24 hours, tons.....	965	717	554
Pulp equipment:			
Grinders, number.....	4	5	5
Digesters, total number.....	7	11	8
Sulphite fiber, number.....	3	8	8
Soda fiber, number.....	4	3	.....
Capacity, yearly, tons of pulp, total.....	20,032	54,400	34,150
Ground, tons.....	6,532	7,800	5,321
Sulphite, tons.....	9,000	43,600	23,820
Soda, tons.....	4,600	3,000	.....

In the value of paper and wood pulp produced Ohio ranked sixth among the states in 1914, 1909, and 1904. The industry as a whole has increased rapidly since 1904, the total cost of materials making a gain of 161.8 per cent during the decade, and the total value of products increasing 112.4 per cent. The wood pulp purchased in 1914 formed 39.7 per cent of the total cost of materials. Sulphite fiber was the principal kind of pulp purchased at each census.

The use of waste paper as a paper stock increased remarkably during the decade, 200,996 tons being reported in 1914 as compared with only 55,475 tons in 1904, a gain of 262.3 per cent.

Book paper was the principal product of the paper mills of the state at each census, forming 33.1 per cent of the total value of products in 1914, 39.8 per cent in 1909, and 36.7 per cent in 1904. Of the specified kinds of paper produced, boards made the greatest per cent of increase in value during the decade, and writing and other fine paper ranked second. Wrapping paper decreased by nearly one-fourth in quantity during the period 1904-1914, but increased 9.4 per cent in value. The \$4,395,659 shown for "all other products" in 1914 includes newspapers, cardboard, bristol board, card middles, tickets, etc., tag stock, tissue paper, blotting paper, all other paper, and wood pulp, to the amount of \$2,942,636, and other products to the amount of \$1,453,023. The latter item includes principally paper bags and boxes.

The total quantity of wood pulp manufactured in the state has decreased steadily from census to census, the output in 1914 being only about one-half of the 1904 production. Practically the entire production in 1914 was used by the mills in which it was manufactured. Sulphite fiber was the principal kind of pulp manufactured at each census.

The total capacity of the paper machines in use in the state increased 70.1 per cent during the decade, but the capacity of the pulp equipment in tons of pulp decreased 41.3 per cent.

**Paint and varnish.**—Table 39 shows the kind, quantity, and value of the paint and varnish products of the state reported at the censuses of 1914, 1909, and 1904.

	1914	1909	1904
Products, total value.....	\$19,326,573	\$13,617,180	\$8,530,142
Pigments.....	\$717,352	\$940,613	\$781,117
Paints.....	\$11,401,735	\$7,074,807	\$4,389,085
In paste form, ground in oil—			
White lead—			
Pounds.....	28,941,498	21,057,529	19,003,727
Value.....	\$1,005,492	\$1,532,797	\$957,134
All other—			
Pounds.....	13,219,598	12,237,952	10,027,720
Value.....	\$1,085,100	\$807,156	\$701,083
In oil, ready mixed for use—			
Gallons.....	8,187,973	6,769,267	3,081,830
Value.....	\$8,411,143	\$5,334,014	\$2,731,703
Varnishes and japans.....	\$5,255,127	\$3,721,880	\$2,424,730
Oleoresinous varnishes—			
Gallons.....	3,268,124	3,790,073	1,736,430
Value.....	\$2,887,622	\$2,413,323	\$1,181,203
Spirit varnishes—			
Gallons.....	96,309	77,786	80,675
Value.....	\$83,236	\$100,848	\$107,147
Damar and similar turpentine and benzine varnishes—			
Gallons.....	150,659	309,080	624,205
Value.....	\$171,809	\$259,204	\$552,284
Drying japans and dryers—			
Gallons.....	1,227,184		
Value.....	\$550,181		
Baking japans and lacquers—			
Gallons.....	644,062	1,715,173	
Value.....	\$340,961	\$672,443	\$470,771
All other.....	\$1,216,818	\$270,071	\$83,325
Fillers:			
Liquid—			
Gallons.....	281,063	292,807	146,460
Value.....	\$163,538	\$155,869	\$89,213
Dry or in paste—			
Pounds.....	2,970,795	4,023,304	3,779,800
Value.....	\$175,981	\$159,570	\$246,412
Putty—			
Pounds.....	1,875,714		
Value.....	\$40,393		
Water paints and kalsomine, dry or in paste—			
Pounds.....	1,500,616	\$655,381	\$508,685
Value.....	\$45,569		
All other products.....	\$1,526,881		

<sup>1</sup> In addition, paints and varnishes to the value of \$140,005 were made in establishments not engaged primarily in the manufacture of paints or varnishes.

The products in 1914 exceeded in value those for 1909 by \$5,709,387, or 41.9 per cent, the increase in value of paints, not including pigments, being 48.6 per cent and in varnishes and japans 41.2 per cent. In 1914 paints constituted 59 per cent of all products in value, and varnishes and japans 27.2 per cent. In 1909 the corresponding ratios were 56.4 per cent and 27.3 per cent and in 1904, 51.5 per cent and 28.4 per cent, respectively.

Paints in oil, ready mixed for use, are the most important class of products. In 1914 the value of the same was \$8,411,143, which was 43.5 per cent of the total value of products, and exceeded the product of 1909 by over \$3,000,000. Oleoresinous varnishes ranked second in 1914 among the products, with a value of \$2,887,622, but show a decrease since 1909 in quantity, with an increase in value.

**Butter, cheese, and condensed milk.**—Ohio is one of the leading dairy products states, ranking eighth in value of products in 1914 and ninth in 1909. Table 40 gives the quantity and value of the principal products for 1914, 1909, and 1904.

The butter, cheese, and condensed-milk industry in 1914 was represented by 143 butter, 129 cheese, and 14

condensed-milk factories. During the decade 1904-1914 the total value of products increased \$14,732,755, or 320.8 per cent. The increase from 1904 to 1909 was 111 per cent and from 1909 to 1914, 99.4 per cent. During the later five-year period the total quantity of butter produced increased 146.2 per cent and its value 151.1 per cent, the value in 1914 forming 64.8 per cent of the total value of products of the industry, as compared with 51.4 per cent in 1909.

	1914	1909	1904
Products, total value.....	\$19,325,077	\$9,689,670	\$4,593,222
Butter:			
Pounds.....	43,064,562	17,401,251	11,501,981
Value.....	\$12,520,138	\$4,985,273	\$2,534,581
Packed solid—			
Pounds.....	23,616,610	11,265,341	7,233,289
Value.....	\$6,719,266	\$3,162,518	\$1,527,514
Prints or rolls—			
Pounds.....	19,447,913	6,225,910	4,358,692
Value.....	\$5,800,872	\$1,822,755	\$1,007,067
Cream sold:			
Pounds.....	13,012,456	4,735,900	1,843,868
Value.....	\$1,810,242	\$500,528	\$116,253
Cheese:			
Pounds.....	8,717,096	11,800,601	17,851,773
Value.....	\$1,051,705	\$1,533,517	\$1,656,963
Full cream—			
Pounds.....	6,104,862	9,768,070	13,219,415
Value.....	\$881,309	\$1,305,401	\$1,231,779
Part cream—			
Pounds.....	1,797,534	1,550,500	
Value.....	\$78,564	\$197,056	
Other kinds—			
Pounds.....	815,000	541,071	4,132,858
Value.....	\$101,862	\$30,400	\$124,184
Condensed milk:			
Pounds.....	50,509,848	37,655,347	1,947,218
Value.....	\$3,066,631	\$2,409,059	\$139,063
Sweetened—			
Pounds.....	3,436,823	4,232,160	266,259
Value.....	\$199,062	\$250,529	\$15,975
Unsweetened and evaporated—			
Pounds.....	47,073,025	33,423,187	1,680,968
Value.....	\$2,866,669	\$2,153,430	\$123,088
All other butter, cheese, and condensed-milk factory products.....	\$972,497	\$161,537	\$127,212
All other products.....	\$401,674	\$98,856	\$20,150

Cheese decreased in quantity and in value during the decade and during each five-year period. From 1904 to 1909 the quantity decreased 31.6 per cent and the value 7.4 per cent, while from 1909 to 1914 the decrease in these items was 26.5 per cent and 31.4 per cent, respectively.

The output of condensed milk increased from less than 2,000,000 pounds in 1904 to over 37,000,000 pounds in 1909, and to more than 50,000,000 pounds in 1914. The remarkable growth of this branch of the industry was due almost entirely to the increased production of unsweetened condensed milk, the output of which in 1914 formed 93.2 per cent of the total quantity of condensed milk reported and its value represented 93.5 per cent of the total value; corresponding proportions for 1909 are 88.8 per cent and 89.3 per cent, respectively. From 1909 to 1914 sweetened condensed milk decreased 795,337 pounds, or 18.8 per cent, in quantity and \$56,567, or 22.2 per cent, in value.

**Glass.**—Table 41 shows the value of the different classes of glass products and the kind and quantity of the principal varieties of pressed and blown glass and of bottles and jars, for 1914, 1909, and 1904.

In 1914 Ohio ranked first among the states in the production of beer, soda, and mineral water bottles;

second in tableware, jellies, tumblers and goblets, lamps, and liquors and flasks; and third in window glass, blown tumblers, stem ware and bar goods, and produced more than one-third of the glass tableware and more than one-fourth of the lamps, gas goods, and beer, soda, and mineral water bottles manufactured in the United States.

	1914	1909	1904
Products, total value.....	\$19,191,342	\$14,358,274	\$9,026,208
Building glass.....	3,805,660	2,744,513	1,625,126
Pressed and blown glass.....	6,490,498	6,190,707	3,954,660
Bottles and jars.....	7,422,402	4,717,658	2,961,727
All other products.....	1,472,778	735,396	484,695
<i>Kind and quality of pressed and blown glass and bottles and jars.</i>			
<b>Pressed and blown glass:</b>			
Tableware, 100 pieces.....	525,673	248,815	161,900
Jellies, tumblers and goblets, dozens.....	3,050,568	4,133,100	2,088,925
Lamps, dozens.....	182,440	50,147	25,744
Chimneys, dozens.....	1,102,386	1,215,815	1,600,314
Lantern globes, dozens.....	318,886	213,586	255,805
Shades, globes, and other gas goods, dozens.....	625,010	641,896	162,940
Blown tumblers, stem ware, and bar goods, dozens.....	1,739,548	2,255,805	1,835,350
Cut ware, dozens.....	15,333	6,000	5,850
<b>Bottles and jars:</b>			
Beer, soda, and mineral, gross....	1,220,253	585,924	433,546
Liquors and flasks, gross.....	545,541	222,704	268,782
Fruit jars, gross.....	73,645	21,626	(1)
Packers' and preservers', gross....	269,673	138,269	10,155

<sup>1</sup> Not shown separately.

Pressed and blown glass was the most important product of the glass industry in Ohio in 1904 and 1909, and while it shows an increase in 1914 over that reported in 1909, and represents 33.8 per cent of the total value of products, bottles and jars displaced it for first place in 1914, with 38.7 per cent of the total.

To avoid disclosures of individual operations the quantity of a number of items have not been included in the table. The most important of these are window, obscured and plate glass, globes and other electrical goods, opal and decorated ware, bottles and jars for prescriptions, vials and druggists' ware, milk jars, and patent and proprietary bottles.

The number of furnaces, including both active and idle, was 139 in 1914, as compared with 138 in 1909 and 93 in 1904. Sixty-five of the total number in 1914 were pot furnaces, with a capacity of 860 pots. The corresponding figures for 1909 were 68 pot furnaces, with 736 pots, and in 1904, 43 pot furnaces, with 620 pots. Forty-one tank furnaces, with 615 rings, were reported in 1914; 57 in 1909, with 532 rings; and 36 in 1904, with 303 rings. Seven intermittent or day-tank furnaces were reported in 1914, with a capacity of 26 tons, as compared with 13 in 1909, with a capacity of 30 tons, and 14 in 1904, with a capacity of 42 tons. Twenty-six tanks, equipped with 52 automatic machines, were reported separately in 1914, corresponding figures for which were included with tank furnaces in 1909.

Gas is the principal fuel used in the glass industry in Ohio, over seven billion cubic feet being used in 1914.

**Agricultural implements.**—Table 42 gives the value of the principal classes of agricultural implements manufactured in the state for 1914, 1909, and 1904.

	1914	1909	1904
Products, total value.....	\$17,484,615	\$14,440,461	\$12,891,197
Plows and cultivators.....	4,627,191	3,062,194	3,031,384
Harvesting implements.....	2,573,726	2,075,727	3,193,853
Seed separators.....	1,364,209	858,106	501,482
Planters and seeders, and all other agricultural implements, including parts.....	6,156,170	7,536,850	5,641,056
All other products.....	2,379,464	307,584	523,422
Amount received for repair work.....	383,855		

Ohio ranked third among the states in the value of its output of agricultural implements at each of the last three censuses. The total value of products increased 35.6 per cent during the decade and 21.1 per cent for the five-year period 1909–1914. Plows and cultivators were the principal class of agricultural implements manufactured in 1914 and 1909, representing 26.5 per cent of the total value of products at the 1914 census and 21.2 per cent in 1909. Harvesting implements was the principal class in 1904. Planters and seeders could not be shown separately without disclosing the operations of individual establishments. The item "All other products" in 1914 includes engines to the value of \$1,697,777, and other products, such as wagons, windmills, castings, etc., to the value of \$681,687.

**Carriages and wagons and materials.**—Table 43 shows the number and value of the different kinds of carriages and wagons manufactured in 1914, 1909, and 1904.

	1914	1909	1904
Products, total value.....	\$16,102,449	\$21,949,459	\$24,002,500
<b>Carriages (family and pleasure):</b>			
Number.....	71,972	135,877	199,428
Value.....	\$4,611,603	\$8,126,285	\$11,373,346
<b>Wagons (business, farm, etc.):</b>			
Number.....	25,417	28,882	40,905
Value.....	\$2,384,122	\$2,733,606	\$2,703,560
<b>Public conveyances:</b>			
Number.....	63	657	217
Value.....	\$29,706	\$206,458	\$107,141
<b>Sleighs and sleds:</b>			
Number.....	3,907	7,589	8,470
Value.....	\$30,711	\$78,542	\$52,166
All other products, including parts and amount received for repair work.....	\$9,136,307	\$10,804,568	\$9,766,281

Ohio ranked first among the states in the manufacture of carriages and wagons at the censuses of 1909 and 1904, but dropped to second place in 1914, being displaced by Indiana. There has been a steady decline in the total value of products for the industry at each successive census, the decrease from 1904 to 1909 being \$2,053,041, or 8.6 per cent, and from 1909 to 1914, \$5,757,010, or 26.2 per cent. Each class of vehicles shown in the table decreased both in number and value from 1909 to 1914. The greatest absolute decrease is shown for family and pleasure carriages, their number decreasing 63,905, or 47 per cent, and their value, \$3,514,682, or 43.3 per cent, while the greatest relative decrease is shown for the number and value of public conveyances, 90.4 per cent and 85.6 per cent, respectively. The decline is due largely to

the rapid development of the automobile industry in recent years; many of the factories formerly manufacturing carriages and wagons now being engaged in the manufacture of automobiles.

**Leather, tanned, curried, and finished.**—Table 44 gives, for 1914, 1909, and 1904, the quantities and values of the principal products reported for this industry.

	1914	1909	1904
Products, total value.....	\$11,027,910	\$10,127,830	\$6,512,754
Harness leather:			
Sides.....	335,127	303,081	300,434
Value.....	\$2,802,057	\$2,540,892	\$1,800,772
Upholstery leather (automobile, furniture, and carriage).....	3,404,500	3,734,827	1,798,850
All other leather.....	4,024,836	3,580,140	1,787,099
All other products.....	485,763	265,277	1,095,397
Work on materials for others.....	8,770	700	30

Ohio was eighth in rank among the states in the manufacture of leather in 1914, having advanced from tenth place in 1909. The total value of products for the industry increased 55.5 per cent from 1904 to 1909 and 14.8 per cent from 1909 to 1914. Upholstery leather (automobile, furniture, and carriage leather) was the product of chief value both in 1914 and 1909, although there was a decrease in value of \$330,237, or 8.8 per cent, for the five-year period. During the same period the value of harness leather increased 10.3 per cent, but there was a decrease of 28,854, or 7.9 per cent, in the number of sides reported. The manufacture of upper and sole leather was also important, but in order to avoid disclosing the operations of individual establishments the statistics for this branch of the industry have been included in "all other leather." Of the total value of leather made in Ohio at each of the censuses shown, Cincinnati contributed 52.3 per cent in 1904, 50 per cent in 1909, and 46.7 per cent in 1914.

The number of cattle hides treated in 1914 (460,521) represents a decrease of 53,705, or 10.4 per cent, as compared with the number reported in 1909, but their cost increased \$350,522, or 6.8 per cent.

**Chemicals.**—Table 45 presents statistics for the chemical industry in Ohio for 1914 and 1909.

	1914	1909
Products, total value.....	\$12,400,360	\$8,361,085
The chemical industry.....	\$11,388,140	\$7,742,045
Sulphuric, nitric, and mixed acids industry, and subsidiary chemical products from other industries.....	\$1,102,220	\$619,040
Acids.....	\$2,435,302	\$1,064,157
Sodas and sodium compounds.....	\$4,530,911	\$2,285,769
Compressed or liquefied gases.....	\$591,248	\$245,541
Glycerin.....		
Pounds.....	6,437,784	6,976,850
Value.....	\$1,140,630	\$1,140,630
Other chemicals.....	\$2,810,810	\$2,532,033
All other products.....	\$875,803	\$493,260

The classified chemical industry includes establishments engaged primarily in the manufacture of acids, with the exception of sulphuric, nitric, and mixed acids, for which there is a separate classification, sodas, potashes, alums, coal-tar products, cyanides,

bleaching materials, compressed or liquefied gases, alkaloids, salts of various metals, chloroform, ether, glycerin, etc., and elementary and compound substances produced by the aid of electricity. Of these groups, sodas constituted the most important for Ohio. There is a considerable production of chemicals by establishments classified under other heads, and in the presentation of statistics for products in detail these have been included, but their value as a total is shown separately from that of the classified industry.

In the production of chemicals Ohio ranked fifth among the states at the censuses of 1914 and 1909, the value of its output constituting 7.2 per cent of the total for the United States in 1914, 6.6 per cent in 1909, 6.1 per cent in 1904, and 7.4 per cent in 1899. The total value of products of the classified chemical industry in Ohio in 1914 shows an increase of \$3,646,095, or 47.1 per cent, over that of 1909.

**Petroleum, refining.**—Table 46 gives the statistics of materials used, the quantities and values of the principal products, and detailed information regarding equipment, for 1914, 1909, and 1904.

	1914	1909	1904
<b>MATERIALS.</b>			
Total cost.....	\$9,024,445	\$8,144,583	\$7,662,397
Crude petroleum: 1			
Barrels (42 gallons).....	5,026,251	4,833,675	4,195,871
Mid-Continent.....	2,076,019		
Lima-Indiana.....	1,360,408	2,410,950	(2)
Illinois.....	850,453	2,167,352	
Pennsylvania grade.....	143,283	255,373	
Cost.....	\$7,901,048	\$4,987,558	\$5,143,137
Sulphuric acid, sulphur, and caustic soda.....	\$182,300	\$250,480	(2)
Containers and materials therefor:			
Wooden.....	\$301,123	\$503,079	\$936,659
Metal.....	\$115,103	\$80,408	
All other materials.....	\$1,363,002	\$2,254,058	\$1,582,601
<b>PRODUCTS.</b>			
Total value.....	\$11,160,180	\$10,753,738	\$10,948,861
Naphthas and lighter products:			
Gasoline (from crude petroleum)—			
Barrels (50 gallons).....	4,821,524		467,594
Value.....	\$3,568,834		\$1,676,529
All other—		\$39,828	
Barrels.....	66,144	\$2,224,233	
Value.....	\$167,483		
Illuminating oils:			
Barrels.....	1,013,058	1,204,186	
Value.....	\$2,072,015	\$2,618,702	\$1,001,105
Fuel oils:			
Barrels.....	1,208,016	1,257,950	\$5,188,808
Value.....	\$1,844,644	\$1,302,720	
Lubricating oils:			
Barrels.....	420,843	543,526	336,116
Value.....	\$1,000,185	\$2,002,387	\$1,540,896
Residuum or tar:			
Barrels.....	132,180	101,105	111,339
Value.....	\$322,272	\$193,408	\$210,911
Greases:			
Barrels.....	16,331	18,076	10,650
Value.....	\$185,051	\$207,225	\$158,885
Paraffin wax:			
Barrels.....	50,305	54,536	47,633
Value.....	\$410,929	\$470,760	\$549,515
All other products.....	\$600,876	\$1,074,198	\$1,623,320
<b>EQUIPMENT.</b>			
Stills, number.....	174	198	217
Steam—			
Number.....	23	38	33
Capacity, barrels (42 gallons).....	21,951	26,589	(2)
Fire—			
Number.....	151	160	184
Capacity.....	105,063	70,292	(2)

<sup>1</sup> Marketed production of crude petroleum produced in the state: 1914, 8,536,352 barrels; 1909, 10,632,793 barrels; 1904, 18,876,631 barrels; 1899, 21,142,103 barrels.

<sup>2</sup> Figures not available.

<sup>3</sup> Includes some partly refined oils and waxes.

<sup>4</sup> In addition, there were produced at the wells in 1914, 48,803 barrels (50 gallons) of casing-head gasoline, valued at \$184,007.

	1914	1909	1904
<b>EQUIPMENT—continued.</b>			
Agitators, number.....	53	44	52
Storage tanks for:			
Crude petroleum—			
Number.....	20	61	20
Capacity (gallons).....	14, 120, 000	21, 521, 000	8, 964, 000
Refined petroleum products—			
Number.....	321		
Capacity.....	26, 905, 000		
Fuel oil—			
Number.....	80	614	490
Capacity.....	26, 771, 000	78, 612, 000	84, 880, 000
Other storage tanks—			
Number.....	631		
Capacity.....	49, 754, 000		

In 1914 Ohio ranked tenth among the states in value of output of this industry, while in 1909 it ranked seventh. The total production of refined oils in 1914 was 3,619,585 barrels, of which fuel oils constituted 35.9 per cent; illuminating oils, 28 per cent; gasoline and naphthas, 24.5 per cent; and lubricating oils, 11.6 per cent. In 1909 the production of refined oils was 3,545,490 barrels, of which fuel oils formed 35.5 per cent; illuminating oils, 34 per cent; gasoline and naphthas, 15.2 per cent; and lubricating oils, 15.3 per cent. Of the crude petroleum used in 1914, a little more than one-half (53.2 per cent) was reported as from the Mid-Continent field; 26.9 per cent from the Lima-Indiana field; 17 per cent, Illinois; and 2.9 per cent of Pennsylvania grade. In 1909 one-half was Lima-Indiana oil, and the balance Illinois and Pennsylvania grade.

**Hosiery and knit goods.**—Table 47 shows for this industry, for 1914, 1909, and 1904, the quantities and cost of materials used and the quantities and values of the products.

The principal material used in the industry was cotton yarn purchased, its cost both in 1914 and 1909 representing about one-third of the total cost of all materials. In 1914, as compared with 1909, there was an increase of 46.3 per cent in the quantity used and 42.5 per cent in its cost. In 1914 cotton yarn formed 64.3 per cent of the total quantity and 44.1 per cent of the cost of all yarns purchased, the corresponding proportions for 1909 being 60.2 per cent and 38.0 per cent, respectively. In 1904 worsted yarn was the principal item of cost.

The total value of products of the industry increased 116.5 per cent for the decade, although the relative increase was greater for the earlier five-year period, 1904-1909, than for the more recent period 1909-1914, being 61 per cent and 34.5 per cent, respectively. The principal products in 1914 were combination suits, their value representing 37 per cent of the total value of all products, as compared with 32.3 per cent in 1909; the increase in number for the five-year period was 51.9 per cent, while their value increased 54.4 per cent. Cotton combination suits constituted 75.4 per cent of the total number in 1914 and 67.6 per cent of their total value, the corresponding proportions for 1909 being 68.4 per cent and 50.5 per cent, respectively. Substantial gains were made both in number

and value of hose and half hose during the decade, and in value during each five-year period. In 1914 the value of merino hose and half hose, although representing a decrease of 19.3 per cent as compared with 1909, formed 42.1 per cent of the total value of all hose and half-hose, and in 1909, 76 per cent. The most remarkable increase from 1909 to 1914 is shown for the number and value of "all other" hose and half hose, from 3,725 dozen pairs, valued at \$8,725, in 1909, to 233,311 dozen pairs, valued at \$376,618, in 1914. Other important products for which increases are shown both in number and value for the later five-year period are hoods, scarfs, etc., and cardigan jackets, sweaters, etc.

	1914	1909	1904 <sup>1</sup>
<b>MATERIALS.</b>			
Total cost.....	\$5, 032, 525	\$3, 851, 419	\$2, 177, 368
Yarns, purchased:			
Cotton—			
Pounds.....	6, 155, 521	4, 207, 238	1, 649, 479
Cost.....	\$1, 765, 372	\$1, 238, 527	\$444, 930
Woolen—			
Pounds.....	776, 308	773, 371	327, 684
Cost.....	\$540, 454	\$439, 977	\$215, 232
Worsted—			
Pounds.....	1, 440, 655	1, 095, 829	784, 770
Cost.....	\$1, 040, 970	\$1, 003, 980	\$760, 490
Merino—			
Pounds.....	1, 107, 919	842, 181	564, 372
Cost.....	\$493, 278	\$308, 934	\$195, 266
All other—			
Pounds.....	78, 707	66, 081	14, 262
Cost.....	\$169, 906	\$177, 528	\$32, 941
Chemicals.....	\$37, 534	\$22, 591	\$21, 730
Fuel and rent of power.....	\$74, 288	\$37, 563	\$25, 461
All other materials.....	\$920, 714	\$532, 319	\$481, 318
<b>PRODUCTS.</b>			
Total value.....	\$8, 654, 103	\$6, 433, 431	\$3, 997, 047
Hose and half hose:			
Cotton—			
Dozen pairs.....	107, 411	72, 602	74, 840
Value.....	\$184, 169	\$150, 464	\$131, 142
Merino or mixed—			
Dozen pairs.....	253, 477	323, 048	239, 162
Value.....	\$407, 241	\$504, 939	\$321, 864
All other—			
Dozen pairs.....	233, 311	3, 725	97, 815
Value.....	\$376, 618	\$8, 725	\$156, 862
Shirts and drawers:			
Cotton—			
Dozens.....	48, 410	87, 151	82, 264
Value.....	\$174, 040	\$106, 667	\$228, 170
All other—			
Dozens.....	21, 766	39, 154	37, 190
Value.....	\$147, 300	\$234, 037	\$247, 771
Combination suits:			
Cotton—			
Dozens.....	219, 704	131, 186	55, 822
Value.....	\$2, 165, 308	\$1, 047, 775	\$395, 058
Merino—			
Dozens.....	62, 986	58, 063	15, 643
Value.....	\$863, 951	\$961, 771	\$212, 379
All other—			
Dozens.....	8, 801	2, 683	4, 623
Value.....	\$176, 070	\$66, 938	\$111, 326
Gloves and mittens:			
Dozen pairs.....	253, 137	319, 522	231, 990
Value.....	\$248, 048	\$239, 848	\$360, 111
Hoods, scarfs, etc.:			
Dozens.....	537, 175	272, 478	206, 024
Value.....	\$1, 587, 664	\$1, 064, 069	\$482, 070
Cardigan jackets, sweaters, etc.:			
Dozens.....	150, 295	115, 457	(2)
Value.....	\$1, 669, 895	\$1, 355, 728	(2)
All other products.....	\$653, 199	\$581, 570	\$1, 349, 794

<sup>1</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.

<sup>2</sup> Included in "all other products."

**Boots and shoes.**—Table 48 shows the number of pairs of the various kinds of boots, shoes, and slippers manufactured in Ohio in 1914, 1909, and 1904.

**Table 48**

	NUMBER OF PAIRS.		
	1914	1909	1904
Products, total.....	17,973,441	13,908,915	13,263,416
Boots and shoes.....	17,401,199	17,693,316	13,063,269
Men's.....	1,419,925	1,792,194	1,661,202
Boys' and youths'.....	1,734,087	1,372,330	1,590,568
Women's.....	10,986,825	11,154,083	9,797,093
Misses' and children's.....	3,030,492	3,464,709	5,014,430
Slippers.....	662,456	1,147,239	192,053
All other footwear.....	149,786	68,360	8,064

The boot and shoe industry in Ohio in 1914 showed a decrease of 4.9 per cent from the production in 1909. Women's boots and shoes were by far the most important class manufactured, 13.6 per cent of the total for this class for the United States in 1914 being made in Ohio, a larger proportion than in 1909, although there was a decrease in the number produced of 187,258 pairs, or 1.7 per cent.

Table 49 shows the number of pairs of the various kinds of footwear produced in 1914 and 1909, classified according to method of manufacture.

**Table 49**

PRODUCT.	Con-sus year.	NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.			
		Total.	Welted.	McKay.	Turned, and wood or metal fastened.
Boots and shoes.....	1914	17,161,199	6,027,083	9,914,087	1,219,420
	1909	17,693,316	5,760,738	9,706,085	2,225,893
Men's, boys', and youths'	1914	3,154,832	1,217,226	1,796,438	141,218
	1909	3,074,524	1,471,204	806,345	796,975
Women's.....	1914	10,986,825	4,093,037	5,332,200	1,080,988
	1909	11,154,083	4,038,041	6,073,809	1,041,033
Misses' and children's....	1914	3,030,492	206,220	2,786,049	47,223
	1909	3,464,709	250,893	2,826,531	387,285
Slippers.....	1914	662,456	.....	470,055	<sup>1</sup> 192,401
	1909	1,147,239	40,376	579,765	518,098
All other footwear.....	1914	149,786	.....	.....	149,786
	1909	68,360	.....	.....	<sup>2</sup> 68,360

<sup>1</sup> Includes "welted."

<sup>2</sup> Includes all kinds reported.

Of the total number of boots and shoes manufactured, 57.8 per cent were made by the McKay method and 35.1 per cent were welted. Of the men's, boys', and youths', 56.9 per cent were made by the McKay method, and 38.6 per cent were welted; of the women's, which formed 63.9 per cent of all the boots and shoes made in the state, 48.6 per cent were of the McKay variety and 42 per cent were welted. Misses' and children's shoes were made principally by the McKay method, 91.7 per cent being of this type.

**Laundries.**—Statistics for power laundries are not included in the general tables or in the totals for all manufacturing industries. Table 50, however, summarizes these statistics for Ohio for 1914 and 1909.

In 1914 Ohio ranked sixth the states both in number of persons engaged in the industry and in

amount received for work done. The foregoing table shows increases between 1909 and 1914 for all items given except amount paid for contract work. The amount received for work done increased \$2,433,537, or 45.2 per cent, and the average number of wage earners 1,372, or 23.3 per cent. In 1914 establishments owned by individuals reported 18.2 per cent of the amount received for work done; those owned by corporations, 62.7 per cent; and those under all other forms of ownership, 19.1 per cent. Seventy-seven establishments had receipts for the year of less than \$5,000; 121, receipts of \$5,000 but less than \$20,000; 78, receipts of \$20,000 but less than \$100,000; and 20, receipts of \$100,000 but less than \$1,000,000.

**Table 50**

	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase, <sup>1</sup> 1909-1914.
	1914	1909	
Number of establishments.....	296	253	17.0
Persons engaged.....	8,434	6,773	24.5
Proprietors and firm members.....	309	277	11.6
Salaries employees.....	800	603	42.6
Wage earners (average number).....	7,265	5,893	23.3
Primary horsepower.....	10,000	7,431	46.8
Capital.....	\$5,086,162	\$3,802,957	33.2
Salaries and wages.....	3,996,049	2,772,137	44.2
Salaries.....	830,455	512,068	63.6
Wages.....	3,167,194	2,259,179	39.7
Paid for contract work.....	2,555	23,874	-89.3
Rent and taxes.....	180,002	122,580	46.8
Cost of materials.....	1,361,546	871,722	56.2
Amount received for work done.....	7,822,491	5,388,954	45.2

<sup>1</sup> A minus sign (-) denotes decrease.

Table 51 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 51**

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January.....	7,132	5,041	93.8	92.9
February.....	7,007	5,020	93.0	92.7
March.....	7,135	5,794	93.9	95.5
April.....	7,270	5,800	95.8	95.6
May.....	7,362	5,897	96.9	97.2
June.....	7,599	6,043	100.0	96.6
July.....	7,505	6,054	98.8	99.8
August.....	7,391	5,976	97.3	98.5
September.....	7,349	6,069	96.7	100.0
October.....	7,166	5,953	94.3	98.2
November.....	7,119	5,912	93.7	97.4
December.....	7,092	5,946	93.3	98.0

Table 52 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 52

	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
	1914	1909	Amount.		Per cent of increase, <sup>1</sup> 1909-1914
			1914	1909	
Primary power, total.....	582	327	10,009	7,431	46.8
Owned.....	265	245	9,626	7,022	37.1
Steam.....	222	198	8,902	6,235	42.8
Internal combustion.....	42	45	609	737	-5.2
Water wheels and motors.....	1	2	25	50	-50.0
Rented.....	317	82	1,283	409	213.7
Electric.....	317	82	1,228	401	206.2
Other.....			55	8	587.5
Electric—Generated in establishment reporting.....	1,036	605	2,195	1,338	64.1

<sup>1</sup> A minus sign (-) denotes decrease.

Table 53 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.

KIND.	Unit.	QUANTITY.		Per cent of increase, <sup>1</sup> 1909-1914.
		1914	1909	
Anthracite coal.....	Tons, 2,240 pounds....	1,994	398	401.0
Bituminous coal.....	Tons, 2,000 pounds....	57,922	59,799	-3.1
Coke.....	Tons, 2,000 pounds....	651	77	745.4
Oil.....	Barrels.....	116	73	58.9
Gas.....	1,000 cubic feet.....	742,424	649,446	14.3

<sup>1</sup> A minus sign (-) denotes decrease.

GENERAL TABLES.

Table 54 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 cities having 50,000 inhabitants or more; and for cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

Table 55 presents, for 1914, in the state as a whole and in cities with 50,000 inhabitants or more, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments; and for cities having from 10,000 to 50,000 inhabitants, for all industries.

TABLE 54.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Expressed in thousands.			INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Expressed in thousands.		
					Wages.	Cost of materials.	Value of products.						Wages.	Cost of materials.	Value of products.

THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

All industries.....	1914	15,658	610,435	2,002,780	\$317,924	\$1,020,782	\$1,782,808	Brick, tile, pottery, and other clay products.	1914	549	27,334	70,432	\$16,487	\$12,176	\$38,067
	1909	15,138	446,934	1,583,155	245,450	824,202	1,437,930		1909	703	23,985	64,520	12,155	8,065	30,531
	1904	13,785	364,298	1,110,932	182,420	527,637	960,812		1904	795	22,638	58,045	10,619	6,456	25,687
Agricultural implements.	1914	59	5,464	11,677	3,829	7,810	17,485	Brushes.....	1914	16	677	848	298	732	1,544
	1909	55	5,997	9,867	3,155	6,319	14,440		1909	22	425	675	158	625	1,219
	1904	71	5,659	8,354	2,910	5,692	12,891	Butter, cheese, and condensed milk.	1914	280	1,480	6,677	1,049	15,968	19,326
Artificial stone products	1914	403	954	2,949	535	793	1,946		1909	325	1,037	3,386	557	7,085	9,690
	1909	299	802	1,325	499	1,378	1,378		1904	431	1,488	3,462	292	3,729	4,593
	1904	67	280	347	135	167	446	Canning and preserving.	1914	2 135	2,507	7,079	946	5,897	8,951
Automobiles, including bodies and parts.	1914	102	18,752	30,249	13,411	55,330	85,711		1909	107	2,000	4,244	532	3,102	4,660
	1909	75	12,130	14,433	7,740	18,522	38,839		1904	107	2,144	3,580	577	2,701	4,401
	1904	22	2,722	1,877	1,617	2,553	6,358	Carriages and wagons and materials.	1914	341	5,997	13,381	3,830	8,561	16,192
Awnings, tents, and sails.	1914	38	615	348	299	1,270	2,131		1909	407	8,815	14,771	4,047	11,414	21,949
	1909	30	392	260	163	853	1,387		1904	456	11,027	16,936	5,269	12,856	24,003
	1904	17	241	107	101	320	718	Carriages and sleds, children's.	1914	7	1,267	1,049	762	1,121	2,429
Bags, paper.....	1914	9	646	853	305	1,831	2,893		1909	9	1,035	985	490	785	1,977
	1909	8	557	508	240	1,638	2,393		1904	8	1,086	738	481	803	1,823
	1904	9	482	1,389	177	955	1,513	Cars and general shop construction and repairs by electric-railroad companies.	1914	48	1,870	3,087	1,228	1,077	2,386
Belting, leather.....	1914	10	78	216	56	543	730		1909	49	1,318	3,635	722	801	1,691
	1909	8	107	495	80	795	1,080		1904	5	160	20	94	55	172
	1904	6	80	307	48	550	753	Cars and general shop construction and repairs by steam railroad companies.	1914	88	21,639	31,389	0,471	16,054	33,286
Blacking and cleansing and polishing preparations.	1914	54	104	237	53	339	798		1909	71	20,728	10,422	12,726	14,266	28,600
	1909	49	103	297	50	297	672		1904	74	17,026	13,954	9,800	10,225	21,428
	1904	21	38	60	14	62	152	Cars, electric-railroad, not including operations of railroad companies.	1914	4	916	4,213	612	2,289	3,594
Boots and shoes, including cut stock and findings.	1914	73	14,674	9,945	7,132	19,883	33,642		1909	4	734	2,875	471	1,094	1,955
	1909	72	16,026	8,925	6,646	18,872	31,551		1904	4	795	1,850	475	1,069	1,828
	1904	73	14,032	6,113	5,275	14,989	25,735	Cars, steam-railroad, not including operations of railroad companies.	1914	5	2,885	6,420	2,434	8,558	11,796
Boxes, cigar.....	1914	26	443	564	161	339	628		1909	6	2,282	4,410	1,304	4,195	6,451
	1909	31	531	1,029	107	360	711		1904	5	2,065	1,725	1,198	3,353	5,839
	1904	30	480	506	136	374	660	Cement.....	1914	7	849	6,075	521	890	2,112
Boxes, fancy and paper.	1914	49	2,456	1,941	961	2,087	4,060		1909	9	887	12,985	544	938	1,465
	1909	46	2,530	1,825	830	1,931	3,635		1904	12	743	9,579	452	534	1,508
	1904	42	1,743	827	475	1,072	2,133	Chemicals.....	1914	29	2,017	18,751	1,460	6,726	11,388
Brass, bronze, and copper products.	1914	84	2,277	4,393	1,557	4,190	7,843		1909	33	1,132	11,715	749	1,748	7,742
	1909	82	2,232	4,214	1,372	3,533	6,572		1904	3 18	1,025	6,109	652	3,003	4,590
	1904	70	1,485	1,800	808	1,545	3,347	Clocks and watches, including cases and materials.	1914	9	1,305	626	779	679	1,808
Bread and other bakery products.	1914	1,634	7,665	8,978	4,783	17,295	30,561		1909	9	1,456	877	784	526	1,981
	1909	1,467	5,972	5,398	3,371	13,666	23,007		1904	6	1,712	649	851	714	1,869
	1904	1,138	5,295	3,875	2,520	9,959	15,611								

<sup>1</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.  
<sup>2</sup> Includes "canning and preserving fruits and vegetables" and "pickles, preserves, and sauces."  
<sup>3</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.

MANUFACTURES—OHIO.

TABLE 54.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Wages. Cost of ma- terials. Value of prod- ucts.			INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Wages. Cost of ma- terials. Value of prod- ucts.		
					Expressed in thousands.								Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Clothing, men's, includ- ing shirts.	1914 1909 1904	267 342 357	10,758 9,950 7,185	2,018 1,704 1,315	\$4,003 4,050 2,749	\$13,756 12,020 0,937	\$27,622 24,869 10,346	Hats and caps, other than felt, straw, and wool.	1914 1909 1904	23 25 21	431 405 340	58 83 67	\$224 174 139	\$574 422 272	\$1,040 804 642
Clothing, women's.....	1914 1909 1904	170 153 143	9,775 8,843 6,379	1,710 1,505 1,303	5,137 4,272 2,724	12,000 10,201 6,769	22,882 19,493 12,804	Hosiery and knit goods.	1914 1909 1904	38 30 28	3,411 3,149 2,490	2,740 1,613 1,221	1,502 1,072 714	5,033 3,851 2,177	8,654 6,433 3,997
Coffee and spice, roast- ing and grinding.	1914 1909 1904	35 30 28	822 782 592	2,002 2,186 1,680	385 352 221	10,184 8,277 7,026	13,312 11,224 9,058	House-furnishing goods, not elsewhere speci- fied.	1914 1909 1904	26 22 24	320 304 306	805 1,069 .....	162 143 133	996 924 489	1,430 1,560 790
Coffins, burial cases, and undertakers' goods.	1914 1909 1904	19 24 19	1,252 1,245 1,164	2,268 2,289 1,454	702 525 537	1,294 1,324 1,170	2,966 3,061 2,524	Ice, manufactured.....	1914 1909 1904	132 97 69	1,277 802 520	27,078 10,058 11,882	904 550 206	876 564 292	3,134 2,270 1,217
Coke, not including gas- house coke.	1914 1909 1904	5 4 4	489 246 113	2,325 1,250 350	352 120 54	1,607 640 170	2,157 851 259	Ink, printing.....	1914 1909 1904	7 8 6	254 183 135	1,013 1,437 732	106 131 99	1,354 809 407	2,704 1,907 1,319
Confectionery.....	1914 1909 1904	132 114 70	3,149 2,493 1,760	4,200 2,005 891	1,254 840 526	6,081 4,089 2,272	10,134 7,307 4,712	Iron and steel, blast fur- naces.	1914 1909 1904	33 40 33	5,788 7,205 5,434	232,179 215,739 107,740	5,171 5,090 3,471	60,739 68,425 32,477	72,969 85,669 40,802
Cooperage and wooden goods, not elsewhere specified.	1914 1909 1904	95 113 120	1,516 1,663 1,723	4,037 3,453 3,096	818 803 823	2,547 2,216 1,988	3,946 3,510 3,559	Iron and steel, steel works and rolling mills.	1914 1909 1904	70 75 57	46,307 38,686 27,750	642,058 515,813 304,102	35,004 24,614 18,658	139,676 139,243 78,210	205,023 197,780 111,967
Copper, tin, and sheet- iron products.	1914 1909 1904	288 221 180	7,448 6,598 3,970	8,488 3,163 3,770	4,500 3,163 1,746	14,450 11,622 5,341	25,059 19,086 9,414	Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	1914 1909 1904	15 17 14	2,365 2,797 2,331	6,167 4,782 .....	1,323 1,336 960	2,002 3,421 2,413	4,651 6,257 4,166
Cordage and twine and lute goods.	1914 1909 1904	6 8 8	580 791 1,070	2,512 3,225 3,285	245 313 361	1,394 1,984 2,518	2,232 2,728 3,250	Iron and steel forgings, not made in steel works or rolling mills.	1914 1909 1904	29 30 22	2,308 2,002 1,878	7,440 4,012 .....	1,570 1,117 783	3,937 2,221 1,324	6,752 4,044 2,842
Cutlery and tools, not elsewhere specified.	1914 1909 1904	81 70 58	3,199 2,820 2,467	8,079 6,567 4,836	1,898 1,518 1,116	1,901 1,050 1,266	6,612 5,036 3,567	Iron and steel, wrought pipe.	1914 1909 1904	5 5 4	2,285 1,081 960	3,103 3,770 .....	1,536 640 350	6,152 2,507 2,115	9,368 3,418 2,920
Dairymen's, poultry- men's, and apiarists' supplies.	1914 1909 1904	18 18 15	442 470 361	1,002 916 662	233 262 107	722 527 419	1,277 1,149 862	Jewelry.....	1914 1909 1904	57 35 10	477 356 262	348 116 94	337 252 102	403 619 229	1,265 1,255 653
Electrical machinery, apparatus, and suppl- ies.	1914 1909 1904	119 115 92	12,005 8,073 5,114	17,771 11,959 7,138	7,409 3,847 2,268	17,482 7,226 4,099	36,121 18,777 11,019	Leather goods.....	1914 1909 1904	487 80 94	1,743 1,800 2,412	1,437 1,309 1,813	966 879 1,003	3,473 2,859 2,931	5,728 4,039 5,444
Explosives.....	1914 1909 1904	11 11 16	311 358 428	5,646 2,602 4,075	188 204 236	672 1,104 1,275	1,430 1,104 1,843	Leather, tanned, cur- ried, and finished.	1914 1909 1904	28 36 40	1,605 1,884 1,010	4,450 4,244 2,770	1,054 1,083 839	8,500 7,720 4,462	11,028 10,128 6,513
Fertilizers.....	1914 1909 1904	24 27 17	1,005 841 490	4,730 3,059 2,630	590 368 235	4,627 2,535 1,386	7,246 4,435 2,280	Lime.....	1914 1909 1904	38 30 41	1,416 1,273 809	7,374 3,872 3,318	777 553 381	700 598 532	2,334 1,620 1,334
Flags, banners, regalla, society badges, and emblems.	1914 1909 1904	17 13 16	1,074 1,262 1,120	487 568 421	531 523 429	1,203 1,509 1,023	2,005 3,026 2,267	Liquors, distilled.....	1914 1909 1904	18 17 23	332 374 627	2,809 2,422 3,517	223 230 317	1,988 2,514 3,410	10,684 12,011 15,077
Flour-mill and gristmill products.	1914 1909 1904	649 673 694	2,363 2,585 2,700	53,524 52,250 53,880	1,506 1,415 1,340	38,967 48,093 35,626	45,171 48,093 40,850	Liquors, malt.....	1914 1909 1904	101 105 114	5,340 4,366 3,771	38,048 31,690 25,288	4,416 3,267 2,802	0,190 6,563 5,056	31,990 25,347 21,621
Food preparations, not elsewhere specified.	1914 1909 1904	76 61 31	1,523 1,020 874	5,709 3,254 .....	827 455 339	20,035 8,271 6,369	27,346 10,837 7,890	Liquors, vinous.....	1914 1909 1904	28 29 47	186 149 170	447 406 677	115 79 88	1,053 718 691	1,800 1,304 1,335
Foundry and machine- shop products.	1914 1909 1904	1,379 1,218 1,003	73,103 64,817 52,986	159,172 112,538 78,859	48,318 38,015 28,207	77,503 64,560 44,546	173,855 145,837 103,713	Lumber and timber products.	1914 1909 1904	61,188 1,390 1,312	11,021 13,456 13,570	61,162 60,255 68,536	7,104 6,701 6,594	18,017 19,972 17,733	31,853 34,597 32,926
Furniture and refrig- erators.	1914 1909 1904	213 228 212	7,831 8,232 8,672	10,317 15,951 14,490	4,469 4,142 3,910	7,420 7,242 5,544	16,687 16,259 13,827	Marble and stone work..	1914 1909 1904	213 198 123	2,523 2,012 3,035	10,353 7,070 9,098	1,636 1,161 1,620	2,049 1,450 1,732	5,204 3,847 4,863
Gas and electric fixtures and lamps and re- flectors.	1914 1909 1904	52 56 22	1,832 1,437 662	2,868 2,356 714	1,021 748 288	2,000 1,777 484	4,899 3,563 1,284	Mattresses and spring beds.	1914 1909 1904	43 38 35	934 961 663	2,228 2,069 1,798	500 435 276	1,998 1,682 1,302	3,427 3,307 2,296
Gas, illuminating and heating.	1914 1909 1904	25 38 58	398 666 2,239	1,358 2,165 2,052	262 431 1,083	480 827 1,347	1,432 3,090 4,812	Millinery and lace goods.	1914 1909 1904	30 31 17	911 1,357 450	409 603 132	433 478 141	1,005 1,459 288	1,918 2,744 696
Glass.....	1914 1909 1904	39 45 37	10,997 10,159 7,844	34,871 10,198 11,260	7,053 5,977 4,512	7,046 14,358 2,837	19,191 14,358 9,026	Mineral and soda waters.	1914 1909 1904	202 174 148	575 457 447	1,059 1,050 .....	342 237 235	860 452 267	2,004 1,395 983
Grease and tallow, not including lubricating greases.	1914 1909 1904	34 23 22	400 300 1,264	2,010 171 .....	270 171 72	671 591 447	1,210 1,017 643	Models and patterns, not including paper patterns.	1914 1909 1904	98 74 61	519 441 283	1,036 673 631	393 294 174	183 159 58	896 670 386

1 Includes "stamped and enameled ware, not elsewhere specified," and "tinware, not elsewhere specified."  
 2 Includes "automobile repairing;" "bolts;" "engines, steam, gas, and water;" "gas machines and gas and water meters;" "hardware;" "hardware, saddlery;" "iron and steel, cast-iron pipe;" "plumbers' supplies, not elsewhere specified;" "pumps, steam and other power;" "steam fittings and steam and hot-water heating apparatus;" and "structural ironwork, not made in steel works or rolling mills."  
 3 Excludes statistics for two establishments, to avoid disclosure of individual operations.  
 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 and weather strips."

TABLE 54.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Expressed in thousands.			INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Expressed in thousands.		
					Wages.	Cost of materials.	Value of products.						Wages.	Cost of materials.	Value of products.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Motorcycles, bicycles, and parts.	1914 1909 1904	9 0 3	752 942 446	1,951 1,895 547	\$518 686 293	\$1,634 1,066 457	\$2,931 2,308 1,041	Screws, machine.....	1914 1909 1904	7 6 4	1,464 324 438	2,885 915 1,100	\$942 204 226	\$1,368 178 301	\$3,275 598 793
Musical instruments, pianos and organs and materials.	1914 1909 1904	27 30 26	1,745 1,841 2,210	2,201 1,092 2,153	1,022 1,992 1,205	1,673 1,922 1,625	3,545 3,925 3,684	Shipbuilding, including boat building.	1914 1909	29 39	2,879 3,200	9,061 8,125	1,939 1,705	1,909 2,462	4,717 5,676
Oil, linseed.....	1914 1909 1904	3 4 4	150 213 71	1,603 1,347 950	116 83 50	3,642 3,081 2,135	3,958 3,627 2,400	Show cases.....	1914 1909 1904	11 14 14	302 349 438	711 599 742	178 173 228	280 307 314	610 668 749
Oil, not elsewhere specified.	1914 1909 1904	21 20 20	138 157 140	495 330	105 102 74	1,888 1,252 1,046	2,676 2,037 1,570	Signs and advertising novelties.	1914 1909	50 28	1,372 1,096	1,800 1,125	734 505	1,744 941	3,551 2,598
Paint and varnish.....	1914 1909 1904	95 87 75	2,107 1,535 1,111	8,721 5,572 4,275	1,295 904 581	11,330 8,570 5,855	10,327 13,617 8,530	Slaughtering and meat packing.	1914 1909 1904	169 158 105	3,619 3,080 2,315	13,037 9,875 4,434	1,488 1,857 1,355	59,681 44,847 25,311	66,674 50,804 20,156
Paper and wood pulp...	1914 1909 1904	48 47 53	5,430 4,673 3,883	50,013 51,402 30,238	3,378 2,410 1,683	16,100 10,898 6,154	23,284 16,965 10,962	Springs, steel, car and carriage.	1914 1909	7 5	819 318	1,567 410	628 180	1,550 297	2,774 642
Paper goods, not elsewhere specified.	1914 1909 1904	129 28 23	2,269 2,040 2,049	3,702 1,900 2,020	1,179 882 653	4,197 3,434 1,836	8,148 6,307 3,073	Stationery goods, not elsewhere specified.	1914 1909 1904	15 14 11	708 982 461	1,118 2,130	394 383 144	906 996 396	2,174 2,434 861
Patent medicines and compounds and druggists' preparations.	1914 1909 1904	252 261 196	1,032 1,005 1,046	1,049 1,568 1,255	479 385 380	3,018 1,888 2,118	7,734 5,859 7,371	Stoves and furnaces, including gas and oil stoves.	1914 1909 1904	105 102 102	8,575 7,274 6,359	10,648 9,478 6,359	5,751 4,217 3,634	8,415 6,300 4,005	19,982 15,358 10,191
Paving materials.....	1914 1909	66 5	1,057 56	23,885 374	1,160 33	723 68	3,507 210	Tin plate and terneplate	1914 1909	7 4	653 676	1,330 1,849	659 449	9,443 7,155	10,826 7,889
Petroleum, refining.....	1914 1909 1904	7 10 12	1,519 1,659 1,900	4,920 4,324 4,380	1,025 1,023 1,054	9,924 8,145 7,662	11,169 10,754 10,949	Tobacco manufactures..	1914 1909 1904	961 1,140 1,329	13,282 12,631 11,175	2,048 1,401 1,011	5,352 4,505 3,912	11,017 12,075 7,500	28,467 28,907 20,489
Photo-engraving.....	1914 1909 1904	20 20 11	411 277 180	366 215 159	306 242 146	170 109 36	974 570 321	Toys and games.....	1914 1909 1904	36 19 10	1,103 387 379	941 283 263	520 175 127	799 379 132	1,909 768 353
Printing and publishing	1914 1909 1904	1,783 1,655 1,542	18,070 15,756 13,859	24,308 18,417 12,272	12,800 9,355 7,573	17,070 11,904 8,679	55,609 41,657 31,327	Umbrellas and canes...	1914 1909 1904	13 15 12	267 287 280	184 82 111	101 105 88	480 607 488	836 1,005 833
Pumps, not including power pumps.	1914 1909 1904	17 20 19	1,014 897 369	1,403 1,322 633	639 517 192	1,404 1,271 218	3,277 2,747 672	Wall plaster.....	1914 1909 1904	22 23 27	626 259 406	3,617 1,823 1,730	370 106 225	770 434 382	1,714 935 1,037
Roofing materials.....	1914 1909 1904	18 11 15	715 428 255	2,076 3,229	420 251 137	2,310 3,147 2,410	3,906 3,198 3,190	Wirework, including wire rope and cable.	1914 1909 1904	43 60 50	810 1,455 1,379	1,281 2,511	456 823 556	2,167 1,906 1,278	3,435 3,620 2,517
Rubber goods, not elsewhere specified.	1914 1909 1904	54 37 27	21,705 10,382 4,815	58,672 25,885 13,946	14,578 5,660 2,318	58,737 32,442 10,225	109,659 53,911 16,964	Wood, turned and carved.	1914 1909 1904	61 83 83	985 1,208 1,267	4,260 4,811	520 533 490	1,286 1,063 1,062	2,284 2,460 2,214
Safes and vaults.....	1914 1909 1904	10 10 11	1,760 2,014 2,153	5,603 3,177 2,316	1,153 1,202 1,395	1,483 2,102 2,047	4,337 5,488 4,895	Wool shoddy.....	1914 1909 1904	5 4 5	523 438 426	1,410 1,100 1,100	255 200 158	820 742 948	1,353 1,257 1,239
Salt.....	1914 1909 1904	8 8 8	813 648 539	4,937 4,034 1,705	441 361 236	1,204 1,090 603	2,107 1,807 1,168	All other industries....	1914 1909 1904	1,222 958 930	39,423 33,923 30,741	98,832 67,919 71,687	22,192 16,961 13,095	71,844 59,460 44,664	133,093 110,313 79,436

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

AKRON—All industries.	1914	1909	1904	305	24,680	65,942	\$17,310	\$66,062	\$122,262	AKRON—Continued. Foundry and machine-shop products.	1914	1909	1904	34	1,552	4,352	\$1,133	\$1,699	\$3,947
Artificial stone products	1914 1909 1904	15 10 3	19 30 22	37 10 11	13 15 8	10 41 36	44 15 8	44 15 8	44 15 8	Liquors, malt.....	1914 1909 1904	3 3 3	184 81 63	1,732 1,522	136 57 46	308 170 113	1,352 945 405		
Bread and other bakery products.	1914 1909 1904	41 25 12	183 90 30	280 105	126 58 18	443 255 47	719 417 76	719 417 76	719 417 76	Lumber and timber products.	1914 1909 1904	13 10 7	367 319 150	1,280 989	245 191 99	883 437 306	1,320 792 602		
Brick, tile, pottery, and other clay products.	1914 1909 1904	15 18 22	1,048 1,172 1,362	2,966 2,902	612 600 670	515 443 441	1,488 1,491 1,818	1,488 1,491 1,818	1,488 1,491 1,818	Patent medicines and compounds.	1914 1909 1904	6 8 6	4 6 3	10 2	1 2 2	5 9 5	15 29 28		
Carriages and wagons...	1914 1909 1904	8 7 10	100 115 159	194 367	75 68 88	54 78 142	193 239 293	193 239 293	193 239 293	Printing and publishing.	1914 1909 1904	37 27 20	800 734 970	1,027 934	534 452 623	685 597 655	1,938 2,353 2,835		

1 Includes "envelopes."  
 2 Includes "perfumery and cosmetics."  
 3 Includes "bookbinding and blank-book making;" "engraving, steel and copper plate, including plate printing," and "lithographing."  
 4 Includes "sausage."  
 5 Includes "automobile repairing;" "engines, steam, gas, and water;" "hardware;" "hardware, saddlery;" and "structural ironwork, not made in steel works or rolling mills."  
 6 Includes "lumber, planing-mill products, not including planing mills connected with sawmills," and "window and door screens."  
 7 Excludes statistics for one establishment, to avoid disclosure of individual operations.  
 8 Includes "bookbinding and blank-book making" and "lithographing."

MANUFACTURES—OHIO.

TABLE 54.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Wages.	Cost of ma- terials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earners (aver- age num- ber).	Primary horse- power.	Wages.	Cost of ma- terials.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
<b>AKRON—Continued.</b>	1914	18	17,468	43,886	\$12,206	\$40,063	\$92,547	<b>CINCINNATI—Con.</b>	1914	177	1,069	1,521	\$925	\$3,600	\$6,380
Rubber goods, not else- where specified.	1909	14	9,015	20,225	5,035	20,630	40,320	Bread and other bakery products.	1909	187	1,340	909	723	3,034	5,103
	1904								1904	190	1,314	.....	592	2,311	3,892
Stoves and hot-air fur- naces.	1914	4	362	900	264	228	888	Brick, tile, pottery, and other clay products.	1914	10	287	749	171	86	391
	1909	5	334	610	228	245	754		1909	14	336	650	159	65	464
	1904	3	302	.....	199	165	468		1904	19	240	.....	122	57	358
Tobacco, cigars.....	1914	5	6	.....	3	3	14	Canning and preserving	1914	10	378	648	134	772	1,354
	1909	7	10	.....	4	6	18		1909	9	217	420	77	483	825
	1904	10	15	.....	6	6	22		1904	7	417	.....	129	765	1,262
All other industries.....	1914	106	2,587	9,278	1,872	12,160	17,821	Carriages and wagons and materials.	1914	75	1,761	2,788	1,203	3,126	5,565
	1909	86	2,950	6,588	1,546	10,124	14,805		1909	74	2,250	2,523	1,295	3,702	6,325
	1904	70	5,709	.....	2,737	17,072	24,608		1904	78	2,705	.....	1,380	4,576	7,670
<b>CANTON—All in- dustries.</b>	1914	276	12,255	43,071	\$8,560	\$21,808	\$43,713	Cars and general shop construction and re- pairs by steam-rail- road companies.	1914	6	747	1,023	564	341	971
	1909	204	9,064	27,016	5,719	14,044	28,583		1909	3	311	590	203	111	328
	1904	168	6,938	.....	2,964	4,594	10,591		1904	3	440	.....	282	199	510
Agricultural imple- ments.	1914	4	271	320	194	543	1,105	Chemicals.....	1914	11	81	493	51	362	618
	1909	5	283	442	127	401	810		1909	11	122	508	76	474	809
	1904	5	525	.....	239	533	1,154		1904	9	99	.....	59	651	958
Bread and other bakery products.	1914	25	131	116	66	203	421	Clothing, men's, includ- ing shirts.	1914	115	5,477	1,628	2,668	7,421	15,105
	1909	10	69	38	34	147	253		1909	183	5,718	559	2,512	8,680	10,975
	1904	7	42	.....	21	49	90		1904	217	4,320	.....	1,702	7,756	14,761
Confectionery.....	1914	9	38	36	22	37	88	Clothing, women's.....	1914	26	1,137	167	616	1,370	2,567
	1909	7	30	18	10	42	69		1909	26	1,325	176	619	1,514	2,913
	1904	3	17	.....	5	11	19		1904	20	1,171	.....	457	1,497	2,712
Cutlery and tools, not elsewhere specified.	1914	7	139	184	84	116	293	Coffee and spice, roast- ing and grinding.	1914	7	227	657	107	1,782	2,280
	1909	5	138	230	74	93	258		1909	8	221	691	91	1,595	2,110
	1904	3	120	.....	56	90	207		1904	10	170	.....	62	1,432	1,835
Foundry and machin- shop products.	1914	47	2,153	3,420	1,400	2,634	8,042	Confectionery.....	1914	21	909	930	345	1,377	2,343
	1909	32	1,748	3,409	1,005	2,267	4,801		1909	22	771	573	279	1,222	2,020
	1904	25	1,225	.....	620	1,208	2,704		1904	15	653	.....	225	977	1,568
Leather goods.....	1914	7	219	130	133	310	545	Cooperage and wooden goods, not elsewhere specified.	1914	20	598	1,446	298	734	1,247
	1909	3	267	131	116	339	549		1909	20	632	1,260	292	766	1,232
	1904	3	66	.....	27	54	117		1904	23	641	.....	318	727	1,350
Lumber and timber products.	1914	10	46	272	34	52	128	Copper, tin, and sheet- iron products.....	1914	48	1,130	1,495	712	3,548	5,570
	1909	3	46	180	29	95	135		1909	37	833	1,154	413	1,633	2,775
	1904	10	80	.....	44	100	202		1904	35	618	.....	432	1,199	2,348
Printing and publish- ing.	1914	21	251	275	193	305	775	Cutlery and tools, not elsewhere specified.	1914	9	101	518	95	137	391
	1909	17	101	185	83	78	293		1909	9	55	166	35	51	136
	1904	13	131	.....	74	52	218		1904	11	85	.....	45	48	175
Tobacco, cigars.....	1914	16	40	.....	16	27	65	Electrical machinery, apparatus, and sup- plies.	1914	16	319	329	191	469	962
	1909	19	70	.....	27	42	106		1909	13	313	397	200	333	830
	1904	16	67	.....	33	22	70		1904	13	243	.....	136	283	621
All other industries.....	1914	130	8,967	38,313	6,408	17,581	32,251	Flags, banners, regalia, society badges, and emblems.	1914	9	436	287	205	505	947
	1909	94	7,192	22,383	4,209	11,140	21,210		1909	8	403	317	162	593	888
	1904	73	3,675	.....	1,845	2,385	5,801		1904	9	327	.....	114	331	699
<b>CINCINNATI—All industries.</b>	1914	2,135	59,861	166,689	33,159	114,107	210,860	Flour-mill and grist- mill products.	1914	7	43	725	35	1,036	1,153
	1909	2,183	60,182	88,522	31,067	101,407	192,516		1909	6	52	685	38	957	1,083
	1904	2,171	53,554	.....	27,390	83,258	166,059		1904	7	93	.....	40	810	973
Bags, paper.....	1914	5	335	693	149	754	1,293	Foundry and machin- shop products.	1914	228	9,055	17,578	5,789	7,741	21,122
	1909	5	250	320	129	730	1,088		1909	200	8,534	12,590	4,985	7,044	18,350
	1904	5	197	.....	68	401	581		1904	186	8,180	.....	4,254	6,309	15,958
Blacking and cleansing and polishing prepara- tions.	1914	10	27	46	14	118	281	Furniture and refriger- ators.	1914	52	1,713	3,450	1,007	1,666	3,514
	1909	14	38	34	14	112	255		1909	60	2,026	3,409	1,071	1,727	4,062
	1904	8	17	.....	6	35	77		1904	62	2,706	.....	1,327	1,962	4,821
Boots and shoes, in- cluding cut stock and findings.	1914	34	7,295	4,195	3,716	8,322	15,320	Hats and caps, other than felt, straw, and wool.	1914	14	239	29	121	344	608
	1909	32	7,989	4,631	3,518	8,584	14,099		1909	12	260	33	112	284	532
	1904	35	6,644	.....	2,563	6,294	11,152		1904	11	261	.....	87	181	424
Boxes, cigar.....	1914	5	139	208	62	166	226	Ice, manufactured.....	1914	14	230	5,048	155	172	472
	1909	8	222	405	82	177	317		1909	8	129	3,229	81	124	385
	1904	6	189	.....	57	238	371		1904	10	109	.....	68	100	332
Boxes, fancy and paper.	1914	17	753	570	293	487	1,015	Leather goods.....	1914	13	416	233	193	928	1,548
	1909	15	669	218	185	292	679		1909	16	533	230	277	790	1,499
	1904	14	639	.....	153	234	509		1904	16	514	.....	271	725	1,407
Brass, bronze, and cop- per products.	1914	12	556	708	346	506	1,187	Leather, tanned, cur- ried, and finished.	1914	12	755	2,382	474	3,954	5,426
	1909	14	563	424	320	385	906		1909	13	907	2,360	570	3,677	5,059
	1904	17	587	.....	300	465	1,108		1904	10	976	.....	510	2,285	3,405

<sup>1</sup> Includes "automobile repairing," "bells," "hardware," "hardware, saddlery," "plumbers supplies, not elsewhere specified," "pumps, steam," "steam fittings and steam and hot-water heating apparatus," and "structural ironwork, not made in steel works or rolling mills."  
<sup>2</sup> Includes "saddlery and harness," and "trunks and valises."  
<sup>3</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.  
<sup>4</sup> Includes "boxes, wooden packing," "lumber, planing-mill products, not including planing mills connected with sawmills," and "window and door screens."  
<sup>5</sup> 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.  
<sup>6</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.  
<sup>7</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.  
<sup>8</sup> Includes "canning and preserving, fruits and vegetables," and "pickles, preserves, and sauces."  
<sup>9</sup> Includes "stamped and enameled ware, not elsewhere specified," and "tinware, not elsewhere specified."  
<sup>10</sup> Includes "automobile repairing," "bells," "engines, steam, gas, and water," "gas machines and gas and water meters," "hardware," "plumbers' supplies, not elsewhere specified," "steam fittings and steam and hot-water heating apparatus," and "structural ironwork, not made in steel works or rolling mills."

TABLE 54.—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.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
<b>CINCINNATI—Con.</b>								<b>CLEVELAND—Con.</b>							
Liquors, malt.....	1914	20	1,727	13,114	\$1,549	\$2,944	\$10,353	Bread and other bakery products.	1914	224	1,612	1,787	\$1,222	\$3,917	\$6,908
	1909	22	1,578	11,416	1,168	2,173	8,874		1909	198	1,229	14	804	2,722	4,731
	1904	21	1,287	.....	938	1,884	7,703		1904	138	1,230	.....	611	1,719	2,982
Lumber and timber products.	1914	37	1,166	3,957	747	1,818	3,246	Brick and tile, terra-cotta, and fire-clay products.	1914	10	703	2,460	478	429	1,215
	1909	45	1,621	6,808	803	5,021	2,887		1909	13	546	1,965	286	213	769
	1904	43	1,503	.....	792	2,627	5,043		1904	8	252	.....	141	84	346
Marble and stone work..	1914	27	327	1,171	214	268	750	Carriages and wagons and materials.	1914	30	289	347	219	271	696
	1909	25	269	854	181	252	632		1909	33	207	175	182	142	492
	1904	21	417	.....	207	373	1,001		1904	32	343	.....	203	189	549
Mattresses and spring beds.	1914	10	84	200	50	121	306	Cars and general shop-construction and repairs by steam-railroad companies.	1914	9	2,877	7,838	2,362	2,297	4,958
	1909	9	165	227	74	223	394		1909	6	1,372	1,640	843	1,077	2,056
	1904	8	72	.....	31	138	212		1904	6	1,313	.....	757	823	1,681
Millinery and lace goods	1914	0	293	31	105	203	443	Chemicals.....	1914	6	653	2,773	488	1,644	3,130
	1909	11	428	59	120	294	547		1909	5	469	1,840	307	978	1,800
	1904	0	204	.....	85	188	324		1904	5	506	.....	308	671	1,373
Models and patterns, not including paper patterns.	1914	19	140	235	92	48	230	Clothing, men's, including shirts.	1914	68	3,590	640	1,666	4,516	9,546
	1909	9	80	65	63	54	151		1909	93	2,745	346	1,096	3,203	5,053
	1904	15	71	.....	43	12	88		1904	70	1,482	.....	642	1,360	2,079
Paint and varnish.....	1914	25	417	2,229	204	2,784	4,517	Clothing, women's.....	1914	106	6,955	1,074	3,717	8,266	16,243
	1909	24	408	1,359	215	2,486	3,880		1909	96	5,418	771	2,903	6,490	12,789
	1904	23	270	.....	148	2,000	2,628		1904	78	3,394	.....	1,682	3,790	7,428
Paper goods, not elsewhere specified.	1914	6	112	261	50	290	474	Confectionery.....	1914	21	990	1,307	388	2,311	3,890
	1909	6	113	252	42	205	346		1909	16	803	679	253	1,553	2,852
	1904	4	30	.....	12	56	106		1904	8	412	.....	106	558	1,715
Patent medicines and compounds and druggists' preparations.	1914	37	228	308	116	705	1,365	Cooperage and wooden goods, not elsewhere specified.	1914	7	301	1,035	138	623	855
	1909	50	202	404	90	497	1,230		1909	10	261	533	136	471	708
	1904	37	305	.....	122	439	1,412		1904	9	167	.....	89	234	392
Printing and publishing	1914	307	4,074	6,056	2,883	4,105	13,387	Copper, tin, and sheet-iron products.	1914	771	1,542	1,422	919	1,854	3,865
	1909	280	3,866	4,671	2,480	3,349	11,519		1909	37	1,364	1,231	640	1,628	2,906
	1904	264	3,997	.....	2,317	3,218	10,321		1904	19	405	.....	213	293	724
Slaughtering and meat packing.	1914	47	1,126	4,928	766	21,567	23,245	Cutlery and tools, not elsewhere specified.	1914	12	1,592	4,031	952	831	3,694
	1909	55	1,116	3,710	669	16,974	19,320		1909	15	1,444	3,246	759	665	2,395
	1904	48	878	.....	522	11,762	13,510		1904	8	867	.....	389	452	1,224
Stoves and hot-air furnaces, including gas and oil stoves.	1914	12	686	998	432	862	2,091	Electrical machinery, apparatus, and supplies.	1914	40	3,326	4,831	1,948	5,892	11,368
	1909	15	872	1,086	485	1,013	2,325		1909	40	1,578	1,980	760	1,780	4,036
	1904	11	614	.....	329	365	1,003		1904	30	1,235	.....	548	1,099	2,653
Tobacco manufactures..	1914	160	2,087	170	958	1,797	4,121	Foundry and machine-shop products.	1914	267	22,301	39,107	15,186	20,869	50,951
	1909	208	2,526	247	988	1,640	4,153		1909	231	17,915	24,204	10,485	15,324	37,443
	1904	253	3,434	.....	1,207	2,245	5,748		1904	164	13,018	.....	7,101	10,017	24,033
All other industries.....	1914	436	10,662	22,514	4,285	24,741	46,535	Furniture.....	1914	23	525	788	406	717	1,595
	1909	397	9,768	17,898	5,132	20,311	40,422		1909	25	467	578	288	401	1,060
	1904	350	10,510	.....	4,720	15,133	35,123		1904	20	543	.....	345	346	661
<b>CLEVELAND—All industries.</b>	1914	2,345	103,317	277,056	67,351	198,493	352,418	Gas and electric fixtures, and lamps and reflectors.	1914	19	323	347	222	520	974
	1909	2,148	84,728	199,898	48,053	154,915	271,961		1909	17	326	199	193	220	654
	1904	1,616	64,041	.....	33,450	97,578	171,924		1904	7	289	.....	112	192	560
Artificial stone products	1914	15	118	177	68	192	241	Hats and caps, other than felt, straw, and wool.	1914	8	122	17	63	168	303
	1909	18	121	168	76	92	233		1909	9	97	11	43	102	199
	1904	5	38	.....	22	22	60		1904	5	59	.....	34	56	151
Automobiles, including bodies and parts.	1914	36	7,006	10,867	5,371	14,732	27,117	Hosiery and knit goods.	1914	16	1,341	523	672	2,334	4,051
	1909	32	6,408	9,135	4,023	10,417	21,404		1909	13	1,234	407	485	1,813	2,957
	1904	10	1,800	.....	1,027	2,030	4,624		1904	6	1,025	.....	348	1,061	1,957
Blacking and cleansing and polishing preparations.	1914	18	46	97	26	162	375	Ice, manufactured.....	1914	6	166	3,567	138	156	570
	1909	10	51	55	29	159	355		1909	5	111	3,206	85	103	368
	1904	7	12	.....	6	17	44		1904	4	43	.....	33	45	195
Boxes, cigar.....	1914	4	54	35	21	44	82	Iron and steel, steel works and rolling mills.	1914	15	8,149	70,844	6,050	24,552	33,389
	1909	5	69	27	19	43	97		1909	14	7,538	60,575	5,150	28,039	38,463
	1904	4	54	.....	16	33	66		1904	9	8,577	.....	4,956	22,772	32,279
Boxes and cartons, paper.	1914	9	708	489	328	772	1,468	Jewelry.....	1914	21	105	71	79	74	232
	1909	6	739	647	266	627	1,141		1909	15	102	34	66	62	208
	1904	6	321	.....	112	199	421		1904	5	47	.....	30	40	105
Brass and bronze products.	1914	28	789	879	534	1,418	2,491	Leather goods.....	1914	30	145	94	97	180	382
	1909	28	801	872	518	1,362	2,668		1909	14	125	84	68	133	271
	1904	19	561	.....	310	745	1,480		1904	12	120	.....	60	89	230

<sup>1</sup> Includes "boxes, wooden packing"; and "lumber, planing-mill products, not including planing mills connected with sawmills."

<sup>2</sup> Includes "envelopes."

<sup>3</sup> Includes "perfumery and cosmetics."

<sup>4</sup> Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."

<sup>5</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.

<sup>6</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.

<sup>7</sup> Includes "stamped and enameled ware, not elsewhere specified," and "tinware, not elsewhere specified."

<sup>8</sup> Includes "automobile repairing," "engines, steam, gas, and water," "gas machines and gas and water meters," "hardware," "iron and steel, cast-iron pipe," "plumbing supplies, not elsewhere specified," "pumps, power, other than steam," "steam fittings and steam and hot-water heating apparatus," and "structural ironwork, not made in steel works or rolling mills."

<sup>9</sup> Includes "saddlery and harness;" and "trunks and valises."

TABLE 54.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage owners (aver- age num- ber).	Primary horse- power.	Expressed in thousands.			INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage owners (aver- age num- ber).	Primary horse- power.	Expressed in thousands.		
					Wages.	Cost of ma- terials.	Value of prod- ucts.						Wages.	Cost of ma- terials.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
<b>CLEVELAND—Con.</b>															
Liquors, distilled.....	1914	6	5	39	\$4	\$10	\$27	<b>COLUMBUS—Con.</b>	1914	4	21	57	\$14	\$224	\$302
	1909	4	1	14	1	3	14	Coffee and spice, roast- ing and grinding.	1909	3	45	19	19	320	604
	1904	4	3	.....	1	.....	13		1904	3	44	.....	22	305	605
Liquors, malt.....	1914	12	1,050	0,554	805	1,858	0,528	Foundry and machine- shop products.	1914	7 50	2,477	4,272	1,088	3,153	6,950
	1909	11	794	3,305	594	1,484	6,124		1909	58	3,012	4,148	1,841	3,465	7,744
	1904	9	601	.....	593	1,108	3,980		1904	49	2,868	.....	1,550	3,393	7,008
Lumber and timber products.	1914	50	1,501	5,280	1,016	3,053	4,910	Furniture and refrigera- tors.	1914	8	328	686	207	401	683
	1909	51	1,147	5,203	909	2,732	4,021		1909	8	374	553	189	405	747
	1904	37	1,084	.....	622	2,510	3,820		1904	2 4	204	.....	91	230	405
Marble and stone work..	1914	19	206	684	159	207	475	Gas fixtures.....	1914	4	134	88	51	110	204
	1909	18	315	780	192	197	498		1909	9	334	263	141	371	770
	1904	7	178	.....	116	106	297		1904	3	32	.....	10	28	62
Mattresses and spring beds.	1914	7	171	398	102	248	485	Ice, manufactured.....	1914	6	159	2,425	105	71	309
	1909	6	150	178	71	203	395		1909	5	158	1,784	91	68	253
	1904	3	112	.....	47	140	239		1904	4	93	.....	42	34	128
Millinery and lace goods.	1914	12	496	350	278	630	1,150	Leather goods.....	1914	8 13	145	134	90	276	487
	1909	6	472	143	160	726	1,206		1909	11	128	127	74	353	560
	1904	5	69	.....	20	58	117		1904	11	124	.....	74	223	483
Models and patterns, not including paper pat- terns.	1914	24	166	252	135	59	270	Liquors, malt.....	1914	5	590	3,520	504	858	3,297
	1909	21	190	213	123	51	251		1909	4 4	473	3,045	371	619	2,728
	1904	15	101	.....	70	20	143		1904	5	455	.....	399	810	2,134
Paint and varnish.....	1914	33	1,002	3,544	645	5,766	10,093	Lumber and timber products.	1914	9 21	358	1,910	240	613	1,088
	1909	24	780	2,024	468	3,889	6,138		1909	27	434	1,808	264	758	1,240
	1904	20	575	.....	394	2,625	3,700		1904	20	305	.....	220	451	799
Patent medicines and compounds and drug- gists' preparations.	1914	52	228	677	119	640	2,140	Marble and stone work.	1914	7	42	75	42	55	135
	1909	50	125	66	62	316	1,010		1909	6	70	445	47	75	169
	1904	30	52	.....	21	132	423		1904	4	111	.....	71	78	188
Photo-engraving.....	1914	5	67	31	70	23	190	Models and patterns, not including paper patterns.	1914	8	34	89	29	9	59
	1909	3	33	23	50	36	144		1909	8	34	58	23	11	70
	1904	4	66	.....	53	10	125		1904	5	12	.....	7	2	19
Printing and publish- ing.	1914	272	4,002	5,154	3,439	4,155	13,086	Paint and varnish.....	1914	7	72	179	41	550	847
	1909	245	3,104	3,328	2,009	2,780	9,535		1909	5	55	141	28	346	902
	1904	184	2,291	.....	1,409	1,086	6,140		1904	2 3	38	.....	19	155	282
Slaughtering and meat packing.	1914	39	1,400	3,220	956	22,303	24,737	Patent medicines and compounds and drug- gists' preparations.	1914	10 23	137	184	59	311	1,068
	1909	35	1,076	2,570	599	15,399	17,192		1909	13	140	285	61	239	946
	1904	19	978	.....	596	9,338	10,616		1904	9	163	.....	55	881	3,214
Stoves and furnaces, in- cluding gas and oil stoves.	1914	27	2,911	2,951	1,871	4,201	8,621	Printing and publishing	1914	11 107	1,020	1,283	712	950	3,528
	1909	20	1,843	1,890	1,155	2,280	4,977		1909	91	991	379	592	689	2,660
	1904	17	1,527	.....	857	1,535	3,005		1904	76	847	.....	510	475	1,916
Tobacco manufactures..	1914	233	1,540	42	775	1,093	2,660	Slaughtering and meat packing.	1914	12 7	204	606	121	2,984	3,211
	1909	254	1,866	26	734	1,047	2,769		1909	6	130	365	101	1,904	2,354
	1904	237	1,389	.....	581	646	1,016		1904	4	60	.....	49	737	852
Wall plaster.....	1914	3	58	265	40	255	386	Stoves and furnaces, in- cluding gas and oil stoves.	1914	7	234	261	190	371	852
	1909	3	56	270	32	123	205		1909	10	204	377	173	310	722
	1904	3	45	.....	25	66	145		1904	10	255	.....	132	190	407
All other industries.....	1914	432	22,111	90,133	13,140	54,266	85,165	Tobacco, cigars.....	1914	31	264	1	83	62	250
	1909	384	19,221	64,422	10,312	43,711	69,429		1909	35	223	.....	81	155	436
	1904	302	16,017	.....	8,054	28,641	46,015		1904	47	220	.....	70	107	340
<b>COLUMBUS—All industries.</b>	1914	643	17,236	35,522	11,177	30,030	57,698	All other industries.....	1914	226	8,508	17,366	5,617	14,540	26,272
	1909	586	16,428	35,780	8,892	25,204	49,032		1909	202	6,277	20,002	3,264	10,103	18,091
	1904	459	14,350	.....	7,287	19,244	39,530		1904	151	4,733	.....	2,348	6,092	11,536
Artificial stone products	1914	9	19	121	14	27	66	<b>DAYTON—All in- dustries.</b>	1914	523	24,061	51,809	14,076	32,954	71,071
	1909	5	25	38	17	23	57		1909	513	21,549	31,501	12,451	27,528	60,378
	1904	3	21	.....	10	14	33		1904	431	17,093	.....	8,503	18,505	39,597
Boots and shoes.....	1914	7	1,725	889	876	3,537	5,224	Boxes, cigar.....	1914	3	80	98	28	57	90
	1909	8	2,479	845	1,076	3,224	5,436		1909	3	86	353	23	47	85
	1904	8	2,306	.....	928	3,055	5,425		1904	3	105	.....	27	45	100
Bread and other bakery products.	1914	75	545	1,106	351	1,153	2,110	Boxes and cartons, paper.	1914	5	518	498	196	460	863
	1909	58	435	75	222	1,022	1,765		1909	5	540	376	196	486	932
	1904	20	290	.....	143	618	997		1904	5	386	.....	114	379	743
Carriages and wagons...	1914	9	208	261	137	345	648	Brass and bronze prod- ucts.	1914	8	95	115	69	207	332
	1909	14	407	477	217	695	1,078		1909	7	210	340	145	213	481
	1904	20	1,151	.....	557	1,270	2,558		1904	2 4	189	.....	109	111	387

<sup>1</sup> Includes "boxes, wooden packing;" "lumber, planing-mill products, not including planing mills connected with sawmills;" and "window and door screens."  
<sup>2</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.

<sup>3</sup> Includes "perfumery and cosmetics."

<sup>4</sup> Includes "bookbinding and blank-book making;" "engraving, steel and copper plate, including plate printing;" and "lithographing."

<sup>5</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.

<sup>6</sup> Includes "sausage."

<sup>7</sup> Includes "automobile repairing;" "hardware;" "iron and steel, cast-iron pipe;" "plumbers' supplies, not elsewhere specified;" "pumps, power, other than steam;" "steam fittings and steam and hot-water heating apparatus;" and "structural ironwork, not made in steel works or rolling mills."

<sup>8</sup> Includes "saddlery and harness;" and "trunks and valises."

<sup>9</sup> Includes "boxes, wooden packing;" and "lumber, planing-mill products, not including planing mills connected with sawmills."

<sup>10</sup> Includes "perfumery and cosmetics."

<sup>11</sup> Includes "bookbinding and blank-book making" and "lithographing."

<sup>12</sup> Includes "sausage."

TABLE 54.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Primary horse- power.	Wages.	Cost of ma- terials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Primary horse- power.	Wages.	Cost of ma- terials.	Value of prod- ucts.	Expressed in thousands.		
																Wages.	Cost of ma- terials.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.																		
<b>DAYTON—Con.</b> Bread and other bakery products.	1914	64	491	651	\$200	\$1,213	\$2,013	<b>TOLEDO—Con.</b> Carriages and wagons and materials.	1914	16	494	1,463	\$347	\$508	\$1,188			
	1909	65	350	401	187	940	1,531		1909	16	514	1,283	257	609	1,317			
	1904	47	262	.....	112	638	861		1904	21	825	.....	399	692	1,756			
Carriages and wagons and materials.	1914	16	241	696	141	290	459	Cars and general shop construction and re- pairs by steam-rail- road companies.	1914	6	814	1,254	596	534	1,202			
	1909	17	374	697	203	347	802		1909	4	1,198	935	634	674	1,427			
	1904	18	383	.....	167	254	566		1904	6	868	.....	465	832	1,307			
Clothing, men's, includ- ing shirts.	1914	4	147	148	63	138	277	Clothing, women's.....	1914	13	892	200	515	1,410	2,434			
	1909	4	106	125	71	209	354		1909	13	1,150	155	492	1,375	2,323			
	1904	4	204	.....	66	167	315		1904	11	.....	.....	251	804	1,448			
Confectionery.....	1914	11	175	150	74	210	405	Confectionery.....	1914	12	184	290	81	507	778			
	1909	11	142	50	51	196	339		1909	12	146	105	51	235	411			
	1904	8	107	.....	33	90	189		1904	10	141	.....	34	135	262			
Copper, tin, and sheet- iron work.	1914	11	72	51	43	81	178	Cooperage and wooden goods, not elsewhere specified.	1914	8	85	75	38	104	189			
	1909	11	63	50	44	88	178		1909	10	116	145	52	106	185			
	1904	6	71	.....	44	65	153		1904	10	30	.....	15	63	83			
Foundry and machine- shop products.	1914	171	3,424	5,862	2,119	2,944	6,859	Copper, tin, and sheet- iron products.	1914	35	698	713	465	1,020	2,029			
	1909	69	3,585	5,576	2,033	2,800	6,778		1909	37	547	265	282	649	1,303			
	1904	50	3,223	.....	1,714	2,268	5,539		1904	20	180	.....	94	198	484			
Furniture.....	1914	10	400	667	210	285	825	Electrical machinery, apparatus, and sup- plies.	1914	11	918	1,155	397	1,821	3,230			
	1909	10	423	795	200	287	744		1909	7	416	248	168	289	632			
	1904	6	427	.....	193	256	738		1904	4	98	.....	35	45	130			
Lumber and timber products.	1914	12	576	1,799	416	1,151	1,899	Flour-mill and gristmill products.	1914	6	234	3,345	187	5,277	5,815			
	1909	11	512	1,659	325	878	1,417		1909	7	204	3,510	140	4,631	5,662			
	1904	11	458	.....	273	720	1,241		1904	8	195	.....	115	3,237	3,676			
Marble and stone work..	1914	4	14	30	11	14	36	Foundry and machine- shop products.	1914	67	3,796	6,679	2,674	3,137	7,855			
	1909	6	41	80	33	39	95		1909	75	3,101	6,931	1,905	3,161	7,024			
	1904	3	27	.....	23	22	65		1904	50	2,895	.....	1,666	2,491	5,190			
Models and patterns, not including paper patterns.	1914	7	37	100	26	8	50	Furniture.....	1914	16	374	740	231	299	734			
	1909	6	31	44	20	5	35		1909	23	580	884	303	545	1,128			
	1904	5	18	.....	7	5	22		1904	12	433	.....	220	338	660			
Printing and publish- ing.	1914	450	680	1,045	459	560	1,774	Leather goods.....	1914	10	69	42	38	92	184			
	1909	45	630	1,078	386	440	1,552		1909	4	88	36	35	78	139			
	1904	40	521	.....	261	310	1,010		1904	3	88	.....	38	113	209			
Slaughtering and meat packing.	1914	9	275	669	193	3,846	4,831	Liquors, malt.....	1914	4	396	2,541	330	724	2,475			
	1909	10	245	484	145	2,636	3,171		1909	4	312	1,631	250	452	1,887			
	1904	7	110	.....	55	1,144	1,310		1904	6	262	.....	222	499	1,610			
Tobacco, cigars.....	1914	44	1,582	115	533	905	2,055	Lumber and timber products.	1914	21	486	2,141	333	1,054	1,747			
	1909	56	1,428	62	487	831	1,893		1909	28	585	2,480	286	1,111	1,793			
	1904	60	1,287	.....	425	570	1,465		1904	23	502	.....	200	1,260	1,784			
Tools, not elsewhere specified.	1914	8	52	112	34	13	76	Marble and stone work..	1914	8	63	227	57	167	331			
	1909	4	40	59	21	7	62		1909	6	82	142	43	109	217			
	1904	3	10	.....	10	3	18		1904	7	77	.....	60	134	263			
All other industries.....	1914	186	15,202	39,084	9,171	20,563	48,049	Models and patterns, not including paper patterns.	1914	6	16	33	15	4	29			
	1909	174	12,653	10,286	7,881	17,070	39,929		1909	7	16	29	9	5	24			
	1904	151	9,296	.....	5,060	11,552	24,920		1904	4	11	.....	6	5	17			
<b>SPRINGFIELD—All industries.</b>	1914	253	7,868	13,113	5,328	13,704	27,722	Paints.....	1914	5	40	186	23	122	267			
	1909	195	7,405	10,179	3,985	8,919	19,240		1909	5	34	150	20	158	252			
	1904	157	6,258	.....	3,253	5,702	13,382		1904	5	32	.....	18	130	225			
<b>TOLEDO.—All in- dustries.</b>	1914	713	27,076	53,369	18,124	70,494	115,949	Patent medicines and compounds and drug- gists' preparations.	1914	31	51	102	29	125	453			
	1909	790	18,878	43,946	9,911	34,084	61,230		1909	51	76	154	36	149	540			
	1904	597	15,697	.....	8,099	25,466	44,501		1904	20	44	.....	15	74	343			
Boxes and cartons, pa- per.	1914	3	64	77	29	55	111	Printing and publish- ing.	1914	88	889	1,095	670	858	2,991			
	1909	5	97	78	26	58	103		1909	72	763	866	480	523	2,004			
	1904	4	59	.....	14	43	76		1904	56	637	.....	360	414	1,451			
Bread and other bakery products.	1914	76	579	541	370	1,253	2,307	Wall plaster.....	1914	4	24	95	15	60	110			
	1909	88	468	314	260	959	1,598		1909	0	45	880	25	130	221			
	1904	64	443	.....	205	724	1,268		1904	5	32	.....	20	81	140			
Brick and tile, terra- cotta, and fire-clay products.	1914	5	193	558	140	103	321	All other industries.....	1914	262	15,717	29,817	10,544	51,230	78,269			
	1909	8	172	675	80	35	177		1909	272	8,098	22,550	4,077	17,744	30,553			
	1904	10	221	.....	117	48	259		1904	233	6,936	.....	3,570	12,807	21,800			

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

MANUFACTURES—OHIO.

TABLE 54.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Primary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Primary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.

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

YOUNGSTOWN— All industries.								YOUNGSTOWN— Continued.							
1914	201	15,861	100,065	\$12,349	\$60,077	\$92,111	Lumber, planing-mill products, not including planing mills connected with sawmills.	1914	12	343	1,240	\$280	\$522	\$1,010	
1909	115	10,498	140,907	7,835	62,202	81,271	1909	8	199	615	135	651	953		
1904	113	8,995	.....	6,400	35,183	40,863	1904	10	208	.....	137	431	703		
Bread and other bakery products.	1914	43	180	116	83	316	Printing and publishing	1914	21	243	303	181	178	702	
	1909	22	95	23	38	133	1909	13	164	188	109	128	454		
	1904	11	48	.....	30	80	1904	10	152	.....	121	60	284		
Foundry and machine-shop products.	1914	119	2,040	8,492	1,580	4,442	7,235	All other industries.....	1914	98	5,510	73,444	3,830	23,756	33,658
	1909	15	1,153	2,674	800	2,702	4,805	1909	50	2,207	61,877	1,540	18,706	24,575	
	1904	13	909	.....	509	1,020	2,070	1904	92	2,148	.....	1,256	10,577	13,836	
Iron and steel, steel works and rolling mills.	1914	8	7,695	113,065	6,305	39,863	48,706								
	1909	7	6,650	75,630	5,204	39,089	50,175								
	1904	7	4,630	.....	3,350	23,000	29,738								

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

ALLIANCE.....	1914	52	2,333	4,678	\$1,617	\$3,656	\$7,175	MARIETTA.....	1914	71	1,401	3,117	\$844	\$2,383	\$4,129
	1909	44	2,524	3,453	1,402	2,853	6,135	1909	66	1,288	2,742	504	1,787	3,215	
	1904	36	.....	.....	.....	.....	.....	1904	73	1,314	.....	610	1,369	2,599	
ASHTABULA.....	1914	57	1,868	7,327	1,345	2,825	5,021	MARION.....	1914	65	2,577	5,575	1,512	2,562	6,385
	1909	44	1,471	2,379	814	2,084	3,459	1909	55	2,610	3,686	1,405	2,577	5,667	
	1904	36	840	.....	456	906	1,805	1904	47	1,721	.....	805	1,352	3,228	
BELLAIRE.....	1914	40	2,603	14,390	1,500	9,278	12,170	MASSILLON.....	1914	70	1,798	5,544	1,100	2,710	5,293
	1909	36	2,597	17,790	1,412	7,159	10,002	1909	59	1,934	4,730	1,127	2,200	4,788	
	1904	30	.....	.....	.....	.....	.....	1904	52	1,965	.....	1,158	1,582	3,707	
CAMBRIDGE.....	1914	39	1,455	5,742	1,112	2,340	3,924	MIDDLETOWN.....	1914	63	4,063	35,328	2,888	10,580	21,787
	1909	32	1,230	5,065	919	2,885	4,201	1909	41	2,576	9,304	1,389	7,950	16,517	
	1904	40	1,557	4,765	852	2,571	4,083	NEWARK.....	1914	79	4,583	8,071	2,969	3,574	9,277
CHILLICOTHE.....	1914	67	1,674	3,558	707	3,038	4,345	1909	72	3,913	8,030	1,958	3,982	7,861	
	1909	54	1,553	.....	570	1,028	3,147	1904	78	3,627	.....	2,130	2,433	5,613	
	1904	64	.....	.....	.....	.....	.....	NORWOOD.....	1914	58	5,808	9,865	3,014	7,217	16,724
EAST LIVERPOOL.....	1914	80	4,830	6,051	2,935	2,842	7,063	1909	49	3,907	6,381	2,081	4,021	9,684	
	1909	82	4,873	5,528	2,704	2,521	6,629	PIQUA.....	1914	78	2,777	5,721	1,508	4,554	7,988
	1904	81	5,228	.....	2,703	2,107	6,437	1909	82	2,683	5,062	1,292	3,852	6,931	
ELYRIA.....	1914	63	2,735	10,814	1,759	5,016	8,792	1904	76	2,644	.....	947	1,908	4,036	
	1909	58	2,673	9,058	1,573	4,465	8,005	PORTSMOUTH.....	1914	70	3,597	5,009	1,751	4,079	7,682
	1904	78	1,737	3,561	778	2,791	4,663	1909	75	3,728	4,028	1,459	3,894	7,277	
FINLAY.....	1914	74	1,378	2,574	574	2,094	3,487	1904	81	4,072	.....	1,479	3,520	6,045	
	1909	71	1,343	.....	925	1,579	2,925	SANDUSKY.....	1914	107	2,727	7,415	1,686	4,059	8,285
	1904	129	0,043	16,767	3,565	9,015	10,877	1909	91	2,118	4,850	1,006	2,835	5,917	
HAMILTON.....	1914	125	0,805	22,593	3,793	9,640	18,184	1904	93	2,323	.....	1,028	2,130	4,879	
	1909	113	0,107	.....	3,321	6,384	13,811	STEUBENVILLE.....	1914	60	4,506	36,731	3,430	11,432	16,959
IRONTON.....	1914	59	1,420	15,147	721	3,294	4,666	1909	55	4,267	37,748	3,203	14,443	21,187	
	1909	63	1,020	16,548	838	4,994	7,118	1904	72	4,184	.....	2,328	3,243	12,370	
	1904	57	1,800	.....	824	3,423	4,755	TIFFIN.....	1914	79	2,177	4,464	1,410	2,302	4,966
LANCASTER.....	1914	53	1,583	2,874	790	3,287	4,003	1909	75	1,932	3,267	828	1,252	3,254	
	1909	42	1,532	2,458	677	3,051	4,074	1904	87	1,945	.....	604	1,000	2,435	
LIMA.....	1914	97	4,870	7,518	3,178	6,369	11,590	WARREN.....	1914	82	2,862	5,747	1,933	6,355	10,400
	1909	85	3,607	3,204	2,024	3,309	7,754	1909	68	1,798	5,530	911	3,004	5,988	
	1904	77	2,733	.....	1,322	2,255	4,828	ZANESVILLE.....	1914	97	3,035	7,064	1,685	5,246	8,300
LORAIN.....	1914	66	6,436	211,182	4,660	17,929	20,110	1909	108	2,932	7,783	1,582	5,056	8,020	
	1909	57	6,097	203,092	4,788	24,222	38,987	1904	99	3,068	.....	1,500	3,291	6,347	
	1904	43	3,102	.....	2,832	9,708	14,401								
MANSFIELD.....	1914	103	3,398	6,637	2,020	4,772	10,282								
	1909	121	3,204	6,077	1,472	4,356	8,173								
	1904	109	3,021	.....	1,309	3,523	7,354								

<sup>1</sup> Includes "structural ironwork, not made in steel works or rolling mills."  
<sup>2</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.  
<sup>3</sup> 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 55.—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.			16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.					

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

	15,658	606,807	13,624	18,958	40,357	17,433	510,435	Mo 534,537	De 476,841	(?)	(?)	(?)	(?)	(?)	\$1,677,551,633
1 All industries.....															
2 Agricultural implements.....	59	6,543	27	194	724	134	5,464	Mo 6,793	De 4,132	5,621	5,580	23	0		31,524,254
3 Aluminum ware.....	8	242	1	15	5	6	216	De 282	Ja 172	283	265	18			519,637
4 Artificial limbs.....	16	50	11	5	8	4	22	Ap 26	Au 20	24	23	1			35,291
5 Artificial stone products.....	403	1,605	499	89	37	26	954	Jo 1,276	Mo 575	1,119	1,116	3			1,759,146
6 Automobile bodies and parts.....	63	4,655	31	116	282	78	4,128	Oc 4,070	Ja 3,319	4,125	3,993	160	2		7,151,783
7 Automobiles.....	39	16,521	3	270	1,229	398	14,624	De 16,751	Jy 12,090	17,155	16,864	280	11		60,002,615
8 Automobile repairing.....	85	246	97	18	5	11	215	Jy 228	Ja 187	234	233	1			392,638
9 Repair work only.....	81	338	92	18	5	11	212	Jy 223	Ja 185	230	229	1			386,506
10 Vulcanizing.....	4	8	5				3	Jy 4	De 4	4	4				6,132
11 Awnings, tents, and sails.....	38	799	23	45	80	36	615	My 842	De 453	576	262	200	1	14	1,244,762
12 Bags, paper.....	9	741		33	42	20	646	Oc 88	Jy 621	624	303	315	0		1,648,306
13 Baking powders and yeast.....	8	72	5	7	13	5	42	Mo 48	So 37	43	16	27			102,440
14 Baskets, and rattan and willow ware.....	34	689	42	21	6	4	617	Jy 705	De 534	659	460	190			317,885
15 Belting, leather.....	10	125		20	17	10	78	Ja 88	No 71	79	78	1			607,349
16 Billiard tables and materials.....	5	49		3	5	1	36	Mh 50	Jy 24	50	48	2			72,073
17 Blacking, stains, and dressings.....	12	58		6	10	5	20	Mh 2	Je 19	22	16	6			68,206
18 Blowing.....	4	9	4				5	Je 4	Ja 3	5					19,980
19 Bookbinding and blank-book making.....	60	1,268	66	44	54	87	977	Je 1,030	De 942	946	567	372	3	4	2,044,694
20 Boots and shoes.....	62	15,985	18	318	717	481	14,401	Mo 16,147	Ap 11,432	15,916	8,759	6,129	77	54	21,542,376
21 Boxes, cigar.....	26	492	30	10	6	8	443	No 465	Au 423	449	172	274	1	2	410,170
22 Boxes, fancy and paper.....	40	2,799	31	127	119	69	2,456	Mh 2,003	De 2,281	2,327	816	1,501	4	6	3,077,700
23 Boxes, wooden packing.....	94	1,899	88	55	50	19	1,397	Je 1,461	De 1,331	1,393	1,321	54	10		2,095,428
24 Brass, bronze, and copper products.....	84	2,768	50	146	293	89	2,277	Ap 2,673	No 2,096	2,115	2,083	29			5,075,622
25 Brass, bronze, and copper.....	79	2,391	57	135	189	76	1,943	Ap 2,158	No 1,757	1,786	1,706	20			5,449,987
26 Aluminum castings.....	5	577	2	11	23	7	334	Ap 415	Au 252	329	320	9			525,535
27 Bread and bakery products.....	1,034	10,950	1,838	233	850	304	7,666	So 7,846	Ja 7,370	7,836	6,202	1,604	25	5	15,354,756
28 Biscuits and crackers.....	11	1,417	1	80	107	78	1,116	My 1,100	Ja 1,079	1,084	589	495			2,877,107
29 All other.....	1,023	9,533	1,837	203	653	321	6,549	So 6,711	Ja 6,263	6,752	5,613	1,409	25	5	12,477,649
30 Brick and tile, terra-cotta, and fire-clay products.....	450	17,826	303	508	470	181	16,238	Jy 18,127	Fe 13,824	17,581	16,098	504	19		42,358,256
31 Building brick.....	166	7,388	90	279	143	61	6,809	Jy 7,004	Fe 4,948	7,448	7,433	5	10		17,589,191
32 Sewer pipe, drain tile, etc.....	227	4,922	201	125	134	44	4,358	Jy 5,045	Ja 3,554	5,122	5,112	2	8		11,832,627
33 Fire brick, stove lining, etc.....	29	1,720	1	92	49	13	1,692	Ap 1,725	De 1,401	1,495	1,400	4	1		4,071,214
34 Tile, other than drain.....	7	1,858	2	40	97	52	1,067	Ja 1,750	Au 1,583	1,671	1,118	653			3,003,372
35 Architectural and fireproofing terra-cotta.....	24	1,938		92	53	11	1,812	So 1,915	De 1,681	1,845	1,845				4,959,570
36 Brooms, from broom corn.....	77	485	85	18	20	8	345	Ja 361	Jy 318	368	326	42			431,429
37 Brushes.....	16	835	9	37	61	61	677	Mh 780	Jy 635	604	518	146			1,310,729
38 Butter.....	143	1,727	239	118	133	141	1,099	Jy 1,225	Fe 1,004	1,075	1,031	44			3,736,633
39 Buttons.....	9	172	7	6	1	1	157	Ja 212	Au 42	201	175	26			96,541
40 Canning and preserving, fruits and vegetables.....	96	1,936	70	88	85	33	1,664	So 1,664	Fe 305	6,005	3,579	2,387	24	15	4,234,478
41 Carpets, rag.....	39	293	42	9	7	4	141	My 187	Ja 106	143	84	50			112,382
42 Carriage and wagon materials.....	64	2,880	27	121	99	70	2,572	Ap 2,077	No 2,257	2,444	2,295	143	4	2	6,520,254
43 Carriages and sleds, children's.....	7	1,375	1	29	46	32	1,267	My 1,402	De 1,019	1,129	1,062	64	2	1	1,828,004
44 Carriages and wagons.....	277	4,410	312	239	305	129	3,426	Ap 3,794	No 2,963	3,286	3,199	84	3		11,199,573
45 Carriages and wagons.....	246	4,210	274	234	297	127	3,284	Ap 3,648	No 2,832	3,145	3,058	84	3		10,998,754
46 Repair work only.....	31	194	38	5	8	2	141	Jy 160	No 131	141	141				209,819
47 Cars and general shop construction and repairs by electric-railroad companies.....	48	1,963		63	20	1	1,879	Ja 1,921	De 1,780	1,780	1,763	26			4,066,813
48 Cars and general shop construction and repairs by steam-railroad companies.....	88	23,240		334	1,238	29	21,639	So 22,637	Je 20,207	21,105	21,081	19	5		16,012,157
49 Cars, electric-railroad, not including operations of railroad companies.....	4	1,013		48	42	7	916	Au 1,077	De 679	969	966	3			3,017,390
50 Cars, steam-railroad, not including operations of railroad companies.....	5	3,085		51	142	7	2,885	Ja 3,915	De 2,008	2,983	2,978	5			7,080,427
51 Cement.....	7	904		17	28	10	840	So 929	Ja 717	857	857				3,970,921
52 Charcoal.....	7	27	11	2			14	So 17	De 7	17	17				11,894
53 Cheese.....	129	224	118	7			97	Je 160	De 34	143	142	1			230,821
54 Chemicals.....	20	2,387		102	203	58	2,017	Ja 2,158	Au 1,896	1,996	1,962	34			13,847,986
55 China decorating, not including that done in potteries.....	5	30	18				12	Oc 18	Ja 4	18	3	14		1	25,310
56 Cleansing and polishing preparations.....	42	231	30	27	56	25	84	Ap 101	Au 70	82	57	25			257,866
57 Cleansing preparations.....	32	178	33	19	42	18	96	Ap 79	Au 55	66	45	21			163,679
58 Polishing preparations.....	10	63	6	8	14	7	18	Mh 24	Au 15	16	12	4			94,187
59 Cloth, sponging and refinishing.....	7	65	11			2	51	Jy 54	De 45	48	48				22,956
60 Clothing, men's.....	224	10,208	263	174	756	324	8,691	Ap 9,172	De 8,175	8,839	8,050	5,732	12	45	13,205,410
61 Regular factories.....	102	8,055	129	154	745	315	6,712	Mh 7,122	De 6,283	6,738	2,532	4,193	6	7	12,971,340
62 Men's and youths'.....	96	7,019	118	152	729	302	6,318	Mh 6,720	De 5,801	6,310	2,483	3,814	6	7	12,616,201
63 Boys'.....	6	436		2	10	13	394	So 408	Ja 303	428	49	379			355,139
64 Contract work.....	122	2,153	134	20	11	9	1,979	Ap 2,104	Ja 1,866	2,101	518	1,539	6	33	234,070
65 Men's and youths'.....	116	2,071	126	20	11	9	1,905	Oc 1,991	Ja 1,785	2,027	501	1,482	6	33	228,115
66 Boys'.....	6	82					74	Mh 83	Oc 64	74	17	67			5,955
67 Clothing, men's, buttonholes.....	10	98	13	2		2	81	Fe 84	De 75	75	14	61			11,113

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.

EXPENSES.										Value of products.	Value added by manufacture.	POWER.				
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Total.	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.		Steam engines. <sup>1</sup>			Internal-combustion engines. <sup>2</sup>		Water wheels and motors. <sup>1</sup>	Electric (rented).	

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

\$14,530,220	\$60,725,007	\$317,023,813	\$5,437,438	\$0,103,403	\$31,240,400	\$061,440,203	\$50,335,812	\$1,782,808,270	\$762,026,204	2,002,780	1,541,212	163,611	14,443	283,514	530,486	1
467,852	816,808	3,820,047	3,081	17,995	164,932	7,584,248	225,530	17,484,615	9,674,830	11,677	7,796	2,147	15	1,719	5,716	2
41,002	7,414	121,004	.....	520	2,841	233,048	11,221	515,340	270,487	692	.....	260	.....	332	117	3
5,725	7,002	10,030	089	5,748	816	10,279	7,480	104,301	87,623	14	.....	4	.....	10	13	4
82,476	33,273	531,080	23,854	10,070	11,700	735,061	27,480	1,046,139	1,182,816	2,949	1,136	1,344	.....	409	50	5
287,830	301,374	1,925,174	5,471	61,007	83,132	4,202,875	166,300	9,556,022	5,090,922	10,972	2,216	346	.....	8,410	713	6
1,068,020	1,095,205	11,485,705	15,202	26,820	324,700	50,304,905	566,417	76,154,488	25,283,166	10,277	6,952	1,356	.....	10,060	3,857	7
20,300	6,822	151,557	1,318	23,808	3,000	113,870	7,747	471,300	349,743	548	98	322	.....	128	20	8
20,300	6,822	149,547	1,318	22,980	3,040	112,541	7,422	456,546	335,583	530	98	322	.....	119	20	9
.....	.....	2,010	.....	888	20	1,329	325	14,814	13,160	9	.....	.....	.....	9	.....	10
01,782	118,320	299,042	.....	20,530	7,848	1,201,152	8,984	2,130,707	860,571	348	.....	44	.....	304	.....	11
90,916	60,901	304,953	938	30,700	14,408	1,814,213	17,066	2,893,011	1,061,732	853	550	110	.....	193	414	12
18,474	30,664	21,527	.....	4,635	1,550	246,754	1,520	415,860	107,595	.....	60	125	.....	42	57	13
2,009	2,983	222,839	2,000	2,300	1,902	137,862	6,558	481,083	330,678	1,148	1,091	55	.....	2	.....	14
45,303	21,790	50,030	128	5,941	5,830	539,593	3,122	729,572	180,857	216	60	.....	55	101	.....	15
11,200	4,064	18,780	200	2,520	847	67,961	511	113,018	45,446	120	110	.....	.....	10	12	16
10,490	22,187	15,270	.....	2,760	670	88,673	900	178,546	88,912	23	4	5	.....	14	.....	17
.....	.....	1,558	300	.....	324	10,921	93	15,830	4,816	.....	.....	.....	.....	1	.....	18
89,040	121,512	534,364	9,199	41,475	15,708	983,087	19,276	2,831,673	1,828,711	758	.....	27	.....	731	.....	19
799,494	1,447,851	7,029,581	44,808	142,070	147,701	19,059,194	148,402	32,773,922	13,526,326	9,813	5,970	1,945	.....	1,898	3,792	20
0,073	0,073	161,285	156	18,024	2,710	329,082	9,770	627,069	288,211	564	272	147	.....	145	60	21
218,265	124,425	661,283	201	78,371	22,611	2,045,142	41,473	4,060,322	1,673,707	1,941	676	410	60	796	223	22
91,522	59,929	716,256	3,443	29,722	21,049	2,027,596	31,433	3,355,820	1,296,881	5,409	4,076	700	.....	633	332	23
326,920	311,439	1,557,484	2,595	30,347	43,692	4,057,000	132,449	7,843,002	3,653,547	4,303	2,816	546	.....	1,031	910	24
296,387	278,339	1,324,685	2,595	28,807	39,564	3,557,416	107,585	6,920,176	3,255,169	4,061	2,816	546	.....	609	910	25
30,533	33,100	232,799	.....	7,450	4,128	499,680	24,804	922,922	398,378	332	.....	.....	.....	332	.....	26
458,820	1,055,208	4,782,765	2,584	301,306	137,853	10,728,290	590,883	30,590,881	13,205,708	8,078	2,289	1,171	0	5,509	839	27
89,915	279,584	480,293	.....	12,610	22,840	1,944,224	48,174	3,785,782	1,792,684	894	386	.....	.....	508	182	28
371,911	775,021	4,302,472	2,584	378,780	116,004	14,783,366	518,709	20,776,999	11,473,024	8,084	1,003	1,171	9	5,001	657	29
1,025,850	602,071	0,707,888	45,404	30,931	264,687	3,401,590	3,806,563	23,375,689	16,167,536	67,161	58,658	4,147	.....	4,356	3,590	30
458,175	177,516	4,190,319	24,757	15,454	167,233	1,031,219	1,880,809	9,278,892	6,366,834	29,992	26,740	1,158	.....	2,094	1,072	31
226,702	167,359	2,027,822	15,468	1,559	87,194	820,743	1,101,917	6,887,944	4,958,084	20,976	10,311	1,151	.....	918	1,073	32
120,287	68,424	935,610	152	13,201	25,917	499,098	208,994	2,617,959	1,551,867	6,808	5,180	720	.....	504	463	33
98,531	223,109	927,992	.....	21,474	21,474	778,407	229,960	2,790,543	1,782,140	3,030	1,480	1,045	.....	505	820	34
122,101	50,533	1,110,145	5,027	720	22,869	260,123	320,847	2,100,981	1,508,011	6,355	5,947	73	.....	335	102	35
14,200	23,689	155,485	150	4,405	3,514	440,271	7,254	840,144	386,619	377	15	237	.....	123	.....	36
99,070	104,635	297,510	381	4,070	10,282	721,210	10,783	1,544,399	812,417	848	435	42	.....	371	50	37
181,018	218,978	822,937	21,119	48,362	33,547	12,308,345	119,320	14,938,008	2,510,943	5,441	3,130	1,009	.....	1,293	193	38
0,389	1,996	63,983	.....	3,740	439	60,334	1,072	165,529	87,523	107	52	25	.....	30	.....	39
108,151	113,303	570,783	544	11,314	22,487	3,080,735	44,067	4,729,992	1,004,890	4,070	4,170	543	.....	260	173	40
10,005	4,322	50,252	.....	3,955	703	26,389	4,068	153,441	122,984	325	60	101	.....	68	.....	41
268,518	151,701	1,505,247	2,213	39,172	51,610	3,614,474	96,729	6,488,372	2,777,169	7,759	6,777	225	.....	757	444	42
79,067	63,217	701,517	.....	10,809	12,225	1,094,754	25,967	2,420,231	1,305,480	1,049	1,05	150	.....	704	55	43
451,780	389,264	2,334,201	13,733	101,728	81,940	4,748,498	101,261	6,910,077	4,864,318	5,622	2,857	1,210	.....	1,555	1,494	44
441,340	387,064	2,242,219	13,455	90,466	70,568	4,660,802	97,153	6,428,086	4,064,071	5,461	2,849	1,155	.....	1,457	1,494	45
10,440	2,200	91,982	2,278	11,262	2,272	81,630	4,108	275,991	190,247	161	8	55	.....	98	.....	46
66,039	14,738	1,228,041	1,840	5	45,379	1,025,145	52,261	2,385,584	1,308,178	3,687	1,350	.....	.....	2,337	1,251	47
460,175	1,128,504	0,470,020	2,422	.....	54,559	15,321,054	732,067	33,286,205	17,232,484	31,389	26,516	757	175	3,941	14,525	48
112,226	57,613	612,244	52,619	15,880	28,435	2,263,183	26,147	3,594,163	1,304,833	4,213	2,165	.....	.....	2,048	618	49
101,595	195,071	2,433,894	.....	17,444	56,472	8,433,897	124,397	11,795,726	3,237,432	6,420	4,090	920	.....	1,410	5,086	50
44,354	58,152	520,893	21,662	90	17,973	421,079	469,251	2,111,574	1,221,244	6,075	5,395	80	.....	1,500	3,390	51
565	330	2,477	1,350	85	71	9,171	274	17,383	7,888	.....	.....	.....	.....	.....	.....	52
2,905	1,533	68,276	1,000	3,149	1,844	1,637,741	7,234	1,175,447	130,472	534	488	46	.....	.....	.....	53
319,797	259,075	1,400,439	12,300	109,303	109,303	5,640,856	1,085,137	11,888,140	4,662,147	18,751	17,717	487	.....	547	3,232	54
.....	.....	6,307	498	176	.....	10,125	335	20,200	9,740	.....	.....	.....	.....	.....	.....	55
52,440	53,814	37,029	2,874	11,099	2,186	245,930	3,648	619,017	369,433	214	50	79	.....	85	.....	56
33,010	37,410	27,695	2,874	7,020	1,190	160,714	2,533	412,085	245,838	150	50	53	.....	53	.....	57
19,430	16,401	10,234	.....	4,070	996	85,222	1,115	206,932	120,595	58	.....	26	.....	32	.....	58
.....	1,175	37,462	.....	7,110	289	401	2,010	83,902	81,551	31	.....	.....	.....	31	.....	59
519,925	1,257,481	4,167,555	1,551,305	339,198	56,908	11,929,090	63,157	24,063,468	12,071,215	1,884	370	310	.....	1,204	206	60
493,739	1,239,508	3,393,710	1,455,302	322,009	54,604	11,855,174	49,717	22,803,277	10,898,336	1,594	370	229	.....	995	200	61
490,199																

TABLE 55.—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.			16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.	
								Maximum month.	Minimum month.					

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

1	Clothing, women's.....	170	11,283	167	240	701	310	0,776	Mh 10,740	De 7,878	0,630	3,404	6,215	11	\$0,559,029
2	Regular factories.....	132	11,007	125	237	700	304	0,551	Mh 10,467	De 7,805	0,324	3,320	6,084	11	9,496,998
3	Suits, skirts, and cloaks.....	68	8,369	82	150	648	217	7,262	Aug 8,053	De 6,602	7,002	3,031	3,968	3	7,560,103
4	Shirt waists and dresses, except house dresses.....	24	1,485	16	42	99	48	1,280	Fe 1,430	Je 1,106	1,343	100	1,130	6	827,463
5	Undergarments and petticoats.....	11	548	6	16	19	17	400	Ap 533	No 428	474	49	425	.....	643,787
6	Wrappers and house dresses.....	14	366	8	18	11	11	318	Se 353	Jy 287	303	28	272	3	257,156
7	All other.....	15	240	13	11	13	11	201	Oc 230	Je 166	202	22	180	.....	196,459
8	Contract work.....	38	270	42	3	1	0	224	Au 315	De 73	306	75	231	.....	62,031
9	Suits, skirts, and cloaks.....	29	185	34	.....	.....	.....	151	Au 217	De 30	222	62	160	.....	17,280
10	Wrappers, house dresses, and all other.....	9	61	8	3	1	0	73	Se 105	De 34	84	13	71	.....	44,771
11	Coffee and spices, roasting and grinding.....	35	1,406	17	71	409	87	822	Ap 800	De 734	785	430	336	1 18	0,577,086
12	Coffins, burial cases, and undertakers' goods.....	19	1,461	6	58	110	36	1,252	Ja 1,328	No 1,165	1,201	080	221	.....	3,781,335
13	Coke, not including gas-house coke.....	5	513	.....	11	10	3	489	Ap 692	No 327	410	410	.....	2,043,569	
14	Condensed milk.....	14	330	2	10	21	7	284	Je 304	No 257	263	223	37	.....	1,565,791
15	Confectionery and ice cream.....	292	5,120	230	215	415	236	3,905	Oc 4,957	Fe 3,497	4,435	1,084	2,843	14 14	8,144,707
16	Confectionery and chewing gum.....	132	3,944	111	168	345	170	3,149	Oc 4,178	Jy 2,451	3,000	1,270	2,304	12 14	6,000,543
17	Ice cream.....	160	1,176	178	62	70	60	816	Je 1,101	Fe 011	795	714	70	2	3,046,164
18	Cooperage.....	79	1,500	61	68	33	23	1,375	Mh 1,472	Jy 1,272	1,294	1,270	3	12	2,503,414
19	Hogsheads and barrels.....	68	1,201	51	54	33	20	1,103	Mh 1,192	De 1,000	1,022	1,008	2	12	2,086,534
20	All other.....	11	290	10	14	.....	8	272	Ja 300	Jy 236	272	271	1	.....	416,880
21	Copper, tin, and sheet-iron work.....	236	3,064	236	190	173	130	2,335	Se 2,474	De 2,176	2,309	2,221	80	7 1	5,450,447
22	Cordials and flavoring sirups.....	8	170	2	13	42	12	110	Je 278	No 70	01	60	34	1	450,951
23	Corsets.....	4	39	1	1	2	.....	31	My 30	De 21	23	22	.....	31,100	
24	Cutlery and edge tools.....	19	1,146	7	40	77	50	972	Mh 1,085	De 854	880	800	88	1	1,357,057
25	Table cutlery.....	3	30	1	1	1	.....	26	Ja 31	Oc 22	26	23	.....	46,949	
26	Razors.....	3	116	3	7	8	2	96	Mh 125	Au 09	03	61	12	.....	215,838
27	Axes, hatchets, scissors, pocket knives, augurs, etc.....	13	1,000	3	32	08	47	850	Mh 932	De 735	770	096	73	1	1,005,170
28	Dairymen's, poultry men's, and ap- drists' supplies.....	18	525	8	27	24	24	442	Je 490	Se 305	459	407	52	.....	1,221,391
29	Druggists' preparations.....	26	446	25	34	97	31	259	Je 271	No 242	246	141	103	2	903,851
30	Dyeing and finishing textiles.....	5	404	1	8	11	2	382	Ja 450	Se 250	428	387	20	12	1,451,379
31	Electrical machinery, apparatus, and supplies.....	119	15,226	46	478	1,330	671	12,005	Ja 13,819	De 11,883	12,190	0,504	2,084	7 1	35,405,810
32	Electroplating.....	36	315	47	20	9	9	230	Ap 240	No 218	235	228	5	2	211,797
33	Enameling.....	6	176	3	6	1	4	102	Jy 178	No 137	155	119	30	.....	301,623
34	Engines, steam, gas, and water.....	47	4,647	14	116	270	1,276	2,002	Ap 3,126	De 2,621	2,597	2,585	7	5	12,681,980
35	Engraving and diesinking.....	26	117	20	3	.....	1	84	De 90	Je 79	90	72	17	.....	58,104
36	Engraving, steel and copper plate, in- cluding plate printing.....	10	153	8	9	12	0	118	Je 131	Ja 112	118	86	25	4 3	69,023
37	Engraving, wood.....	4	7	5	.....	.....	.....	2	Ja 3	Jy 0	2	2	.....	1,799	
38	Envelopes.....	6	344	.....	23	15	16	790	Ja 880	Se 728	811	326	485	.....	1,614,965
39	Explosives.....	11	369	.....	25	25	8	311	My 321	De 205	205	294	1	.....	2,265,848
40	Fancy articles, not elsewhere specified.....	14	440	10	14	74	18	324	De 347	Ap 302	341	240	100	1	1,235,452
41	Fertilizers.....	24	1,266	5	68	184	34	1,005	Se 1,047	Oc 771	1,000	1,003	0	.....	8,531,660
42	Files.....	8	196	5	8	3	2	173	Mh 189	No 154	176	106	10	.....	196,710
43	Flags and banners.....	6	177	11	9	4	2	151	Je 161	Se 147	151	73	78	.....	225,878
44	Flavoring extracts.....	34	363	31	16	59	143	109	Je 122	No 90	105	65	50	.....	505,148
45	Flour-mill and gristmill products.....	640	3,876	858	275	259	121	2,303	Au 2,425	Je 2,209	2,403	2,382	18	3	18,841,102
46	Food preparations, not elsewhere specified.....	76	2,134	56	68	390	97	1,523	Se 1,874	Fe 1,301	1,601	1,239	361	1	11,719,674
47	Foundry and machine-shop products.....	992	60,372	582	2,175	4,742	1,320	51,553	Mh 56,015	No 46,096	40,227	48,675	483	66 3	159,568,026
48	Boiler shops.....	22	1,503	16	40	190	36	1,207	Mh 1,458	No 959	1,071	1,071	.....	.....	9,125,323
49	Foundries.....	111	12,403	47	324	568	128	11,346	Mh 12,116	No 10,533	11,424	11,274	114	36	17,315,593
50	Machine shops.....	859	46,466	530	1,802	3,978	1,156	39,000	Mh 42,441	No 34,674	30,732	36,330	369	30 3	133,126,110
51	Foundry supplies.....	15	195	3	19	35	18	120	Je 137	De 107	119	119	.....	.....	520,103
52	Fur goods.....	25	186	26	8	9	7	136	No 216	Ap 69	195	69	.....	.....	321,954
53	Furnishing goods, men's.....	40	2,548	28	49	66	37	2,308	No 2,533	My 2,253	2,535	335	2,104	13 23	1,833,882
54	Furniture.....	209	6,079	172	303	522	242	7,750	Mh 8,459	Jy 7,091	7,352	6,950	325	2	17,156,275
55	Wood, and rattan, and willow.....	149	5,387	120	228	180	90	4,760	Mh 5,271	De 4,474	4,683	4,493	112	72 1	9,305,975
56	Metal.....	18	1,383	22	52	226	81	1,004	My 1,137	De 772	773	769	2	1 1	3,300,076
57	Store and office furniture.....	42	2,304	30	113	116	50	1,986	Fe 2,097	De 1,880	1,896	1,683	211	2	4,400,274
58	Gas and electric fixtures.....	38	1,106	23	45	93	40	905	Oc 1,123	Jy 785	1,007	570	436	1	1,490,413
59	Gas fixtures.....	19	613	10	13	34	17	534	Oc 737	Jy 432	635	214	421	.....	790,062
60	All other, including electric fix- tures.....	19	493	13	27	59	23	371	No 391	Au 344	372	356	15	1	700,351
61	Gas, illuminating and heating.....	25	512	2	38	61	13	308	My 427	Ja 362	427	425	1	1	8,570,222
62	Gas machines and gas and water motors.....	12	250	6	15	29	13	187	Ja 200	De 169	187	175	12	.....	650,193

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.				
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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	Electric (rented).

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

\$767,347	\$1,424,103	\$5,130,614	\$311,154	\$281,359	\$61,377	\$12,008,712	\$81,127	\$22,881,753	\$10,791,914	1,710	30	351	1,338	56	1
765,237	1,421,781	5,038,880	311,154	278,324	61,098	11,997,755	78,144	22,687,391	10,611,492	1,657	30	351	1,276	56	2
590,800	1,194,014	4,085,741	811,082	210,596	47,893	9,385,755	54,547	18,070,697	8,630,394	1,060	30	140	890	3	3
110,010	148,940	600,127	72	61,777	4,991	1,280,451	12,839	2,461,684	1,159,294	231	.....	.....	231	4	4
31,200	35,210	180,884	.....	3,620	5,592	748,601	4,657	1,079,745	326,487	241	.....	207	34	56	5
20,081	23,776	114,117	.....	7,648	1,125	342,348	3,678	564,570	218,544	75	.....	.....	75	6	6
13,080	19,812	62,011	.....	4,683	1,497	231,690	2,423	510,795	276,773	50	.....	4	48	7	7
2,110	2,432	97,734	.....	3,035	279	10,957	2,983	194,362	180,422	62	.....	.....	62	8	8
.....	.....	68,524	.....	2,015	206	902	2,305	97,993	94,696	40	.....	.....	40	9	9
2,110	2,432	29,210	.....	1,020	73	9,965	678	96,309	85,726	22	.....	.....	22	10	10
207,101	613,391	385,217	1,539	39,981	44,950	10,136,827	47,557	13,312,493	3,128,100	2,062	367	301	1,394	385	11
67,830	208,143	701,049	476	0,027	71,052	1,258,794	34,042	2,906,388	1,072,652	2,208	1,535	470	75	188	12
20,003	13,008	352,340	.....	.....	0,835	364,977	1,241,668	2,150,814	550,169	2,325	2,325	.....	.....	3,844	13
42,081	22,824	157,062	.....	.....	12,820	2,453,443	51,128	3,211,022	707,361	702	686	16	.....	386	14
421,284	614,701	1,784,277	2,307	169,856	66,042	8,199,052	163,688	14,841,068	5,979,028	8,332	2,662	2,678	2	2,990	15
341,082	425,242	1,253,943	141	129,885	49,634	5,985,179	95,330	10,138,602	4,653,093	4,200	1,707	375	.....	2,118	16
80,202	89,549	530,334	2,160	39,971	10,408	2,213,873	68,258	4,208,066	1,025,935	4,132	955	2,303	2	872	17
103,552	41,003	749,573	225	14,595	25,732	2,386,303	40,183	3,661,969	1,265,483	3,622	3,141	230	.....	251	18
83,230	30,510	607,440	225	11,740	22,266	2,006,591	38,353	3,115,000	1,070,005	2,902	2,501	160	.....	241	19
20,322	1,574	142,133	.....	2,849	3,466	379,712	1,830	570,960	195,418	720	640	70	.....	10	20
343,123	310,075	1,586,615	33,527	67,452	41,903	6,476,621	52,057	10,702,747	4,174,099	2,650	492	1,298	.....	900	21
20,480	57,435	45,857	.....	11,267	7,065	532,352	3,175	890,359	354,832	96	35	.....	.....	61	22
2,850	1,837	0,500	.....	2,270	97	8,413	441	32,519	23,655	6	.....	.....	.....	6	23
80,174	124,285	507,702	425	4,176	12,471	395,401	41,741	1,423,701	986,559	2,715	1,030	630	.....	1,046	24
1,200	1,828	13,055	.....	101	362	6,228	784	25,986	18,974	76	71	.....	.....	5	25
18,138	14,908	49,920	.....	640	1,082	30,772	2,774	131,346	97,800	203	150	45	.....	8	26
69,830	107,549	504,211	425	3,535	10,427	358,401	38,183	1,266,309	869,785	2,436	880	523	.....	1,033	27
40,564	26,440	233,021	100	2,855	9,921	712,785	8,784	1,277,115	555,546	1,002	770	99	.....	133	28
50,125	155,214	138,916	.....	10,891	11,230	528,449	10,883	1,291,403	752,071	380	127	.....	.....	259	29
22,538	13,047	100,027	.....	3,250	6,832	392,477	51,108	705,018	262,083	4,100	4,030	.....	.....	20	30
1,107,747	2,028,604	7,409,090	4,056	93,582	284,801	16,905,997	576,251	36,120,978	18,638,730	17,771	5,161	2,685	.....	8,925	31
29,100	11,098	160,420	65	15,574	1,044	68,740	11,685	374,971	294,540	646	.....	344	.....	302	32
19,300	4,180	92,188	3,998	4,240	966	79,921	21,061	276,710	175,734	150	15	20	.....	115	33
263,901	409,551	1,082,543	10,951	10,243	37,286	2,704,215	132,989	6,801,351	4,024,147	9,617	3,045	4,130	447	1,995	34
3,140	490	37,803	4,000	67,017	178	18,328	994	132,073	112,751	46	.....	4	.....	42	35
18,557	0,600	73,453	100	6,231	242	27,186	2,233	175,240	145,821	37	.....	.....	.....	37	36
.....	.....	1,076	.....	320	5	206	3	5,380	5,171	.....	.....	.....	.....	.....	37
98,008	23,900	393,172	8,450	21,359	10,715	1,874,521	16,678	2,811,649	920,450	667	94	.....	142	431	38
76,215	40,028	188,050	5,485	1,585	20,292	933,258	38,846	1,439,009	466,905	5,646	2,413	40	500	2,693	39
42,840	123,041	158,609	2,588	8,214	7,346	321,157	6,024	957,742	630,561	285	.....	65	3	217	40
71,857	287,074	590,307	8,477	76	39,544	4,534,802	91,892	7,245,998	2,619,304	4,739	3,365	265	.....	1,109	41
12,205	8,853	83,862	.....	4,002	1,150	52,843	7,679	188,513	127,901	614	395	150	.....	69	42
20,480	3,600	77,240	.....	2,850	1,600	138,253	1,799	278,231	138,179	213	150	25	35	3	43
23,520	55,315	47,189	272	0,780	4,142	412,537	4,304	908,011	491,170	183	85	14	.....	84	44
411,545	320,704	1,505,072	7,939	24,405	138,319	38,569,587	387,799	45,171,200	6,213,814	53,524	30,333	11,831	7,641	3,719	45
212,465	498,002	827,137	5,819	10,431	57,144	19,894,156	140,601	27,346,187	7,311,430	5,709	4,773	600	.....	3,257	46
6,496,728	6,428,451	34,235,583	283,786	446,302	1,243,506	47,742,035	2,002,198	122,816,681	72,472,448	106,890	51,127	10,791	370	38,602	47
188,098	302,810	772,495	4,034	7,244	54,661	2,319,463	45,140	4,152,436	1,787,833	2,680	2,504	.....	.....	116	48
753,596	609,406	7,420,049	22,067	36,888	163,438	5,852,195	779,272	18,215,108	11,583,641	17,106	0,310	2,031	.....	8,825	49
4,554,464	5,426,226	26,043,939	257,685	402,170	1,025,407	39,570,377	1,777,786	100,449,137	59,100,074	87,044	42,253	14,760	370	20,661	50
27,254	52,130	56,700	2,000	8,921	3,206	231,604	8,955	548,662	308,103	1,016	585	95	.....	336	51
29,400	7,341	99,048	.....	29,500	1,722	146,027	1,876	422,945	274,142	41	.....	.....	.....	42	52
98,640	91,035	618,075	18,804	23,829	12,162	2,096,287	18,007	3,290,867	1,182,573	714	.....	168	.....	546	53
778,282	691,903	4,414,612	16,338	127,689	155,299	7,086,404	204,171	16,411,298	9,120,723	16,051	12,204	1,897	.....	2,450	54
407,610	214,864	2,670,039	15,611	82,547	79,923	3,993,550	130,524	9,183,474	5,059,400	10,334	7,916	762	.....	1,656	55
142,157	231,464	631,303	27	11,881	21,793	1,390,624	23,349	2,692,055	1,278,082	1,332	900	130	.....	302	56
228,485	169,575	1,113,180	800	33,261	56,683	1,702,230	50,298	4,535,769	2,783,241	4,385	3,388	505	.....	492	57
80,671	123,580	472,634	875	34,494	9,611	1,142,141	33,757	2,217,918	1,042,020	1,304	118	187	.....	990	58
32,162	53,902	205,018	810	13,414	4,586	531,828	22,007	999,246	445,411	883	18	61	.....	804	59
54,509	69,078	267,616	65	21,080	5,025	610,313	11,750	1,218,672	596,600	421	100	126	.....	195	60
57,020	52,379	261,720	300	6,870	125,280	115,366	364,415	1,431,826	952,045	1,353	1,079	197	.....	77	61
43,118	39,704	128,514	200	7,006	5,911	218,419	5,745	569,666	337,592	311	138	168	.....	128	62

\* Same number reported for one or more other months.

\* None reported for one or more other months.

TABLE 55.—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—			Male.	Female.	Male.	Female.	
								Maximum month.	Minimum month.						

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

1 Glass.....	39	11,541	4	197	227	116	10,997	Ap 13,290	Au 7,192	11,997	10,986	951	39	21	\$18,978,280
2 Glass, cutting, staining, and ornamenting.	40	595	33	42	20	19	481	No 614	Jy 437	494	405	87	2	.....	509,283
3 Grease and tallow, not including lubricating greases.	34	480	30	22	25	3	400	Jo 423	No 307	400	399	1	.....	.....	1,087,975
4 Tallow.....	17	254	18	16	23	1	196	So 225	No 178	193	192	1	.....	.....	704,998
5 All other, including soap stock.....	17	226	12	6	2	2	204	Jo 216	Do 187	207	207	.....	.....	.....	382,977
6 Grindstones.....	10	579	1	14	13	5	546	My 618	Do 427	527	527	.....	.....	.....	1,354,888
7 Hair work.....	7	41	9	1	2	2	27	Mh 28	Au 25	27	4	23	.....	.....	23,001
8 Hand stamps.....	18	75	18	7	6	5	39	(*) 30	(*) 30	39	36	2	1	.....	53,171
9 Hardware.....	51	5,326	25	126	231	141	4,803	Ap 5,240	Jy 4,324	4,630	4,208	401	10	11	8,879,616
10 Locks, hinges, and other builders' hardware.	16	1,171	11	45	53	26	1,036	My 1,148	Jy 834	967	904	62	1	.....	2,090,238
11 All other.....	35	4,155	14	81	178	115	3,767	Ap 4,118	Jy 3,484	3,663	3,304	339	9	11	6,183,378
12 Hats and caps, other than felt, straw, and wool.	28	532	42	20	25	14	431	Fe 4,470	So 354	442	176	264	.....	.....	431,700
13 Hats, fur-felt.....	7	38	6	8	2	.....	27	Mh 29	Ja 22	28	16	12	.....	.....	29,439
14 Hosiery and knit goods.....	38	3,730	13	97	128	81	3,411	Mh 3,709	No 3,081	3,526	807	2,694	2	23	7,135,898
15 House-furnishing goods, not elsewhere specified.	26	429	18	28	30	24	320	Ap 370	Au 290	202	204	88	.....	.....	1,059,014
16 Ink, manufactured.....	132	1,706	72	167	125	65	1,277	Au 1,859	Ja 821	1,312	1,297	15	.....	.....	10,247,927
17 Ink, printing.....	7	414	.....	30	99	34	254	Au 269	Mh 249	258	254	4	.....	.....	2,089,375
18 Instruments, professional and scientific.	28	565	14	41	29	24	457	No 502	Ja 411	483	341	137	2	3	942,607
19 Iron and steel, blast furnaces.....	33	6,925	.....	152	600	78	5,786	Ap 6,030	No 4,456	6,385	6,384	1	.....	.....	95,470,294
20 Iron and steel, steel works and rolling mills.	70	51,219	3	859	3,455	505	46,397	Mh 51,727	No 36,045	48,785	48,463	321	1	.....	232,224,732
21 Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	15	2,557	3	52	83	54	2,365	Ap 2,580	Do 2,086	2,217	1,954	262	1	.....	6,020,439
22 Iron and steel forgings, not made in steel works or rolling mills.	29	2,504	6	83	67	40	2,308	Mh 2,697	Au 2,008	2,335	2,320	2	.....	.....	5,806,488
23 Iron and steel, cast-iron pipe.....	8	1,532	.....	20	69	17	1,417	Fe 1,677	Do 1,165	1,473	1,470	3	.....	.....	4,206,729
24 Iron and steel, wrought pipe.....	5	2,382	2	37	49	9	2,285	Mh 2,736	Oc 1,868	2,067	2,067	.....	.....	.....	13,365,625
25 Jewelry.....	67	992	76	32	67	40	477	Do 563	Jy 460	508	456	43	9	.....	770,488
26 Labels and tags.....	7	121	2	9	12	6	92	Do 100	Ap 89	92	53	39	.....	.....	265,010
27 Lamps and reflectors.....	14	1,005	1	28	37	12	927	Ap 1,282	Do 641	876	823	53	.....	.....	1,458,698
28 Automobile lamps.....	7	820	1	16	8	7	785	Ap 1,228	Do 522	757	711	46	.....	.....	1,159,575
29 Reflectors, and carriage and wagon lamps.	7	179	.....	12	21	4	142	My 156	So 112	119	112	7	.....	.....	299,123
30 Leather goods, not elsewhere specified	12	77	12	3	3	6	53	Fe 59	So 43	58	36	22	.....	.....	123,164
31 Leather, tanned, curried, and finished.	28	1,751	18	62	48	18	1,605	Fe 1,739	Do 1,461	1,602	1,590	3	.....	.....	13,147,152
32 Lime.....	38	1,568	34	60	41	21	1,410	So 1,680	Do 1,125	1,361	1,353	3	5	.....	8,851,018
33 Liquors, distilled.....	18	398	11	19	29	7	332	So 368	Jy 305	377	356	21	.....	.....	5,149,914
34 Whisky and alcohol.....	9	383	4	19	28	6	326	So 362	Jy 299	369	348	21	.....	.....	5,102,424
35 All other.....	9	15	7	.....	1	.....	6	Au 10	Ja 5	8	8	.....	.....	.....	47,490
36 Liquors, malt.....	101	6,371	38	354	587	52	5,340	Jy 6,028	Fe 4,910	5,068	5,057	11	.....	.....	61,936,027
37 Liquors, vinous.....	23	303	22	24	57	14	189	Oc 261	Jy 163	179	199	10	.....	.....	2,122,589
38 Lithographing.....	28	1,951	8	72	136	62	1,673	Jo 1,714	No 1,625	1,624	1,395	227	2	.....	4,059,347
39 Looking-glass and picture frames.....	14	493	8	25	45	5	410	Ap 429	Ja 328	408	365	43	.....	.....	930,130
40 Lubricating greases.....	8	146	.....	22	34	17	73	Ap 78	Do 65	65	65	.....	.....	.....	436,033
41 Lumber and timber products.....	675	5,929	833	173	83	42	4,798	My 5,425	Do 4,321	5,714	5,699	44	1	.....	7,276,428
42 Lumber, planing-mill products, not including planing mills connected with sawmills.	400	6,819	319	422	401	161	5,516	Au 5,862	Ja 5,106	5,232	5,203	28	1	.....	15,042,399
43 Malt.....	5	89	1	9	4	1	74	Fe 99	Jy 54	81	80	1	.....	.....	991,222
44 Marble and stone work.....	213	3,095	216	140	172	44	2,523	My 2,765	No 2,247	2,445	2,442	3	.....	.....	7,374,604
45 Mattresses and spring beds.....	43	1,126	30	52	75	35	934	Ap 987	Do 873	876	635	241	.....	.....	2,443,777
46 Millinery and lace goods.....	30	1,116	35	39	73	58	911	Fe 1,299	Jo 534	897	221	672	.....	.....	828,341
47 Embroideries, dress and cloak trimmings, women's neckwear, etc.	10	263	12	6	33	32	180	Mh 189	Do 170	174	39	135	.....	.....	207,172
48 Trimmings, hat frames, etc.....	20	853	23	33	40	26	731	Fe 1,113	Jo 355	723	182	537	.....	.....	621,169
49 Mineral and soda waters.....	202	972	242	61	75	19	575	Jy 689	Ja 481	568	554	8	.....	.....	1,503,089
50 Minerals and earths, ground.....	19	497	6	32	21	5	438	Ap 508	Fe 358	417	417	.....	.....	.....	1,182,513
51 Mirrors.....	11	148	9	10	7	7	115	So 125	My 105	118	116	2	.....	.....	186,687
52 Models and patterns, not including paper patterns.	98	709	111	40	21	18	519	Jy 560	Ja 473	524	510	12	2	.....	747,769
53 Motorcycles, bicycles, and parts.....	9	891	4	29	72	34	752	Ap 1,007	So 511	759	729	30	.....	.....	2,719,392
54 Mucilage and paste.....	14	81	13	12	7	6	44	My 41	Ja 41	49	29	20	.....	.....	109,879
55 Musical instruments, organs.....	8	150	12	9	1	5	123	Fe 135	Oc 102	118	112	4	2	.....	181,126
56 Musical instruments, pianos.....	13	786	7	33	25	14	707	Ap 745	Jy 681	687	685	2	.....	.....	2,042,356
57 Musical instruments, piano and organ materials.	6	960	4	16	20	5	915	Fe 1,011	So 811	852	778	74	.....	.....	1,622,047
58 Oil, linseed.....	3	328	.....	14	157	7	150	Fe 184	Ap 106	146	146	.....	.....	.....	2,952,343
59 Oil, not elsewhere specified.....	20	319	4	38	93	46	138	My 144	No 132	134	134	.....	.....	.....	1,197,555
60 Optical goods.....	20	280	8	21	41	35	175	Mh 196	Ja 135	184	155	29	.....	.....	342,823
61 Paints.....	65	2,925	23	170	826	269	1,697	Ap 1,822	Do 1,587	1,695	1,561	134	.....	.....	12,518,932

\* Owned power only.

\* 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.			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.			Total.	Steam engines. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$606,903	\$302,764	\$7,052,066	\$10,000	\$12,490	\$155,455	\$5,369,552	\$1,670,125	\$10,191,342	\$12,145,665	34,871	28,502	4,382	.....	1,987	25,318	1
63,785	29,388	294,553	927	16,483	3,763	417,938	10,010	978,688	550,740	360	.....	178	.....	182	.....	2
48,487	22,872	270,138	2,326	2,811	5,587	605,509	65,967	1,215,913	544,437	2,010	1,354	70	.....	586	10	3
38,537	20,145	139,416	487	1,816	4,057	586,828	38,420	965,742	340,494	1,409	794	29	.....	586	.....	4
9,950	2,727	130,722	1,839	995	1,530	18,681	27,547	250,171	203,943	601	560	41	.....	.....	10	5
28,852	17,423	254,536	6,500	.....	5,592	37,381	23,438	488,361	427,542	1,866	1,608	175	.....	83	30	6
2,500	3,446	13,200	125	4,118	135	8,026	139	45,614	37,449	.....	.....	.....	.....	.....	.....	7
8,876	5,840	26,425	500	0,788	399	32,110	532	111,798	79,150	26	.....	10	.....	16	.....	8
311,203	416,307	2,909,362	7,271	16,584	100,623	3,834,308	328,488	9,069,625	4,906,829	8,687	4,116	598	10	3,963	1,491	4
89,892	89,540	607,214	7,271	5,600	26,364	890,524	36,910	1,924,972	997,538	2,026	1,115	200	.....	711	466	10
221,311	326,767	2,362,148	.....	10,984	74,250	2,943,784	291,578	7,144,653	3,909,291	6,661	3,001	308	10	3,252	1,025	11
34,388	31,383	224,410	.....	21,782	1,916	568,985	6,476	1,040,277	465,816	58	.....	.....	.....	58	.....	12
4,000	1,000	19,207	309	5,748	567	46,523	873	91,095	43,699	13	.....	.....	.....	13	.....	13
301,892	221,346	1,502,400	73,504	80,268	37,234	4,969,270	63,249	8,654,103	3,621,578	2,740	1,670	96	.....	974	1,034	14
62,195	63,813	161,817	997	7,751	12,032	984,671	10,869	1,430,265	434,735	895	700	72	.....	123	426	15
223,947	119,661	904,476	5,412	21,653	108,749	209,975	584,934	3,134,302	2,258,393	27,978	26,356	969	.....	653	861	16
186,510	180,851	196,050	1,245	3,625	23,015	1,321,532	32,402	2,763,637	1,409,603	1,913	1,553	360	.....	.....	1,000	17
72,667	50,504	253,723	33,872	10,347	5,524	239,172	7,999	867,742	620,571	436	128	211	.....	97	96	18
558,205	850,530	5,170,730	40,900	15,000	743,620	41,379,764	10,358,760	72,969,368	12,230,844	232,179	196,256	32,725	150	3,048	38,872	19
2,308,915	4,641,282	38,004,187	22,222	64,548	1,405,181	129,835,882	9,840,009	205,023,391	65,346,900	642,958	601,164	14,296	1	27,497	186,057	20
176,537	130,023	1,322,597	812	5,969	57,775	2,478,573	123,151	4,651,422	2,049,698	6,167	1,890	756	.....	3,521	607	21
206,624	93,224	1,570,372	.....	8,174	54,613	3,519,885	417,551	6,752,467	2,815,031	7,440	2,800	1,806	.....	2,834	1,906	22
62,501	79,635	888,269	.....	.....	27,727	1,875,960	186,493	3,355,043	1,292,590	7,387	5,000	20	.....	2,367	5,021	23
92,903	47,305	1,534,575	.....	5,310	26,713	5,940,555	211,654	9,347,581	3,215,372	3,193	3,178	15	.....	333	7,302	24
11,892	73,749	337,464	875	32,361	3,763	396,866	6,608	1,265,096	861,622	348	.....	15	.....	.....	1	25
19,297	13,827	44,239	853	5,190	1,525	120,472	1,694	250,206	128,040	63	.....	28	.....	35	.....	26
66,190	46,250	548,525	430	14,330	11,737	1,398,734	25,037	2,681,177	1,257,406	1,564	370	480	.....	714	45	27
46,680	29,284	465,011	.....	11,820	9,940	1,273,825	20,299	2,327,540	1,033,416	1,244	335	250	.....	659	45	28
19,510	16,966	83,514	430	2,510	1,841	124,909	4,738	353,637	223,090	320	35	230	.....	55	.....	29
4,731	6,070	29,403	.....	1,472	840	105,881	1,414	169,420	62,125	60	.....	29	.....	31	.....	30
164,070	61,830	1,054,461	.....	6,967	77,596	8,401,167	105,086	11,627,916	3,121,663	4,450	3,942	145	.....	303	2,072	31
101,928	55,863	777,215	10,648	2,828	22,467	351,919	354,063	2,334,349	1,628,367	7,374	4,707	504	.....	2,163	1,080	32
73,036	53,500	222,941	35	1,568	7,273,583	1,897,475	90,736	10,683,552	8,695,341	2,809	2,747	20	20	13	394	33
73,036	52,084	218,517	.....	.....	7,260,348	1,885,522	89,905	10,644,583	8,669,156	2,710	2,678	12	20	.....	394	34
.....	1,482	4,424	35	1,568	13,235	11,953	831	38,909	26,185	99	69	17	.....	13	.....	35
1,153,801	825,989	4,410,392	111,132	6,234	6,298,612	8,291,702	898,780	31,990,274	22,799,792	38,048	36,438	642	32	936	6,432	36
53,979	75,919	114,800	926	3,960	49,450	1,040,367	12,332	1,800,050	747,361	447	245	49	10	143	.....	37
225,906	273,584	1,427,918	10,107	40,678	30,774	1,248,111	34,270	4,179,127	2,896,746	1,829	715	386	.....	728	976	38
46,518	51,317	258,265	.....	9,553	6,605	320,087	10,735	1,133,128	582,306	885	250	.....	.....	280	10	39
34,376	38,701	45,680	.....	3,138	2,697	349,771	6,376	703,448	347,301	134	25	109	.....	.....	.....	40
245,108	104,696	2,387,621	100,954	19,559	68,455	4,294,746	52,066	9,043,930	4,697,118	29,964	27,114	1,008	130	1,712	726	41
685,235	437,303	3,845,987	101,211	100,921	127,443	11,211,474	190,423	18,892,060	7,490,163	25,187	14,300	5,288	150	5,449	2,461	42
13,082	8,726	52,496	.....	3,080	5,863	613,775	26,193	771,055	131,087	.....	605	.....	.....	430	.....	43
245,201	214,045	1,636,178	95,696	22,946	45,667	1,925,110	123,998	5,263,892	3,214,875	10,353	5,410	2,230	.....	2,713	1,935	44
114,082	110,257	499,945	46,905	20,078	22,535	1,965,363	32,183	3,426,908	1,426,362	2,228	1,000	400	.....	759	16	45
68,581	83,693	433,194	150	38,513	5,091	989,311	15,610	1,917,019	912,998	408	85	27	50	247	70	40
12,580	44,038	85,889	150	10,963	1,186	197,343	2,805	410,668	210,520	48	.....	27	.....	21	.....	47
56,001	30,655	347,305	.....	27,550	3,905	791,968	12,805	1,507,251	702,478	361	85	.....	50	226	70	48
70,741	65,551	342,370	320	30,197	12,520	837,527	22,626	2,003,699	1,143,540	1,059	315	344	9	391	14	49
44,436	20,795	227,343	1,845	1,027	7,927	292,657	59,464	779,555	428,034	3,967	3,272	60	.....	635	150	50
20,189	20,889	76,390	.....	4,364	1,586	158,929	3,666	301,562	198,757	246	120	71	.....	55	.....	51
71,187	25,969	392,660	2,070	26,882	4,616	170,214	13,040	896,184	712,930	1,036	145	414	50	427	35	52
84,788	114,207	517,741	.....	8,180	19,246	1,590,224	43,942	2,931,383	1,297,217	1,951	470	210	.....	1,271	40	53
13,946	13,083	23,929	.....	5,913	1,086	105,440	2,087	198,011	91,384	118	34	23	.....	61	.....	54
9,623	4,229	75,499	.....	1,923	1,806	109,165	3,252	239,467	127,080	191	65	72	.....	54	.....	55
88,309	32,269	447,389	2,044	36,972	17,725	1,052,572	15,221	1,972,369	904,516	996	820	88	.....	88	68	56
35,613	20,078	499,512	.....	26,652	10,204	470,138	22,569	1,332,880	840,173	1,014	.....	400	.....	614	428	57
57,069	150,957	115,917	.....	612	18,382	3,065,322	36,709	3,957,939	315,908	1,603	910	.....	.....	693	34	58
82,851	100,082	105,294	50	7,078	10,462	1,877,541	10,915	2,075,950	787,494	495	354	67	.....	74	84	59
47,554	44,952	102,891	351	22,807	2,613	211,411	4,775	617,070	400,884	102	.....	.....	.....	102	.....	60
487,834	1,135,401	1,031,701	2,573	57,950	116,112	8,803,724	104,884	14,824,073	5,915,465	7,709	4,262	812	.....	2,605	1,194	61

<sup>1</sup> Same number reported throughout the year.

<sup>2</sup> Same number reported for one or more other months.

MANUFACTURES—OHIO.

TABLE 55.—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—		Male.		Female.	Male.	Female.		
								Maximum month.	Minimum month.							
1 Paper and wood pulp.....	48	5,865	1	166	185	83	5,430	Mh <sup>5</sup> 5,534	De 5,104	5,226	4,584	612	30	.....	\$22,973,752	
2 Paper goods, not elsewhere specified.....	23	1,729	19	35	138	58	1,470	Mh 1,618	No 1,420	1,443	808	635	2	4	4,207,854	
3 Patent medicines and compounds.....	198	1,631	162	133	462	244	640	Mh 718	Jy 572	601	399	280	14	.....	3,027,744	
4 Paving materials.....	66	2,221	44	117	82	21	1,957	So 2,649	De 1,189	1,940	1,932	.....	.....	.....	7,395,265	
5 Perfumery and cosmetics.....	28	488	25	21	259	50	183	Oc 149	Au 117	139	63	70	.....	.....	413,142	
6 Petroleum, refining.....	7	2,626	.....	35	1,026	46	1,519	Oc 1,502	Au 1,458	1,505	1,483	22	2	6	10,426,715	
7 Photographic apparatus.....	4	58	9	8	8	2	13	Fe <sup>5</sup> 15	Se 10	13	3	.....	.....	.....	6,351	
8 Photographic materials.....	26	588	18	52	69	38	411	Au 41	Ja 394	43	42	11	.....	.....	74,370	
9 Photo-engraving.....	39	1,025	23	47	76	26	853	So 1,354	Ap 602	777	363	413	1	.....	471,758	
10 Pickles, preserves, and sauces.....	17	468	10	18	42	16	407	Oc 520	Ap 313	374	147	227	.....	.....	2,626,220	
11 Preserves.....	22	532	13	20	34	10	440	Se 903	Ja 206	403	216	186	1	.....	1,051,743	
12 Pickles and sauces.....	43	2,439	16	101	206	74	2,042	Au 2,169	My 1,920	2,003	1,816	28	234	15	1,574,477	
13 Plumbers' supplies, not elsewhere specified.....	99	11,844	41	297	260	150	11,096	Mh 11,390	Jy 10,482	11,193	8,158	2,068	34	33	13,872,886	
14 Pottery.....	45	8,733	7	200	141	101	8,284	Mh 8,415	Jy 8,035	8,303	5,781	2,461	33	28	9,315,812	
15 China ware.....	45	2,030	20	91	119	48	2,661	Mh 2,824	Jy 2,294	2,739	2,258	470	.....	.....	4,438,199	
16 Earthen and stone ware.....	17	172	14	6	.....	1	151	Ap 158	My <sup>5</sup> 146	151	119	31	1	.....	119,375	
17 All other.....	5	57	2	4	.....	1	40	Do 105	Mh 26	10	.....	.....	19	.....	104,410	
18 Poultry, killing and dressing.....	772	10,365	607	564	698	428	7,078	Ja 8,182	Se 7,863	7,949	5,873	2,036	37	3	15,445,512	
19 Printing and publishing, book and job.....	715	9,565	663	506	579	307	7,450	Ja 7,652	Se 7,340	7,416	5,503	1,876	37	.....	13,960,459	
20 Job printing.....	12	450	5	20	16	18	391	No 403	Au 381	305	251	141	.....	.....	700,715	
21 Book publishing and printing.....	30	212	13	28	98	35	38	Fe 51	Jy 20	40	28	12	.....	.....	593,662	
22 Book publishing without printing.....	15	138	16	10	5	8	99	Ap <sup>5</sup> 101	Ja 95	98	61	7	.....	.....	190,676	
23 Linotype work, typesetting, etc.....	12	150	11	21	46	31	50	Ap 55	De 45	45	41	4	.....	.....	243,527	
24 Printing and publishing, music.....	901	12,350	715	700	2,252	1,418	7,274	Do 7,377	Jy 7,125	7,400	5,989	1,278	140	2	20,682,947	
25 Printing and publishing, newspapers and periodicals.....	80	4,856	30	173	1,229	647	2,768	Fe 2,814	Jy 2,681	2,820	2,535	261	24	.....	9,112,381	
26 Printing and publishing.....	607	6,773	591	414	803	593	4,402	Ap 4,464	Jo 4,338	4,470	3,360	1,003	114	2	10,697,732	
27 Printing and publishing and job printing.....	205	730	115	113	220	178	104	Do 110	Au 98	110	91	14	2	.....	872,834	
28 Publishing without printing.....	7	34	5	4	1	3	21	Oc <sup>5</sup> 23	Fe <sup>5</sup> 19	21	21	.....	.....	.....	58,059	
29 Printing materials.....	17	1,212	11	30	126	22	1,014	Fe 1,155	Oc 905	976	976	.....	.....	.....	2,734,230	
30 Pumps, not including power pumps.....	9	794	1	41	87	22	643	Jo 685	De 571	571	500	.....	.....	.....	2,291,211	
31 Pumps, steam and other power.....	4	117	5	8	17	6	81	Ap 100	Au 53	84	84	.....	.....	.....	227,020	
32 Refrigerators.....	11	1,128	4	26	126	49	923	Ap 1,004	Au 856	875	327	544	1	3	1,901,763	
33 Regalia and society badges and emblems.....	18	874	9	33	76	41	715	Se 800	De 586	632	605	25	.....	.....	3,632,886	
34 Roofing materials.....	54	29,212	10	460	5,433	1,595	21,705	My 25,439	Ja 19,479	21,903	19,451	2,423	24	5	100,742,327	
35 Rubber goods, not elsewhere specified.....	154	1,854	166	79	165	41	1,403	De 1,548	Au 1,306	1,554	1,395	134	25	.....	4,138,397	
36 Saddlery and harness.....	8	2,081	1	61	106	63	1,700	Fe 1,882	Au 1,650	1,720	1,719	.....	.....	.....	4,948,552	
37 Safes and vaults.....	10	809	.....	32	47	17	813	Oc 800	Jy 772	777	704	73	.....	.....	2,903,990	
38 Salt.....	17	196	15	10	24	8	139	Oc 144	Ja 136	142	141	1	.....	.....	350,259	
39 Sausage.....	8	186	7	12	11	7	149	Fe 169	Au 137	139	139	.....	.....	.....	415,927	
40 Saws.....	7	1,634	.....	33	88	49	1,464	Ap 1,639	Oc 1,248	1,547	1,436	108	3	.....	3,759,999	
41 Screws, machine.....	3	2,104	.....	25	115	39	1,925	Mh 2,321	Au 1,467	1,867	1,799	59	9	.....	9,206,797	
42 Sewing machines and attachments.....	5	2,739	.....	32	66	18	2,623	Mh 3,330	No 1,828	2,448	2,446	.....	.....	.....	12,410,669	
43 Shipbuilding, iron and steel.....	24	307	20	13	6	3	256	So 298	Mh 230	248	248	.....	.....	.....	469,777	
44 Shipbuilding, wooden, including boat building.....	4	155	0	5	3	3	135	Ap 147	De 125	125	125	.....	.....	.....	228,822	
45 New vessels.....	5	72	1	3	2	.....	66	Fe 80	Mh 47	66	66	.....	.....	.....	111,279	
46 Repair work.....	15	80	19	5	1	.....	55	Au 92	Ja 25	57	57	.....	.....	.....	119,676	
47 Small boats.....	33	2,360	22	65	132	74	2,067	Fe 2,289	No 1,899	1,963	151	1,772	7	33	1,701,797	
48 Shirts.....	11	349	5	21	13	8	302	Ap 330	No 270	274	268	4	2	.....	523,134	
49 Show cases.....	50	1,719	20	85	97	136	1,372	My 1,431	Ja 1,308	1,380	871	504	3	2	3,178,843	
50 Signs and advertising novelties.....	10	174	6	12	11	11	134	Ap 146	No 129	135	102	32	1	.....	104,929	
51 Electric signs.....	21	778	12	42	30	43	612	Ap 684	Ja 583	627	459	159	.....	.....	1,640,851	
52 Signs, other than electric.....	10	767	11	31	47	82	596	No 624	Fe 575	627	310	313	2	2	1,433,063	
53 Advertising novelties.....	152	4,321	153	179	418	86	3,480	De 4,150	Se 3,310	3,866	3,715	86	5	.....	14,043,736	
54 Slaughtering and meat packing.....	8	112	3	0	0	5	89	Do 98	No 77	90	90	.....	.....	.....	435,876	
55 Smelting and refining, not from the ore.....	9	600	8	17	27	17	531	Fe 583	So 478	512	296	204	10	2	714,612	
56 Sporting and athletic goods.....	7	913	.....	23	56	15	819	De 1,005	Ja 705	1,005	1,005	.....	.....	.....	1,619,021	
57 Springs, steel, car and carriage.....	35	3,186	5	97	155	76	2,853	Mh 3,214	No 2,393	2,704	2,146	550	6	2	6,629,146	
58 Stamped and enameled ware, not elsewhere specified.....	20	648	3	44	39	16	546	Mh 618	De 479	484	457	24	2	1	1,375,745	
59 Stamped ware.....	15	2,638	2	53	116	60	2,307	Mh 2,596	No 1,905	2,220	1,689	526	4	1	5,253,401	
60 Enameled ware and bath tubs.....	15	894	7	30	100	49	708	Ja 755	Se 660	691	466	225	.....	.....	2,264,768	
61 Stationery goods, not elsewhere specified.....	8	107	12	5	4	5	81	De 92	Jy 31	93	84	0	.....	.....	180,511	
62 Statuary and art goods.....	33	3,000	9	94	365	118	2,414	Se 2,620	Ap 2,290	2,375	2,367	.....	.....	.....	7,451,386	
63 Steam fittings and steam and hot-water heating apparatus.....	13	770	2	20	78	33	623	Se 774	Ja 506	654	653	.....	.....	.....	2,003,903	
64 Radiators and cast-iron heating boilers.....	20	2,230	7	65	287	85	1,788	Se 1,840	De 1,725	1,721	1,714	.....	.....	.....	5,447,483	
65 All other.....	3	26	2	1	3	1	19	Ja 23	De 14	41	13	.....	.....	.....	28,020	
66 Steam packing.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$501,616	\$270,582	\$3,377,778	\$9,051	\$12,761	\$161,096	\$14,828,600	\$1,280,584	\$23,284,192	\$7,174,918	50,013	43,609	490	3,900	2,014	7,440	1
117,720	102,366	780,170	103	15,054	488,728	2,262,488	43,683	5,330,506	3,030,335	3,035	1,865	57	.....	1,113	997	2
233,480	466,468	204,184	1,895	67,123	20,338	2,229,920	43,180	5,611,855	3,338,785	1,449	829	50	.....	670	403	3
197,033	95,261	1,169,371	3,816	37,927	45,184	403,874	259,371	3,507,253	2,794,008	23,885	18,842	695	.....	4,348	528	4
33,390	137,961	46,113	683	12,969	12,948	204,366	1,599	830,893	624,958	114	.....	80	.....	34	80	5
192,318	922,785	1,024,535	40,889	.....	148,620	9,424,188	500,257	11,169,180	1,244,744	4,920	4,820	50	50	.....	70	6
3,280	3,280	7,108	.....	1,224	26	3,281	25	22,701	19,445	.....	.....	.....	.....	.....	.....	7
11,071	12,375	20,870	.....	3,520	835	39,391	1,731	113,887	72,765	61	.....	25	.....	30	.....	8
90,744	86,334	395,683	14,981	27,920	2,921	157,728	12,703	974,274	803,843	300	.....	51	.....	315	11	9
93,120	120,120	369,484	1,677	9,066	14,783	2,741,135	31,271	4,221,091	1,449,285	2,100	1,937	66	.....	97	395	10
25,839	73,432	158,678	502	6,474	8,326	869,975	12,311	1,566,321	684,035	821	.....	17	.....	37	60	11
07,284	46,638	210,806	1,115	2,592	6,457	1,871,160	18,980	2,655,370	705,250	1,279	1,170	49	.....	60	395	12
239,309	470,702	1,297,199	1,020	28,323	30,838	2,042,989	104,143	5,129,257	2,982,125	4,032	2,495	390	.....	1,147	158	13
536,771	444,523	6,689,440	27,399	2,826	99,337	3,785,853	1,182,449	15,291,685	10,323,883	9,271	7,390	978	.....	900	797	14
394,858	255,319	5,107,827	25,891	1,360	64,038	3,031,527	803,138	11,313,206	7,478,541	5,087	3,805	975	.....	604	540	15
140,833	183,004	1,602,770	1,248	1,089	34,461	723,492	363,803	3,816,035	2,727,680	3,804	8,282	223	.....	299	257	16
11,080	1,200	78,843	377	.....	838	30,334	15,448	1,566,321	684,035	380	308	74	.....	3	.....	17
5,640	2,232	25,978	.....	720	628	438,937	1,485	498,427	58,004	45	.....	.....	.....	45	.....	18
1,238,425	883,907	5,097,537	513,710	438,906	131,862	6,703,096	208,113	19,016,250	13,004,041	8,904	1,849	975	1	6,139	2,230	19
1,109,547	753,109	4,741,964	132,228	403,897	120,603	6,254,664	189,707	17,040,040	11,196,809	8,402	1,814	837	1	5,750	2,230	20
62,556	31,094	238,527	12,245	10,797	5,158	405,290	14,971	1,210,152	789,891	514	35	138	.....	341	.....	21
07,010	90,880	21,456	368,537	9,314	5,172	31,195	609	875,498	343,004	12	.....	.....	.....	12	.....	22
12,306	7,824	96,190	680	5,898	929	12,047	2,766	189,050	174,237	36	.....	.....	.....	36	.....	23
46,115	61,650	34,327	86,275	8,474	1,424	1,424	12	484,344	412,001	.....	.....	.....	.....	.....	.....	24
1,544,101	2,904,509	5,032,571	936,212	312,971	103,015	7,541,397	231,169	28,023,200	20,250,724	12,720	2,536	1,908	43	8,233	1,098	25
640,823	1,641,106	2,490,034	7,013	103,075	90,057	4,483,418	91,540	14,649,950	10,075,001	5,625	1,315	270	0	4,034	727	26
690,844	973,975	3,005,710	37,694	176,371	83,347	2,899,459	137,593	10,934,197	7,897,145	6,929	1,221	1,623	37	4,048	971	27
212,434	289,428	70,827	891,505	33,525	8,611	158,520	2,036	2,430,134	2,278,578	166	.....	15	.....	151	.....	28
8,521	2,659	15,769	.....	4,020	407	80,316	1,207	101,997	61,384	24	8	.....	.....	16	.....	29
70,945	102,063	638,503	.....	8,401	25,111	1,384,026	19,394	3,277,182	1,873,162	1,403	785	430	.....	183	234	30
85,752	68,690	378,048	22,439	6,299	7,376	555,378	20,039	1,855,471	780,054	1,229	1,120	61	.....	48	1,130	31
13,048	20,691	54,230	1,302	2,090	10,778	1,818	1,818	276,178	137,572	266	130	.....	.....	.....	5	32
84,634	170,682	463,731	1,040	11,940	21,791	1,053,221	9,593	2,326,039	1,263,915	274	60	185	.....	29	188	33
07,761	106,539	428,591	1,592	3,480	29,020	2,247,345	71,752	3,905,812	1,586,715	2,076	1,773	100	.....	203	1,380	34
1,687,441	4,814,937	14,578,251	3,375	14,245	923,546	57,837,001	900,475	109,658,005	50,921,120	58,672	49,951	1,152	.....	7,569	41,295	35
140,550	164,521	764,811	1,065	39,989	33,895	3,046,468	21,178	4,869,957	1,802,311	1,109	567	149	.....	390	203	36
138,328	395,691	1,153,082	25,721	5,390	28,604	1,434,290	48,558	4,837,430	2,854,552	5,603	4,120	293	.....	1,253	2,738	37
88,248	61,317	440,905	2,079	5,000	18,268	909,080	265,128	2,197,204	929,906	4,937	4,248	305	.....	384	1,418	38
26,988	27,843	106,337	.....	2,191	3,955	1,372,023	12,107	1,718,983	320,853	681	403	63	.....	225	.....	39
15,480	14,507	97,103	.....	7,730	2,992	77,935	8,744	274,834	188,455	524	.....	224	.....	300	.....	40
128,330	124,064	941,952	.....	1,912	33,348	1,307,623	60,665	3,275,186	1,906,898	2,885	400	290	.....	2,195	125	41
101,027	159,493	1,260,711	.....	1,830	43,888	2,549,773	57,524	4,508,758	1,901,461	2,043	800	235	.....	1,908	60	42
148,588	72,970	1,791,649	.....	88,826	1,571,259	1,406,066	140,066	4,291,645	2,580,320	8,748	7,242	.....	.....	1,506	6,251	43
20,795	6,089	146,916	2,497	2,990	3,003	193,493	3,762	425,142	227,887	913	728	90	.....	95	.....	44
10,800	5,340	75,820	2,450	.....	1,469	138,215	1,931	244,723	104,577	397	240	.....	.....	67	.....	45
3,045	209	31,774	47	220	945	17,091	500	70,975	62,775	303	260	43	.....	.....	.....	46
6,950	540	39,322	.....	2,770	589	37,587	1,322	109,444	70,535	303	228	47	.....	28	.....	47
165,905	124,881	735,232	38,115	52,863	7,681	1,747,403	16,078	3,558,361	1,794,280	1,064	550	47	.....	467	.....	48
30,962	16,152	178,272	1,500	6,510	4,499	270,460	9,323	619,465	339,682	711	360	100	.....	251	.....	49
166,589	107,828	734,014	9,135	26,940	22,723	1,718,301	25,554	3,551,045	1,807,190	1,800	986	218	.....	596	58	50
14,333	12,722	73,983	450	7,455	812	87,916	1,979	299,754	209,859	111	.....	10	.....	101	.....	51
84,342	72,490	369,312	7,520	10,186	11,673	849,149	14,945	1,582,293	721,109	932	470	74	.....	388	13	52
67,864	82,616	290,719	1,235	9,308	6,933	784,236	8,630	1,609,088	870,222	757	516	134	.....	107	45	53
369,046	455,250	1,381,400	8,057	45,721	122,072	57,998,310	298,660	64,990,390	6,663,426	12,350	9,139	618	.....	2,599	3,300	54
23,470	8,297	85,823	500	1,501	4,002	236,740	74,319	578,085	267,020	607	640	4	.....	53	783	55
44,350	38,224	253,999	8,888	5,564	4,842	423,899	8,285	986,496	554,312	411	164	160	.....	78	22	56
61,574	81,393	627,932	.....	4,431	14,663	1,401,459	149,040	2,773,666	1,223,167	1,567	390	331	.....	846	8	57
282,676	212,655	1,668,737	150	20,708	51,485	2,781,704	280,240	6,700,998	3,718,988	3,571	1,580	1,135	.....	856	832	58
94,144	50,303	347,689	150	20,308	12,378	783,674	15,661	1,548,963	749,728	1,150	425	504	.....	221	5	59
188,532	162,352	1,321,048	.....	39,107	1,998,190	244,585	244,585	5,212,035	2,600,200	2,421	1,155	631	.....	635	827	60
82,658	143,261	394,192	1,026	4,620	20,771	881,334	24,780	2,174,425	1,268,311	1,118	670	140	.....	308	724	61
8,920	4,208	55,089	.....	2,670	1,107	34,187	2,067	135,854	90,600	60	.....	55	.....	14	105	62
314,196	545,892	1,540,950	5,775	27,087	65,586	2,195,623	108,980	6,314,783	4,010,180	3,979	2,310	794	.....	875	1,336	63
73,092	129,844	446,739	100	14,270	13,129	590,073	38,564	1,487,232	858,595	712	175	73	.....	464	440	64
241,104	416,048	1,099,311	5,675	12,817	52,457	1,005,550	70,416	4,827,551	3,151,585	3,267	2,135	721	.....	411	806	65
4,000	2,530	11,603	36	720	403	18,852	633	37,895	18,410	72	.....	72	.....	.....	.....	66

\* Same number reported for one or more other months.

TABLE 55.—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.	Salari- ed officers, superin- tendents, and man- agers.		Clerks, etc.		Wage earners.			16 and over.			Under 16.	
				Malo.	Fe- male.	Aver- age num- ber.	Number, 15th day of—		Total.	Malo.	Fe- male.	Malo.		Fe- male.	
							Maximum month.	Minimum month.							

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

1 Stencils and brands.....	16	69	15	4	4	4	42	Se <sup>a</sup> 43	No <sup>a</sup> 41	43	41	1	1	.....	\$87,410	
2 Sterotyping and electrotyping.....	16	368	12	14	25	11	300	Se 310	Jy 200	311	310	1	1	.....	455,433	
3 Stoves and hot-air furnaces, except gas and oil stoves.....	79	5,730	33	199	307	150	5,041	Oo 5,332	Jy 4,376	5,091	5,068	18	5	.....	10,656,668	
4 Stoves and ranges.....	38	4,574	15	127	240	104	4,088	Mh 4,374	Jy 3,503	4,016	4,014	2	.....	8,189,909		
5 Hot-air furnaces and fireless cookers.....	41	1,156	18	72	67	40	953	Oo 1,086	Jo 336	1,075	1,054	16	5	.....	2,466,754	
6 Stoves, gas and oil.....	26	4,056	8	115	321	78	3,534	Jo 3,938	No 3,182	3,232	3,201	12	19	.....	6,118,589	
7 Structural ironwork, not made in steel works or rolling mills.....	93	8,012	43	264	809	239	6,057	Jo 7,254	De 5,893	6,889	6,815	63	11	.....	22,077,020	
8 Sugar, beet.....	3	350	.....	0	54	5	232	Oo 970	Mh 48	882	874	8	.....	4,393,089		
9 Sulphuric, nitric, and mixed acids.....	4	259	.....	11	24	2	223	Do 349	Fe 172	330	338	1	.....	2,214,623		
10 Surgical appliances.....	16	190	15	11	0	15	140	Jo <sup>a</sup> 133	My 135	143	80	61	2	.....	159,638	
11 Suspenders, garters, and elastic-woven goods.....	11	364	8	13	24	20	209	Jy 328	Ja 255	274	33	241	.....	448,651		
12 Tin plate and terneplate.....	7	1,030	.....	10	48	10	953	Oo 1,054	De 689	1,026	900	126	.....	3,201,598		
13 Tinware, not elsewhere specified.....	17	2,578	9	44	210	55	2,260	Se 2,414	De 2,010	2,010	1,386	624	.....	12,644,722		
14 Tobacco, chewing and smoking, and snuff.....	24	1,587	19	32	219	60	1,257	Se 1,359	Ja 1,137	1,224	593	630	1	.....	6,813,802	
15 Tobacco, cigars.....	937	13,568	1,013	192	254	84	12,025	Fe 12,581	Jy 11,760	12,102	3,807	8,338	10	7	.....	8,200,257
16 Tools, not elsewhere specified.....	62	2,716	58	106	230	95	2,227	Ap 2,402	De 1,913	2,034	1,884	149	1	.....	6,789,137	
17 Shovels, spades, scoops, carpenters' tools, etc.....	10	402	1	25	29	10	307	My 434	Oc <sup>a</sup> 375	303	353	0	1	.....	950,190	
18 Machinists' tools.....	12	1,725	9	46	163	57	1,450	Ja 1,580	De 1,255	1,285	1,176	109	.....	4,010,201		
19 Toys and games.....	40	529	48	35	38	28	380	My 429	No 278	380	355	31	.....	628,746		
20 Trunks and valises.....	36	1,229	28	34	38	26	1,103	Oc 1,283	Ja 841	1,063	757	298	0	2	.....	1,690,765
21 Umbrellas and canes.....	21	354	17	24	12	14	287	Ap 325	No 225	230	205	24	1	.....	562,426	
22 Varnishes.....	13	363	13	12	43	23	207	Ap 297	Ja 240	268	05	171	2	.....	579,884	
23 Vainit lights and ventilators.....	30	797	12	91	205	79	410	My 454	No 370	371	340	30	1	.....	4,443,920	
24 Vinegar and cider.....	3	16	2	1	.....	1	12	At <sup>a</sup> 15	Ja <sup>a</sup> 10	12	12	.....	12,026			
25 Vinegar.....	18	48	15	2	3	2	23	Oc 53	Mh <sup>a</sup> 10	43	43	.....	67,274			
26 Cider.....	4	22	4	1	3	2	12	Oo 18	Ja <sup>a</sup> 10	12	12	.....	45,909			
27 Wall paper, not made in paper mills.....	3	152	.....	11	30	5	106	Fe 128	Jy 60	109	94	15	.....	331,152		
28 Wall plaster.....	22	753	6	42	69	10	626	Se 680	Ja 548	565	502	3	.....	2,687,681		
29 Washing machines and clothes wringers.....	11	230	2	19	21	17	171	My 204	De 121	122	110	3	.....	450,167		
30 Window and door screens and weather strips.....	19	265	14	16	16	10	210	My 301	Ja 167	193	187	6	.....	269,166		
31 Window and door screens.....	15	242	12	14	14	6	190	My 286	Ja 155	179	173	6	.....	230,205		
32 Weatherstrips.....	4	23	2	2	1	4	14	Jo <sup>a</sup> 16	Ja <sup>a</sup> 12	14	14	.....	38,961			
33 Wirework, including wire rope and cable.....	43	1,028	22	65	85	46	810	Ap 889	Do <sup>a</sup> 750	750	671	78	10	.....	1,706,469	
34 Wire rope and cable, and woven-wire fencing.....	14	270	7	24	44	25	170	My 219	De <sup>a</sup> 146	147	147	.....	579,370			
35 All other.....	20	752	15	41	41	21	694	Ap 677	Oo 599	612	524	78	10	.....	1,127,099	
36 Wood preserving.....	5	202	.....	13	16	10	163	My 168	Fe <sup>a</sup> 119	121	121	.....	783,812			
37 Wood, turned and carved.....	61	1,156	60	57	27	27	985	Mh 1,109	Se 863	1,023	994	29	.....	1,842,654		
38 Wooden goods, not elsewhere specified.....	16	171	12	9	4	5	141	Ap <sup>a</sup> 145	De 136	148	128	19	.....	194,265		
39 Wool shoddy.....	5	569	1	11	31	3	523	Do 556	Se 492	560	378	182	.....	1,285,417		
40 All other industries*.....	267	31,393	140	932	2,287	787	27,247	.....	.....	.....	.....	.....	.....	.....	62,707,970	

\*All other industries embrace—  
 Aeroplanes and parts..... 1  
 Ammunition..... 3  
 Artificial flowers..... 1  
 Artists' materials..... 1  
 Asbestos products, not including steam packing..... 1  
 Babbitt metal and solder..... 5  
 Bags, other than paper..... 9  
 Bells..... 2  
 Belting and hose, woven..... 4  
 Bone, carbon, and lamp black..... 1

Boot and shoe cut stock..... 5  
 Boot and shoe findings..... 6  
 Butter, reworking..... 2  
 Canning and preserving, fish..... 1  
 Cash registers and calculating machines..... 9  
 Clocks..... 2  
 Clothing, horse..... 2  
 Collars and cuffs, men's..... 2  
 Combs and hairpins, not made from metal or rubber..... 1  
 Cordage and twine..... 5

Cotton goods..... 3  
 Cotton lace..... 1  
 Cotton, small wares..... 2  
 Dental goods..... 6  
 Emery and other abrasive wheels..... 4  
 Felt goods..... 2  
 Firearms..... 2  
 Fire extinguishers, chemical..... 1  
 Fireworks..... 2  
 Galvanizing..... 6  
 Gloves and mittens, leather..... 6

Glucose and starch..... 2  
 Glue, not elsewhere specified..... 5  
 Gold and silver, reducing and refining, not from the ore..... 2  
 Hardware, saddlery..... 4  
 Hats, straw..... 3  
 Ink, writing..... 2  
 Iron and steel, doors and shutters..... 4  
 Iron and steel, nails and spikes, cut and wrought, including wire nails..... 4  
 Japanning..... 2

<sup>1</sup> Owned power only.

<sup>2</sup> 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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$4,600	\$4,635	\$28,888	\$580	\$6,880	\$391	\$25,062	\$962	\$108,661	\$82,637	53	5	48	1
36,332	31,036	237,867	5,204	19,131	1,876	203,170	10,586	747,335	524,579	952	35	917	2
389,166	404,325	3,484,887	1,500	38,463	94,242	3,360,208	142,491	9,990,696	6,487,997	7,172	3,819	2,109	2,890
207,083	305,614	2,848,006	.....	10,750	67,723	2,354,199	119,666	7,261,140	4,787,275	5,483	2,938	1,519	2,285
122,083	98,711	636,881	1,500	18,713	26,519	1,006,009	22,825	2,729,556	1,700,722	1,689	881	500	605
250,354	480,622	2,265,949	5,936	145,996	58,354	4,826,911	85,587	9,990,903	5,078,405	3,476	1,970	238	1,523
433,046	1,187,559	4,678,237	181,854	32,334	160,398	12,360,572	243,732	22,615,795	10,011,491	16,155	8,007	1,993	9,846
31,897	61,845	209,395	5,972	.....	10,296	809,994	67,043	2,051,307	1,174,270	3,520	3,445	75	726
31,550	31,301	161,340	.....	.....	10,841	352,543	49,892	832,284	459,849	2,042	1,020	240	120
17,452	31,941	70,045	15	0,700	4,000	132,078	1,603	423,370	289,698	45	.....	.....	45
21,950	37,576	104,453	.....	6,200	2,419	582,177	3,655	938,702	352,870	153	20	.....	133
39,960	30,680	658,563	.....	.....	22,489	9,389,144	56,599	10,826,098	1,383,355	1,330	607	333	390
154,022	234,020	1,244,967	.....	10,141	40,992	4,834,689	44,425	7,595,606	2,716,495	2,222	1,175	287	760
119,903	370,901	553,098	.....	33,779	3,281,047	4,747,004	41,250	11,228,328	6,440,074	1,462	605	10	847
416,067	424,891	4,798,770	11,408	159,405	2,100,894	7,089,009	39,509	17,238,751	10,110,233	581	70	75	436
252,745	328,585	1,330,250	7,020	11,788	60,248	1,420,412	94,244	5,187,996	3,664,340	5,364	2,839	923	1,943
46,850	36,198	233,615	.....	1,044	8,929	482,080	27,267	793,000	463,650	1,186	831	443	362
119,362	240,457	849,132	.....	1,980	44,734	595,799	39,018	3,200,179	2,565,367	3,321	2,400	73	848
86,533	51,030	247,593	7,020	8,764	0,585	351,533	27,964	1,014,811	635,314	357	58	407	392
55,330	64,200	520,163	.....	12,479	11,871	779,120	19,919	1,908,700	1,109,661	941	455	255	231
49,440	24,285	172,267	.....	14,394	4,763	293,549	4,407	678,355	380,399	271	175	4	92
20,150	70,882	100,803	500	16,410	3,705	475,818	4,103	836,003	355,082	184	.....	138	40
293,442	347,254	263,120	2,119	10,793	37,090	2,401,943	28,671	4,502,593	2,071,889	1,012	570	25	417
60	520	7,125	5,353	50	98	9,571	261	25,395	15,563	40	40	40	17
1,000	2,810	11,891	400	1,249	372	50,796	1,072	95,677	40,809	330	253	45	15
1,100	2,810	7,919	400	1,044	246	47,520	386	74,889	26,983	58	27	14	17
600	.....	3,972	.....	205	126	9,276	686	23,788	13,826	272	226	31	15
30,837	28,301	66,823	.....	1,200	2,267	251,228	7,652	450,387	191,507	221	180	30	11
73,652	94,518	370,977	6,846	28,478	13,714	645,546	124,443	1,713,618	943,629	3,617	2,140	355	1,122
12,678	30,824	90,721	.....	0,172	3,266	345,144	2,612	712,851	365,095	416	200	204	12
23,188	16,295	153,801	250	8,558	1,843	203,048	6,015	560,884	351,821	512	260	149	103
20,928	14,711	145,063	250	7,490	1,547	195,764	5,484	517,867	316,619	460	260	132	68
2,260	1,584	8,738	.....	1,008	301	7,284	531	43,017	35,202	52	.....	17	35
126,008	90,727	455,950	40	15,984	18,408	2,138,042	29,103	3,434,551	1,267,406	1,281	240	280	755
40,076	34,363	123,248	.....	5,380	5,360	1,302,698	4,811	1,802,413	494,904	146	.....	98	48
85,932	59,364	332,702	40	10,604	13,048	835,344	24,292	1,632,133	772,502	1,135	240	188	707
36,299	21,202	119,101	.....	2,630	6,377	574,620	9,608	937,325	352,798	440	260	.....	186
112,186	35,455	520,103	8,161	6,757	17,613	1,269,721	16,525	2,284,105	997,858	4,250	3,682	410	158
10,250	5,745	68,077	60	2,209	831	115,887	4,350	253,999	133,762	415	265	73	77
34,700	25,140	255,035	.....	160	14,176	778,783	40,879	1,353,121	533,459	1,410	1,190	.....	220
2,422,725	3,220,765	15,908,266	48,987	197,264	777,534	54,900,193	1,036,420	100,593,500	44,656,887	65,189	44,353	3,272	17,324

Jewelry and instrument cases.....	2	Oilcloth, enameled.....	3	Rules, ivory and wood.....	1	Waste.....	1
Knife goods.....	1	Oleomargarine.....	2	Sand-lime brick.....	1	Watch and clock materials.....	1
Lasts.....	3	Paper patterns.....	3	Sealos and balances.....	4	Watch cases.....	3
Lead, bar, pipe, and sheet.....	2	Peanuts, grading, roasting, cleaning, and shelling.....	3	Screws, wood.....	1	Watches.....	2
Locomotives, not made by railroad companies.....	1	Pens, fountain and stylographic.....	5	Sewing-machine cases.....	1	Wheelbarrows.....	4
Matches.....	4	Phonographs and graphophones.....	1	Silk goods, including throwsters.....	1	Whips.....	2
Musical instruments and materials, not specified.....	10	Plated ware.....	1	Silversmithing and silverware.....	2	Windmills.....	2
Needles, pins, and hooks and eyes.....	1	Pocketbooks.....	1	Soap.....	34	Window shades and fixtures.....	7
Oil, cottonseed, and cake.....	1	Pulp, from fiber other than wood.....	1	Soda-water apparatus.....	2	Wire.....	5
		Pulp goods.....	2	Typewriters and supplies.....	3	Wool pulling.....	2
				Upholstering materials.....	3	Woolen and worsted goods.....	13

\* Same number reported for one or more other months.

TABLE 55.—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.			10 and over.		Under 10.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.	
								Maximum month.	Minimum month.					

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

1	AKRON—All industries.....	305	32,992	211	672	5,788	1,049	24,080	Ap. 28,774	Ja. 22,831	24,501	21,007	2,781	47	0	\$111,313,330
2	Artificial stone products.....	15	42	20	2	1	.....	19	My 30	Ja 7	30	30	.....	.....	.....	41,968
3	Automobile repairing.....	4	6	2	2	.....	.....	2	So 3	Au 1	3	3	.....	.....	.....	8,375
4	Brass and bronze products.....	4	13	2	3	.....	1	7	My 10	So 5	6	6	.....	.....	.....	17,060
5	Bread and other bakery products.....	41	200	55	5	12	6	183	Jy 192	Ja 169	180	145	43	1	.....	491,568
6	Brick, tile, terra-cotta and fire-clay products.....	9	657	1	20	15	6	616	Ap 677	Fe 572	626	626	.....	.....	.....	1,515,823
7	Carpets, rag.....	4	13	4	.....	.....	.....	9	Jo 16	De 5	17	2	15	.....	.....	8,731
8	Carriages and wagons.....	8	125	10	0	0	3	100	Do 131	So 87	134	130	4	.....	.....	457,740
9	Confectionery and ice cream.....	10	79	7	4	8	2	68	Au 75	Do 46	95	38	27	.....	.....	132,775
10	Copper, tin, and sheet-iron work.....	5	63	3	0	.....	1	63	Jy 70	Fe 30	53	53	.....	.....	.....	61,612
11	Foundry and machine-shop products.....	25	1,326	10	60	59	18	1,182	Ap 1,337	Do 1,026	1,032	1,011	21	.....	.....	3,880,811
12	Foundries.....	5	194	.....	8	4	.....	1,182	Ap 207	Fe 102	186	186	.....	.....	.....	320,986
13	Machine shops.....	20	1,132	10	52	52	18	1,000	Ap 1,130	Do 840	846	825	21	.....	.....	3,559,825
14	Gas and electric fixtures.....	3	26	2	2	4	1	17	Ap 10	Jy 14	17	16	1	.....	.....	61,504
15	Liquors, malt.....	8	224	.....	16	21	3	184	Jo 227	Ja 167	169	167	2	.....	.....	1,146,604
16	Lumber and timber products.....	18	445	9	30	30	9	367	Au 404	Do 323	332	323	0	.....	.....	707,115
17	Mineral and soda waters.....	5	21	0	.....	3	.....	0	Au 12	Ja 8	0	0	.....	.....	.....	24,143
18	Models and patterns, not including paper patterns.....	6	54	0	2	.....	1	45	Jo 55	Mh 36	48	48	.....	.....	.....	56,612
19	Patent medicines and compounds.....	6	11	7	.....	.....	.....	4	De 7	My 2	8	4	4	.....	.....	14,585
20	Pottery, china, earthen and stoneware.....	6	464	1	14	13	4	432	Mh 400	Jy 200	417	350	61	.....	.....	780,183
21	Printing and publishing.....	37	1,000	25	36	108	31	800	Ja 870	So 750	703	505	227	1	.....	1,857,807
22	Rubber goods, not elsewhere specified.....	18	21,231	1	341	4,080	1,441	17,408	Ap 21,033	Ja 15,493	17,578	15,055	1,806	23	4	83,182,054
23	Saddlery and harness.....	4	8	4	.....	.....	.....	4	Ap 4	Ja 4	4	4	.....	.....	.....	10,701
24	Stoves and hot-air furnaces.....	4	407	.....	10	26	0	362	Oc 406	Ja 282	400	308	2	.....	.....	1,155,112
25	Tobacco, cigars.....	5	12	6	.....	.....	.....	6	(*) 6	(*) 6	6	6	.....	.....	.....	5,485
26	All other industries *.....	71	3,505	27	113	500	112	2,763	.....	.....	2,505	2,072	469	22	2	15,598,884

* All other industries embrace—	Brooms.....	1	Clothing, men's.....	2	Floes.....	1	
Agricultural implements.....	1	Brushes.....	1	Clothing, women's.....	1	Flavoring extracts.....	1
Automobile bodies and parts.....	1	Butter.....	1	Coffee, roasting and grinding.....	2	Food preparations, not elsewhere specified.....	3
Automobiles.....	1	Cars and general shop construction and repairs by steam-railroad companies.....	1	Copra.....	2	Fur goods.....	1
Awnings, tents, and sails.....	1	China decorating, not including that done in potteries.....	1	Electrical machinery, apparatus, and supplies.....	3	Furniture.....	1
Baking powders.....	1	Cleaning and polishing preparations.....	1	Electroplating.....	2	Glass.....	1
Bolting, leather.....	1			Engines, steam, gas, and water.....	1	Hand stamps.....	2
Bluing.....	1			Engraving and die-sinking.....	1	Hardware.....	2
Boxes and cartons, paper.....	1						

1	CANTON—All industries.....	270	14,378	178	514	922	500	12,255	Oc 12,753	No 11,039	12,202	10,856	1,897	18	21	\$37,086,125
2	Artificial stone products.....	4	22	3	3	1	.....	15	So 24	Fe 8	24	24	.....	.....	.....	11,679
3	Bread and other bakery products.....	25	193	28	18	13	3	131	No 185	Ja 123	130	107	28	1	.....	187,870
4	Carriages and wagons.....	6	52	5	4	1	2	40	Jo 44	Ja 35	41	40	.....	.....	.....	150,230
5	Confectionery and ice cream.....	12	85	10	11	4	8	57	Au 60	Mh 49	65	41	24	.....	.....	109,989
6	Confectionery.....	9	57	8	8	1	2	38	No 44	Jo 32	44	21	23	.....	.....	35,584
7	Ice cream.....	3	28	2	3	3	1	19	Jy 27	Fe 13	21	20	1	.....	.....	75,505
8	Foundry and machine-shop products.....	29	1,471	17	83	68	47	1,256	Ap 1,335	De 1,146	1,141	1,080	52	.....	.....	3,613,240
9	Iron and steel, steel works and rolling mills.....	6	4,253	.....	44	302	108	3,799	Oc 4,142	Fe 3,430	4,008	3,928	80	.....	.....	13,618,244
10	Lumber, planing-mill products, not including planing mills connected with sawmills.....	8	64	5	11	6	3	39	Oc 43	Mh 37	38	38	.....	.....	.....	105,445
11	Mineral and soda waters.....	4	21	2	4	1	1	13	Jo 16	De 11	10	0	.....	1	.....	44,937
12	Patent medicines and compounds.....	4	34	2	0	0	2	15	Au 16	Fe 13	16	3	13	.....	.....	46,874
13	Printing and publishing, book and job.....	15	98	19	10	2	3	64	Oc 69	Ap 60	67	55	12	.....	.....	78,164
14	Printing and publishing, newspapers and periodicals.....	6	349	.....	17	73	72	187	Do 199	Jy 179	198	134	60	2	2	363,431
15	Roofing materials, metal shingles, ceilings, etc.....	3	258	.....	10	27	15	200	Oc 234	My 189	205	205	.....	.....	.....	827,729
16	Signs and advertising novelties.....	7	61	.....	5	4	5	42	My 46	No 40	40	21	17	.....	2	32,597
17	Structural ironwork, not made in steel works or rolling mills.....	5	306	.....	19	27	11	249	So 279	Do 154	266	266	.....	.....	.....	875,247
18	Tobacco, cigars.....	16	63	15	7	.....	1	40	De 43	My 32	45	21	23	.....	1	20,718
19	All other industries *.....	127	7,053	72	259	387	233	6,102	.....	.....	5,092	4,875	1,087	14	16	17,960,831

* All other industries embrace—	Canning and preserving, fruits and vegetables.....	1	Cordials and flavoring sirups.....	1	Furniture.....	5	
Agricultural implements.....	4	Carpets, rag.....	2	Cutlery and edge tools.....	3	Gas and electric fixtures.....	2
Automobile repairing.....	1	Carriages and wagon materials.....	1	Dairy-men's, poultrymen's, and applanists' supplies.....	1	Hardware.....	2
Awnings, tents, and sails.....	1	Cars and general shop construction and repairs by electric-railroad companies.....	1	Electrical machinery, apparatus, and supplies.....	2	Hardware saddlery.....	1
Balls.....	1	Cleaning preparations.....	2	Electroplating.....	4	House furnishing goods, not elsewhere specified.....	2
Boxes, fancy and paper.....	1	Clothing, women's.....	5	Engraving, steel and copper plate, including plate printing.....	1	Ice, manufactured.....	1
Boxes, wooden packing.....	4	Coffee, roasting and grinding.....	2	Flour-mill and gristmill products.....	3	Iron and steel, doors and shutters.....	1
Brass and bronze products.....	4	Copper, tin, and sheet-iron work.....	3			Iron and steel forgings, not made in steel works or rolling mills.....	2
Brick.....	2						
Brooms.....	1						
Butter.....	2						

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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$2, 153, 053	\$5, 000, 587	\$17, 310, 415	\$41, 231	\$83, 028	\$1, 200, 036	\$64, 789, 216	\$1, 273, 176	\$122, 291, 600	\$56, 220, 208	65, 942	51, 722	3, 286	95	10, 839	39, 610	1
1, 500	300	12, 830	.....	1, 008	842	15, 439	435	44, 190	28, 316	37	6	16	.....	15	.....	2
8, 120	.....	1, 475	.....	270	43	2, 635	241	15, 965	13, 089	1, 740	455	.....	.....	1, 285	.....	3
2, 818	121	5, 561	.....	520	122	17, 214	779	29, 322	11, 329	24	.....	12	.....	12	.....	4
14, 341	21, 427	126, 926	.....	16, 015	2, 098	423, 905	19, 084	718, 877	275, 888	280	.....	18	.....	262	.....	5
38, 277	24, 743	361, 009	7, 500	1, 383	14, 183	120, 895	217, 480	994, 480	656, 055	2, 070	1, 985	10	.....	75	157	6
.....	.....	3, 064	.....	360	72	2, 237	56	8, 373	6, 080	2	.....	1	.....	1	.....	7
13, 250	7, 200	74, 543	720	3, 048	2, 767	51, 057	2, 453	193, 103	130, 593	194	75	88	.....	31	20	8
4, 420	6, 476	30, 567	.....	4, 721	519	117, 544	1, 021	211, 100	91, 935	59	.....	92	.....	28	.....	9
6, 732	1, 075	42, 676	.....	3, 680	907	58, 665	1, 556	132, 167	71, 886	27	.....	10	.....	17	.....	10
121, 774	80, 617	573, 085	.....	7, 440	34, 541	1, 111, 989	61, 418	2, 860, 630	1, 697, 232	2, 808	1, 015	1, 203	40	550	1, 399	11
8, 000	2, 500	155, 617	.....	.....	3, 107	183, 711	9, 528	402, 136	208, 897	233	75	55	.....	103	39	12
113, 774	78, 957	717, 468	.....	7, 440	31, 374	928, 278	41, 890	2, 456, 503	1, 488, 335	2, 575	940	1, 148	40	447	1, 860	13
1, 950	5, 814	10, 555	.....	3, 942	167	40, 025	800	92, 890	52, 065	14	.....	11	.....	3	.....	14
76, 990	23, 334	130, 184	.....	.....	180, 023	276, 020	32, 117	1, 352, 045	1, 043, 899	1, 732	1, 475	253	.....	4	188	15
67, 293	20, 363	245, 432	.....	4, 410	8, 002	875, 457	7, 736	1, 326, 093	442, 900	1, 280	975	245	.....	60	.....	16
.....	1, 800	7, 840	.....	360	325	11, 923	344	44, 138	31, 871	20	4	9	.....	7	.....	17
3, 240	520	38, 550	200	1, 100	445	12, 496	996	71, 192	57, 700	66	.....	55	.....	10	2	18
.....	.....	800	.....	480	49	4, 450	99	14, 704	10, 245	10	.....	.....	.....	10	.....	19
27, 699	18, 877	251, 481	.....	8, 009	120, 468	56, 325	493, 957	317, 164	396	810	86	.....	.....	81	.....	20
104, 510	121, 001	534, 203	27, 420	15, 878	16, 363	663, 882	20, 790	1, 938, 085	1, 253, 413	1, 027	360	131	.....	536	.....	21
1, 320, 011	4, 074, 084	12, 290, 000	.....	2, 580	827, 955	48, 419, 400	643, 928	92, 547, 496	43, 484, 150	43, 886	37, 178	242	.....	6, 466	32, 572	22
.....	.....	3, 261	.....	1, 290	60	5, 737	103	18, 987	13, 148	3	.....	.....	.....	3	.....	23
18, 760	34, 073	263, 785	.....	720	15, 084	218, 068	9, 140	887, 506	659, 398	900	400	400	.....	100	450	24
.....	.....	3, 185	.....	442	1, 405	2, 933	64	14, 165	11, 178	.....	.....	.....	.....	.....	.....	25
319, 268	638, 772	1, 088, 268	5, 385	14, 206	95, 715	12, 215, 850	205, 022	18, 282, 146	5, 800, 665	8, 868	6, 984	465	55	1, 364	4, 741	26

Hardware, saddlery.....	1	Monuments and tombstones.....	1	Pens, fountain and stylographic.....	1	Steam packing.....	1
Hats, fur-felt.....	1	Musical instruments and materials, not specified.....	1	Photo-engraving.....	1	Structural ironwork, not made in steel works or rolling mills.....	2
Hosiery and knit goods.....	1	Musical instruments, pianos.....	1	Pickles, preserves, and sauces.....	1	Surgical appliances.....	1
Ice, manufactured.....	1	Oilcloth, enameled.....	1	Shipbuilding, wooden, including boat building.....	1	Toys and games.....	1
Ink, printing.....	1	Optical goods.....	1	Signs and advertising novelties.....	3	Wirework.....	2
Iron and steel, steel works and rolling mills.....	1	Paper and wood pulp, paper mills exclusively.....	1	Slaughtering and meat packing.....	1	Wood, turned and carved.....	1
Jewelry.....	1	.....	.....	Sporting and athletic goods.....	2	.....	.....
Mattresses and spring beds.....	1	.....	.....	.....	.....	.....	.....

\$1, 100, 004	\$1, 346, 183	\$8, 540, 045	\$60, 457	\$80, 105	\$314, 870	\$20, 512, 035	\$1, 205, 151	\$43, 713, 440	\$21, 905, 360	43, 071	25, 081	3, 701	58	14, 231	4, 702	1
3, 700	1, 040	9, 495	.....	925	60	6, 480	110	30, 342	23, 752	13	.....	5	.....	8	.....	2
17, 561	13, 302	66, 220	.....	2, 658	1, 134	195, 114	8, 170	420, 716	217, 432	116	.....	8	.....	113	.....	3
4, 400	1, 550	23, 700	.....	180	650	20, 520	1, 458	74, 240	62, 262	61	.....	16	.....	45	.....	4
10, 241	5, 646	35, 141	.....	2, 924	691	62, 016	3, 422	179, 648	114, 210	114	.....	65	.....	49	.....	5
7, 101	2, 087	22, 120	.....	2, 684	323	35, 413	1, 273	87, 576	50, 890	95	.....	15	.....	20	.....	6
3, 050	3, 559	13, 015	.....	240	368	26, 603	2, 149	92, 072	63, 320	79	.....	50	.....	29	.....	7
204, 750	120, 120	822, 718	38, 763	12, 502	20, 181	1, 289, 170	71, 677	5, 760, 113	4, 390, 206	1, 921	380	88	.....	1, 453	223	8
132, 657	305, 047	3, 245, 446	2, 742	.....	65, 210	9, 611, 384	597, 585	16, 887, 269	6, 678, 300	28, 428	17, 225	2, 766	.....	8, 447	2, 397	9
12, 135	5, 331	27, 924	.....	210	691	44, 877	1, 792	111, 981	65, 312	231	65	80	.....	86	.....	10
5, 100	1, 528	7, 480	.....	120	307	20, 847	464	45, 458	24, 147	11	.....	.....	.....	11	.....	11
9, 113	11, 250	6, 699	.....	968	682	58, 554	224	169, 716	110, 938	5	.....	.....	.....	5	.....	12
12, 946	2, 703	39, 796	508	5, 734	325	31, 874	1, 844	123, 309	80, 591	51	.....	.....	.....	51	.....	13
64, 565	87, 881	153, 372	150	4, 833	4, 144	265, 164	5, 606	652, 496	381, 036	224	.....	.....	.....	224	.....	14
21, 817	29, 562	120, 740	126	1, 200	5, 649	453, 446	5, 994	722, 839	263, 399	280	110	.....	.....	170	.....	15
5, 600	4, 189	23, 947	.....	2, 956	101	17, 983	226	70, 616	52, 407	5	.....	.....	.....	5	.....	16
43, 217	37, 689	154, 647	.....	560	5, 112	723, 721	11, 898	1, 038, 804	303, 185	625	115	85	.....	425	250	17
4, 175	210	16, 544	.....	984	9, 202	27, 124	195	64, 622	37, 303	.....	.....	.....	.....	.....	.....	18
557, 027	622, 979	3, 790, 162	24, 163	43, 261	191, 731	7, 084, 661	584, 486	17, 361, 367	9, 092, 220	10, 985	7, 186	606	55	3, 139	1, 825	19

Lamps and reflectors.....	2	Photo-engraving.....	1	Slaughtering and meat packing.....	1	Surgical appliances.....	2
Leather goods, not elsewhere specified.....	2	Plumbers' supplies, not elsewhere specified.....	2	Soap.....	1	Tin plate and terneplate.....	1
Liquors, malt.....	3	Pottery.....	2	Springs, steel, car and carriage.....	1	Tools, not elsewhere specified.....	4
Marble and stone work.....	2	Pumps, steam.....	1	Stamped and enameled ware, not elsewhere specified.....	2	Toys and games.....	1
Mattresses and spring beds.....	2	Rubber goods, not elsewhere specified.....	3	Steam fittings and steam and hot-water heating apparatus.....	5	Trunks and valises.....	1
Minerals and earths, ground.....	1	Saddlery and harness.....	4	Stereotyping and electroplating.....	1	Umbrellas and canes.....	1
Models and patterns, not including paper patterns.....	1	Saws and vaults.....	1	Stoves and hot-air furnaces.....	2	Watch cases.....	1
Mucilage and paste.....	1	Shirts.....	1	Sulphuric, nitric, and mixed acids.....	1	Watches.....	1
Paints.....	2	.....	.....	.....	.....	Window and door screens.....	1
.....	.....	.....	.....	.....	.....	Wirework.....	3

\* Same number reported for one or more other months.

\* Same number reported throughout the year.

TABLE 55.—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.			16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.					

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

1	CINCINNATI—All industries....	2,135	72,858	1,808	2,802	5,848	2,440	59,801	Fe	02,782	Oc	57,139	50,372	44,009	14,512	228	133	\$167,408,150
2	Artificial limbs.....	7	19	7	1	1	1	9	Ap	11	No	7	11	10	1			8,348
3	Automobiles.....	6	336	3	14	26	5	288	Ap	455	Oc	130	440	440				10,363
4	Automobile repairing.....	17	92	10	4	2	4	93	Oc	08	Ja	55	60	60				77,092
5	Awnings, tents, and sails.....	6	71	5	6	6	4	50	My	08	Ja	40	45	24	21			152,453
6	Bags, paper.....	5	300		23	27	14	335	Oc	357	Ap	310	331	103	102		6	620,583
7	Bolting, leather.....	3	50		10	18	4	32	Ja	34	No	30	30	30				805,446
8	Blacking, stains, and dressings.....	3	20	7	1	4	1	7	Ja	7	Je	7	7	7				10,359
9	Bookbinding and blank-book making.....	25	272	28	5	4	7	228	Mh	244	Au	208	221	114	105		4	109,770
10	Boots and shoes.....	26	7,300	4	105	277	285	7,129	Fe	7,878	Ap	5,634	7,302	4,358	2,850		43	0,002,007
11	Boxes, cigar.....	5	152	8	2	3		130	Fe	151	So	128	130	72	67			154,014
12	Boxes, fancy and paper.....	17	880	7	38	51	31	753	Ja	774	Jy	728	748	212	531		1	642,035
13	Boxes, wooden packing.....	8	271	7	10	5	5	244	Oc	230	Au	223	224	221		3		306,521
14	Brass, bronze, and copper products.....	12	647	13	21	45	12	550	Ja	628	De	470	481	473	8			1,470,344
15	Bread and other bakery products.....	177	2,187	182	40	204	83	1,000	Oc	1,733	Ja	1,558	1,717	1,292	423		2	4,072,950
16	Brick, tile, pottery, and other clay products.....	10	341	7	23	8	10	287	Je	352	Fe	220	284	250	34			648,480
17	Brooms, from broom corn.....	6	52	12		4		36	Ja	37	Jy	34	37	37				19,515
18	Carriage and wagon materials.....	14	700	9	27	22	18	127	Mh	770	Jy	428	690	570	21	4	2	1,590,495
19	Carrriages and wagons.....	61	1,444	61	83	118	45	1,037	Mh	1,370	Oc	880	904	927	36	1		3,122,367
20	Carrriages and wagons.....	46	1,336	46	70	111	44	1,056	Mh	1,200	Oc	800	884	847	30	1		3,010,645
21	Repair work only.....	16	108	15	4	7	1	81	Mh	83	My	70	80	80				111,730
22	Cars and general shop construction and repairs by steam-railroad companies.....	6	807		2	57	1	747	Fe	809	De	660	720	724	5			593,735
23	Chemicals.....	11	149	6	20	20	13	81	Jy	90	Fe	69	70	70				560,327
24	Cleansing and polishing preparations.....	7	64	6	8	22	8	20	Mh	25	Au	18	18	12	0			82,968
25	Clothing, men's.....	105	5,325	127	83	530	178	4,402	Ap	4,677	De	4,108	4,486	1,652	2,701		8	7,571,834
26	Regular factories.....	44	4,170	55	70	530	173	3,342	Ap	3,554	De	3,045	3,400	1,415	1,980		3	7,488,221
27	Men's and youths'.....	44	4,170	55	70	530	173	3,342	Ap	3,554	De	3,045	3,400	1,415	1,980		3	7,488,221
28	Contract work.....	61	1,147	72	4	6	6	1,060	Ap	1,122	Ja	987	1,077	237	802		5	83,013
29	Men's and youths'.....	57	1,007	67	4	6	6	1,015	Ap	1,077	Ja	942	1,030	223	760		5	81,833
30	Boys'.....	4	50					45	De	47	Au	43	47	14	33			1,780
31	Clothing, men's, buttonholes.....	7	68	9	1			58	Ja	61	Jy	53	53	9	44			9,035
32	Clothing, women's.....	26	1,330	39	33	85	45	1,137	Au	1,250	De	892	1,054	351	700		3	1,230,585
33	Coffee and spice, roasting and grinding.....	7	334	3	20	71	13	227	Mh	239	Ja	203	227	112	115			1,070,009
34	Confectionery.....	21	1,143	22	38	96	78	909	Oc	1,245	Jy	690	1,065	442	603		11	1,159,030
35	Cooperage and wooden goods, not elsewhere specified.....	20	565	22	22	5	8	508	Mh	607	Jy	387	447	445	2			1,057,503
36	Copper, tin, and sheet-iron work.....	41	750	35	62	67	53	533	Fe	583	De	492	504	500		4		1,804,502
37	Cutlery and tools, not elsewhere specified.....	9	143	8	10	16	8	101	Ap	111	Se	87	80	70	1			294,555
38	Electrical machinery, apparatus, and supplies.....	16	454	9	27	79	20	319	Oc	343	Jy	290	322	293	28		1	901,327
39	Electroplating.....	5	71	5	4	4	3	57	Mh	58	Se	51	57	55	1		1	32,404
40	Engraving and die-sinking.....	14	75	16	1			57	Fe	90	Jy	56	60	46	13			37,025
41	Engraving, steel and copper plate, including plate printing.....	4	86	3	3	9	1	70	Je	79	Mh	64	71	58	7		3	35,135
42	Flavoring extracts.....	10	107	10	6	13	35	43	Je	55	No	33	44	26	18			229,908
43	Flour-mill and gristmill products.....	7	74	4	7	13	7	43	(*)	43	(*)	43	43	40	3			543,655
44	Food preparations, not elsewhere specified.....	12	89	8	10	5	6	60	Au	68	Se	50	67	56	11			190,803
45	Foundry and machine-shop products.....	170	8,237	113	386	650	187	6,901	Ja	7,651	Se	5,360	6,878	6,820	44		5	20,230,522
46	Fur goods.....	5	42	3	2		1	36	No	43	Mh	31	29	16	13			59,740
47	Furnishing goods, men's.....	5	166	6	7	18	4	131	Oc	154	Ap	112	113	15	98			93,995
48	Furniture and refrigerators.....	52	2,002	66	92	100	31	1,713	Ja	1,890	Jy	1,485	1,541	1,457	21		62	3,165,631
49	Glass, cutting, staining, and ornamenting.....	7	207	5	14	14	6	108	Ja	181	Je	156	175	129	46			209,050
50	Grease and tallow, not including lubricating greases.....	6	172	7	4	2	1	168	Au	165	De	152	152	152				215,189
51	Hand stamps.....	3	17	1	3	2	3	8	(*)	8	(*)	8	8	8				10,842
52	Hats and caps, other than felt, straw, and wool.....	14	293	21	10	14	9	239	Ja	265	Se	180	250	79	169		2	233,037
53	Ice, manufactured.....	14	288	2	25	25	6	230	Jy	316	Ja	157	210	218	1			1,954,421
54	Instruments, professional and scientific.....	3	9	3	2			4	(*)	4	(*)	4	4	4				6,350
55	Jewelry.....	24	400	43	17	20	23	288	De	207	Au	281	297	251	40		6	467,814
56	Leather, tanned, curried, and finished.....	12	817	13	22	24	3	755	Fe	859	De	655	782	782				8,210,193
57	Liquors, malt.....	20	2,001		82	185	7	1,727	Jy	1,901	Ja	1,621	1,685	1,660	5			15,321,596
58	Lithographing.....	10	461	5	20	33	20	383	Fe	398	Au	358	390	341	54		1	1,202,104
59	Looking-glass and picture frames.....	4	266	1	11	33	2	219	Ap	238	Ja	155	211	202	9			524,538
60	Lumber and timber products.....	6	594	4	17	19	7	547	My	653	Oc	444	564	564	10			1,135,167
61	Lumber, planing-mill products, not including planing mills connected with sawmills.....	23	476	20	37	39	5	375	Au	403	Fe	337	375	375				953,268

\* Owned power only.

\* 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.			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.	Total.	Steam engines. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>

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

\$6,927,139	\$8,324,037	\$33,159,083	\$1,850,195	\$1,990,053	\$8,026,537	\$11,908,350	\$2,198,284	\$210,860,386	\$96,753,752	106,689	73,625	9,046	75	23,943	27,965	1
900	625	5,837	680	2,134	69	7,408	193	42,454	34,863	5	4	1	2	19	60	2
30,520	20,109	220,838	553	3,000	5,702	595,433	6,581	946,725	244,711	384	365	14	5	56	30	4
4,900	2,572	41,205	968	6,450	783	32,052	1,263	118,156	82,841	70	70	30	8	56	30	5
10,770	9,008	25,738	.....	4,379	792	125,643	1,140	217,800	91,011	608	400	90	113	381	6	6
61,091	38,832	148,900	038	28,820	4,798	744,243	9,701	1,262,801	508,857	.....	.....	.....	.....	.....	.....	.....
18,080	13,751	24,070	.....	2,021	2,168	187,814	1,675	257,900	68,411	119	60	.....	59	7	.....	7
2,690	8,000	5,824	.....	1,152	72	44,972	170	70,500	31,358	10	.....	5	5	.....	.....	8
8,740	11,664	118,165	820	18,423	1,524	97,920	2,941	346,538	245,068	114	.....	2	112	9	.....	9
446,892	630,006	3,034,008	3,925	95,472	61,280	7,655,583	50,989	14,525,078	6,812,506	4,115	3,555	355	205	2,481	10	10
3,800	2,432	63,150	.....	8,570	928	102,509	3,048	220,188	120,031	268	240	.....	28	60	11	11
62,188	33,054	263,343	60	30,258	3,514	476,273	11,005	1,015,741	528,483	570	230	140	200	75	12	12
15,863	7,238	133,029	1,340	7,215	4,408	307,685	6,898	647,257	272,704	973	900	10	63	6	13	13
55,260	59,330	346,143	600	6,521	9,778	488,095	19,415	1,880,792	680,592	708	472	152	84	348	14	14
122,722	247,300	924,539	.....	79,167	33,173	3,590,418	94,157	6,385,076	2,095,101	1,524	687	6	831	397	15	15
38,850	23,275	171,376	.....	2,780	5,171	60,111	35,448	300,869	305,300	749	630	60	59	77	16	16
.....	2,940	22,065	.....	2,008	194	66,465	1,622	131,867	69,780	32	.....	.....	32	.....	17	17
60,691	34,244	402,180	.....	28,796	10,248	909,394	18,685	1,713,063	785,013	1,412	1,255	85	72	53	18	18
166,452	143,085	890,703	9,565	50,732	22,079	2,171,657	26,725	3,851,998	1,659,616	1,376	875	111	390	221	19	19
156,792	142,425	747,142	9,542	61,700	20,546	2,127,078	24,009	3,694,537	1,542,850	1,309	875	111	323	221	20	20
9,660	1,560	53,651	23	8,032	1,533	43,979	2,716	157,401	110,706	67	.....	.....	67	.....	21	21
3,744	59,791	563,855	.....	1,890	1,890	307,663	33,713	970,656	629,280	1,023	790	18	215	328	22	22
34,306	30,820	50,707	.....	6,481	5,822	331,603	80,033	618,143	256,507	493	377	60	56	13	23	23
26,740	18,280	7,818	.....	5,164	900	71,807	1,208	204,660	131,555	36	.....	.....	36	.....	24	24
284,275	820,418	2,202,709	1,048,012	202,150	25,404	0,487,227	22,902	13,333,110	6,822,981	983	370	7	606	128	25	25
270,439	807,781	1,000,904	1,035,875	101,934	24,164	0,481,357	17,138	12,748,641	6,250,040	877	370	.....	507	122	26	26
270,439	807,781	1,000,904	1,035,875	101,934	24,164	0,481,357	17,138	12,748,641	6,250,040	877	370	.....	507	122	27	27
4,836	12,637	301,805	12,137	10,222	1,240	5,870	5,764	584,569	572,935	106	.....	7	99	6	28	28
4,836	12,637	301,805	12,137	10,222	1,240	5,870	5,764	584,569	572,935	84	.....	7	77	6	29	29
.....	.....	18,065	.....	678	37	24	646	24,967	24,297	22	.....	.....	22	.....	30	30
780	21,280	720	.....	353	7,825	245	.....	41,182	33,112	9	.....	.....	9	.....	31	31
70,121	163,211	610,107	.....	52,073	3,614	1,362,769	7,317	2,666,509	1,190,483	167	.....	.....	167	.....	32	32
58,500	99,807	100,981	.....	17,861	0,444	1,771,117	11,043	2,280,048	503,888	657	200	245	212	385	33	33
86,252	133,906	344,534	.....	44,271	8,767	1,356,390	20,143	2,343,292	966,759	930	680	150	100	587	34	34
50,140	8,046	298,455	200	8,305	10,877	1,077,470	20,761	1,247,302	513,065	1,446	1,275	95	76	366	35	35
120,109	98,246	358,856	2,180	18,295	12,058	1,698,123	10,898	2,779,081	1,070,060	632	.....	447	185	40	36	36
24,126	24,387	95,196	.....	3,016	1,624	127,659	9,221	390,913	254,033	518	175	80	263	.....	37	37
64,930	95,748	191,438	75	16,080	6,283	458,147	10,765	901,895	432,983	329	.....	146	183	38	38	38
7,370	4,328	39,089	.....	4,151	960	12,770	1,754	81,426	66,902	112	.....	35	77	.....	39	39
1,100	480	30,720	4,000	3,906	108	11,439	259	79,538	67,840	11	.....	.....	11	.....	40	40
5,460	5,793	44,270	.....	3,240	64	17,001	995	98,252	75,256	19	.....	.....	19	.....	41	41
8,300	26,409	21,925	272	4,645	781	188,184	1,880	439,197	240,133	57	40	.....	17	.....	42	42
15,206	16,895	34,855	.....	6,130	4,031	1,026,681	9,636	1,152,502	116,185	725	500	180	45	90	43	43
8,022	0,365	32,000	85	3,935	1,289	215,812	2,335	312,652	94,505	187	125	35	27	14	44	44
955,256	809,424	4,411,238	30,761	156,224	148,926	5,505,135	232,396	15,319,472	9,581,941	13,154	6,212	1,823	5,119	3,544	45	45
4,000	260	24,058	.....	5,160	184	21,952	632	71,072	48,488	18	.....	.....	18	.....	46	46
18,100	24,067	55,888	14,188	4,602	750	231,818	314	372,270	140,138	7	.....	.....	7	.....	47	47
177,204	106,290	1,006,707	1,248	60,594	26,819	1,564,116	41,940	3,513,554	1,907,498	3,450	2,805	320	325	354	48	48
28,144	13,724	95,254	.....	4,660	1,026	141,400	2,470	297,215	153,345	88	.....	43	45	.....	49	49
6,152	2,824	103,922	62	1,392	697	138,309	20,181	319,100	160,610	397	282	.....	115	.....	50	50
3,516	2,000	3,885	500	1,840	98	6,485	229	20,984	14,270	3	.....	.....	3	.....	51	51
23,080	18,902	121,351	.....	14,348	1,199	340,511	3,324	607,699	263,864	20	.....	.....	20	.....	52	52
41,736	25,303	154,654	.....	4,170	18,837	55,312	117,070	471,855	299,473	5,048	5,030	.....	18	442	53	53
1,404	.....	3,443	.....	680	75	1,280	86	10,121	8,805	4	.....	.....	4	.....	54	54
40,648	28,789	192,547	.....	19,776	1,861	222,907	2,631	728,691	503,153	213	.....	.....	213	.....	55	55
53,983	27,875	474,350	.....	5,750	40,998	3,900,416	53,885	5,425,725	1,471,424	2,382	2,310	50	22	1,172	56	56
348,728	306,464	1,549,682	.....	2,733	1,853,447	2,671,742	272,155	10,352,807	7,408,910	13,114	12,800	302	12	2,254	57	57
61,120	58,712	294,967	5,153	12,279	8,376	202,487	8,976	831,525	602,062	462	420	18	324	.....	58	58
24,618	43,438	146,318	.....	4,941	3,898	135,521	4,869	431,059	290,069	330	305	.....	25	10	59	59
35,465	28,571	322,503	4,467	8,112	13,824	619,389	6,066	1,120,631	501,076	1,420	1,380	40	147	29	60	60
88,653	49,174	291,720	.....	8,903	10,754	806,809	11,155	1,472,296	654,332	1,564	1,330	87	.....	978	61	61

<sup>1</sup> Same number reported for one or more other months.

<sup>2</sup> Same number reported throughout the year.

TABLE 55.—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.	10 and over.		Under 10.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.		Female.	Male.	Female.		
								Maximum month.	Minimum month.							

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

CINCINNATI—Continued.																		
1	Marble and stone work.....	27	408	28	25	24	4	327	My	380	Jy	287	300	358	2	.....	.....	\$553,991
2	Matresses and spring beds.....	10	109	13	4	4	4	84	Ap	87	De	78	78	52	20	.....	.....	170,647
3	Millinery and lace goods.....	9	395	4	18	32	19	293	Je	440	No	151	342	20	313	.....	.....	132,444
4	Mineral and soda waters.....	12	154	14	6	18	.....	110	Je	133	De	103	105	105	.....	.....	.....	207,638
5	Models and patterns, not including paper patterns.....	19	183	18	12	12	1	140	Je	153	Oc	123	140	130	.....	1	.....	238,497
6	Optical goods.....	5	49	1	4	3	5	36	Aug	37	De	34	34	31	3	.....	.....	56,228
7	Paints.....	15	571	14	41	116	35	305	Je	380	No	330	351	343	8	.....	.....	4,028,062
8	Patent medicines and compounds, and druggists' preparations.....	37	414	31	25	90	40	228	Mh	248	Se	217	220	144	70	.....	.....	1,010,607
9	Photo-engraving.....	8	240	5	15	19	10	101	Je	201	No	183	185	180	5	.....	.....	152,005
10	Plumbers' supplies, not elsewhere specified.....	5	513	5	10	55	7	430	Fe	480	No	393	405	403	1	1	.....	1,269,731
11	Printing and publishing, book and job.....	164	2,064	164	147	183	111	2,359	No	2,441	Ap	2,267	2,369	1,763	623	10	3	4,287,076
12	Printing and publishing, music.....	8	114	7	13	38	9	47	Ap	52	Aug	42	42	38	4	.....	.....	147,768
13	Printing and publishing, newspapers and periodicals.....	96	1,902	59	92	537	227	987	De	1,042	Se	904	1,042	956	85	1	.....	3,993,935
14	Printing and publishing.....	10	1,054	5	35	368	62	584	De	606	Se	573	606	505	11	.....	.....	2,024,239
15	Printing, publishing, and job printing.....	17	663	11	24	118	109	401	De	434	Jy	386	434	360	73	1	.....	1,853,062
16	Publishing without printing.....	69	185	43	33	51	56	2	(*)	2	(*)	2	2	1	1	.....	.....	110,034
17	Rubber goods, not elsewhere specified.....	3	14	3	4	.....	2	5	(*)	5	(*)	5	5	5	.....	.....	.....	1,082
18	Saddlery and harness.....	9	625	10	25	75	9	400	De	547	Mh	359	539	499	18	22	.....	1,593,046
19	Shirts.....	10	1,195	3	27	65	25	1,075	Mh	1,257	Se	920	962	68	891	2	1	622,167
20	Signs and advertising novelties.....	7	191	3	11	13	5	159	Jy	169	Oc	150	163	110	51	2	.....	260,666
21	Slaughtering and meat packing.....	47	1,410	65	73	118	28	1,126	De	1,282	Ap	1,065	1,284	1,245	39	.....	.....	4,378,022
22	Statuary and art goods.....	3	63	2	2	3	3	53	De	60	Jy	19	60	51	9	.....	.....	118,384
23	Steam fittings and steam and hot-water heating apparatus.....	6	1,407	4	28	226	68	1,081	Se	1,102	My	1,041	1,095	1,088	.....	7	.....	3,355,064
24	Stencils and brands.....	7	37	6	1	2	4	24	Mh	25	Ap	22	25	25	.....	.....	.....	43,621
25	Stoves and hot-air furnaces, including gas and oil stoves.....	12	836	2	46	61	42	685	Fe	735	Jy	633	668	604	4	.....	.....	1,831,415
26	Structural ironwork, not made in steel works or rolling mills.....	16	369	15	20	24	12	298	Jy	334	De	252	253	253	.....	.....	.....	564,403
27	Suspenders, garters, and elastic woven goods.....	5	140	5	5	4	11	115	Aug	144	Ja	61	102	5	97	.....	.....	89,012
28	Tobacco manufactures.....	100	2,432	178	42	101	24	2,087	Ja	2,203	Je	2,001	2,081	885	1,194	2	.....	2,269,564
29	Varnishes.....	9	111	4	17	29	9	52	(*)	52	(*)	52	52	51	1	.....	.....	548,074
30	Wire work, including wire rope and cable.....	9	123	2	12	6	6	97	Ja	114	Oc	84	103	103	.....	.....	.....	277,905
31	All other industries*.....	302	12,124	200	481	876	401	10,157	.....	.....	.....	.....	10,056	8,080	1,930	23	14	30,598,537

*All other industries embrace—	1	Canning and preserving, fruits and vegetables.....	1	Cotton small wares.....	1	Glue, not elsewhere specified.....	3
Aluminum ware.....	1	Dental goods.....	1	Dyeing and finishing textiles.....	1	Gold and silver, reducing and refining, not from the ore.....	2
Artificial stone products.....	2	Carpets, rug.....	3	Enameling.....	2	Hair work.....	2
Automobile bodies and parts.....	3	Carriages and sleds, children's.....	1	Engines, steam, gas, and water.....	5	Hardware.....	2
Babbitt metal and solder.....	5	Cars and general shop construction and repairs by electric-railroad companies.....	3	Engraving, wood.....	2	Hats, fur-felt.....	3
Bags, other than paper.....	3	Cars, electric-railroad, not including operations of railroad companies.....	1	Envelopes.....	1	Hats, straw.....	5
Baking powders.....	4	Cash registers and calculating machines.....	1	Fancy articles, not elsewhere specified.....	1	Hosiery and knit goods.....	4
Baskets, and rattan and willow ware.....	3	Clocks.....	1	Fire extinguishers, chemicals.....	1	House-furnishing goods, not elsewhere specified.....	6
Bells.....	1	Clothing, sponging and refinishing.....	3	Flags and banners.....	3	Ink, printing.....	6
Belting and hose, woven.....	2	Coffins, burial cases, and undertakers' goods.....	5	Foundry supplies.....	3	Ink, writing.....	1
Billiard tables and materials.....	1	Coke, not including gas-house coke.....	1	Galvanizing.....	1	Iron and steel, steel works and rolling mills.....	1
Bluing.....	1	Confectionery (ice cream).....	9	Gas and electric fixtures.....	1	Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.....	1
Boot and shoe cut stock.....	3	Cotton goods.....	1	Gas machines and gas and water meters.....	3	.....	.....
Boot and shoe findings.....	5	.....	.....	Glass.....	1	.....	.....
Brushes.....	5	.....	.....	Glucose and starch.....	1	.....	.....
Butter.....	5	.....	.....	.....	.....	.....	.....
Buttons.....	1	.....	.....	.....	.....	.....	.....

CLEVELAND—All industries.....																		
1	Artificial stone products.....	15	148	12	8	7	3	118	My	155	Oc	90	114	114	.....	.....	.....	191,328
2	Automobile bodies and parts.....	28	1,800	15	55	139	25	1,505	Je	1,808	De	1,378	1,419	1,411	6	2	.....	3,950,737
3	Automobiles.....	8	6,177	.....	99	453	184	5,441	De	6,899	Se	4,600	6,890	6,832	67	.....	.....	10,682,303
4	Automobile repairing.....	10	63	8	7	1	3	44	De	51	Ja	36	52	51	1	.....	.....	73,378
5	Awnings, tents, and sails.....	8	294	4	17	26	14	233	Je	306	De	152	227	124	103	.....	.....	370,991
6	Blacking, stains, and dressings.....	4	29	4	4	6	3	12	(*)	12	(*)	12	12	7	5	.....	.....	41,897
7	Bookbinding and blank-book making.....	17	226	21	11	5	6	123	My	190	Oc	174	188	118	69	1	.....	149,990
8	Boxes, cigar.....	4	60	5	.....	.....	1	54	Oc	58	Aug	48	58	15	43	.....	.....	72,200
9	Boxes and cartons, paper.....	9	784	.....	32	29	15	708	Fe	748	De	653	678	398	370	.....	.....	951,612
10	Boxes, wooden packing.....	11	584	1	20	21	7	525	Jy	570	Fe	488	498	494	4	.....	.....	715,054
11	Brass and bronze products.....	28	928	18	46	54	21	789	Je	866	Ja	675	792	752	10	.....	.....	1,433,187
12	Bread and other bakery products.....	224	2,279	225	55	326	61	1,612	Je	1,653	Ja	1,569	1,635	1,327	305	1	2	2,930,233
13	Brick and tile, terra-cotta, and fire-clay products.....	10	760	5	21	24	7	703	Oc	760	Fe	580	730	730	.....	.....	.....	1,484,331

\* Owned power only.

\* 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.				
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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>

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

\$38,807	\$24,700	\$213,080	\$50,651	\$8,115	\$4,363	\$258,404	\$9,407	\$750,387	\$482,576	1,171	742	416	13	420	1	
3,040	6,521	49,500	150	7,743	1,086	178,301	2,301	305,824	124,629	170	50	50	150	6	2	
20,303	10,221	104,895	10	14,900	2,229	202,023	638	443,629	240,308	31	40	8	31	3	3	
7,506	14,528	67,595	10	5,002	1,798	74,415	4,818	245,995	160,702	92	40	8	44	4	4	
20,064	12,950	92,216	1,100	6,853	1,343	44,177	4,199	238,763	190,387	235	145	16	74	25	5	
8,076	5,288	23,072	.....	7,309	465	30,396	1,286	99,500	67,818	22	.....	.....	22	6	6	
119,224	182,242	216,715	.....	27,508	43,861	2,303,144	31,156	3,801,552	1,877,262	2,092	1,735	125	232	785	7	
51,187	120,114	110,040	.....	11,409	10,963	670,845	25,465	1,304,680	659,276	308	227	.....	81	361	8	
32,046	23,510	150,448	1,775	15,416	613	73,517	4,850	357,530	279,163	169	.....	.....	109	9	9	
58,582	91,430	255,510	.....	5,919	0,050	207,333	11,648	1,110,538	801,557	1,245	1,065	.....	180	10	10	
328,444	260,493	1,447,230	184,806	156,860	26,665	2,034,847	63,363	5,794,334	3,606,121	2,923	679	224	2,020	302	11	
27,015	43,282	31,827	53,068	6,934	1,115	60,522	12	206,335	220,804	.....	.....	.....	.....	12	12	
236,871	508,885	940,153	293,293	47,532	40,409	1,557,373	34,881	0,024,804	4,453,140	2,538	617	10	1,911	355	13	
108,805	350,890	625,022	6,736	30,109	22,473	1,082,817	22,678	3,545,320	2,430,825	1,544	15	.....	1,529	355	14	
72,042	184,790	318,101	2,300	9,543	15,767	437,107	11,439	1,840,010	1,406,473	994	602	10	332	.....	15	
61,024	63,106	2,040	284,257	7,880	2,229	37,440	264	630,555	592,842	.....	.....	.....	.....	16	16	
2,100	492	3,154	.....	1,200	10	1,394	230	13,731	12,101	1	.....	.....	1	17	17	
53,728	67,533	180,351	.....	6,751	13,443	914,504	6,524	1,525,732	604,404	225	55	.....	175	18	18	
80,927	52,514	375,098	35,017	34,709	2,640	903,185	8,176	800,307	800,307	645	550	.....	95	19	19	
20,504	12,083	83,093	600	10,844	1,785	141,910	3,018	293,880	148,046	210	170	.....	40	20	20	
145,065	130,577	705,261	2,512	30,615	44,000	21,465,708	100,069	23,244,885	1,678,448	4,028	3,659	287	682	1,447	21	
3,080	3,230	33,132	.....	1,980	707	16,364	1,333	72,895	55,198	60	.....	55	5	105	22	
113,753	362,478	720,672	.....	10,320	32,021	871,741	24,411	3,039,359	2,143,207	1,832	1,385	150	297	896	23	
1,300	3,170	16,704	280	3,845	263	7,570	339	51,399	43,400	38	.....	.....	38	24	24	
80,949	70,802	432,310	450	25,760	12,213	840,407	21,862	2,090,656	1,228,207	908	305	80	113	700	25	
37,306	27,001	206,207	2,680	12,712	9,131	400,851	9,638	864,888	304,309	726	400	113	213	155	26	
6,066	7,215	35,801	.....	3,680	170	160,523	1,175	300,164	138,466	65	.....	.....	65	1	27	
88,310	130,625	957,791	2,542	51,956	511,782	1,787,694	9,755	4,120,904	2,323,455	170	50	.....	120	10	28	
42,441	62,107	47,300	.....	2,015	4,764	366,028	3,876	715,824	355,929	137	90	10	37	29	29	
23,212	7,067	60,578	.....	3,430	2,462	100,779	4,648	249,682	144,255	140	59	.....	81	20	30	
1,322,403	1,474,302	3,734,897	83,521	370,214	4,806,953	25,530,700	527,450	47,216,682	21,158,532	22,400	14,441	2,228	75	5,065	7,291	31

Iron and steel, doors and shutters.....	1	Musical instruments, organs.....	2	Roofing materials.....	4	Surgical appliances.....	6
Iron and steel forgings, not made in steel works or rolling mills.....	2	Musical instruments, pianos.....	4	Safes and vaults.....	3	Tinware, not elsewhere specified.....	4
Japanning.....	1	Musical instruments, piano and organ materials.....	2	Sausage.....	3	Toys and games.....	3
Jewelry and instrument cases.....	2	Oil, cottonseed and cake.....	1	Saws.....	3	Trunks and valises.....	2
Labels and tags.....	1	Oil, not elsewhere specified.....	3	Shipsbuilding, wooden, including boat building.....	2	Umbrellas and canes.....	3
Lamps and reflectors.....	6	Oleomargarine.....	1	Show cases.....	2	Upholstering materials.....	1
Lasts.....	1	Paper goods, not elsewhere specified.....	5	Silverware.....	2	Vinegar and cider.....	1
Lead, bar, pipe, and sheet.....	2	Paper patterns.....	2	Smelting and refining, not from the ore.....	3	Washing machines and clothes wringers.....	2
Leather goods, not elsewhere specified.....	2	Pens, fountain and stylographic.....	2	Soap.....	12	Waste.....	1
Liquors, distilled.....	2	Photographic materials.....	1	Sporting and athletic goods.....	2	Watch and clock materials.....	1
Liquors, vinous.....	3	Pickles, preserves, and sauces.....	9	Springs, steel, car and carriage.....	1	Watch cases.....	1
Malt.....	2	Plated ware.....	1	Stamped and enameled ware, not elsewhere specified.....	3	Window shades and fixtures.....	4
Mirrors, framed and unframed.....	4	Printing materials.....	5	Stationery goods, not elsewhere specified.....	3	Window and door screens.....	3
Muchlago and paste.....	2	Pumps, not including power pumps.....	3	Regalia and society badges and emblems.....	6	Wood preserving.....	2
Musical instruments and materials, not specified.....	1	.....	.....	.....	.....	Wood, turned and carved.....	5
.....	.....	.....	.....	.....	.....	Wool shoddy.....	1

\$10,243,884	\$15,274,202	\$67,350,779	\$1,748,342	\$1,817,652	\$4,862,090	\$187,590,280	\$10,902,284	\$362,418,052	\$153,025,488	277,066	180,032	33,230	385	63,410	71,499	1
11,723	9,935	68,130	690	2,059	1,235	98,753	3,270	240,522	138,499	177	50	43	.....	84	.....	2
103,462	148,843	1,101,237	577	33,913	45,118	1,840,978	84,202	4,372,867	2,447,687	3,944	665	157	.....	3,122	600	3
440,235	973,855	4,269,922	14,462	20,700	152,694	12,664,138	142,350	22,743,728	9,037,234	6,023	4,600	150	.....	2,173	2,094	4
9,520	1,520	42,503	150	4,856	543	13,789	1,060	90,702	81,283	73	49	.....	49	24	.....	5
20,644	39,073	118,914	.....	2,730	3,606	454,306	3,432	720,595	262,767	94	.....	35	.....	59	.....	6
6,690	13,763	9,183	.....	1,200	535	35,849	710	86,879	50,320	8	.....	.....	.....	8	.....	7
18,288	7,480	109,880	2,433	13,807	912	80,431	2,235	295,357	212,691	166	.....	.....	.....	106	.....	8
.....	624	20,826	.....	1,680	393	42,230	1,352	84,914	38,332	35	20	.....	.....	15	.....	9
65,894	36,552	328,416	135	30,000	9,928	757,322	15,166	1,408,463	690,045	489	245	35	.....	209	130	10
38,420	36,307	267,700	2,058	15,070	8,790	916,612	8,101	1,389,070	404,897	1,808	1,368	230	.....	210	315	11
113,948	89,562	534,308	1,860	19,854	10,694	1,367,993	49,807	2,491,119	1,073,319	879	150	174	.....	555	15	12
115,401	420,407	1,222,160	.....	70,650	35,397	3,800,391	116,573	6,907,698	2,990,644	1,787	779	120	.....	888	293	13
55,167	27,220	478,030	1,295	748	14,728	182,213	247,275	1,214,905	785,417	2,460	2,190	30	.....	240	170	14

\* Same number reported for one or more other months.

\* Same number reported throughout the year.



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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$1,100	\$2,400	\$22,953		\$223	\$465	\$62,900	\$910	\$101,658	\$37,848	21				21		1
11,399	20,878	22,234		6,300	1,419	922,699	2,907	1,064,076	138,570	145	6	67		72		2
3,900	1,250	10,742		3,260	61	16,712	1,048	49,736	31,976	41	12			29		3
2,880	1,320	11,676		840	451	23,033	1,079	52,717	28,605	40		25		15		4
33,028	9,279	207,272	\$2,000	9,374	5,482	236,542	10,001	643,545	397,002	307		69		238		5
32,248	9,159	193,812	2,000	8,564	5,180	218,597	9,489	599,013	370,927	292		69		223		6
780	120	13,460	200	810	302	17,945	512	44,532	26,075	15				15		7
135,772	162,179	2,361,615		5,504	2,179,697	117,112		4,957,868	2,661,059	7,838	7,174	16	175	473	8,750	8
93,080	141,402	487,737		2,880	36,096	1,508,784	135,006	3,129,970	1,486,180	2,773	2,400	5		368	75	9
19,372	21,970	17,227	2,718	4,053	908	123,583	1,468	288,012	162,961	89	25	48		16		10
15,282	19,029	12,430	2,718	3,393	706	92,687	1,139	240,141	146,315	58	25	25		8		11
4,000	2,950	4,797		660	202	30,896	329	47,871	4,403,262	31		23		8		12
181,709	370,714	1,482,426	402,680	121,182	24,793	4,086,797	26,819	8,518,878	3,915,188	371				371		13
163,409	366,374	1,172,136	408,823	114,878	24,179	4,050,993	21,768	7,987,949	3,723,643	299				299		14
159,899	338,812	1,027,489	408,204	102,738	23,330	3,691,320	18,466	7,252,331	3,542,545	248				248		15
3,540	27,562	144,047	610	12,140	849	369,673	3,302	735,618	372,643	61				61		16
18,300	4,340	310,290	83,866	6,304	614	35,804	5,051	528,929	488,074	72				72		17
18,300	4,340	310,290	83,866	6,304	614	35,804	5,051	528,929	488,074	72				72		18
557,380	1,016,858	3,716,909	311,154	100,440	45,378	8,210,051	56,098	16,243,292	7,977,143	1,074	30	140		904		19
557,380	1,016,858	3,043,241	311,154	104,971	45,099	8,208,922	53,921	16,142,765	7,870,922	1,025	30	140		855		20
453,586	871,631	3,089,604	311,082	146,266	40,871	6,945,611	41,876	13,746,813	6,769,426	810	30	140		640		21
94,030	137,063	513,755	72	43,177	3,935	1,123,212	10,228	2,151,426	1,017,980	186				186		22
9,450	8,164	30,080		3,632	274	122,988	1,422	200,070	75,680	22				22		23
320		8,893		1,896	19	17,231	395	44,456	26,830	7				7		24
		73,668		1,475	279	1,129	2,177	100,527	97,221	49				49		25
		53,092		1,415	206	992	1,702	74,533	71,749	33				33		26
		20,576		60	73	137	385	25,994	25,472	16				16		27
129,476	131,850	517,086		46,255	26,641	2,787,209	49,368	4,964,892	2,128,225	2,410	930	821		659	219	28
95,536	100,590	387,518		87,486	22,365	2,279,641	31,775	3,890,465	1,579,079	1,807	680	15		612	80	29
33,940	31,263	129,568		8,769	4,276	607,658	17,593	1,074,397	549,146	1,103	250	808		47	189	30
18,084	23,838	138,464		943	0,833	616,953	6,496	855,328	231,879	1,035	945	2		88	6	31
100,326	184,813	918,604	30,075	25,194	20,882	1,813,986	40,053	3,864,955	2,010,916	1,422	800	174		448	243	32
10,680	45,093	41,903		10,987	5,603	400,976	2,700	687,844	275,108	68	10			58		33
361,615	517,190	1,048,238	2,123	20,495	55,876	5,740,529	151,042	11,367,538	6,465,967	4,831	466	1,580		2,785	1,870	34
3,600	1,150	62,724	65	6,381	171	25,468	5,805	129,630	98,557	241				128	4	35
22,810	45,366	142,812		0,468	255,817	11,708	11,708	587,093	320,168	715	40	475		200	353	36
2,040	1,071	10,940		1,587	25	3,119	207	30,160	26,834	10				10		37
9,660	10,293	1,716		2,813	154,183	1,764	1,764	326,953	170,006	97		45		52		38
29,040	48,209	111,124	928	896	5,395	547,889	15,249	1,021,473	458,335	521	120	212		189		39
1,557,219	1,880,901	10,586,721	112,898	128,562	394,738	13,012,451	837,177	34,959,563	21,109,835	27,522	12,005	3,186	100	12,231	11,629	40
0,930	1,778	27,274		1,068	743	20,709	1,950	77,722	55,053	125*				125		41
301,788	459,501	3,383,247	3,408	3,507	93,674	2,544,189	346,490	8,457,476	5,698,797	7,075	1,570	585		4,920	2,604	42
1,245,501	1,428,622	7,176,200	109,400	123,987	300,321	10,447,553	488,737	26,424,365	15,488,075	20,322	10,310	2,001	100	7,311	9,025	43
14,000	6,706	63,088		21,682	1,148	105,888	789	290,425	183,748	14				14		44
57,568	73,658	405,538	10,385	28,957	8,187	702,409	14,327	1,594,709	877,973	788	80	305		403		45
33,388	35,812	214,807	10,358	25,177	2,684	426,656	5,107	903,620	471,857	145		30		115		46
4,500	2,205	14,415	27	2,580	250	30,148	89	63,294	24,057	5				5		47
19,680	35,641	176,316		1,200	5,253	236,605	0,131	627,795	382,059	638	80	275		283		48
48,728	40,090	222,215	810	18,131	2,811	518,410	10,582	973,952	444,960	347	100	80		167	137	49
10,060	1,420	38,987	125	3,738	270	44,555	1,358	124,503	78,500	26				26		50
2,292	1,916	13,282		2,880	164	12,918	132	53,766	40,716	8				8		51
143,460	275,585	2,060,541	4,271	4,600	70,790	2,373,766	267,491	5,760,060	3,124,803	4,776	2,126			2,650	1,160	52
7,600	11,185	63,171		4,986	326	166,531	1,156	802,796	135,100	17				17		53
100,643	152,975	671,539	2,817	62,346	15,919	2,310,504	23,922	4,051,162	1,716,726	523	85	5		433	80	54
20,092	6,145	137,681		1,822	36,635	38,279	117,493	570,167	414,395	3,567	3,442			125	80	55
33,378	41,627	140,167	32,450	6,746	2,777	135,520	4,469	488,577	348,588	242	128	67		47	80	56
143,092	192,361	918,461	1,985		158,850	6,816,341	3,846,908	13,088,385	2,435,136	40,090	22,990	17,100			11,448	57
583,670	929,094	6,049,623	5,028	600	199,910	22,708,050	1,784,260	33,388,829	8,836,519	70,844	68,625	350		1,869	17,532	58
129,203	111,088	969,418	812	3,476	48,510	1,022,937	85,757	3,541,937	1,533,243	4,393	1,575	41		2,777	530	59
70,087	39,664	415,595		2,274	21,257	635,667	129,446	1,754,030	983,917	2,438	482	776		1,180	18	60

\* Same number reported for one or more other months.

\* Same number reported throughout the year.

TABLE 55.—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—		Male.	Female.		Male.	Female.

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

CLEVELAND—Continued.															
1 Jewelry.....	21	130	19	7	4	4	105	Ja <sup>a</sup> 111	Oc 100	108	107	1	1	\$130,438	
2 Leather goods.....	30	105	26	12	4	8	145	Ap 156	No 132	140	128	11	1	224,582	
3 Liquors, distilled.....	6	11	4	1	1	1	5	(*) 5	(*) 5	6	6			35,176	
4 Liquors, malt.....	12	1,240	5	46	114	10	1,050	Jy 1,140	Mh 950	1,030	1,028	2		10,541,199	
5 Lithographing.....	8	611	3	20	32	21	620	Jo 551	Ap 508	500	471	38		838,030	
6 Lumber, planing-mill products, not including planing mills connected with sawmills.....	36	1,052	14	50	40	17	931	So 1,026	Ja 860	877	877			1,174,002	
7 Marble and stone work.....	10	252	16	9	15	7	205	Ap 230	De 102	186	186			514,831	
8 Mattresses and spring beds.....	7	203	1	9	11	11	171	My 186	De 158	157	122	35		255,343	
9 Millinery and lace goods.....	12	506	22	12	35	31	496	Mh 658	Je 339	467	185	280	2	620,152	
10 Mineral and soda waters.....	25	101	24	19	25	4	89	So 108	Ja <sup>a</sup> 70	103	99	4		127,566	
11 Models and patterns, not including paper patterns.....	24	210	24	15	4	7	166	Ap 195	Ja 154	158	155	2	1	180,189	
12 Oil, not elsewhere specified.....	12	206	24	72	30	80	My 87	Oc <sup>a</sup> 75	74	74	74			725,061	
13 Optical goods.....	7	87	4	9	12	12	50	Se 51	Mh 49	50	50			83,204	
14 Paints.....	21	1,532	1	61	568	125	787	Ap 853	No 720	774	709	65		5,356,036	
15 Patent medicines and compounds and druggists' preparations.....	52	530	44	44	123	100	228	Mh 257	My 204	210	130	83		892,736	
16 Photo-engraving.....	5	108	1	14	10	10	67	So <sup>a</sup> 74	Ja <sup>a</sup> 63	73	73			91,579	
17 Plumbers' supplies, not elsewhere specified.....	20	1,131	6	53	110	39	923	Ja 1,020	Jo 838	968	706	9	233	15	2,151,702
18 Printing and publishing, book and job.....	160	2,783	113	160	256	113	2,135	Mh 2,218	No 2,030	2,048	1,630	393	16		3,700,458
19 Printing and publishing, newspapers and periodicals.....	81	2,017	45	100	534	203	1,126	Ap 1,171	Au 1,070	1,138	1,057	68	13		3,371,200
20 Sausage.....	8	158	7	0	21	5	116	Oc 120	Ja 113	116	116			292,142	
21 Slaughtering and meat packing.....	31	1,522	31	35	144	28	1,284	Do 1,733	Oc 1,135	1,356	1,308	46	2		0,187,293
22 Stereotyping and electroplating.....	4	125	2	7	6	6	104	Ap 107	Do 96	104	103		1		105,110
23 Stoves and hot-air furnaces.....	16	660	8	31	37	20	555	Oc 612	Jy 511	586	531	5		1,222,368	
24 Stoves and ranges.....	7	535	1	10	20	15	471	Ja 508	Jy 430	458	458			1,066,020	
25 Hot-air furnaces.....	9	125	7	12	8	14	84	No 119	Ap <sup>a</sup> 62	128	123	6		155,748	
26 Stoves, gas and oil.....	11	2,667	55	216	40	2,356	Jo 2,757	Au 2,006	2,112	2,005	1	16		3,700,019	
27 Structural ironwork, not made in steel works or rolling mills.....	21	2,347	62	230	59	1,987	Se 2,111	Ja 1,809	2,030	1,958	62	10		6,169,718	
28 Tobacco manufactures.....	233	1,887	247	29	49	13	1,549	Oc 1,613	Mh 1,491	1,519	587	931	1		932,509
29 Varnishes.....	12	499	7	48	116	53	275	My 318	No 240	230	210	28	1		2,610,095
30 Wall plaster.....	3	75	6	0	2	2	58	Au 69	Ja <sup>a</sup> 46	57	54	3		872,843	
31 Wirework.....	13	629	2	32	65	29	501	Ap 565	Do 450	447	385	62		1,021,754	
32 All other industries*.....	264	21,053	145	537	2,416	550	17,360			19,081	14,851	4,142	64	24	65,013,813

* All other industries embrace—	Cars, electric-railroad, not including operations of railroad companies.....	1	Engraving, steel and copper plate, including photo printing.....	3	Hats, fur-felt.....	1	
Agricultural implements.....	1	Cash registers and calculating machines.....	3	Engraving, wood.....	1	House furnishing goods, not elsewhere specified.....	5
Artificial limbs.....	1	Cheese.....	3	Envelopes.....	2	Ink, writing.....	1
Artificial stone products.....	5	Clocks.....	1	Fancy articles, not elsewhere specified.....	2	Iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works and rolling mills.....	3
Babbitt metal and solder.....	1	Clothing, men's, buttonholes.....	3	Files.....	3	Iron and steel, cast-iron pipe.....	1
Bags, other than paper.....	6	Coffee, roasting and grinding.....	3	Firearms.....	1	Japanning.....	1
Bags, paper.....	1	Coffins, burial cases, and undertakers' goods.....	2	Flour-mill and gristmill products.....	5	Labels and tags.....	1
Baking powders.....	3	Coke, not including gas-house coke.....	2	Foundry supplies.....	5	Lead, bar, pipe, and sheet.....	1
Baskets and rattan and willow ware.....	3	Collars and cuffs, men's.....	1	Furnishing goods, men's.....	3	Leather, tanned, curried, and finished.....	3
Belting, leather.....	2	Corsets.....	2	Galvanizing.....	3	Liquors, vinous.....	5
Belting and hose, woven.....	2	Cutlery and edge tools.....	2	Gas, illuminating and heating.....	2	Looking glass and picture frames.....	2
Bluing.....	1	Dairymen's, poultrymen's, and apiarists' supplies.....	1	Gas machines and gas and water meters.....	2	Lubricating greases.....	4
Boots and shoes.....	2	Dyeing and finishing textiles.....	1	Glue, not elsewhere specified.....	2	Lumber and timber products.....	1
Brushes.....	6	Emery and other abrasive wheels.....	1	Grease and tallow, not including lubricating greases.....	1	Mirrors, framed and unframed.....	1
Canning and preserving, fish.....	1	Enameling.....	2	Hair work.....	3	Motocycles, bicycles, and parts.....	2

COLUMBUS—All industries.....															
1 Artificial stone products.....	0	23	4	4	0	19	Jy 28	Ja 6	20	26				65,415	
2 Awnings, tents, and sails.....	3	33	1	4	6	27	My 43	Ja 14	28	18				64,039	
3 Boots and shoes.....	7	1,890	3	25	101	42	1,725	Jo 1,804	Ju 1,478	1,833	905	910	10	2	4,580,636
4 Boxes, wooden packing.....	5	53	3	1	1	2	48	Jy 53	Ja 36	47	47				70,878
5 Bread and other bakery products.....	75	736	81	18	50	30	545	Mh 507	De 523	537	434	103			1,007,244
6 Brooms, from broom corn.....	9	23	9	2	2	1	11	Se 13	Fe <sup>a</sup> 10	12	9	3			6,855
7 Carpets, rag.....	3	32	4	2	1	1	25	My 30	Ja 17	23	15	8			10,429
8 Carriages and wagons.....	9	247	15	8	13	3	208	Ap 244	Oc 174	190	101	8			374,010
9 Cars and general shop construction and repairs by steam-railroad companies.....	4	2,874	6	115	1	1	2,753	Mh <sup>a</sup> 2,892	De 2,534	2,809	2,803	0			1,876,955
10 Coffee and spice, roasting and grinding.....	4	44	1	5	13	4	21	Do 24	Ju 19	24	14	10			133,800

<sup>1</sup> Owned power only.

<sup>2</sup> 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.				
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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>

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

20,804	\$5,366	\$79,473	\$550	\$8,882	\$658	\$71,698	\$2,188	\$231,816	\$157,930	71	.....	.....	.....	71	.....	1
20,975	8,954	96,647	.....	14,794	1,857	183,728	2,757	382,037	195,552	94	50	4	.....	40	.....	2
.....	1,482	3,749	35	1,488	3,271	9,074	628	27,474	17,772	39	9	17	.....	13	.....	3
217,688	203,375	804,651	75,000	3,301	2,023,172	1,713,302	145,037	6,528,168	4,669,829	6,554	6,457	.....	.....	97	1,648	4
81,966	80,470	587,204	2,800	18,209	0,087	842,858	10,747	1,490,835	1,077,230	513	.....	213	.....	300	263	5
93,770	50,100	722,984	40,554	39,573	10,551	1,070,941	32,194	3,336,086	1,323,951	3,192	1,494	603	.....	1,095	40	6
14,613	17,715	159,080	450	3,684	4,994	196,315	10,400	474,907	265,032	634	.....	328	.....	356	9	7
17,740	10,660	102,274	790	12,940	1,973	242,363	5,899	484,882	236,620	398	.....	.....	.....	398	70	8
38,073	50,732	277,630	.....	19,101	2,399	615,980	13,959	1,150,150	520,211	350	85	27	50	188	.....	9
23,036	15,311	60,482	.....	8,312	1,230	130,573	3,995	299,259	155,991	112	.....	29	.....	83	.....	10
25,019	5,688	135,408	200	10,400	1,281	56,481	2,653	270,256	220,122	252	.....	137	.....	115	.....	11
45,411	73,995	95,144	50	6,454	5,729	1,055,969	7,762	1,573,816	510,085	260	174	12	.....	74	80	12
17,882	10,886	31,512	351	7,808	650	96,093	1,117	244,882	147,652	24	.....	.....	.....	24	.....	13
211,715	752,375	491,902	2,573	14,276	45,758	4,171,944	52,673	7,535,698	3,311,081	2,901	835	355	.....	1,711	398	14
85,458	176,599	118,554	1,373	34,399	13,264	628,499	11,177	2,139,881	1,500,205	677	300	6	.....	371	41	15
20,840	22,168	79,433	10,997	3,733	534	21,226	2,189	195,929	172,514	31	.....	.....	.....	31	.....	16
123,904	322,702	539,323	.....	12,101	12,448	829,588	32,498	2,220,453	1,358,457	1,135	435	335	.....	365	5	17
441,660	331,110	1,544,771	158,774	131,244	33,805	1,915,562	61,965	5,852,348	3,874,821	2,126	150	71	.....	1,905	110	18
299,130	752,734	1,180,491	332,932	88,404	47,889	1,687,942	42,700	6,298,280	4,567,638	2,405	1,120	42	.....	1,243	624	19
25,728	21,509	92,716	.....	120	2,927	1,244,093	9,334	1,526,895	273,558	599	385	35	.....	179	.....	20
100,940	152,379	893,136	450	7,140	38,664	20,949,095	100,353	23,210,323	2,199,900	2,300	1,450	215	.....	965	766	21
19,055	12,457	88,766	3,918	6,935	884	43,892	5,466	244,470	195,121	630	.....	.....	.....	303	.....	22
65,126	50,352	384,092	350	11,040	13,059	627,409	20,893	1,413,883	765,671	858	468	65	.....	325	178	23
47,330	44,912	332,873	.....	5,000	12,108	382,789	19,679	1,013,584	611,116	823	468	40	.....	315	178	24
17,796	11,440	51,819	350	6,040	951	244,620	1,124	400,299	154,555	35	25	.....	.....	10	.....	25
146,751	334,019	1,485,095	.....	136,680	42,589	3,563,625	49,100	7,206,718	3,593,987	2,123	900	36	.....	1,187	275	26
205,624	388,220	1,480,279	16,810	10,086	54,841	2,694,155	67,451	6,036,669	3,274,063	3,696	2,135	651	.....	910	3,728	27
70,597	88,400	775,360	.....	41,418	287,971	1,084,211	8,396	2,666,378	1,573,771	42	.....	.....	.....	42	.....	28
145,900	156,274	153,036	.....	7,680	23,770	1,520,270	15,160	2,557,281	1,015,851	643	480	.....	.....	163	276	29
12,134	13,318	40,067	6,846	7,650	2,347	213,255	11,840	384,615	129,514	295	50	135	.....	80	.....	30
75,780	64,764	307,417	.....	10,198	12,948	1,566,753	13,174	2,453,961	991,034	970	60	303	.....	616	142	31
1,687,752	2,743,268	11,032,694	55,310	171,319	652,520	34,544,388	1,715,376	62,057,475	25,797,711	44,683	28,287	2,931	60	13,405	10,515	32

Musical instruments and materials, not specified.....	4	Printing materials.....	1	Shirts.....	4	Tin plate and terneplate.....	1
Musical instruments, organs.....	1	Pumps, not including power pumps.....	1	Showcases.....	2	Tools, not elsewhere specified.....	10
Needles, pins, and hooks and eyes.....	1	Pumps, power other than steam.....	1	Signs and advertising novelties.....	5	Toys and games.....	3
Oil, linseed.....	1	Regalia and society badges and emblems.....	1	Smelting and refining, not from the ore.....	2	Typewriter supplies.....	3
Paper and wood pulp.....	2	Roofing materials.....	2	Soap.....	4	Umbrellas and canes.....	3
Paper goods, not elsewhere specified.....	2	Rubber goods, not elsewhere specified.....	4	Soda-water apparatus.....	1	Vinegar and cider.....	1
Paving materials.....	1	Rules, ivory and wood.....	1	Springs, steel, car and carriage.....	3	Wall paper.....	1
Peanuts, grading, roasting, cleaning, and shelling.....	1	Safes and vaults.....	1	Stationery goods, not elsewhere specified.....	1	Washing machines.....	1
Pens, fountain and stylographic.....	1	Salt.....	2	Statuary and art goods.....	3	Watch and clock materials.....	1
Petroleum, refining.....	2	Saws.....	1	Steam fittings and steam and hot-water heating apparatus.....	9	Watches.....	1
Photographs and graphophones.....	1	Screws, machine.....	2	Stencils and brands.....	4	Window and door screens.....	2
Photographic apparatus.....	1	Sewing-machine cases.....	1	Surgical appliances.....	2	Window shades and fixtures.....	1
Pickles, preserves, and sauces.....	4	Sewing machines and attachments.....	2	Suspenders, garters, and elastic woven goods.....	1	Wire.....	1
Pottery.....	2	Shipbuilding, iron and steel.....	1	Wool shoddy.....	6	Wood, turned and carved.....	3
Printing and publishing, music.....	3	Shipbuilding, wooden, including boat building.....	2	Woolen goods.....	1	Worsted goods.....	1

\$1,748,034	\$2,515,588	\$11,177,197	\$257,768	\$372,291	\$790,047	\$29,780,008	\$847,490	\$57,608,084	\$20,971,586	35,522	18,781	6,835	32	9,874	9,532	1
4,068	.....	13,069	.....	582	316	25,761	997	65,583	38,855	121	50	63	.....	8	15	2
6,440	3,620	20,519	.....	1,320	620	54,099	593	111,284	60,592	16	.....	.....	.....	10	.....	3
106,760	183,518	876,087	.....	29,990	24,482	3,503,866	33,322	5,224,343	1,687,160	889	75	182	.....	632	.....	4
2,347	2,693	26,505	.....	1,272	557	51,808	2,455	107,729	53,466	252	.....	16	.....	236	.....	5
37,350	58,974	351,383	195	17,534	10,681	1,112,217	40,414	2,118,926	996,266	1,106	460	79	.....	567	99	6
.....	1,374	5,258	.....	660	104	14,794	198	33,487	18,495	.....	.....	20	.....	2	.....	7
1,679	336	8,569	.....	848	77	7,864	312	29,613	21,442	.....	.....	25	.....	6	.....	8
23,600	24,415	137,314	.....	3,600	3,313	342,443	3,138	648,097	302,516	.....	.....	160	.....	2	.....	9
9,240	31,200	2,194,591	.....	.....	6,808	3,060,279	106,182	5,401,494	2,235,033	3,281	2,268	615	.....	398	2,100	10
10,610	14,953	14,487	.....	3,840	2,038	222,579	1,838	301,734	77,317	57	.....	15	.....	42	.....	11

\* Same number reported for one or more other months.

\* Same number reported throughout the year.

TABLE 55.—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.	10 and over.		Under 10.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

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

1	<b>COLUMBUS—Continued.</b>																	
2	Confectionery and ice cream.....	13	282	11	16	27	14	214	De	260	Ja	157	279	176	100	.....	3	\$398,325
3	Confectionery.....	6	113	5	7	16	3	82	De	138	Ja	46	138	40	95	.....	3	120,300
4	Ice cream.....	7	169	6	9	11	11	132	Jo	172	Fe	103	141	136	5	.....	.....	278,025
5	Electroplating.....	4	42	4	2	.....	2	84	So	37	Ja <sup>a</sup>	31	36	34	2	.....	.....	18,447
6	Food preparations, not elsewhere specified.	6	31	6	1	3	2	19	So <sup>a</sup>	22	Jo	13	19	5	14	.....	.....	18,558
7	Foundry and machine-shop products.	45	2,705	33	80	497	102	2,083	Ja	2,190	De	1,020	2,110	2,095	24	.....	.....	8,881,907
8	Furniture and refrigerators.....	8	372	6	20	15	3	328	Ja	400	Jo	248	302	287	15	.....	.....	620,877
9	Gas fixtures.....	4	147	3	4	5	1	134	Oo	309	Jy	75	240	91	149	.....	.....	162,725
10	Glass, cutting, staining, and ornamenting.	4	114	.....	13	2	6	93	No	110	Jo	77	97	92	5	.....	.....	122,935
11	Hats and caps, other than felt, straw, and wool.	3	39	5	4	1	.....	29	Jo	33	Ja <sup>a</sup>	26	26	19	7	.....	.....	14,803
12	Ice, manufactured.....	6	225	1	21	40	4	150	Au	219	Ja	100	138	138	.....	.....	.....	1,072,357
13	Iron and steel forgings, not made in steel works or rolling mills.	5	453	.....	10	18	17	390	My	437	Jy	334	382	376	2	.....	4	933,846
14	Liquors, malt.....	5	703	.....	37	63	7	600	Jy	688	Mh	553	583	583	.....	.....	.....	11,830,788
15	Lumber and timber products.....	3	59	.....	6	3	.....	60	Mh	60	So	38	63	63	.....	.....	.....	94,031
16	Lumber, planing-mill products, not including planing mills connected with sawmills.	13	313	10	20	19	2	262	Au <sup>a</sup>	281	Ja	233	264	264	.....	.....	.....	461,990
17	Marble and stone work.....	7	55	7	3	3	.....	42	So <sup>a</sup>	63	Ja	13	46	46	.....	.....	.....	80,272
18	Millinery and lace goods.....	5	116	4	5	5	5	97	Fe	164	Jo	31	98	6	62	.....	.....	58,484
19	Models and patterns, not including paper patterns.	8	48	10	2	.....	2	34	Jy <sup>a</sup>	36	No	31	36	31	5	.....	.....	40,284
20	Patent medicines and compounds.....	15	89	14	8	9	22	36	No	41	Jy	30	37	23	12	.....	2	167,457
21	Printing and publishing, book and job.	58	663	43	51	37	43	479	Mh	512	Au	437	483	332	149	2	.....	773,177
22	Printing and publishing, newspaper and periodicals.	42	739	26	49	177	90	397	De <sup>a</sup>	423	Jy	370	413	387	23	3	.....	1,465,578
23	Printing and publishing, and job printing.	7	501	1	25	150	37	288	De	314	Jy	262	314	305	6	3	.....	1,044,670
24	Printing without publishing.....	6	140	3	9	10	13	105	My	113	Fe	98	91	75	16	.....	.....	299,465
25	Saddlery and harness.....	20	98	22	15	17	40	4	De <sup>a</sup>	8	Ja <sup>a</sup>	2	8	7	1	.....	.....	211,443
26	Shirts.....	9	175	11	9	33	6	116	Fe	124	Oc	103	123	105	18	.....	.....	326,176
27	Shifts.....	4	48	5	2	8	.....	33	Mh <sup>a</sup>	39	Jy	22	33	1	10	1	12	25,662
28	Slaughtering and meat packing.	7	240	5	8	18	14	204	Jy	215	My	108	204	204	.....	.....	.....	546,683
29	Stereotyping and electroplating.....	3	48	2	2	6	2	30	So	30	Fe <sup>a</sup>	34	37	37	.....	.....	.....	59,021
30	Stoves and hot-air furnaces.....	7	273	1	15	14	9	234	Au	274	Jo	192	231	229	2	.....	.....	537,928
31	Structural ironwork, not made in steel works or rolling mills.	5	160	1	12	9	5	133	Jy	161	Fe	111	116	116	.....	.....	.....	839,972
32	Tobacco, cigars.....	31	304	29	0	2	.....	264	Fe	325	So	211	224	43	181	.....	.....	84,460
33	All other industries*.....	105	6,825	104	313	805	252	5,351	.....	.....	.....	.....	5,433	4,301	1,126	6	.....	14,167,572

*All other industries embrace—	2	Carriage and wagon materials.....	2	Electrical machinery, apparatus, and supplies.....	2	Gloves and mittens, leather.....	2
Agricultural implements.....	3	Cars and general shop construction and repairs by electric-railroad companies.....	2	Engraving and die-sinking.....	1	Grease and tallow, not including lubricating greases.....	1
Artificial limbs.....	7	Cleaning and polishing preparations.....	2	Envelopes.....	1	Hand stamps.....	2
Automobile bodies and parts.....	2	Chemicals.....	1	Fancy articles, not elsewhere specified.....	1	Hard ware.....	2
Automobiles.....	1	Clothing, men's and youths'.....	1	Fertilizers.....	1	Hats, fur-felt.....	1
Automobile repairing.....	1	Clothing, women's.....	2	Files.....	1	Hosiery and knit goods.....	1
Baking powders and yeast.....	1	Coffins, burial cases, and undertakers' goods.....	3	Flavoring extracts.....	1	Instruments, professional and scientific.....	1
Baskets and rattan and willow ware.....	1	Cooperage.....	1	Flour-mill and gristmill products.....	5	Iron and steel, steel works and rolling mills.....	1
Belted leather.....	1	Copper, tin, and sheet-iron work.....	4	Foundry supplies.....	1	Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.....	2
Billiard tables and materials.....	1	Dental goods.....	1	Fur goods.....	2	Iron and steel, doors and shutters.....	1
Bookbinding and blank-book making.....	5	Druggists' preparations.....	4	Furnishing goods, men's.....	1		
Boxes and cartons, paper.....	2			Gas, illuminating and heating.....	1		
Brass and bronze products.....	2			Glass.....	2		
Brick.....	2						
Butter.....	2						

1	<b>DAYTON—All industries.....</b>	523	28,261	426	1,113	2,064	597	24,061	My	25,663	De	21,171	23,818	20,018	3,773	19	8	\$71,541,173
2	Artificial stone products.....	5	31	7	1	.....	.....	23	Ap	34	Oo	14	23	23	.....	.....	.....	24,360
3	Awnings, tents, and sails.....	4	28	4	1	1	1	21	My	31	Oc <sup>a</sup>	17	17	10	7	.....	.....	19,620
4	Boxes, cigar.....	3	80	1	3	2	.....	80	Au <sup>a</sup>	85	Mh	75	80	26	52	.....	2	40,781
5	Boxes and cartons, paper.....	5	579	.....	24	29	8	518	Je	572	No	441	452	148	303	1	.....	942,751
6	Brass and bronze products.....	8	122	7	13	5	2	95	Au	104	No	80	84	84	.....	.....	.....	141,965
7	Bread and other bakery products.....	64	676	73	12	74	26	491	Oc	502	Ap <sup>a</sup>	480	496	365	130	.....	1	955,175
8	Brooms, from broom corn.....	5	23	5	1	.....	.....	17	My	19	Oc <sup>a</sup>	15	19	16	3	.....	.....	16,373
9	Carriage and wagon materials.....	4	193	2	11	3	3	174	Ja	200	So	147	176	176	.....	.....	.....	337,721
10	Carriages and wagons.....	12	89	15	4	1	2	67	Je	79	No	51	53	52	1	.....	.....	112,881
11	Cars and general shop construction and repairs by electric-railroad companies.....	4	72	.....	2	1	.....	60	Jy	74	Oo	62	65	65	.....	.....	.....	50,986

<sup>1</sup> Owned power only.

<sup>2</sup> 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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$24,446	\$32,110	\$137,134	\$1,000	\$7,908	\$2,172	\$559,082	\$11,010	\$889,007	\$319,509	754	45	445	264	106	1	
13,090	18,085	34,374		4,783	840	170,650	2,315	261,800	88,825	156		50	106	4	2	
11,355	13,431	102,760	1,000	3,215	1,332	388,423	8,701	627,807	230,683	598	45	395	158	102	3	
3,056	504	19,313		1,430	137	6,050	1,285	48,387	41,046	111		111			4	
1,500	2,700	6,428		1,440	210	20,411	586	48,672	21,675	23		10	13	1	5	
211,568	613,505	1,445,483	4,156	18,012	64,534	2,400,386	117,023	5,719,007	3,202,498	3,476	1,385	843	1,248	3,178	6	
35,075	16,348	206,614	2,400	12,455	5,618	391,708	9,625	683,494	282,161	680	400	196	90	94	7	
7,820	6,360	51,619		4,421	2,725	113,085	1,612	204,400	89,103	88		50	38		8	
15,187	5,713	57,801		3,900	1,445	95,061	2,371	232,789	135,357	79		39	40		9	
4,272	728	18,049		1,068	74	27,707	540	61,185	32,938	3			3		10	
18,430	21,149	104,837	1,462	5,600	12,077	19,550	51,771	309,060	287,739	2,425	2,425			172	11	
33,041	22,920	288,201			11,931	417,764	61,554	850,971	371,663	1,415	380	485	550	240	12	
100,163	69,218	503,827			509,388	704,019	93,595	3,297,419	2,439,805	3,529	3,095		32	402	1,266	13
7,946	3,871	37,698		1,849	930	89,008	960	147,200	57,232	360					14	
27,968	17,071	182,682	8,000	12,243	5,211	460,180	8,852	833,314	304,282	1,298	810	280	208	270	15	
2,900	1,068	41,600		300	257	54,371	845	135,397	80,181	75	55	15	5	40	16	
4,981	11,635	41,077		3,423	204	133,079	739	255,713	121,895	23			23		17	
760	1,280	29,409		2,430	274	8,154	895	50,166	50,117	89		45	44	5	18	
18,216	23,778	17,425		0,486	1,825	102,704	1,194	562,379	398,481	32			32		19	
74,909	45,282	277,275	18,382	26,442	7,308	331,910	12,139	1,036,632	692,583	518		100	418		20	
108,591	252,960	325,416	156,713	25,241	9,611	453,992	13,870	2,121,812	1,653,950	640		18	631	4	21	
74,235	211,654	264,390		14,160	5,733	382,140	10,235	1,590,121	1,197,740	469		18	451	4	22	
10,906	15,941	60,136		8,516	2,108	71,221	3,260	237,575	163,094	180			180		23	
23,450	25,374	800	156,713	2,565	1,770	625	375	294,116	293,116						24	
10,256	19,218	73,980		5,544	1,321	230,736	2,853	302,747	150,158	122		63	59	5	25	
1,708	8,248	13,235	1,092	2,194	105	23,508	384	69,172	45,280	5			5		26	
12,236	23,181	116,057		1,275	5,704	2,069,859	14,027	3,210,921	227,035	606	528		78	150	27	
5,651	5,997	31,149	293	2,100	299	41,326	2,287	105,975	62,362	102		15	87		28	
27,150	37,108	190,132		4,804	4,728	365,262	5,981	851,973	480,730	261		35	226		29	
32,065	17,470	86,291	1,500	5,569	350	181,007	3,886	350,387	165,094	468		25	373		30	
10,154	1,279	83,086	55	4,050	42,708	91,372	977	250,317	157,968	1			1		31	
714,360	931,828	3,142,627	62,520	153,030	49,570	10,965,511	237,204	20,836,288	9,633,573	12,337	6,420	2,840	3,127	1,778	32	

Iron and steel, cast-iron pipe.....	1	Optical goods.....	3	Roofing materials.....	1	Toys and games.....	2
Jewelry.....	6	Paints.....	6	Saws.....	2	Trunks and valises.....	3
Lamps and reflectors.....	1	Paper goods, not elsewhere specified..	1	Show cases.....	4	Varnishes.....	1
Leather goods, not elsewhere specified	1	Perfumery and cosmetics.....	4	Signs and advertising novelties.....	3	Wall plaster.....	3
Lithographing.....	2	Photographic apparatus.....	1	Smelting and refining, not from the ore	1	Washing machines and clothes wringers.....	2
Looking-glass and picture frames.....	2	Photographic materials.....	3	Soap.....	3	Window and door screens and weather strips.....	4
Lubricating greases.....	2	Photo-engraving.....	2	Stationery goods, not elsewhere specified.....	2	Window shades and fixtures.....	2
Mattresses and spring beds.....	4	Plumbers' supplies, not elsewhere specified.....	1	Steam fittings and steam and hot-water heating apparatus.....	2	Wirework, including woven wire fencing.....	2
Mineral and soda waters.....	5	Printing materials.....	2	Surgical appliances.....	2	Wood, turned and carved.....	1
Mirrors, framed and unframed.....	1	Pumps, not including power pumps..	1	Tinware, not elsewhere specified.....	1	Wooden goods, not elsewhere specified	2
Mucilage and paste.....	3	Pumps, power, other than steam.....	1	Tools, not elsewhere specified.....	1	Wool pulling.....	1
Musical instruments, pianos.....	1	Regalia and society badges and emblems.....	2				
Oilcloth, enameled.....	1						
Oleomargarine.....	1						

\$2,610,573	\$2,795,909	\$14,075,625	\$145,041	\$298,379	\$870,037	\$32,007,802	\$945,919	\$71,071,374	\$38,117,653	51,809	22,645	2,093	276	26,195	6,982	1
1,200		15,235		231	69	11,706	951	44,600	31,883	136	75	56		5	20	2
1,885	1,480	10,733		1,126	242	13,644	340	35,522	21,538	9				9		3
2,333	1,885	27,639		5,170	236	56,015	1,043	90,341	33,283	98		40		58		4
47,300	42,168	196,092	56	7,800	5,867	453,604	6,857	863,497	403,036	408	100	50		258		5
17,170	3,547	68,860	75	3,070	409	200,930	6,164	332,470	125,467	115	50	10		55		6
28,229	79,494	290,241		11,604	6,284	1,174,930	37,590	2,012,777	800,248	651	20	12	1	578	2	7
885		8,595		170	115	15,682	289	41,575	25,604	20		52		8		8
23,000	6,892	89,672		720	4,779	218,022	9,563	314,490	86,911	490	300	25		165		9
5,175	1,937	51,563		9,652	916	58,984	3,032	144,524	82,507	200		76		130		16
3,150	480	47,031			879	27,777	675	79,991	51,539	97				97	45	11

\* Same number reported for one or more other months.

MANUFACTURES—OHIO.

TABLE 55.—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—			Male.	Female.		Male.	Female.
								Maximum month.	Minimum month.						

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

DAYTON—Continued.																		
1	Confectionery and ice cream	16	278	17	17	41	6	197	Se <sup>a</sup>	226	Ja	167	209	84	125	.....	\$286,264	
2	Confectionery	11	249	12	15	41	6	175	Oo	209	Jy	151	188	63	125	.....	168,577	
3	Ice cream	5	29	5	2	.....	.....	22	Jy	37	Ja <sup>a</sup>	13	21	21	.....	117,637		
4	Copper, tin, and sheet-iron work	11	99	10	4	3	1	72	Ja	80	Do	63	68	68	.....	106,311		
5	Engines, steam, gas, and water	4	52	3	5	1	2	41	Ja	52	No <sup>a</sup>	31	31	31	.....	113,021		
6	Foundry and machine-shop products	53	3,481	28	128	214	70	3,041	Mh	3,361	Do	2,509	2,515	2,440	04	2	3	7,902,744
7	Furniture	10	455	5	23	20	7	400	Ja	457	Oo	329	387	380	7	.....	827,221	
8	Lumber and timber products	12	662	8	31	39	8	576	Au	626	Do	459	497	494	3	.....	1,428,264	
9	Marble and stone work	4	24	9	.....	.....	.....	14	Mh <sup>a</sup>	18	Do	10	13	13	.....	22,462		
10	Mineral and soda waters	6	30	4	2	1	1	22	Jy <sup>a</sup>	29	No <sup>a</sup>	16	20	20	.....	34,443		
11	Models and patterns, not including paper patterns	7	47	7	1	1	1	37	Mh	45	Do	32	33	32	1	.....	24,095	
12	Printing and publishing, book and job	32	313	30	23	22	8	230	Ja	260	No	203	223	165	57	1	.....	352,202
13	Printing and publishing, newspapers and periodicals	15	608	8	33	95	51	421	Fe	452	Se	382	411	332	70	9	.....	1,157,796
14	Slaughtering and meat packing	9	335	8	10	33	.....	275	Do	308	Jy	259	309	309	.....	1,019,007		
15	Tobacco, cigars	44	1,682	45	28	10	8	1,592	Fe	1,605	Do	1,516	1,546	155	1,380	.....	802,358	
16	Tools, not elsewhere specified	8	76	16	5	2	1	52	Fe <sup>a</sup>	58	Do	43	50	50	.....	68,821		
17	Machinists' tools	3	35	0	3	1	.....	25	Jn	37	Au <sup>a</sup>	18	26	26	.....	41,025		
18	All other	5	41	10	2	1	1	27	My	33	Do	17	24	24	.....	27,796		
19	Toys and games	5	263	2	0	9	1	242	Oo	336	Ja	91	265	222	43	.....	263,145	
20	All other industries*	173	17,957	103	713	1,447	390	15,304	.....	.....	.....	.....	15,776	14,252	1,518	6	.....	54,480,846

*All other industries embrace—	Carpets, rag	2	Coffins, burial cases, and undertakers' goods	1	Flour-mill and gristmill products	3	
Aeroplanes and parts	1	Cars and general shop construction and repairs by steam-railroad companies	1	Cooperage	2	Food preparations, not elsewhere specified	4
Agricultural implements	2	Cars, steam-railroad, not including operation of railroad companies	1	Dental goods	1	Fur goods	1
Automobile bodies and parts	4	Cash registers and calculating machines	3	Electrical machinery, apparatus, and supplies	7	Furnishing goods, men's	2
Automobiles	1	Chemicals	1	Electroplating	1	Gas, illuminating and heating	1
Bags, other than paper	1	China, decorating, not including that done in potteries	1	Emery and other abrasive wheels	1	Gas machines and gas and water meters	2
Baskets and rattan and willow ware	2	Clothing, men's	2	Engraving and diesinking	3	Glass, cutting, staining, and ornamenting	3
Bookbinding and blank-book making	1	Clothing, men's	2	Envelopes	1	Grease and tallow, not including lubricating greases	1
Boot and shoe cut stock	1	Clothing, men's	2	Fertilizers	1	Hand stamps	2
Brick	2	Coffee, roasting and grinding	3	Files	1	Hardware	3
Butter	3			Flavoring extracts	3		
Buttons	1						
Canning and preserving, fruits and vegetables	1						

SPRINGFIELD—All industries																	
1	253	9,614	242	340	880	284	7,808	Ja	8,836	No	6,730	7,950	7,148	704	8	.....	\$32,400,600
2	7	1,750	2	39	227	35	1,447	Ja	2,149	Oo	773	1,617	1,004	13	.....	12,684,180	
3	9	47	15	7	1	.....	24	Je	34	Fe	12	22	22	.....	25,925		
4	27	143	31	2	5	2	103	Se <sup>a</sup>	110	Mh <sup>a</sup>	94	110	88	20	2	.....	196,571
5	3	10	3	.....	.....	.....	7	Se	8	Do	6	8	8	.....	.....	12,600	
6	6	53	10	2	1	2	38	Do	47	Ja	27	48	48	.....	.....	34,052	
7	7	650	3	15	51	19	562	Ap	655	Do	431	427	422	5	.....	1,901,555	
8	33	1,497	23	60	94	34	1,285	Fe	1,425	No	1,031	1,257	1,253	4	.....	3,697,265	
9	6	16	7	.....	.....	.....	9	Ja	10	Au	8	10	10	.....	.....	5,170	
10	3	563	.....	12	8	3	540	Fe	604	Se	493	514	514	.....	.....	1,177,613	
11	18	185	19	10	6	10	140	No	154	My	133	154	114	40	.....	317,269	
12	9	710	3	35	132	37	503	Mh	575	Do	452	467	352	115	.....	1,844,445	
13	14	68	16	1	.....	.....	51	Je	57	No <sup>a</sup>	47	55	31	23	1	.....	37,834
14	111	3,022	110	157	355	142	3,158	.....	.....	.....	.....	3,261	2,082	574	5	.....	10,466,211

*All other industries embrace—	Brooms	1	Dairymen's, poultrymen's, and apiarists' supplies	1	Furnishing goods, men's	1	
Automobile bodies and parts	4	Butter	2	Electrical machinery, apparatus, and supplies	2	Furniture	4
Automobiles	1	Carpets, rag	2	Electroplating	1	Gas and electric fixtures	2
Automobile repairing	1	Cars and general shop construction and repairs by electric-railroad companies	2	Emery and other abrasive wheels	1	Gas, illuminating and heating	1
Awning, tents, and sails	2	Clothing, men's	1	Fancy articles, not elsewhere specified	1	Hand stamps	1
Bookbinding and blank-book making	1	Coffee, roasting and grinding	2	Flavoring extracts	1	Ice, manufactured	2
Boots and shoes	1	Coffins, burial cases, and undertakers' goods	3	Flour-mill and gristmill products	4	Instrument, professional and scientific	1
Boxes, cigar	1	Confectionery and ice cream	1	Food preparations, not elsewhere specified	1	Leather, tanned, curried, and finished	2
Boxes and cartons, paper	1					Liquors, malt	3
Brass and bronze products	1					Lumber and timber products	1

<sup>a</sup> Owned power only.

<sup>a</sup> 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.	Clarks, etc.	Wage earners.		Rent of factory.	Taxes, including internal revenue and corporation income.	Principal materials.			Fuel and rent of power.	Total.	Steam engines. <sup>1</sup>	Internal combustion engines. <sup>2</sup>		Water wheels and motors. <sup>1</sup>

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

\$22,720	\$44,431	\$90,802	.....	\$11,222	\$1,072	\$291,862	\$9,906	\$527,725	\$225,957	351	33	.....	.....	318	6	1
22,320	41,675	73,637	.....	9,802	749	213,276	5,961	405,427	186,190	159	.....	.....	.....	150	3	2
400	2,750	17,265	.....	1,330	323	78,586	3,945	122,293	39,767	192	33	.....	.....	150	3	3
4,540	3,804	49,017	.....	2,625	1,320	80,805	3,225	177,807	96,837	51	.....	50	.....	1	.....	4
9,850	2,154	30,219	.....	2,470	371	104,420	1,110	164,713	59,183	133	90	8	60	25	150	5
300,388	314,316	1,850,871	\$8,856	38,438	35,637	2,100,532	160,027	5,685,634	3,235,075	5,066	1,750	664	.....	2,652	138	6
47,000	30,503	209,680	62	10,860	5,679	272,337	12,577	824,823	639,409	667	525	.....	.....	142	.....	7
70,578	30,830	416,122	73,390	6,143	9,278	1,134,976	15,845	1,899,216	748,395	1,799	1,510	207	.....	82	438	8
.....	836	11,369	.....	660	79	13,306	843	35,705	21,566	30	.....	.....	.....	30	8	9
2,700	1,040	18,410	.....	2,000	297	33,795	919	79,111	44,397	56	20	31	.....	5	.....	10
1,800	1,435	20,354	.....	1,756	103	7,447	647	49,768	41,674	100	.....	25	50	25	.....	11
58,607	28,806	122,822	448	18,917	2,400	141,595	4,987	472,842	326,260	294	.....	119	.....	175	.....	12
50,337	135,221	320,960	15,710	7,284	7,537	363,324	15,500	1,107,527	738,697	704	300	.....	.....	404	302	13
27,108	33,796	193,221	.....	240	10,425	3,819,716	29,602	4,830,647	984,420	669	415	20	.....	234	108	14
37,307	31,720	533,300	50	14,210	223,053	900,352	4,802	2,055,431	1,150,277	115	.....	8	.....	107	.....	15
6,507	2,417	33,805	.....	3,624	695	12,057	1,385	75,802	62,360	112	50	15	.....	47	.....	16
2,007	507	15,210	.....	960	362	4,197	457	23,400	18,746	70	50	15	.....	5	.....	17
4,500	1,850	18,655	.....	2,694	243	7,860	628	52,402	43,614	42	.....	.....	.....	42	.....	18
9,732	8,517	115,817	.....	7,030	613	241,539	3,401	476,318	231,288	162	.....	90	.....	72	.....	19
1,824,472	1,062,110	6,253,131	40,394	128,007	657,467	20,107,777	620,642	48,748,452	27,040,833	39,220	17,407	1,135	165	20,513	5,765	20

House-furnishing goods, not elsewhere specified..... 1	Paper and wood pulp..... 2	Roofing materials..... 1	Steam fittings and steam and hot-water heating apparatus..... 2
Ice, manufactured..... 1	Paper goods, not elsewhere specified.. 2	Rubber goods, not elsewhere specified..... 1	Stereotyping and electrotyping..... 1
Iron and steel, steel works and rolling mills..... 1	Patent medicines and compounds..... 9	Saddlery and harness..... 1	Stoves and hot-air furnaces..... 3
Jewelry..... 2	Peanuts, grading, roasting, cleaning, and shelling..... 1	Scales and balances..... 2	Structural ironwork, not made in steel works or rolling mills..... 2
Labels and tags..... 5	Perfumery and cosmetics..... 1	Screws, machines..... 1	Surgical appliances..... 1
Lasts..... 2	Photo-engraving..... 1	Screws, wood..... 1	Umbrellas and canes..... 1
Liquors, malt..... 3	Pickles, preserves, and sauces..... 2	Sewing machines and attachments..... 1	Varnishes..... 2
Lithographing..... 1	Plumbers' supplies, not elsewhere specified..... 2	Shirts..... 2	Vault lights and ventilators..... 2
Mattresses and spring beds..... 2	Poltery..... 2	Signs and advertising novelties..... 2	Wall plaster..... 1
Millinery and lace goods..... 1	Printing and publishing, music..... 1	Soap..... 6	Wirework, including wire rope and cable..... 1
Mucilage and paste..... 2	Pulp goods..... 1	Sporting and athletic goods..... 1	Wood, turned and carved..... 3
Paints..... 3	Pumps, steam and other power..... 3	Stationery goods, not elsewhere specified..... 3	

\$869,154	\$1,250,574	\$5,328,080	\$60,887	\$48,348	\$209,007	\$13,356,114	\$347,394	\$27,721,789	\$14,018,281	13,113	6,002	3,849	65	3,107	5,530	1
98,912	106,708	1,211,113	.....	600	70,345	2,063,676	69,402	5,761,511	3,028,373	2,436	2,106	205	.....	125	2,038	2
5,900	1,200	17,208	1,340	630	285	17,161	555	52,910	35,200	68	22	46	.....	.....	.....	3
4,020	5,646	66,107	.....	4,435	1,631	228,269	7,937	397,510	101,370	134	.....	40	.....	94	.....	4
.....	.....	6,100	.....	408	173	4,661	297	17,080	12,122	13	.....	.....	.....	13	.....	5
2,700	1,157	24,904	.....	1,364	245	32,381	441	75,978	43,150	40	.....	.....	.....	40	.....	6
38,001	93,940	404,635	.....	761	13,455	403,578	29,333	1,314,062	821,151	1,366	150	320	.....	396	658	7
142,636	138,951	877,537	9,693	6,252	21,681	1,703,799	63,521	3,794,058	2,026,738	2,516	760	957	.....	790	505	8
.....	.....	8,457	.....	840	20	1,584	177	18,230	16,469	16	.....	6	.....	10	.....	9
27,988	9,741	203,145	.....	.....	8,569	223,328	22,486	757,550	511,736	478	.....	400	.....	78	428	10
17,080	3,915	88,270	1,875	5,298	1,026	87,900	3,822	279,800	188,078	110	.....	10	.....	100	.....	11
205,392	320,885	341,755	26,281	3,046	15,017	1,197,428	12,976	3,159,482	1,949,078	501	375	.....	.....	126	201	12
1,000	.....	23,270	.....	1,454	11,641	22,289	348	72,068	49,431	10	.....	10	.....	.....	.....	13
325,435	469,427	1,965,525	21,698	23,272	124,919	6,710,120	136,039	12,021,533	5,175,379	5,425	2,679	1,355	65	1,326	710	14

Lumber, planing-mill products, not including planing mills connected with sawmills..... 2	Photographic apparatus..... 1	Springs, steel, car, and carriage..... 1	Suspenders, garters, and elastic woven goods..... 1
Marble and stone work..... 2	Photo-engraving..... 2	Stationery goods, not elsewhere specified..... 1	Tools, not elsewhere specified..... 5
Mattresses and spring beds..... 1	Pickles, preserves, and sauces..... 1	Stamps..... 1	Toys and games..... 3
Mineral and soda waters..... 2	Plumbers' supplies, not elsewhere specified..... 1	Steam fittings and steam and hot-water heating apparatus..... 2	Washing machines and clothes wringers..... 1
Mirrors, framed and unframed..... 1	Pumps, not including power pumps..... 1	Stencils and brands..... 1	Window and door screens..... 1
Musical instruments, pianos..... 1	Rubber goods, not elsewhere specified..... 1	Stereotyping and electrotyping..... 1	Wirework..... 1
Paints..... 1	Saddlery and harness..... 2	Stoves and hot-air furnaces..... 1	Wood, turned and carved..... 1
Paper goods, not elsewhere specified..... 1	Scales and balances..... 1	Stoves, gas and oil..... 1	
Patent medicines and compounds..... 4	Signs and advertising novelties..... 3	Structural ironwork, not made in steel works or rolling mills..... 1	
	Slaughtering and meat packing..... 4		

\* Same number reported for one or more other months.

MANUFACTURES—OHIO.

TABLE 55.—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.			16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.					

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

	713	31,885	645	981	2,368	915	27,070	Se 28,205	Jy 25,604	27,284	23,035	4,147	38	04	\$01,149,054
1 TOLEDO—All industries.....	713	31,885	645	981	2,368	915	27,070	Se 28,205	Jy 25,604	27,284	23,035	4,147	38	04	\$01,149,054
2 Artificial stone products.....	12	49	18	2	.....	.....	29	Je <sup>3</sup> 40	Ja <sup>3</sup> 18	31	31	.....	.....	.....	39,094
3 Automobile repairing.....	4	27	14	.....	.....	.....	13	Je 14	Fe 12	13	13	.....	.....	.....	43,265
4 Bookbinding and blank-book making	4	54	3	3	6	2	40	De 44	Ja 30	44	25	19	.....	.....	48,038
5 Boxes and cartons, paper.....	3	77	5	3	2	3	4	Se 78	Jo 51	60	24	33	2	1	115,477
6 Bread and other bakery products....	76	779	87	24	58	31	579	No 608	Ja 549	587	467	120	.....	.....	846,513
7 Brick and tile, terra-cotta, and fire-clay products.	5	211	.....	11	6	1	193	Au 254	Fe 109	200	200	.....	.....	.....	478,280
8 Brooms, from broom corn.....	5	32	5	1	1	.....	25	Fe 30	Jy 10	27	27	.....	.....	.....	36,800
9 Carpets, rag.....	5	27	4	1	5	1	10	My <sup>a</sup> 20	Fe <sup>a</sup> 12	14	11	3	.....	.....	15,127
10 Carriage and wagon materials.....	7	206	1	11	8	5	181	Fe 101	De 156	150	153	3	.....	.....	372,143
11 Carriages and wagons.....	9	406	8	26	44	10	318	Ja 351	Jy 286	321	317	4	.....	.....	1,733,724
12 Cars and general shop construction and repairs by steam-railroad companies.	6	889	.....	20	50	5	814	Fe 1,078	Oc 620	743	743	.....	.....	.....	984,094
13 Clothing, women's.....	13	1,042	5	28	90	27	392	Mh 993	Je 737	017	321	596	.....	.....	790,464
14 Coffee, roasting and grinding.....	5	537	5	17	189	51	275	Oc 313	De 230	258	158	81	1	18	3,239,361
15 Confectionery and ice cream.....	12	238	5	18	18	13	184	Fe 233	Jy 147	206	50	148	1	1	227,557
16 Coppage and wooden goods, not elsewhere specified.	8	98	5	0	.....	2	85	Au 98	Fe 73	84	65	18	.....	1	89,187
17 Copper, tin, and sheet-iron products.	36	812	33	27	31	23	698	Ja 770	De 595	604	486	115	2	1	4,239,344
18 Electrical machinery, apparatus, and supplies.	11	1,028	4	10	55	32	918	Au 1,203	Fe 500	1,041	720	321	.....	.....	1,696,023
19 Flour-mill and gristmill products....	6	292	2	22	30	4	234	Se 251	My 220	243	242	1	.....	.....	2,751,580
20 Foundry and machine-shop products.	48	3,718	22	112	212	49	3,323	Au 3,594	De 2,975	2,929	2,908	20	1	.....	6,732,416
21 Furnishing goods, men's.....	3	870	.....	11	4	16	830	No 964	Fe 742	926	117	780	11	18	709,099
22 Furniture.....	16	444	12	23	18	17	374	Mh 424	De 318	326	321	4	.....	1	767,962
23 Glass, cutting, staining, and ornamenting.	10	110	12	4	1	4	89	Au <sup>3</sup> 96	Ja 72	94	70	22	2	.....	43,885
24 Hosiery and knit goods.....	3	86	1	3	9	3	70	Ja 108	Au 30	103	5	95	.....	3	209,177
25 House-furnishing goods, not elsewhere specified.	3	82	.....	0	5	2	19	Ap 26	Oc <sup>3</sup> 14	17	16	1	.....	.....	51,621
26 Leather goods.....	10	94	10	5	8	2	69	Ja 75	No 64	67	64	3	.....	.....	125,365
27 Liquors, malt.....	4	454	.....	13	40	5	396	Jy 472	Fe 352	369	369	.....	.....	.....	7,295,676
28 Lumber, planing-mill products, not including planing mills connected with sawmills.	15	447	11	16	27	9	384	Jy 439	Ja 320	365	365	.....	.....	.....	1,013,245
29 Marble and stone work.....	8	97	6	12	13	3	63	My 80	Fe 41	61	61	.....	.....	.....	197,422
30 Mineral and soda waters.....	8	77	18	2	10	1	46	Je <sup>3</sup> 58	Ja 37	41	41	.....	.....	.....	60,731
31 Models and patterns, not including paper patterns.	6	24	8	.....	.....	.....	18	Au 25	De 9	17	15	2	.....	.....	17,334
32 Paints.....	5	71	1	9	17	4	40	Ap <sup>3</sup> 46	De <sup>3</sup> 35	35	34	1	.....	.....	246,056
33 Patent medicines and compounds...	24	77	19	11	8	14	25	Je 29	Ja 22	29	17	12	.....	.....	96,013
34 Printing and publishing, book and job.	55	567	50	39	38	40	490	De 411	Jy 383	411	331	76	5	.....	712,831
35 Job printing.....	49	534	45	36	30	33	390	De 401	Jy 373	401	321	75	5	.....	685,452
36 Book publishing without printing and linotype work.	6	33	5	3	8	7	10	( <sup>c</sup> ) 10	( <sup>c</sup> ) 10	10	10	.....	.....	.....	27,429
37 Printing and publishing, newspapers, etc.	24	700	7	42	178	31	302	Au 401	De 380	381	337	44	.....	.....	1,247,995
38 Printing and publishing.....	5	478	.....	17	138	51	267	De 285	Jy <sup>3</sup> 253	286	262	24	.....	.....	796,591
39 Printing, publishing, and job printing.	4	202	2	15	36	24	125	Au 143	De 95	95	75	20	.....	.....	441,751
40 Publishing without printing.....	15	25	5	10	4	0	.....	.....	.....	.....	.....	.....	.....	.....	9,653
41 Structural ironwork, not made in steel works or rolling mills.	6	397	4	7	36	5	345	Ja 495	No 297	298	298	.....	.....	.....	942,192
42 Tools, not elsewhere specified.....	4	27	4	7	.....	1	15	Ja <sup>3</sup> 25	Jy <sup>3</sup> 11	20	20	.....	.....	.....	36,299
43 Wall plaster.....	4	39	.....	7	6	2	24	Se 31	Ja <sup>3</sup> 10	21	21	.....	.....	.....	81,027
44 All other industries *.....	227	16,760	166	413	1,145	447	14,589	.....	.....	15,225	13,566	1,626	13	20	62,814,927

\*All other industries embrace—

Artificial limbs.....	1
Automobile bodies and parts.....	3
Automobiles.....	2
Awnings, tents, and sails.....	6
Bags, paper.....	1
Bolting, leather.....	2
Billiard tables and materials.....	1
Blacking, stains, and dressings.....	1
Boxes, cigar.....	1
Boxes, wooden packing.....	3
Brass and bronze products.....	7
Brushes.....	2
Butter.....	2
Butter, reworking.....	1
Carriages and sleds, children's.....	3
Cars and general shop construction and repairs by electric-railroad companies.....	1
China decorating, not including that done in potteries.....	1
Cleansing and polishing preparations.....	1
Cloth, sponging and refinishing.....	1
Clothing, men's.....	3
Corsets.....	1
Cutlery and edge tools.....	3
Dairymen's, poultrymen's, and apiculturists' supplies.....	2
Druggists' preparations.....	3
Electroplating.....	2

Engines, steam, gas, and water.....	1
Engraving, steel and copper plate, including plate printing.....	2
Engraving, wood.....	1
Fancy articles, metal novelties.....	2
Flavoring extracts.....	2
Food preparations, not elsewhere specified.....	2
Fur goods.....	1
Gas and electric fixtures.....	2
Gas, illuminating and heating.....	2
Glass.....	4
Gloves and mittens, leather.....	1
Hand stamps.....	1
Hardware.....	1

Hats and caps, other than felt, straw, and wool.....	2
Ice, manufactured.....	2
Instruments, professional and scientific.....	2
Iron and steel, blast furnaces.....	1
Iron and steel, steel works and rolling mills.....	2
Iron and steel, wrought pipe.....	2
Jewelry.....	2
Lute goods.....	1
Lamps and reflectors.....	1
Lithographing.....	3
Liquors, vinous.....	1
Looking-glass and picture frames.....	1

<sup>1</sup> Owned power only.

<sup>2</sup> Includes rented power, other than electric.

MANUFACTURES—OHIO.

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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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$2,496,197	\$3,059,606	\$18,124,084	\$109,954	\$354,250	\$1,937,278	\$68,242,346	\$2,251,923	\$115,040,426	\$44,555,157	53,369	30,247	3,420	150	19,552	13,228	1
2,020		17,180		1,446	243	35,816	808	81,930	45,306	69	15	45		9		2
		11,920		2,076	410	13,233	680	46,232	32,319	18		14		4		3
4,476	4,641	24,048	5,046	2,844	320	27,683	2,250	84,700	54,767	38				38		4
3,300	2,480	29,187	10	1,766	421	64,455	835	110,982	55,692	77		40		37		5
40,657	70,636	370,411	380	25,491	10,259	1,211,602	41,278	2,307,211	1,054,331	541	76	7		453	11	6
16,830	5,050	140,402		120	4,889	67,760	35,640	321,377	217,977	558	315	3		240		7
1,000	900	14,680		100	311	30,570	582	57,350	26,198	24		2		22		8
1,200	1,050	5,254		588	46	1,236	307	18,203	16,660	43		43				9
22,640	9,310	115,110		0,250	4,927	199,960	8,024	383,490	175,506	721	704			17	19	10
56,600	55,695	232,056		1,800	14,118	286,153	14,080	804,087	503,854	742	650	29		63	1,218	11
22,852	45,370	596,422			4,268	507,240	20,774	1,201,920	607,915	1,254	1,199			55	885	12
80,120	182,772	514,943		22,973	5,464	1,400,936	9,133	2,493,570	1,023,501	200				200		13
60,400	275,012	117,411	1,439	2,580	18,664	4,454,383	15,478	5,889,320	1,419,459	487				487		14
30,396	20,409	81,314		8,283	1,698	498,821	7,765	777,552	270,966	290		25		295		15
5,525	805	37,874		472	594	101,604	2,034	189,316	85,678	75				75		16
61,909	45,323	465,470	581	13,091	13,293	1,004,394	15,914	2,020,358	1,009,048	713				653		17
53,738	00,463	396,746		12,774	12,070	1,802,120	18,532	3,229,892	1,409,230	1,155	270			885	200	18
53,354	43,745	186,923			11,880	5,233,368	43,657	5,815,383	538,363	3,345	3,185		150	10	105	19
230,273	249,809	2,317,852	7,002	35,504	54,619	2,299,266	190,828	6,544,002	4,054,505	5,277	2,768	1,094		1,415	4,055	20
28,780	23,670	179,254	2,696	11,681	5,213	587,452	5,935	921,918	328,531	168				168		21
54,035	28,443	231,043	160	7,014	7,154	282,890	16,420	734,231	434,921	740	418	125		197	20	22
6,399	5,527	61,118	802	3,284	280	85,317	1,908	189,089	101,864	52				52		23
6,400	10,494	20,139	4,845	5,255	1,055	66,785	2,155	128,230	59,290	61		28		33		24
10,460	8,464	14,645		2,220	191	58,461	330	128,204	69,413	12		6		6		25
5,480	9,120	38,031		6,674	706	90,454	1,088	184,247	92,705	42				42		26
59,932	48,265	329,635	32,498	445,143	667,129	56,500	2,474,913	1,751,215	2,541	2,541	2,480			52	126	27
38,480	43,015	271,800	5,513	9,804	912,503	7,670	1,480,036	500,454	1,306	1,306	1,041	35		230	16	28
17,404	13,210	57,085	7,675	840	1,349	194,683	1,972	381,045	134,390	227		130		97		29
2,800	9,514	32,062		1,913	891	53,165	1,934	159,036	103,937	119	103			10	5	30
		15,304	260	1,224	120	3,618	685	28,988	24,685	33		8		25		31
16,227	19,293	22,920		1,440	1,448	118,727	3,422	266,676	144,527	186		40		140		32
23,485	13,940	13,653	400	7,263	1,097	60,568	1,116	278,477	216,793	50	4			46		33
74,736	42,209	263,176	11,468	37,559	5,957	292,987	10,731	962,787	659,069	404		2		402		34
71,476	32,198	251,957	5,065	36,647	5,678	289,264	10,438	905,027	605,325	400		2		398		35
3,260	10,011	11,219	6,403	912	279	3,723	293	57,760	53,744	4				4		36
120,809	220,052	339,549	35,762	18,441	11,121	468,421	9,578	1,834,305	1,356,306	595				595		37
92,264	161,440	257,961		12,510	8,578	382,509	6,148	1,380,641	991,984	402				402		38
26,520	53,475	81,688		4,500	2,503	81,296	3,320	369,405	284,789	181				181		39
11,025	5,131		35,762	1,431	40	4,616	110	84,259	79,533	12				12		40
23,925	55,291	250,838		610	7,135	450,917	18,207	873,570	404,446	1,004	630	80		294	1,164	41
2,300	416	12,070		990	33	4,605	331	33,431	28,495	30		15		15		42
7,400	7,680	15,219		1,990	2,741	57,359	2,735	109,616	49,524	95		90		5		43
1,190,864	1,420,433	10,250,840	57,430	101,281	1,277,226	44,555,705	1,074,531	71,603,560	25,373,314	30,077	16,380	1,499		12,198	5,344	44

Lumber and timber products.....	1	Pens, fountain and stylographic.....	1	Saws.....	1	Stereotyping and electrotyping.....	1
Mattresses and spring beds.....	2	Perfumery and cosmetics.....	4	Scales and balances.....	1	Stoves and hot-air furnaces.....	2
Millinery and lace goods.....	3	Petroleum, refining.....	2	Shipbuilding, iron and steel.....	1	Stoves, gas and oil.....	1
Mirrors, framed and unframed.....	3	Photo-engraving.....	3	Shipbuilding, wooden, including boat building.....	7	Surgical appliances.....	1
Motorcycles, bicycles, and parts.....	1	Pickles, preserves, and sauces.....	3	Shirts.....	2	Tobacco, chewing and smoking, and snuff.....	1
Mucilage and paste.....	3	Plumbers' supplies, not elsewhere specified.....	3	Show cases.....	1	Tobacco, cigars.....	40
Musical instruments and materials, not specified.....	2	Pottery.....	1	Signs and advertising novelties.....	2	Toys and games.....	1
Musical instruments, pianos.....	1	Pulp goods.....	1	Slaughtering and meat packing.....	3	Umbrellas and canes.....	1
Oil, insected.....	2	Pumps, not including power pumps.....	1	Soap.....	1	Wheelbarrows.....	1
Oil, not elsewhere specified.....	2	Refrigerators.....	1	Sporting and athletic goods.....	1	Window and door screens.....	2
Optical goods.....	1	Rubber goods, not elsewhere specified.....	2	Springs, steel, car and carriage.....	1	Wire work.....	1
Paper goods, not elsewhere specified.....	1	Safes and vaults.....	1	Statuary and art goods.....	1	Wood preserving.....	1
Paving materials.....	2	Sausage.....	1	Stencils and brands.....	3	Wood, turned and carved.....	2

\* Same number reported for one or more other months.

\* Same number reported throughout the year.

MANUFACTURES—OHIO.

TABLE 55.—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—			Male.	Female.		Male.	Female.
								Maximum month.	Minimum month.						

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

1	YOUNGSTOWN—All industries..	201	13,224	148	352	1,507	356	15,861	Mh 17,449	De 13,491	15,919	15,052	863	4	.....	\$130,101,772
2	Artificial stone products.....	9	61	7	4	1	1	48	Je 68	Ja 28	40	30	1	.....	89,844	
3	Bread and other bakery products....	43	200	45	6	12	7	130	De 134	Ja 126	130	120	13	.....	412,253	
4	Confectionery and ice cream.....	7	91	7	2	6	.....	70	Je 86	Ja 68	75	33	42	.....	237,548	
5	Foundry and machine-shop products.	14	1,279	6	32	94	19	1,123	Ja 1,310	De 824	868	868	.....	4,955,508		
6	Iron and steel, steel works and rolling mills.	8	8,232	.....	66	524	47	7,595	Mh 8,584	No 6,442	8,222	8,218	4	.....	64,928,461	
7	Lumber, planing-mill products, not including planing mills connected with sawmills.	12	415	0	33	23	10	343	Jy 468	De 260	267	266	1	.....	1,415,160	
8	Printing and publishing, book and job.	6	136	5	11	15	7	98	Oc 108	De 93	93	64	29	.....	132,057	
9	Printing and publishing, newspapers and periodicals.	15	243	8	15	57	18	145	Ap 148	Au 142	147	137	6	4	.....	297,720
10	All other industries*.....	87	7,567	64	183	775	247	6,298	.....	.....	6,068	5,301	767	.....	57,583,221	

\* All other industries embrace—  
 Automobile bodies and parts..... 2  
 Awnings, tents, and sails..... 1  
 Brass and bronze products..... 1  
 Brooms..... 2  
 Butter..... 1  
 Carpets, rag..... 1  
 Carriages and wagons..... 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

Cleaning preparations..... 2  
 Clothing, men's..... 1  
 Coffee, roasting and grinding..... 1  
 Copper, tin, and sheet-iron work... 4  
 Electrical machinery, apparatus, and supplies..... 2  
 Enameling..... 1  
 Flour-mill and gristmill products... 2

Food preparations, not elsewhere specified..... 3  
 Furniture..... 2  
 Gas and electric fixtures..... 2  
 Gas, illuminating and heating..... 1  
 Glass, cutting, staining, and ornamenting..... 2

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

1	ALLIANCE.....	52	2,800	40	122	274	31	2,333	Jy 2,568	No 2,061	2,394	2,325	66	3	.....	\$3,665,344	
2	ASHTABULA.....	57	2,032	39	58	47	20	1,608	Au 2,087	Ja 1,578	1,979	1,875	101	3	.....	4,298,265	
3	BARBERTON.....	34	3,714	32	58	413	93	3,118	Mh 3,423	De 2,779	3,017	2,609	407	1	.....	14,624,143	
4	BELLAIRE.....	40	2,865	34	50	138	40	2,603	Ja 2,832	Se 2,428	2,608	2,362	234	12	.....	7,670,474	
5	CAMBRIDGE.....	39	1,656	32	42	109	18	1,455	Mh 1,784	No 1,112	1,619	1,500	109	4	.....	2,968,860	
6	CHILICOTHE.....	40	1,758	36	38	97	30	1,557	Au 1,630	Ap 1,375	1,570	1,257	319	3	.....	2,904,812	
7	COSHOCOTON.....	47	1,840	24	67	67	68	1,614	Oc 1,640	Jy 1,581	1,644	1,009	635	.....	2,629,750		
8	EAST CLEVELAND.....	7	153	7	3	8	6	129	Se 158	Ja 107	139	134	5	.....	288,864		
9	EAST LIVERPOOL.....	80	5,180	68	152	86	44	4,830	Mh 4,943	Jy 4,638	4,818	3,557	1,235	13	13	.....	6,593,376
10	ELYRIA.....	63	3,236	40	119	221	121	2,735	My 3,061	No 2,482	2,762	2,378	380	2	2	.....	9,485,688
11	FINDLAY.....	78	2,041	58	76	124	46	1,787	Au 1,791	Ja 1,646	1,843	1,082	753	3	5	.....	3,707,551
12	FOSTORIA.....	47	1,498	36	77	87	46	1,252	Ap 1,384	Jy 1,124	1,298	1,050	248	.....	3,121,474		
13	FREMONT.....	65	2,400	46	76	153	62	2,063	Oc 2,217	Ja 1,881	1,991	1,623	366	1	1	.....	4,086,333
14	HAMILTON.....	129	6,023	100	196	459	125	6,043	Ja 6,642	No 5,648	6,068	5,274	778	16	.....	21,887,892	
15	IRONTON.....	59	1,602	48	58	50	26	1,420	Mh 1,671	No 1,009	1,504	1,264	219	17	4	.....	5,254,995
16	LAKEWOOD.....	22	2,217	16	28	197	202	1,774	No 1,900	Jy 1,671	1,851	1,622	229	.....	4,493,959		
17	LANCASTER.....	53	1,784	50	43	100	8	1,583	Jy 1,663	Ja 1,473	1,537	1,101	436	.....	1,589,321		
18	LIMA.....	97	5,305	73	97	202	57	4,876	Se 5,330	Do 4,280	5,103	3,847	1,255	1	.....	10,201,164	
19	LORAIN.....	66	7,266	42	292	393	103	6,436	Mh 7,874	No 4,945	7,330	3,849	88	2	.....	38,360,423	
20	MANSFIELD.....	103	4,106	89	135	332	102	3,308	Ap 3,712	No 2,923	3,300	2,633	722	5	.....	10,466,468	
21	MARIETTA.....	71	1,736	57	77	144	57	1,401	Je 1,535	Se 1,212	1,315	1,236	75	4	.....	3,404,539	
22	MARION.....	60	3,162	60	87	372	66	2,577	Mh 2,840	De 2,365	2,406	2,169	232	5	.....	9,699,258	
23	MASILLON.....	70	2,096	45	96	130	57	1,708	Jy 1,964	De 1,270	1,623	1,465	163	.....	7,482,679		
24	MIDDLETOWN.....	63	4,841	46	159	471	162	4,003	Ap 4,362	No 3,504	4,014	3,533	481	.....	23,974,223		
25	MOUNT VERNON.....	27	882	19	23	52	16	772	Ap 818	De 721	730	690	19	15	.....	1,891,704	
26	NEWARK.....	79	5,143	81	100	277	102	4,583	Je 4,765	Jy 4,302	4,529	4,063	435	11	.....	8,952,591	
27	NORWOOD.....	58	6,853	36	216	564	229	5,808	Je 6,047	De 5,473	5,523	4,315	1,207	1	.....	21,102,363	
28	PIQUA.....	78	3,220	67	110	204	62	2,777	Mh 2,948	Jy 2,596	2,713	1,879	830	4	.....	6,717,065	
29	PORTSMOUTH.....	76	4,178	60	146	233	142	3,597	Fe 4,456	Ap 2,360	3,849	2,612	1,217	20	.....	7,514,538	
30	SANDUSKY.....	107	3,276	67	140	263	79	2,727	Ap 2,910	Ja 2,612	3,052	2,689	361	1	1	.....	9,510,029
31	STUEBENVILLE.....	60	4,937	63	93	243	32	4,506	My 4,991	De 3,490	4,804	4,578	215	11	.....	19,337,008	
32	TIFFIN.....	76	2,585	89	81	163	78	2,177	Ap 2,268	Oc 2,047	2,158	1,769	345	64	.....	5,314,470	
33	WARREN.....	82	3,354	61	138	197	106	2,862	Ja 2,992	My 2,777	2,852	2,339	509	3	1	.....	8,550,271
34	ZANESVILLE.....	97	3,469	78	97	198	61	3,035	Mh 3,289	Ja 2,649	3,167	2,651	513	3	.....	5,862,172	

<sup>1</sup> Owned power only.

<sup>2</sup> 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.				
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. <sup>1</sup>	Internal combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	Electric (rented).

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

\$1,023,422	\$2,033,065	\$12,348,800	\$85,658	\$60,807	\$880,897	\$62,386,698	\$6,690,106	\$92,111,272	\$23,034,468	196,865	156,690	27,198	40	12,737	61,565	1
3,015	847	23,431	4,006	461	1,011	18,993	1,098	55,457	35,366	95	33	2		60		2
12,345	10,074	82,861	584	10,444	2,593	304,610	11,455	619,880	303,815	115		25		90		3
2,340	6,105	37,003	500	6,304	1,417	70,471	4,302	189,235	105,372	265		185		80		4
79,142	159,098	901,325		750	40,783	1,989,161	86,911	3,077,945	1,001,873	4,481	1,810	60		3,111	2,113	5
247,307	617,472	6,304,659	5,650		331,069	37,779,298	2,083,814	48,796,464	8,933,352	113,065	98,025	10,800		3,240	86,709	6
60,378	26,518	230,061	350	1,950	13,141	512,436	9,870	1,010,128	487,816	1,246	629	130		487		7
23,292	16,120	58,615	3,827	6,582	737	67,943	1,878	251,625	181,804	78				78		8
33,300	67,901	122,759	10,078	4,971	2,810	105,771	2,498	540,152	431,883	225				225		9
562,243	1,123,370	4,448,171	59,703	35,345	487,417	21,529,000	4,488,184	37,570,380	11,553,187	77,095	55,693	15,996	40	5,366	22,743	10

Gloves and mittens, leather.....	1	Mattresses and spring beds.....	2	Photo-engraving.....	1	Structural ironwork, not made in steel works or rolling mills.....	5
Ice, manufactured.....	1	Mineral and soda waters.....	3	Pickles, preserves, and sauces.....	2	Tobacco, cigars.....	8
Iron and steel, blast furnaces.....	4	Models and patterns, not including paper patterns.....	2	Rubber goods, not elsewhere specified.....	1	Tools, not elsewhere specified.....	1
Iron and steel, wrought pipe.....	1	Optical goods.....	1	Sausage.....	1	Trunks and valises.....	1
Jewelry.....	1	Paints.....	1	Signs and advertising novelties.....	1	Wall plaster.....	2
Liquors, distilled.....	1	Patent medicines and compounds.....	1	Slaughtering and meat packing.....	1		
Liquors, malt.....	2	Perfumery and cosmetics.....	1	Stoves and hot-air furnaces.....	3		
Marble and stone work.....	2						

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

\$212,078	\$308,698	\$1,016,099	\$11,037	\$7,620	\$40,840	\$3,465,255	\$191,131	\$7,174,760	\$3,518,380	4,678	3,701	327		650	5,144	1
115,007	61,558	1,344,806	1,945	8,546	38,002	2,736,293	88,768	5,020,991	2,195,930	7,327	5,304	1,140		793	4,220	2
219,448	640,195	1,733,854	3,681	2,382	105,122	3,844,658	200,917	3,343,422	4,737,847	7,211	6,508	290		353	3,943	3
120,802	184,770	1,666,393		5,424	98,775	8,190,842	1,078,578	12,170,200	2,891,786	14,300	12,902	1,093		485	2,742	4
79,110	121,705	1,111,938	752	6,080	25,596	2,219,164	120,790	3,923,786	1,583,832	5,742	5,281	210	1	250	901	5
75,190	95,840	851,917	2,567	7,842	61,397	2,454,040	110,352	4,083,486	1,512,485	4,705	4,127	514		124	400	6
148,771	188,151	804,727	1,920	7,046	24,421	1,756,389	57,274	3,470,686	1,063,032	3,501	2,299	508	3	601	170	7
5,009	13,364	81,393		1,410	2,135	137,634	9,556	295,786	148,596	397	243			154		8
247,260	141,207	2,035,210	45,151	11,312	84,490	2,300,292	535,789	7,002,003	4,250,822	6,051	4,120	748		1,183	278	9
275,393	350,235	1,759,007	150	17,539	60,624	4,870,397	145,939	8,791,734	3,775,398	10,814	6,090	2,181	600	1,943	3,540	10
140,507	137,455	778,029	3,398	5,723	94,001	2,070,186	120,907	4,092,778	1,871,685	3,561	1,869	988		704	207	11
151,918	100,165	655,011		10,729	35,495	4,268,952	100,013	6,124,679	1,755,714	3,563	1,729	1,649		185	1,044	12
185,014	228,595	1,096,845	523	7,555	48,271	2,200,021	96,475	4,779,082	2,483,436	3,064	1,436	754		1,474	443	13
506,856	710,779	3,564,404	11,598	37,552	238,325	8,584,466	430,526	16,877,260	7,802,268	16,767	13,762	1,546	32	1,427	7,571	14
107,028	63,088	720,734	20,634	8,324	103,453	2,834,095	400,008	4,666,185	1,372,032	15,147	13,890	784	2	492	671	15
131,000	407,510	1,021,904	420	3,490	94,158	1,478,225	125,711	3,006,498	2,002,562	2,969	1,150	369		1,450	1,713	16
52,584	106,951	790,419	260	7,639	15,076	3,255,592	31,841	4,602,615	1,315,182	2,874	675	1,744		455	390	17
308,071	273,831	3,177,520	7,774	20,910	309,435	6,178,440	190,262	11,508,680	5,220,472	7,513	4,520	524		2,474	2,883	18
554,942	451,802	4,659,729	8,217	340,323	14,541,946	3,387,438	3,387,438	20,110,037	11,180,953	211,182	207,377	474		3,331	40,385	19
290,230	524,370	2,028,628	3,548	23,274	142,533	4,638,591	133,208	10,281,968	5,510,100	6,637	3,705	1,128		1,744	1,001	20
136,225	158,549	843,584	90,626	8,202	53,536	2,321,417	61,372	4,128,618	1,745,820	3,117	2,065	743		309	29	21
174,395	477,028	1,512,473	3,033	12,492	81,340	2,453,481	108,157	6,384,864	3,823,226	5,575	4,635	374		566	6,085	22
197,462	148,750	1,185,800		6,807	46,794	2,591,921	126,952	6,293,124	2,574,251	5,544	3,500	531		1,513	2,178	23
419,116	748,464	2,888,440	4,281	45,052	2,206,772	9,785,990	794,004	21,787,151	11,207,157	35,328	32,982	301	610	1,345	12,946	24
47,908	74,638	443,054		2,290	15,779	1,444,604	31,484	2,302,660	826,581	2,907	2,214	696	19	68	1,281	25
192,660	354,017	2,969,207	28,790	13,548	150,752	3,119,393	454,654	9,276,762	5,702,715	8,071	3,968	2,970		1,133	4,305	26
569,595	684,207	3,013,982	13,328	17,090	648,055	7,081,402	135,548	16,724,360	9,507,410	9,865	8,770	493		602	14,333	27
258,598	164,273	1,507,883	11,797	21,498	63,114	4,466,064	97,495	7,988,279	3,434,720	5,721	3,345	643		1,733	1,170	28
415,388	415,894	1,750,595	19,008	6,958	10,319	3,930,187	98,927	7,682,145	3,603,031	5,009	3,385	990		721	1,083	29
292,320	332,638	1,685,974	5,425	18,244	233,093	3,893,800	254,996	8,234,865	4,220,060	7,415	4,224	709	5	2,477	906	30
247,767	301,056	3,430,111	416	13,278	146,749	10,126,282	1,305,074	16,953,987	5,526,731	36,731	34,450	1,694		557	10,462	31
143,008	194,747	1,409,961	27,176	13,026	78,427	2,234,724	156,941	4,905,880	2,604,215	4,464	1,469	632	200	2,113	517	32
285,850	264,395	1,933,239	10,670	13,760	50,021	6,154,258	200,247	10,399,737	4,045,232	5,749	3,381	65		2,303	1,808	33
163,792	228,398	1,685,467	1,915	17,714	66,741	5,003,489	242,626	8,300,231	3,054,116	7,004	5,453	332	235	1,044	4,200	34

\* Same number reported for one or more other months.

# OKLAHOMA.

By LESLEY E. VOORHEES.

## GENERAL STATISTICS.

**General character of the state.**—The territory of Oklahoma and Indian Territory were admitted to the Union as one state under the name of Oklahoma, November 16, 1907. Therefore, for the census years preceding the consolidation, the statistics of the two territories have been combined in this report for the purposes of comparison.

The state ranks seventeenth in size among the states, having an area of 70,057 square miles, of which 69,414 represent land surface. Its inhabitants in 1900 numbered 790,391, and in 1910, 1,657,155, and its estimated population in 1914 was 2,027,000. In this respect Oklahoma ranked twenty-third among the states in 1910, while in density of population it ranked thirty-second, with 23.9 inhabitants per square mile, the corresponding figure for 1900 being 11.4. The percentage of increase in population during the decade 1900-1910 was greater than for any state except Washington.

The urban population in 1910—that is, the population residing in incorporated places of 2,500 inhabitants or more—was 320,155, or 19.3 per cent of the total, as against 7.4 per cent in 1900. There were in the state in 1914 nine cities each having an estimated population of more than 10,000—Chickasha, Enid, Guthrie, McAlester, Muskogee, Oklahoma City, Sapulpa, Shawnee, and Tulsa. These cities, whose aggregate population in that year formed 11.7 per cent of the estimated total population of Oklahoma, reported 35.6 per cent of the state's manufactured products.

The steam-railway mileage of Oklahoma, as reported by the Interstate Commerce Commission in 1914, was 6,398, and the electric-railway mileage in 1912 (the latest year for which figures are available) was 232. The Arkansas and Red Rivers are navi-

gable for boats of light draft for some distance, thus giving water connections with the lower Mississippi.

The total value of all farm crops in 1909 was \$133,454,405, the most important being corn and cotton (including cotton seed), valued at \$48,080,554 and \$41,187,408, respectively. The value of domestic animals sold or slaughtered on farms was \$61,099,694, Oklahoma ranking ninth in that year.

The mineral production of the state in 1914 was valued at \$78,744,447, the most important items being petroleum, \$57,253,187; bituminous coal, \$8,204,015, and natural gas, \$8,050,039. Oklahoma ranked first among the states in 1914 in value of marketed production of petroleum and fourth in value of natural gas, the value of its output of the two products combined, representing approximately one-fifth of the total for the United States.

**Importance and growth of manufactures.**—In 1914 the value of the products of the manufacturing industries of Oklahoma amounted to \$102,005,693, and the total average number of wage earners employed was 17,443. The state ranked thirty-fourth in value of products in that year and fortieth in 1909, while in average number of wage earners it ranked thirty-ninth at both censuses. In 1914, as compared with the total value of products of manufactures for the United States, Oklahoma's proportion was small, four-tenths of 1 per cent. The corresponding proportions for 1909 and 1904 were three-tenths of 1 per cent and two-tenths of 1 per cent, respectively.

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

Table 1	MANUFACTURING INDUSTRIES.				PER CENT OF INCREASE. <sup>1</sup>		
	1914	1909	1904	1899	1909-1914	1904-1909	1899-1904
Number of establishments.....	2,518	2,310	1,123	495	9.0	105.7	126.0
Persons engaged.....	22,700	18,084	7,450	(2)	25.9	141.9	.....
Proprietors and firm members.....	2,464	2,698	1,187	(2)	-8.7	127.3	.....
Salaried employees.....	2,708	2,193	813	259	27.4	109.7	202.2
Wage earners (average number).....	17,443	13,143	5,456	2,381	32.7	140.9	129.1
Primary horsepower.....	97,308	71,139	29,608	11,572	36.8	140.3	155.9
Capital.....	\$65,477,054	\$38,872,038	\$16,124,417	\$4,054,391	68.4	141.1	297.7
Salaries and wages.....	14,213,375	9,235,472	3,517,822	1,112,729	53.1	164.0	216.1
Salaries.....	3,202,332	2,045,295	713,420	218,662	56.6	184.7	228.6
Wages.....	11,011,043	7,240,177	2,799,402	894,067	52.1	158.6	213.1
Paid for contract work.....	909,729	373,054	11,149	(2)	-17.7	310.3	.....
Rent and taxes (including internal revenue).....	307,885	562,687	* 188,848	(2)	61.7	.....	.....
Cost of materials.....	70,969,750	34,152,894	16,393,952	5,430,447	107.8	108.3	201.9
Value of products.....	102,005,693	53,082,405	24,459,107	8,133,936	90.0	119.5	200.7
Value added by manufacture (value of products less cost of materials).....	31,035,943	19,529,511	8,065,155	2,703,489	58.9	142.1	198.3

<sup>1</sup> A minus sign (-) denotes decrease.

<sup>2</sup> Figures not available.

<sup>3</sup> Exclusive of internal revenue.

There was a remarkable growth in the manufactures of the state during the 15 years covered by Table 1. During the earlier five-year periods every item in the table more than doubled, while the increases for the last five-year period, though not so large, show a rapid development. The increases in average number of wage earners, value of products, and value added by manufacture, during the latter period were 32.7 per cent, 90 per cent, and 58.9 per cent, respectively, while the corresponding percentages for the United States as a whole were only 6.4, 17.3, and 15.8. The de-

crease in proprietors and firm members is explained in the discussion of Table 4; the decrease in the amount paid for contract work, 17.7 per cent, is not significant because the amount depends largely upon the method of operation and not upon the magnitude of the transactions.

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.

INDUSTRY.	CENSUS OF 1914.						PER CENT OF INCREASE. <sup>1</sup>									
	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.	1900-1914	1904-1909	1899-1904	1900-1914	1904-1909	1899-1904	1900-1914	1904-1909	1899-1904
All industries.....	2,518	17,443	100.0	\$102,005,093	100.0	\$31,035,043	100.0	32.7	140.9	120.1	00.0	119.5	200.7	58.9	142.1	108.3
Flour-mill and gristmill products.....	253	700	4.0	16,088,600	16.4	2,821,724	7.5	-16.9	36.5	78.8	-12.8	50.3	155.0	-12.4	44.7	121.3
Petroleum refining.....	23	510	3.0	13,014,372	12.8	3,423,635	11.0	.....	.....	.....	1,133.0	.....	.....	613.1	.....	.....
Smelting and refining, zinc.....	6	1,041	9.4	9,938,743	9.7	2,059,289	6.6	189.9	.....	.....	231.1	.....	.....	137.0	.....	.....
Oil, cottonseed, and cake.....	60	851	4.9	7,580,813	7.4	1,306,410	4.2	40.5	17.1	123.4	40.3	66.8	255.7	38.7	24.6	181.0
Lumber and timber products.....	284	2,661	15.2	4,118,522	4.0	2,428,260	7.8	-16.5	.....	.....	-7.3	.....	.....	-17.7	.....	.....
Printing and publishing.....	624	1,619	9.3	4,023,851	3.9	3,100,410	10.0	-4.7	49.1	118.2	0.9	80.9	210.9	3.9	83.4	216.1
Foundry and machine-shop products.....	122	886	5.1	3,173,342	3.1	1,400,416	4.8	93.0	277.7	426.1	131.4	488.4	294.9	91.2	399.4	460.7
Bread and other bakery products.....	342	697	4.0	2,773,811	2.7	1,193,015	3.9	66.7	166.2	399.0	54.6	150.2	620.8	44.6	192.6	442.3
Cars and general shop construction and repairs by steam-railroad companies.....	13	1,718	9.8	2,270,374	2.2	1,314,020	4.2	21.7	415.3	.....	33.4	222.3	568.4	24.0	414.6	281.5
Glass.....	12	1,270	7.3	2,005,736	2.0	1,285,928	4.1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ice, manufactured.....	97	528	3.0	1,904,140	1.8	1,202,018	3.9	17.6	127.0	258.2	26.0	141.1	371.4	24.4	137.3	402.5
Butter.....	14	46	0.3	808,078	0.8	135,931	0.4	.....	.....	.....	-29.0	.....	.....	-38.7	.....	.....
Coffee, roasting and grinding.....	6	60	0.3	750,077	0.7	138,811	0.5	.....	.....	.....	61.4	.....	.....	95.8	.....	.....
Confectionery (ice cream).....	51	90	0.6	636,793	0.6	269,808	0.8	.....	.....	.....	.....	.....	.....	.....	.....	.....
Explosives.....	6	73	0.4	538,015	0.5	217,896	0.7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brick.....	23	402	2.3	495,993	0.5	306,449	1.2	-44.9	82.0	83.9	-61.8	101.8	175.7	-51.3	110.2	148.1
Copper, tin and sheet-iron work.....	72	141	0.8	474,484	0.5	233,102	0.8	-30.5	237.7	.....	-40.7	271.6	.....	-39.9	259.3	.....
Milneral and soda waters.....	108	122	0.7	472,235	0.5	292,957	0.9	-11.7	18.2	290.3	3.7	60.2	381.4	-15.5	59.8	351.2
Clothing, men's, including shirts.....	6	207	1.2	417,442	0.4	155,034	0.5	83.2	.....	.....	114.0	.....	.....	127.9	.....	.....
Saddlery and harness.....	30	54	0.3	307,701	0.3	128,005	0.4	.....	.....	.....	-1.0	33.0	78.3	-14.1	17.3	104.8
Marble and stone work.....	55	142	0.8	339,575	0.3	217,580	0.7	-3.4	133.3	.....	-18.7	294.3	.....	-5.6	220.8	.....
Wall plaster.....	6	151	0.9	313,216	0.3	200,063	0.7	-41.7	.....	.....	-27.9	.....	.....	-22.4	.....	.....
Confectionery.....	37	57	0.3	204,504	0.3	120,035	0.4	.....	.....	.....	159.5	.....	.....	132.1	.....	.....
Mattresses and spring beds.....	11	75	0.4	268,378	0.3	104,301	0.3	.....	.....	.....	75.2	.....	.....	92.6	.....	.....
Brooms, from broom corn.....	36	97	0.6	227,224	0.2	120,068	0.4	.....	.....	.....	-8.5	244.4	620.0	16.5	151.2	583.3
Food preparations, not elsewhere specified.....	11	41	0.2	219,522	0.2	70,901	0.2	.....	.....	.....	25.7	.....	.....	8.4	.....	.....
All other industries.....	210	2,500	14.0	28,178,080	27.6	7,145,302	23.0	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup>Percentages are based on figures in Table 20; 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 26 industries, or industry groups, for each of which products valued at more than \$200,000 were reported for 1914. These industries include 2 with products exceeding \$10,000,000 in value, 2 with products between \$5,000,000 and \$10,000,000, 7 with products between \$1,000,000 and \$5,000,000, and 15 with products valued at less than \$1,000,000. Among those industries included in "all other industries" are cement, cordage and twine, the killing and dressing of poultry, and slaughtering and meat packing, each of which have products valued at more than \$200,000, but statistics for which can not be shown separately without disclosing individual operations.

The industries in this table are arranged in the order of their importance, as shown by value of products, but the arrangement for most of the industries would vary considerably from that given if based on average number of wage earners or value added by manu-

facture. Slaughtering and meat packing, an industry for which statistics can not be shown separately, ranked first in value of products and value added by manufacture and sixth in number of wage earners. The flour-mill and gristmill industry, ranking second in value of products, was ninth in number of wage earners and fifth in value added by manufacture. This industry requires comparatively few wage earners, as the processes are largely carried on by machinery, and consequently the value added by manufacture is small in proportion to that of most other industries. Petroleum refining, third in value of products, was twelfth in number of wage earners and second in value-added by manufacture. Smelting and refining, zinc, fourth in value of products, was third in number of wage earners and sixth in value added by manufacture. Oil, cottonseed, and cake, fifth in value of products, was eighth in number of wage earners and ninth in value added by manu-

facture. Lumber and timber products, sixth in value of products, was first in number of wage earners and fourth in value added by manufacture, while printing and publishing, seventh in value of products, was fourth in number of wage earners and third in value added by manufacture.

In rank according to value of products, there were many changes in 1914 as compared with 1909. Slaughtering and meat packing, by far the most important industry in the state in 1914, held thirteenth place in 1909. Foundry and machine-shop products, eighth in order of importance, held the same rank at both censuses. Flour-mill and gristmill products and the smelting and refining of zinc, as previously stated, ranked second and fourth, respectively, in 1914 but were first and fifth in 1909. Petroleum refining advanced from eleventh place in 1909 to third place in 1914. Oil, cottonseed, and cake, the lumber and timber industry, and printing and publishing dropped in rank from second, third, and fourth places in 1909 to fifth, sixth, and seventh, respectively, in 1914. For most of the remaining industries, changes from census to census are noticeable. Of the industries shown in the table, petroleum refining shows the largest increase in value of products during the period 1909-1914 (1,133.6 per cent) and smelting and refining, zinc, foundry and machine-shop products, clothing, men's, including shirts, and confectionery each more than doubled in value of products.

*Flour-mill and gristmill products.*—This industry does not include data for the small custom mills grinding for toll or local consumption exclusively. The figures show that during the two earlier five-year periods and for the decade 1904-1914 the industry increased rapidly, although the totals for 1914 indicate a considerable decrease, as compared with those for 1909. This condition is similar to that shown for the industry in other states.

*Petroleum, refining.*—The statistics for this industry show its remarkable growth in the state during the past few years. In 1909, when it was reported for the first time, there were only 9 establishments, with products valued at \$1,055,011. By 1914 the number of establishments had more than doubled, and the value of products had increased to \$13,014,372, a more than tenfold increase.

*Smelting and refining, zinc.*—While this industry shows the smallest number of establishments of any of the more important industries given in the table, its value of products ranks fourth among the industries of the state. During the five-year period 1909-1914 the number of establishments doubled, the number of wage earners increased 189.9 per cent, while the value of products and the value added by manufacture increased 231.1 per cent and 137 per cent, respectively.

*Oil, cottonseed, and cake.*—The statistics include those for all establishments engaged primarily in extracting oil from the cotton seed or in refining crude oil. The

industry shows a decided increase in all items during each of the five-year periods from 1899 to 1914.

*Lumber and timber products.*—The operations of logging camps, sawmills, planing mills, and wooden-box factories are included under this classification for comparative purposes. The industry as a whole shows a decrease from 1909 to 1914. This loss is largely in the value of products reported for the planing mills operated independently of sawmills. The logging camps and sawmills show the greatest decrease in number of establishments, wage earners employed, and value added by manufacture. In 1914, as in 1909, the lumber and timber industry reported more wage earners than any other industry in the state.

*Printing and publishing.*—Besides the printing and publishing of newspapers and periodicals, books, music, and job printing, this classification includes, for comparative purposes, those establishments engaged in bookbinding and blankbook making, and in engraving, steel and copper plate, including plate printing. The newspaper and periodical branch of the industry is by far the most important, reporting over 85 per cent of the number of establishments and 80 per cent of the value of products. For the combined industry, the increase in value of products from 1909 to 1914 was very small, only nine-tenths of 1 per cent, while the average number of wage earners during this period decreased 4.7 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."

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.				
		Total.	Male.	Female.	Per cent of total.	
					Male.	Female.
All classes.....	1914 1909	22,700 18,034	21,295 17,071	1,405 963	93.8 94.7	6.2 5.3
Proprietors and officials.....	1914 1909	3,569 3,630	3,493 3,547	76 83	97.9 97.7	2.1 2.3
Proprietors and firm members...	1914 1909	2,464 2,698	2,394 2,628	70 70	97.2 97.4	2.8 2.6
Salaried officers of corporations..	1914 1909	355 284	353 278	2 6	99.4 97.9	0.6 2.1
Superintendents and managers..	1914 1909	760 648	746 641	4 7	99.5 98.9	0.5 1.1
Clerks and other subordinate salaried employees.	1914 1909	1,688 1,261	1,353 1,059	335 202	80.2 84.0	19.8 16.0
Wage earners (average number)....	1914 1909	17,443 13,143	16,449 12,465	994 678	94.3 94.8	5.7 5.2
16 years of age and over.....	1914 1909	17,309 13,020	16,320 12,345	989 675	94.3 94.8	5.7 5.2
Under 16 years of age.....	1914 1909	134 123	129 120	5 3	96.3 97.6	3.7 2.4

In 1914 there were 22,700 persons reported as engaged in the manufactures of the state, of whom 17,443,

or over three-fourths, were wage earners; 3,569 were proprietors and officials; and 1,688 were clerks and other subordinate salaried employees. Of the latter class, 19.8 per cent were females, a slightly larger proportion than in 1909, when 16 per cent were females. Of the wage earners 16 years of age and over, 16,320, or 94.3 per cent, were males, and 989, or 5.7 per cent,

females. Figures for the sex and age distribution of wage earners for individual industries will be found in Table 30.

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.

	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.								
	Per cent of increase, <sup>1</sup> 1909-1914.			Per cent distribution.					
	Total.	Male.	Female.	Total.		Male.		Female.	
				1914	1909	1914	1909	1914	1909
All classes.....	25.9	21.7	45.9	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials.....	-1.7	-1.5	.....	15.7	20.1	10.4	20.8	5.4	8.6
Proprietors and firm members.....	-8.7	-8.9	.....	10.9	15.0	11.2	15.4	5.0	7.3
Salaried officers of corporations.....	25.0	27.0	.....	1.0	1.0	1.7	1.6	0.1	0.6
Superintendents and managers.....	15.7	16.4	.....	3.3	8.6	8.5	3.8	0.3	0.7
Clerks and other subordinate salaried employees.....	33.9	27.8	65.8	7.4	7.0	6.4	6.2	23.8	21.0
Wage earners (average number).....	32.7	32.0	40.0	76.8	72.9	77.2	73.0	70.7	70.4
16 years of age and over.....	32.9	32.2	46.5	76.3	72.2	76.6	72.3	70.4	70.1
Under 16 years of age.....	8.9	7.5	.....	0.0	0.7	0.6	0.7	0.4	0.3

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

With the exception of proprietors and firm members, the table shows increases for the five-year period in the total number of the several classes of persons engaged in manufacturing industries. The decrease in the number of proprietors and firm members was due largely to the decrease in the small lumber mills and gristmills operated by individuals and firms, and also to the fact that some establishments operated under this form of ownership in 1909 were incorporated during the period between the censuses and reported as corporations in 1914. In such cases the same individuals reported as proprietors or firm members at the former census were in some instances returned as salaried officers of corporations at the latter. While there was an increase of only 427 in the number of clerks and other subordinate salaried employees, the percentage of gain, 33.9 per cent, is the largest shown for any of the classes. The average number of wage earners 16 years of age and over, which constituted 76.3 per cent of the total number of persons employed in 1914 and 72.2 per cent in 1909, shows an increase of 32.9 per cent between these years. Wage earners under 16 years of age also show a slight increase for the period 1909-1914, but the proportion which this class formed of the total number of wage earners was only six-tenths of 1 per cent in 1914 and seven-tenths 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.

Each of the classes enumerated in this table shows an increase for both five-year periods, except pro-

prietors and firm members, for which the decrease has been explained. The increases, however, are much greater for the earlier than for the later five-year period.

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.							
	Number.			Per cent distribution.			Per cent of increase. <sup>1</sup>	
	1914	1909	1904	1914	1909	1904	1909-1914	1904-1909
Total.....	22,700	18,034	7,450	100.0	100.0	100.0	25.9	141.9
Proprietors and firm members.....	2,464	2,008	1,187	10.9	15.0	15.9	-8.7	127.3
Salaried employees.....	2,793	2,103	813	12.3	12.2	10.0	27.4	169.7
Wage earners (average).....	17,443	13,143	5,450	76.8	72.9	73.2	32.7	140.9

<sup>1</sup> A minus sign (-) denotes decrease.

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.

For all industries combined, the actual number of wage earners shows an increase at each successive census period. In 1914, 93.6 per cent of the number were males. The proportion of females over 16 years of age and of children each show a decrease during the decade.

Most of the industries, for which separate figures are shown in the table, are of a character which normally employ only men, so that, with two exceptions, either there are no women employed or the proportion is exceedingly small.

Of the 11 industries for which separate figures are given, only three show an increased proportion of males in 1914, as compared with 1909. In bread and other bakery products, the proportion of females over 16 years of age was 8.1 per cent in 1909, while in 1914 it had increased to 23.8. On the other hand, in printing and publishing, an industry which also

reports a comparatively large number of women, the proportion decreased from 17.4 per cent in 1909 to 14.5 in 1914. Children under 16 show insignificant proportions for all the industries, except printing and publishing, where an increase from 2.8 per cent in 1909 to 6.1 per cent in 1914 is shown.

**Table 6**

INDUSTRY.	Census year.	WAGE EARNERS.				INDUSTRY.	Census year.	WAGE EARNERS.			
		Average number. <sup>1</sup>	Per cent of total.					Average number. <sup>1</sup>	Per cent of total.		
			16 years of age and over.		Under 16 years of age.				16 years of age and over.		Under 16 years of age.
			Male.	Female.					Male.	Female.	
All industries.....	1914 1909 1904	17,443 13,143 5,456	93.6 93.9 92.0	5.7 5.1 6.0	0.8 0.9 2.0	Lumber and timber products.....	1914 1909	2,651 3,175	99.7 99.7	0.2 (?)	0.2 0.2
Bread and other bakery products.....	1914 1909	697 418	75.6 90.4	23.8 8.1	0.6 1.4	Oil, cottonseed, and cake.....	1914 1909	851 581	100.0 100.0	.....	.....
Brick.....	1914 1909	402 730	99.8 99.7	.....	0.2 0.3	Petroleum, refining.....	1914 1909	516 75	100.0 100.0	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1914 1909	1,718 1,412	99.8 97.8	0.2 0.1	..... 2.1	Printing and publishing.....	1914 1909	1,619 1,698	79.4 79.9	14.5 17.4	6.1 2.8
Flour-mill and gristmill products.....	1914 1909	700 842	100.0 99.8	.....	..... 0.2	Smelting and refining, zinc.....	1914 1909	1,041 596	100.0 100.0	.....	.....
Foundry and machine-shop products.....	1914 1909	886 457	99.7 100.0	0.1 .....	0.2 .....	All other industries.....	1914 1909	5,234 2,740	88.6 86.6	11.0 12.6	0.4 0.9
Ice, manufactured.....	1914 1909	528 440	98.9 98.9	0.4 .....	0.8 1.1						

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

Table 7 shows the average number and the per cent distribution of wage earners employed in each of the nine 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—								
		Chickasha.	Enid.	Guthrie.	McAlester.	Muskogee.	Oklahoma City.	Sapulpa.	Shawnee.	Tulsa.
Total.....	1914 1909 1904	337 364 .....	283 303 .....	185 282 333	171 180 .....	828 381 .....	2,226 1,398 720	433 ..... .....	845 1,806 .....	845 492 .....
16 years of age and over:										
Male.....	1914 1909 1904	326 356 .....	252 275 .....	137 247 297	160 104 .....	751 360 .....	1,904 1,245 665	407 ..... .....	728 730 .....	801 428 .....
Female.....	1914 1909 1904	11 5 .....	30 28 .....	32 18 26	9 16 .....	73 15 .....	316 145 37	15 ..... .....	102 73 .....	40 25 .....
Under 16 years of age.....	1914 1909 1904	..... 3 .....	1 ..... .....	16 17 10	2 ..... .....	4 6 .....	6 8 18	11 ..... .....	15 3 .....	4 9 .....
Per cent of total:										
16 years of age and over—										
Male.....	1914 1909 1904	96.7 97.8 .....	89.0 90.8 .....	74.0 87.6 89.2	93.6 91.1 .....	90.7 94.5 .....	85.5 89.1 92.4	94.0 ..... .....	86.2 90.6 .....	94.8 92.6 .....
Female.....	1914 1909 1904	3.3 1.4 .....	10.6 9.2 .....	17.3 6.4 7.8	5.3 8.9 .....	8.8 3.9 .....	14.2 10.4 5.1	3.5 ..... .....	12.1 9.1 .....	4.7 5.4 .....
Under 16 years of age.....	1914 1909 1904	..... 0.8 .....	0.4 ..... .....	8.6 6.0 3.0	1.2 ..... .....	0.5 1.6 .....	0.3 0.6 2.5	2.5 ..... .....	1.8 0.4 .....	0.5 1.9 .....

<sup>1</sup> Figures do not agree with those published because certain establishments revised their reports for that census.

The number of wage earners employed in Oklahoma City increased 209.2 per cent during the decade shown in the table and 59.2 per cent during the period 1909–1914. During the latter period the male wage earners

over 16 years of age increased 52.9 per cent and females, 117.9 per cent. The opposite was true in Guthrie, decreases being shown for both five-year periods for the total number and for males over 16 years of age.

Muskogee shows an increase of 447, or 117.3 per cent, in the total average number of wage earners for the five-year period 1909-1914. Shawnee and Tulsa also show increases for 1914 as compared with 1909, 4.8 per cent, and 82.9 per cent, respectively. Chickasha, Enid, and McAlester each show decreases. While the number of female wage earners employed in the cities of Oklahoma is comparatively small, the number increased during the last five-year period in every city, except McAlester, and only two cities, McAlester and Tulsa, show a decrease in proportion of this class.

**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.

The last three months of the year show the greatest activity in the combined industries of the state at each census period, October being the month of maximum employment. The month of minimum employment, on the other hand, varied considerably, being August in 1914, February in 1909, and May in 1904. The greatest variation in number employed during the

year occurred in 1909, when the smallest number for any month was 80.4 per cent of the largest. In 1914, though the number employed was greater, the minimum number represented 93.4 per cent of the maximum.

**Table 8**

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number. <sup>1</sup>			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January.....	17,305	11,820	5,455	96.0	80.7	92.1
February.....	17,170	11,782	5,301	95.0	80.4	90.5
March.....	17,104	12,237	5,356	94.0	83.5	90.4
April.....	17,493	12,285	5,270	96.7	83.8	89.1
May.....	17,807	12,518	5,144	98.4	85.4	86.8
June.....	17,334	12,905	5,280	95.8	88.0	88.9
July.....	17,232	13,153	5,280	95.3	89.7	89.1
August.....	16,902	13,405	5,107	93.4	91.9	87.2
September.....	17,308	13,820	5,532	96.2	94.3	93.4
October.....	18,088	14,050	5,923	100.0	100.0	100.0
November.....	17,011	14,551	5,855	99.0	99.3	98.8
December.....	17,446	14,505	5,854	96.4	98.9	98.8

<sup>1</sup> 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 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 nine cities having more than 10,000 inhabitants.

**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.	
		<b>All Industries.....</b>	<b>17,443</b>	<b>17,305</b>	<b>17,170</b>	<b>17,104</b>	<b>17,403</b>	<b>17,807</b>	<b>17,334</b>	<b>17,232</b>	<b>16,902</b>	<b>17,308</b>	<b>18,088</b>	
Bread and other bakery products.....	697	680	<i>656</i>	661	671	695	698	724	725	717	717	716	724	90.5
Brick.....	402	301	362	415	510	488	534	457	484	389	339	330	206	38.6
Cars and general shop construction and repairs by steam-railroad companies.....	1,718	<b>1,800</b>	1,512	1,554	1,667	1,832	1,806	1,002	2,005	1,010	1,833	1,703	1,502	69.3
Flour-mill and gristmill products.....	700	681	<i>661</i>	<i>650</i>	666	660	657	726	763	761	728	728	738	85.4
Foundry and machine-shop products.....	886	859	870	953	989	960	984	941	912	856	777	755	770	76.3
Ice, manufactured.....	528	<i>442</i>	247	313	451	570	807	907	890	765	526	355	274	29.7
Lumber and timber products.....	2,651	2,763	2,811	2,820	2,805	<b>2,837</b>	2,780	2,644	2,539	2,624	2,585	2,402	<b>2,812</b>	81.5
Oil, cottonseed, and cake.....	851	1,441	1,081	924	195	193	190	250	285	891	1,067	1,077	1,718	11.1
Petroleum, refining.....	516	601	501	497	505	496	511	499	507	517	526	519	514	82.4
Printing and publishing.....	1,019	1,585	<i>1,668</i>	1,576	1,594	1,634	1,610	1,600	1,600	1,638	1,675	1,664	1,680	85.0
Smelting and refining, zinc.....	1,041	1,588	1,588	1,602	1,634	1,645	<i>1,676</i>	1,603	1,638	1,770	1,752	1,752	1,677	89.0
All other industries.....	5,234	5,264	5,324	5,499	5,797	5,808	5,173	4,970	<i>4,656</i>	4,660	4,962	5,462	5,325	78.4
<b>Total for cities.....</b>	<b>6,153</b>	<b>5,741</b>	<b>5,742</b>	<b>5,860</b>	<b>6,012</b>	<b>6,237</b>	<b>6,200</b>	<b>6,280</b>	<b>6,251</b>	<b>6,487</b>	<b>6,578</b>	<b>6,291</b>	<b>6,067</b>	<b>87.8</b>
<b>CHICKASHA.....</b>	<b>337</b>	<b>245</b>	271	262	282	336	348	370	381	374	406	396	375	59.0
<b>ENID.....</b>	<b>283</b>	<b>252</b>	<i>258</i>	260	267	266	278	307	295	292	315	315	311	75.6
<b>GUTHRIE.....</b>	<b>185</b>	192	195	177	<i>162</i>	165	171	182	188	186	206	191	205	78.6
<b>MCALISTER.....</b>	<b>171</b>	<b>190</b>	161	<i>150</i>	175	174	158	178	173	177	166	167	183	78.9
<b>MUSKOGEE.....</b>	<b>828</b>	<b>887</b>	<i>787</i>	704	821	858	823	870	895	892	800	780	743	82.3
<b>OKLAHOMA CITY.....</b>	<b>2,226</b>	<b>2,144</b>	<i>2,155</i>	2,168	2,141	2,168	2,239	2,226	2,138	2,276	<b>2,410</b>	2,373	2,294	88.6
<b>SAPULPA.....</b>	<b>433</b>	437	421	446	431	476	488	419	406	439	445	<i>800</i>	398	79.9
<b>SHAWNEE.....</b>	<b>845</b>	<b>500</b>	772	756	794	859	806	920	991	973	968	891	770	56.5
<b>TULSA.....</b>	<b>845</b>	836	812	877	<b>939</b>	935	880	802	<i>784</i>	878	812	788	788	83.5

The total for the combined industries of the state shows very little fluctuation from month to month in the number of wage earners employed, the proportion which the minimum formed of the maximum being 93.4 per cent. With the exception of the three seasonal industries, the manufacture of brick, ice, and cottonseed oil

and cake, which naturally show considerable differences in the number employed during the different seasons, there was a marked regularity in the number engaged in the industries shown. Of the remaining industries the least variation is reported for printing and publishing, and the greatest for steam-railroad repair shops.

Of the nine cities, Oklahoma City reported the largest number of wage earners and shows the least fluctuation in employment, 11.4 per cent. Chickasha and Shawnee show the greatest variation, 40.1 per cent and 43.5 per cent, respectively. In these two cities steam-railroad repair shops, the principal industry, reported relatively few wage earners for the month of January.

Prevailing hours of labor.—In Table 10 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 a smaller number of hours.

Table 10

INDUSTRY AND CITY.	Census year.	AVERAGE NUMBER OF WAGE EARNERS.								
		Total.	In establishments where the prevailing hours of labor per week were—							
			48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries.....	1914 1909	17,443 13,143	4,369 2,965	2,247 303	2,277 1,949	687 526	3,996 4,711	1,719 1,463	1,332 868	816 368
Bread and other bakery products.....	1914 1909	697 418	83 58	5 4	283 52	22 14	220 236	58 15	8 34	18 5
Brick.....	1914 1909	402 730	15		49 46		353 669			
Cars and general shop construction and repairs by steam-railroad companies.	1914 1909	1,718 1,412	748 195		314 896	14		642 290		
Flour-mill and gristmill products.....	1914 1909	700 842	27 98	3 10	30 11		252 280	165 168	223 271	
Foundry and machine-shop products.....	1914 1909	886 457	72 18		239 90	35 1	533 343		2	
Ice, manufactured.....	1914 1909	528 449	7 5		10 9	16 9	41 40	134 124	46 24	274 247
Lumber and timber products.....	1914 1909	2,651 3,175	126 800	17 180	388 155	210 166	1,494 1,631	406 253		10
Oil, cottonseed, and cake.....	1914 1909	851 681			2		8 15		813 488	28 64
Petroleum, refining.....	1914 1909	516 75	1 11		76 12	14	64	168 34		193 17
Printing and publishing.....	1914 1909	1,619 1,098	1,176 1,122	50 58	295 323	22 32	68 163	2	6	
Smelting and refining, zinc.....	1914 1909	1,041 509		1,359		282 196		185		
All other industries.....	1914 1909	5,234 2,740	2,129 643	813 50	591 304	72 114	958 1,118	144 370	234 40	293 35
Total for cities.....	1914	6,153	2,117	798	1,056	100	943	641	269	229
CHICKASHA.....	1914	337	225		2		41	9	59	1
ENID.....	1914	283	35	16	39	28	106	19	40	
GUTHRIE.....	1914	185	90	8	12		9	7	53	
MCALESTER.....	1914	171	50		25	9	16	28		37
MUSKOGEE.....	1914	828	167	6	370	12	63	176	29	16
OKLAHOMA CITY.....	1914	2,226	600	603	521	34	256	83	61	68
SAPULPA.....	1914	432	46	74	6		29	261		27
SHAWNEE.....	1914	845	725	5	18	8	9	40	25	15
TULSA.....	1914	845	177	86	63	9	414	29	2	65

In 1909, 5,743, or 43.7 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 less than 60 per week, while in 1914 the proportion was 54.9 per cent. During the five-year period the proportion of wage earners in plants where 60 hours constituted a week's work showed the greatest decrease—from 35.8 per cent in 1909 to 22.9 per cent in 1914—while that in plants where the prevailing hours were between 48 and 54 showed the greatest increase—from 2.3 per cent in 1909 to 12.9 per cent in 1914.

Among the separate industries, smelting and refining, zinc, shows the most pronounced decrease in hours of labor. In 1909, only slightly more than one-third

of the wage earners in this industry were employed in establishments where the hours of labor were less than 60 per week, in 1914 none worked as many as 60 hours, and 82.8 per cent were employed less than 54 hours per week.

In 1914, 56.4 per cent of the wage earners in the bakeries of the state were employed in establishments operated less than 60 hours per week, as compared with 30.6 per cent in 1909. The railroad repair shops in Oklahoma show an increase in the proportion of wage earners working more than 60 hours per week, 37.4 per cent in 1914 as compared with 20.5 per cent in 1909.

Of the combined total average number of wage earners, 6,153, for the nine cities in 1914, 4,071, or

66.2 per cent, were in establishments where the prevailing hours were less than 60 per week, and 2,117, or 34.4 per cent, were in establishments where 48 hours or less constituted a week's work.

In Oklahoma City and Shawnee the proportion of wage earners in establishments in which the prevailing hours were less than 60 per week was 79 per cent and 89.5 per cent, respectively. The largest proportion

in the 60-hour group—49 per cent—is shown for Tulsa; and the largest in establishments with prevailing hours over 60 per week appears for Sapulpa—64.2 per cent.

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

	Census year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER.						DISTRICTS OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 OR OVER.	
			Total.		10,000 to 25,000.		25,000 to 100,000.		Number or amount.	Per cent of aggregate.
			Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.		
Number of places.....	1914 1910 1900		0 8 2		6 6 2			3 2		
Population <sup>1</sup> .....	1914 1910 1900	2,026,634 1,657,155 790,391	237,094 108,866 20,043	11.7 10.2 2.5	88,452 79,383 20,043	4.4 4.8 2.5	148,642 89,483	7.3 5.4	1,789,440 1,488,289 770,348	88.3 89.8 97.5
Number of establishments.....	1914 1909 1899	2,518 2,310 495	591 486 69	23.5 21.0 13.9	213 251 69	8.5 10.9 13.9	378 235	15.0 10.2	1,927 1,824 426	76.5 79.0 86.1
Average number of wage earners.....	1914 1909 1899	17,443 * 13,143 2,351	6,153 4,176 461	35.3 31.8 19.4	2,254 2,397 461	12.9 18.2 19.4	3,899 1,770	22.4 13.5	11,290 8,967 1,920	64.7 85.2 80.6
Value of products.....	1914 1909 1899	\$102,005,693 * 63,682,405 8,133,936	\$36,308,575 19,844,676 1,492,998	35.6 37.9 18.4	\$8,959,027 9,717,041 1,493,998	8.8 18.1 18.4	\$27,348,948 10,147,035	26.8 18.9	\$65,097,118 33,817,729 6,639,938	64.4 63.0 81.6
Value added by manufacture.....	1914 1909 1899	31,035,943 * 19,529,511 2,703,489	10,106,225 6,966,763 639,880	32.6 35.7 23.7	2,731,838 3,443,467 639,800	8.8 17.6 23.7	7,374,387 3,523,296	23.8 18.0	20,929,718 12,562,748 2,063,629	67.4 64.3 76.3

<sup>1</sup> Census estimate of population for 1914. \* Figures do not agree with those published in 1909 because certain establishments revised their reports for that census.

In any comparison of the figures in this table it should be borne in mind that while the distinction is made between cities of 10,000 inhabitants and over and the balance of the state, it is not necessarily between the same cities at each census and the balance of the state. In 1900 only two cities, Guthrie and Oklahoma City, reported a population of 10,000 and over, while Chickasha, Enid, McAlester, Muskogee, Sapulpa, Shawnee, and Tulsa, each having less than 10,000 inhabitants, were included in the districts outside. Similarly, the same cities may not be shown in the same group at each census. Tulsa, which in 1910 was in the group reporting a population of from 10,000 to 25,000, had advanced to the group having an estimated population of from 25,000 to 100,000 in 1914.

The table shows that for 1914 the nine cities which contained 11.7 per cent of the estimated population of the state, reported 23.5 per cent of the total number of establishments; 35.3 per cent of the total average number of wage earners; 35.6 per cent of the total value of products; and 32.6 per cent of the total value added by manufacture. A comparison of the totals for the cities in 1914 with those for 1909 and 1899 shows increases at each successive census for each item, a condition similar to that which prevailed in the districts outside the cities.

The relative importance in manufactures of each of the nine cities having more than 10,000 inhabitants, as measured by average number of wage earners and by

value of products, in 1914, 1909, and 1904, is shown in Table 12. The cities are listed in the order of their importance as shown by value of products. Those for which comparative figures are not shown for 1909 and 1904 had less than 10,000 inhabitants in those years.

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1914	1909	1904	1914	1909	1904
Oklahoma City.....	2,226	1,398	720	\$20,725,811	\$7,367,884	\$3,670,730
Tulsa.....	845	462		3,838,326	1,552,642	
Muskogee.....	828	381		2,754,811	2,279,151	
Enid.....	253	303		2,010,533	2,453,188	
Shawnee <sup>1</sup> .....	845	806		2,597,965	1,940,823	
Chickasha.....	337	354		1,719,676	1,896,959	
Guthrie.....	185	282	333	853,435	1,442,795	1,200,662
Sapulpa.....	433			694,457		
McAlester.....	171	180		573,511	451,234	

<sup>1</sup> Figures do not agree with those published in 1909 because certain establishments revised their reports for that census.

Oklahoma City, the largest city in the state, reported \$20,725,811 as the value of the products of its manufacturing industries in 1914. This amount represented 20.3 per cent of the total for the state and 57.1 per cent of the total for the nine cities. The principal industries were printing and publishing, slaughtering and meat packing, and the manufacturing of flour-mill and gristmill products. In Tulsa, the manufacture of foundry and machine-shop products was the chief industry. Petroleum refining and the manufacture of flour-mill and gristmill and planing mill products were also important industries.

In Muskogee steam-railroad repair shops, flour mills and gristmills, and the refining of petroleum were the principal industries; in Enid, poultry killing and dressing and flour mills and gristmills; in Shawnee, flour mills and gristmills and steam-railroad repair shops; in Chickasha, flour mills and gristmills, cottonseed-oil mills, and steam-railroad repair shops; in Guthrie, flour mills and gristmills, cottonseed-oil mills, and the printing and publishing of newspapers and periodicals; in Sapulpa, steam-railroad repair shops; and in McAlester, cottonseed-oil mills.

**Character of ownership.**—Table 13 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.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.						VALUE OF PRODUCTS.							
		Indi-vid-uals.	Cor-pora-tions.	All oth-ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.		
						Indi-vid-uals.	Cor-pora-tions.	All oth-ers.	Indi-vid-uals.	Cor-pora-tions.	All oth-ers.		Indi-vid-uals.	Cor-pora-tions.	All oth-ers.	Indi-vid-uals.	Cor-pora-tions.	All oth-ers.
All industries.....	1914	1,533	549	436	17,443	3,098	13,037	1,398	17.2	74.7	8.0	\$102,005,693	\$3,048,451	\$88,689,116	\$5,268,126	7.9	86.9	5.2
	1909	1,257	501	552	13,143	3,113	8,225	1,805	23.7	62.6	13.7	53,682,405	7,699,080	39,397,331	6,592,986	14.3	73.4	12.3
	1904	635	242	246	5,459	1,389	3,366	701	25.5	61.7	12.8	24,459,107	4,173,454	17,401,144	2,384,509	17.1	71.1	11.8
Cars and general shop construction and repairs by steam-railroad companies.	1914		13		1,718		1,718		100.0			2,270,374		2,270,374				100.0
	1909		8		1,412		1,412		100.0			1,701,851		1,701,851				100.0
Flour-mill and gristmill products.	1914	117	66	70	700	97	508	95	13.9	72.6	13.6	16,688,690	1,086,923	14,022,604	1,579,073	6.5	84.0	9.5
	1909	106	97	92	842	105	590	147	12.5	70.1	17.6	19,144,475	1,387,666	15,244,212	2,512,597	7.2	79.6	13.1
Foundry and machine-shop products.	1914	60	36	26	896	251	525	110	28.3	59.3	12.4	3,173,342	873,033	2,042,397	257,912	27.5	64.4	8.1
	1909	25	22	17	457	125	240	92	27.4	52.5	20.1	1,371,463	318,170	686,828	366,465	23.2	50.1	26.7
Ice, manufactured.....	1914	10	69	18	528	25	435	68	4.7	82.4	12.9	1,604,146	76,958	1,336,356	190,832	4.8	83.8	11.9
	1909	6	62	9	449	21	398	30	4.7	88.6	6.7	1,272,515	44,484	1,155,376	72,655	3.5	90.8	5.7
Lumber and timber prod-ucts.	1914	211	32	41	2,651	1,034	1,295	322	39.0	48.8	12.1	4,113,522	968,830	2,398,690	746,002	23.6	58.3	18.1
	1909	198	41	103	3,175	1,094	1,371	710	34.5	43.2	22.4	4,438,563	1,170,314	2,336,840	931,409	26.4	52.6	21.0
Petroleum, refining.....	1914		23		516		516		100.0			13,014,372		13,014,372				100.0
	1909		20		75		275		100.0			1,055,011		1,055,011				100.0
Printing and publishing..	1914	443	97	84	1,619	609	859	151	37.6	53.1	9.3	4,023,851	1,277,341	2,346,202	400,308	31.7	58.3	9.9
	1909	307	87	114	1,608	647	780	271	38.1	45.9	16.0	3,988,542	1,233,929	2,197,781	556,832	30.9	55.1	14.0
Smelting and refining, zinc.	1914		6		1,641		1,641		100.0			9,938,743		9,938,743				100.0
	1909		3		566		566		100.0			3,002,233		3,002,233				100.0
Total for cities.....	1914	281	201	109	6,153	746	5,003	404	12.1	81.3	6.6	36,308,575	2,366,804	32,386,701	1,555,070	6.5	89.2	4.3
CHICKASHA.....	1914	15	8	6	337	19	293	25	5.6	86.9	7.4	1,719,676	63,059	1,592,330	64,287	3.7	92.6	3.7
ENID.....	1914	16	20	9	283	34	225	24	12.0	79.5	8.5	2,610,533	108,015	2,412,498	92,020	4.1	92.4	3.5
GUTHRIE.....	1914	19	6	5	185	43	128	14	23.2	69.2	7.6	853,485	110,715	705,639	37,131	13.0	82.7	4.4
MCALESTER.....	1914	16	11	6	171	26	120	25	15.2	70.2	14.6	573,511	72,657	410,347	90,507	12.7	71.5	15.8
MUSKOGEE.....	1914	34	33	13	828	92	694	42	11.1	83.8	5.1	2,754,811	227,467	2,345,000	182,344	8.3	85.1	6.6
OKLAHOMA CITY.....	1914	86	76	33	2,226	202	1,861	163	9.1	83.6	7.3	20,725,811	730,011	19,462,231	533,569	3.5	93.9	2.6
SAPULPA.....	1914	16	7	7	433	45	399	19	10.4	85.2	4.4	604,457	102,337	416,467	85,603	16.9	68.9	14.2
SHAWNEE.....	1914	27	11	8	845	82	750	13	9.7	88.8	1.5	2,597,965	182,719	2,334,728	80,518	7.0	89.9	3.1
TULSA.....	1914	52	29	22	845	203	563	79	24.0	66.6	9.3	3,868,326	771,774	2,707,461	389,091	20.0	70.0	10.0

<sup>1</sup> Includes the group "individuals," to avoid disclosure of individual operations.

<sup>2</sup> Incides the group "all others," to avoid disclosure of individual operations.

For all industries combined, this table shows an increase in the number of establishments at each of the two five-year periods for both individual and corporate forms of ownership. "All others," which includes firms and cooperative organizations, shows a decrease during the later five-year period. In 1914 corporations, with but 21.8 per cent of the total number of establishments in the state, reported 74.7 per cent of the average number of wage earners and 86.9 per cent of the total value of products. In 1909 and 1904, although the number of establishments under corporate ownership formed practically the same proportions of the total—21.7 per cent and 21.5 per cent, respectively—the corresponding proportions of the total value of products were considerably less—73.4 in 1909 and 71.1 in 1904.

In both 1914 and 1909 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 in each of the nine cities shown for 1914. For establishments in the cities taken as a group, 34 per cent are under corporate ownership, a greater percentage than for the state as a whole. In Oklahoma City only 6.1 per cent of the value of products was reported by establishments not incorporated.

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

In 1914, 152 establishments, or 6.1 per cent of the total number in the state, each reported products exceeding \$100,000 in value, as compared with 106, or

4.6 per cent of the total, in 1909, and 60, or 5.3 per cent, in 1904. In 1914 these establishments reported 58.4 per cent of the total average number of wage earners for the state, 79.5 per cent of the total value of products, and 66.1 per cent of the total value added by manufacture. In the same year the small establishments—those having products less than \$5,000 in value—although representing 55.7 per cent of the total number of establishments, reported only 3.1 per cent

of the total value of products and 6.5 per cent of the value added by manufacture. For the establishments having products valued at \$100,000 and over, large actual increases in the value of products are shown from census to census, but the proportions which they formed of the total showed a slight decrease during the earlier five-year period and a marked increase during the later—from 58 per cent in 1904 to 57.3 per cent in 1909 and 79.5 per cent in 1914.

**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.....	2,518	2,310	1,123	17,443	13,143	5,466	\$102,005,693	\$53,682,405	\$24,450,107	\$31,035,943	\$19,520,511	\$3,065,155
Less than \$5,000.....	1,403	1,182	612	1,618	1,068	760	3,168,934	2,675,597	1,430,330	2,012,505	1,792,560	999,858
\$5,000 to \$20,000.....	707	727	326	2,676	2,863	1,382	6,824,090	7,194,668	3,124,083	3,783,033	4,142,194	1,847,463
\$20,000 to \$100,000.....	250	295	125	3,065	3,008	1,460	10,885,671	13,057,308	5,720,690	4,718,895	5,877,865	2,188,556
\$100,000 to \$1,000,000.....	138	102	60	7,233	4,400	1,854	37,784,338	25,870,502	14,184,034	11,301,582	7,001,117	3,029,278
\$1,000,000 and over.....	14	4	.....	2,951	208	.....	43,342,654	4,881,270	.....	0,150,928	715,775	.....
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	55.7	51.2	54.5	9.3	12.7	13.9	3.1	5.0	5.8	6.5	9.2	12.4
\$5,000 to \$20,000.....	28.1	31.5	29.0	14.8	21.8	25.3	6.7	13.4	12.8	12.2	21.2	22.9
\$20,000 to \$100,000.....	10.2	12.8	11.1	17.6	29.7	26.8	10.7	24.3	23.4	15.2	30.1	27.1
\$100,000 to \$1,000,000.....	5.5	4.4	5.3	41.5	33.5	34.0	37.0	48.2	58.0	30.6	35.8	37.6
\$1,000,000 and over.....	0.6	0.2	.....	16.9	2.3	.....	42.5	9.1	.....	29.5	3.7	.....

Table 15 gives, for 1914 and 1909, for seven 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.

**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
<b>FLOUR-MILL AND CRISTMILL PRODUCTS.....</b>	253	295	100.0	100.0	700	842	100.0	100.0	\$16,688,600	\$19,144,475	100.0	100.0	\$2,321,724	\$2,051,580	100.0	100.0
Less than \$5,000.....	101	82	39.9	27.8	34	55	4.9	6.5	204,261	240,320	1.6	1.3	65,436	52,056	2.8	2.0
\$5,000 to \$20,000.....	72	108	28.5	36.6	79	121	11.3	14.4	782,774	1,147,394	4.7	6.0	163,300	231,804	7.0	8.7
\$20,000 to \$100,000.....	48	63	19.0	21.4	120	109	17.1	20.1	1,940,908	3,000,735	11.6	15.7	322,945	491,723	13.9	18.5
\$100,000 to \$1,000,000.....	20	39	11.5	13.2	367	894	52.4	46.8	9,904,510	11,042,152	59.3	57.7	1,321,452	1,403,920	56.9	52.9
\$1,000,000 and over.....	3	8	1.2	1.0	100	103	14.3	12.2	3,796,231	3,718,874	22.7	10.4	448,585	472,068	19.3	17.8
<b>FOUNDRY AND MACHINE-SHOP PRODUCTS.....</b>	122	64	100.0	100.0	886	457	100.0	100.0	3,173,342	1,371,463	100.0	100.0	1,400,410	784,784	100.0	100.0
Less than \$5,000.....	48	21	39.3	32.8	66	33	7.4	7.2	122,725	58,638	3.9	4.3	91,225	38,401	6.1	4.9
\$5,000 to \$20,000.....	40	27	32.8	42.2	199	121	22.5	26.5	388,734	319,347	12.2	23.3	261,064	211,194	17.4	26.9
\$20,000 to \$100,000.....	25	13	20.5	20.3	250	139	28.9	30.4	967,795	515,010	30.5	37.4	409,609	317,771	31.3	40.5
\$100,000 to \$1,000,000.....	9	3	7.4	4.7	305	164	41.2	35.9	1,694,088	480,468	53.4	35.0	677,458	217,418	45.2	27.7
<b>ICE, MANUFACTURED.....</b>	97	77	100.0	100.0	528	449	100.0	100.0	1,604,146	1,272,515	100.0	100.0	1,202,018	965,459	100.0	100.0
Less than \$5,000.....	20	13	20.6	16.9	17	19	3.2	4.2	44,566	38,766	2.8	3.0	29,866	24,032	2.5	2.5
\$5,000 to \$20,000.....	55	45	56.7	58.4	220	191	41.7	42.5	643,630	513,581	40.1	40.4	474,750	399,064	39.5	41.3
\$20,000 to \$100,000.....	22	19	22.7	24.7	291	239	55.1	53.2	916,944	720,168	57.1	56.6	697,402	542,303	58.0	56.2
<b>LUMBER AND TIMBER PRODUCTS.....</b>	284	342	100.0	100.0	2,651	3,175	100.0	100.0	4,113,522	4,438,563	100.0	100.0	2,428,260	2,951,317	100.0	100.0
Less than \$5,000.....	191	200	67.3	58.5	665	604	25.1	20.9	420,734	448,807	10.4	10.1	344,762	372,516	14.2	12.6
\$5,000 to \$20,000.....	65	92	22.9	26.9	497	744	18.7	23.4	617,804	894,724	15.0	20.2	391,607	676,469	16.1	22.9
\$20,000 to \$100,000.....	20	42	7.0	12.3	363	995	13.9	31.3	733,685	1,662,859	17.8	37.5	411,397	1,104,358	16.9	37.4
\$100,000 to \$1,000,000.....	8	8	2.8	2.3	1,121	772	42.3	24.3	2,332,299	1,432,173	56.7	32.3	1,280,494	797,974	52.7	27.0
<b>OIL, COTTONSEED, AND CAKE.....</b>	60	39	100.0	100.0	851	581	100.0	100.0	7,589,813	5,186,605	100.0	100.0	1,306,410	941,108	100.0	100.0
\$5,000 to \$20,000.....	7	.....	11.7	.....	20	.....	2.4	.....	80,153	.....	1.1	.....	22,531	.....	1.7	.....
\$20,000 to \$100,000.....	18	17	30.0	45.0	188	160	19.7	28.6	1,047,990	1,120,181	13.8	21.6	177,795	217,379	13.7	23.1
\$100,000 to \$1,000,000.....	35	22	58.3	56.4	663	415	77.9	71.4	6,461,670	4,066,424	85.1	78.4	1,106,084	723,727	84.7	78.9
<b>PETROLEUM, REFINING.....</b>	23	9	100.0	100.0	516	75	100.0	100.0	13,014,372	1,055,011	100.0	100.0	3,423,635	479,538	100.0	100.0
\$20,000 to \$100,000.....	6	5	26.1	55.6	29	26	5.6	34.7	305,091	159,561	2.3	15.1	70,428	52,442	2.3	10.9
\$100,000 to \$1,000,000.....	12	4	52.2	44.4	270	49	52.3	65.3	5,100,311	895,460	39.7	84.9	1,498,592	427,096	42.9	89.1
\$1,000,000 and over.....	5	.....	21.7	.....	217	.....	42.1	.....	7,542,970	.....	58.0	.....	1,875,645	.....	54.8	.....
<b>PRINTING AND PUBLISHING.....</b>	624	598	100.0	100.0	1,619	1,698	100.0	100.0	4,023,851	3,988,542	100.0	100.0	3,100,410	2,984,419	100.0	100.0
Less than \$5,000.....	467	436	74.8	72.9	442	507	27.3	29.9	961,171	960,088	23.9	24.2	707,796	784,130	24.8	26.3
\$5,000 to \$20,000.....	130	133	20.8	22.2	401	595	30.3	35.0	1,085,591	1,198,066	27.0	30.0	830,913	943,119	27.4	31.6
\$20,000 to \$100,000.....	21	26	3.4	4.3	350	444	21.6	26.1	925,468	1,094,833	23.0	27.4	695,803	828,820	21.5	27.8
\$100,000 to \$1,000,000.....	6	3	1.0	0.5	336	152	20.8	9.0	1,048,621	729,615	26.1	18.3	814,832	428,350	26.3	14.4

<sup>1</sup> Includes the group "\$5,000 to \$20,000."

In 1914 more than 90 per cent of the value of products for the petroleum-refining, and more than 80 per cent of the flour-mill and gristmill, and cottonseed-oil industries was reported by establishments each of which had products valued at \$100,000 or more. The wage earners employed in these establishments represented 94.4 per cent, 66.7 per cent, and 77.9 per cent, respectively, of the total number reported by each industry.

The petroleum-refining industry, which reported no establishment in 1909 with a product of over \$1,000,000 in value, in 1914 shows five such establishments with a combined product of \$7,542,970.

Lumber and timber products, reporting 8 establishments with products in the group "\$100,000 to \$1,000,000" in both 1914 and 1909, shows a substantial increase in the average size of the establishments, not only in regard to value of products, but number of wage earners and value added by manufacture.

Table 16 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 14 for the state as a whole.

In the cities the same general condition prevails as that found throughout the state for all industries combined, 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, 87.3, appears for Oklahoma City, the principal manufacturing city of the state, while Shawnee, fifth among the manufacturing cities and with 86.1 per cent of its products in this class, reports the highest percentages for average number of wage earners and value added by manufacture—84.5 and 75.8, respectively.

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.
<b>CHICKASAW.</b>	29	337	100.0	\$1,719,676	100.0	\$443,038	100.0
Less than \$5,000.....	11	6	1.8	23,529	1.4	13,145	3.0
\$5,000 to \$20,000.....	11	41	12.2	120,942	7.0	50,582	11.4
\$20,000 to \$100,000.....	4	41	12.2	164,306	9.6	86,367	19.5
\$100,000 to \$1,000,000.....	3	249	73.9	1,410,899	82.0	292,944	66.1
<b>ENID.</b>	45	283	100.0	2,610,533	100.0	582,081	100.0
Less than \$5,000.....	14	10	3.5	28,033	1.1	17,708	3.2
\$5,000 to \$20,000.....	20	92	32.5	217,890	8.3	126,754	22.0
\$20,000 to \$100,000.....	7	42	14.8	224,184	8.6	113,814	20.2
\$100,000 to \$1,000,000.....	4	139	49.1	2,140,430	82.0	303,805	54.1
<b>GUTHRIE.</b>	30	185	100.0	853,485	100.0	290,501	100.0
Less than \$5,000.....	12	15	8.1	32,427	3.8	16,525	5.7
\$5,000 to \$20,000.....	15	80	46.5	206,774	24.2	122,360	42.1
\$20,000 to \$100,000.....	3	84	45.4	614,284	72.0	151,586	52.2
<b>MCALISTER.</b>	33	171	100.0	573,511	100.0	275,911	100.0
Less than \$5,000.....	17	20	11.7	48,477	8.5	27,059	10.0
\$5,000 to \$20,000.....	10	42	24.0	109,445	19.1	60,460	21.9
\$20,000 to \$100,000.....	6	109	63.7	415,589	72.5	187,792	68.1
<b>MUSKOGEE.</b>	80	528	100.0	2,754,811	100.0	1,181,619	100.0
Less than \$5,000.....	30	37	4.5	65,304	2.4	40,812	3.4
\$5,000 to \$20,000.....	30	114	13.8	301,965	11.0	190,580	16.1
\$20,000 to \$100,000.....	13	122	14.7	536,928	19.5	280,749	23.8
\$100,000 to \$1,000,000.....	7	555	77.0	1,850,554	67.2	669,478	56.7
<b>OKLAHOMA CITY.</b>	195	2,226	100.0	\$20,725,811	100.0	\$4,494,022	100.0
Less than \$5,000.....	67	45	2.0	155,102	0.7	109,061	2.4
\$5,000 to \$20,000.....	61	222	10.0	617,133	3.0	411,236	9.2
\$20,000 to \$100,000.....	44	554	24.9	1,867,057	9.0	877,344	19.5
\$100,000 and over.....	23	1,405	63.1	18,086,519	87.3	3,096,381	68.9
<b>SAPULPA.</b>	30	433	100.0	604,457	100.0	369,884	100.0
Less than \$5,000.....	12	18	4.2	32,701	5.4	24,202	6.5
\$5,000 to \$20,000.....	12	51	11.8	144,890	24.0	79,869	21.6
\$20,000 to \$100,000.....	6	304	70.0	426,866	70.6	265,823	71.9
<b>SHAWNEE.</b>	46	845	100.0	2,597,965	100.0	790,423	100.0
Less than \$5,000.....	17	13	1.5	37,173	1.4	20,727	2.6
\$5,000 to \$20,000.....	22	74	8.8	237,257	9.1	98,096	12.4
\$20,000 to \$100,000.....	3	44	5.2	87,136	3.4	72,847	9.2
\$100,000 to \$1,000,000.....	4	714	84.5	2,236,599	86.1	599,253	75.8
<b>TULSA.</b>	103	845	100.0	3,808,320	100.0	1,698,746	100.0
Less than \$5,000.....	31	29	3.4	65,045	1.7	44,202	2.6
\$5,000 to \$20,000.....	37	148	17.5	420,615	10.9	240,263	14.1
\$20,000 to \$100,000.....	22	162	19.2	839,883	21.7	378,890	22.0
\$100,000 to \$1,000,000.....	13	506	59.9	2,543,283	65.7	1,040,451	61.2

<sup>1</sup> Includes the group "\$20,000 to \$100,000."

<sup>2</sup> Includes the group "\$100,000 to \$1,000,000."

<sup>3</sup> Includes the group "\$1,000,000 and over."

Table 17 shows the size of establishments in 1914, as measured by the number of wage earners employed, for all industries combined, for 11 of the more important industries, and for each of the nine cities having more than 10,000 inhabitants. Table 18 presents, for 1914, percentages based on the figures in Table 17, and for 1909, similar percentages for all industries combined and for individual industries in the state as a whole.

Considering the total for all industries, there were 455 establishments in operation in 1914 in which no wage earners were employed. These were small establishments in which the work was done by the proprietors or firm members. In some cases they employed a few wage earners for short periods, but the number was so

small and the period so short that in computing the average number, as described in the "Explanation of terms," no wage earners could be shown for these establishments. The printing and publishing industry and bakeries reported 58 per cent of such establishments in the state.

The comparatively small establishments still predominate in the majority of the industries of the state. Of the 2,518 establishments reported for all industries, 1,594, or 63.3 per cent employed on the average from 1 to 5 wage earners during the year. While the small establishments predominate in number, they gave employment to only 2,988 wage earners, or 17.1 per cent of the total for all establishments. There were only 10 establishments in the state that

reported the employment of more than 250 wage earners each, but these establishments gave employment to 4,266, or 24.5 per cent of the total average number of wage earners reported for all establishments. These large establishments are shown for steam-

railroad repair shops, lumber and timber products, smelting and refining of zinc, and slaughtering and meat packing, the last being included in "all other industries."

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.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries.....	2,518	17,443	455	1,504	2,988	340	3,811	77	2,340	21	1,524	15	2,514	6	2,006	4	2,260		
Bread and other bakery products.....	342	697	104	223	350	14	141	.....	.....	.....	.....	1	200	.....	.....	.....	.....		
Brick.....	23	402	.....	3	7	15	171	4	148	1	70	.....	.....	.....	.....	.....	.....		
Cars and general shop construction and repairs by steam-railroad companies.....	13	1,718	.....	.....	2	2	33	.....	80	3	188	3	553	1	312	1	550		
Flour-mill and gristmill products.....	253	700	62	104	252	21	240	0	202	.....	.....	.....	.....	.....	.....	.....	.....		
Foundry and machine-shop products.....	122	880	8	71	173	36	382	6	180	.....	.....	1	145	.....	.....	.....	.....		
Ice, manufactured.....	97	528	3	64	195	27	259	3	74	.....	.....	.....	.....	.....	.....	.....	.....		
Lumber and timber products.....	284	2,051	12	109	420	59	806	7	204	2	113	3	417	2	601	.....	.....		
Oil, cottonseed, and cake.....	60	851	.....	13	40	33	472	14	333	.....	.....	.....	.....	.....	.....	.....	.....		
Petroleum, refining.....	23	510	.....	5	14	9	122	7	270	2	110	.....	.....	.....	.....	.....	.....		
Printing and publishing.....	624	1,619	100	418	761	33	350	12	347	.....	.....	1	181	.....	.....	.....	528		
Smelting and refining, zinc.....	6	1,041	.....	.....	.....	.....	.....	1	34	.....	.....	2	670	.....	.....	1	.....		
All other industries.....	671	5,234	106	463	702	67	739	15	402	13	1,037	4	636	1	417	2	1,182		
Total for cities.....	591	6,153	79	341	794	120	1,364	36	1,004	5	343	7	1,162	1	312	2	1,114		
CHICKASHA.....	29	327	5	15	28	0	60	2	50	.....	.....	1	190	.....	.....	.....	.....		
ENID.....	45	283	4	29	74	10	93	1	30	1	77	.....	.....	.....	.....	.....	.....		
GUTHRIE.....	30	186	4	17	34	6	60	3	61	.....	.....	.....	.....	.....	.....	.....	.....		
MCALISTER.....	33	171	2	23	40	7	100	1	25	.....	.....	.....	.....	.....	.....	.....	.....		
MUSKOGEE.....	30	828	9	53	147	11	112	5	140	.....	.....	1	108	1	312	.....	.....		
OKLAHOMA CITY.....	105	2,226	36	91	187	49	580	14	415	2	110	2	361	.....	.....	1	564		
SAPULPA.....	40	433	4	10	43	4	43	1	27	1	74	1	246	.....	.....	.....	.....		
SHAWNEE.....	43	845	4	30	74	3	33	3	84	.....	.....	1	104	.....	.....	1	550		
TULSA.....	103	845	7	64	161	24	274	6	184	1	82	1	144	.....	.....	.....	.....		

Among the cities, those showing large percentages of the total number of their wage earners reported by establishments employing more than 100 wage

earners each, are Chickasha, 59.1; Muskogee, 50.7; Sapulpa, 56.8; and Shawnee, 77.4. Oklahoma City reported 41.5 per cent of its wage earners in this class.

Table 18

INDUSTRY AND CITY.	Census year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER.								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			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 1909	17.1 25.2	21.8 28.3	13.4 16.3	8.7 10.1	14.4 12.4	11.5 1.9			13.0 5.7	.....	Petroleum, refining.....	1914 1909	2.7 10.7	23.6 89.3	52.3	21.3	.....	.....
Bread and other bakery products.....	1914 1909	51.1 70.8	20.2 29.2	.....	.....	28.7	.....	.....	.....	Printing and publishing.....	1914 1909	47.0 50.8	21.6 25.4	21.4 16.5	9.0 7.2	.....	.....	.....	.....	.....	.....
Brick.....	1914 1909	1.7 5.1	42.5 21.0	36.8 39.4	18.9 34.5	.....	.....	.....	.....	Smelting and refining, zinc.....	1914 1909	.....	.....	2.1	.....	24.6 100.0	41.2	32.2	.....	.....	
Cars and general shop construction and repairs by steam-railroad companies.....	1914 1909	0.1 .....	1.9 0.8	4.6 5.7	10.9 5.7	32.2 34.3	18.2 53.4	32.0	.....	All other industries.....	1914 1909	14.6 31.3	14.1 25.5	8.8 25.2	19.8 5.7	12.1 12.2	8.0	22.6	.....	.....	.....
Flour-mill and gristmill products.....	1914 1909	36.0 44.6	35.1 39.3	28.9 9.8	6.2	.....	.....	.....	.....	Total for cities.....	1914	12.9	22.2	17.3	5.6	18.9	5.1	18.1	.....	.....	
Foundry and machine-shop products.....	1914 1909	19.5 21.7	43.1 42.4	21.0 9.4	16.4 26.5	.....	.....	.....	.....	CHICKASHA.....	1914	8.3	17.8	14.8	.....	59.1	.....	.....	.....	.....	
Ice, manufactured.....	1914 1909	36.9 38.5	49.0 55.7	14.0 5.8	.....	.....	.....	.....	.....	ENID.....	1914	26.1	32.9	13.8	27.2	.....	.....	.....	.....	.....	
Lumber and timber products.....	1914 1909	15.8 18.6	33.8 34.6	7.7 13.9	4.3 17.1	15.7 7.9	22.7 8.0	.....	.....	GUTHRIE.....	1914	18.4	32.4	49.2	.....	.....	.....	.....	.....	.....	
Oil, cottonseed, and cake.....	1914 1909	5.4 2.8	55.5 62.5	39.1 34.8	.....	.....	.....	.....	.....	MCALISTER.....	1914	26.9	58.5	14.6	.....	.....	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	MUSKOGEE.....	1914	17.8	13.5	18.0	.....	13.0	37.7	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	OKLAHOMA CITY.....	1914	8.4	26.5	18.6	4.9	16.2	.....	25.3	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	SAPULPA.....	1914	9.9	9.9	6.2	17.1	56.8	.....	.....	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	SHAWNEE.....	1914	8.8	3.9	9.9	.....	12.3	.....	65.1	.....	.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	TULSA.....	1914	19.1	32.4	21.8	9.7	17.0	.....	.....	.....	.....	

Engines and power.—Table 19 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 by the establishments reporting.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1914	1909	1904	Amount.			Per cent distribution.		
				1914	1909	1904	1914	1909	1904
Primary power, total.....	3,254	2,265	590	97,308	71,139	29,608	100.0	100.0	100.0
Owned.....	1,538	1,407	590	87,036	65,791	23,851	89.4	92.5	97.4
Steam engines and turbines <sup>1</sup> .....	842	862	371	70,803	56,643	27,753	72.8	79.6	93.7
Internal-combustion engines.....	685	539	214	15,976	8,676	989	16.4	12.2	3.3
Water wheels, turbines, and motors.....	11	6	5	256	472	109	0.3	0.7	0.4
Rented.....	1,716	858	( <sup>2</sup> )	10,273	5,348	757	10.6	7.5	2.6
Electric.....	1,716	858	( <sup>2</sup> )	10,068	5,281	597	10.3	7.4	2.0
Other.....				205	67	160	0.2	0.1	0.5
Electric.....	2,324	985	43	23,760	7,887	910	100.0	100.0	100.0
Rented.....	1,716	858	( <sup>2</sup> )	10,068	5,281	597	42.4	67.0	65.6
Generated by establishments reporting.....	608	127	43	13,692	2,606	313	57.6	33.0	34.4

<sup>1</sup> Figures for horsepower include for 1904 the amounts reported under the head of "other" owned power.

<sup>2</sup> Not reported.

This table shows an increase from 1909 to 1914 in all forms of power, except that generated by water wheels, turbines, and motors. Of the total increase in primary power, amounting to 26,169 horsepower, or 36.8 per cent, during this period, 14,160 horsepower, or 54.1 per cent of it, was in power generated by steam engines. This kind of power, although showing a large increase from census to census, shows a decrease in the proportion it formed of the total primary power at each census. Internal-combustion engines, on the other hand, show not only large actual increases in the amount of power generated during each of the two five-year periods from 1904 to 1914, but give an increased proportion of the total primary power reported at each period. In the average capacity of the engines of this class, there is a marked increase since 1904, namely, from an average of 5 horsepower in that year to 16 horsepower in 1909 and to 23 horsepower in 1914.

The use of rented power, almost wholly electric, has greatly increased since 1904, when 757 horsepower of this character, representing 2.6 per cent of the total primary power, was reported. In 1909 the amount of such power had increased to 5,348 horsepower, or 7.5 per cent of the total, and in 1914 to 10,273 horsepower, or 10.6 per cent of the total.

In 1909, 67 per cent of the electric power reported was rented, but in 1914, while there was an actual increase in the rented electric power reported, the proportion decreased to 42.4 per cent, that generated in the establishments representing 57.6 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 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.

INDUSTRY AND CITY.	COAL.				Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 lbs.).	Bituminous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, including gasoline (barrels).	
All industries.....	1,682	429,745	29,879	224,575	24,078,701
Bread and other bakery products.....	83	1,471	50	31	234,014
Brick.....		2,142			1,804,378
Cars and general shop construction and repairs by steam-railroad companies.....		34,445	1,283	22,575	700
Flour-mill and gristmill products.....		27,854		19,435	250,150
Foundry and machine-shop products.....	45	1,453	2,445	2,944	290,935
Glass.....		3,300		6	2,428,681
Ice, manufactured.....		48,382	1,056	5,383	333,827
Lumber and timber products.....	554	7,838		349	12,434
Oil, cottonseed, and cake.....		46,249		1,207	356,054
Petroleum, refining.....		2,762		143,282	2,976,649
Smelting and refining, zinc.....		130,622	23,166		13,226,345
Wall plaster.....		4,458		11,673	
All other industries.....	1,000	121,769	1,879	17,690	1,676,534
Total for cities.....	866	44,112	4,215	90,467	2,230,040
CHICKASHA.....		12,191	533	2,149	176
ENID.....	80	5,571	1,390	11,984	1,210
GUTHRIE.....		100		10	94,006
MCALESTER.....	8	10,383	428	80	545
MUSKOGEE.....	7	5,376	293	45,049	252,379
OKLAHOMA CITY.....	755	931	490	25,851	1,137,419
SAFULPA.....		90		8	97,591
SHAWNEE.....	16	9,407	172	2,483	114,933
TULSA.....		63	909	2,853	531,781

## 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 Oklahoma are here presented, and also statistics for power laundries.

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

	1914	1909	1904
Total value .....	\$16,688,690	\$10,144,475	\$12,018,023
Wheat flour:			
Barrels .....	2,072,240	2,205,039	1,062,317
Value .....	\$9,832,201	\$10,959,367	\$8,886,633
Rye flour:			
Barrels .....	430	149	458
Value .....	\$2,010	\$988	\$2,152
Corn meal and corn flour:			
Barrels .....	266,284	382,721	206,223
Value .....	\$664,488	\$1,124,244	\$497,903
Bran and middlings:			
Tons .....	83,282		
Value .....	\$1,690,005	286,005	155,031
Feed and offal:			
Tons .....	141,419	\$6,790,825	\$2,681,053
Value .....	\$3,803,072		
All other cereal products, value .....	\$8,523	\$300	
All other products, value .....	\$418,391	\$209,041	\$1,182

The value of the products of the flour-mill and gristmill industry amounted to \$16,688,690 in 1914, an increase of 38.9 per cent for the decade but a decrease of 12.8 per cent for the last five-year period. This is true of each item, except rye flour. Wheat flour, the chief product at each census period, represented 58.9 per cent of the total value of products in 1914. The number of establishments reporting the manufacture of wheat flour decreased 14.1 per cent from 1909 to 1914; the quantity produced decreased 6 per cent and its value 10.3 per cent. Feed and offal constitutes the next most important product in 1914, representing 22.8 per cent of the total value of products.

**Oil, cottonseed, and cake.**—Oklahoma ranks tenth among the states in cottonseed products manufactured. The increase in the total value of products from census to census shows a rapid growth of this industry in the state. 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, and 1904.

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 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.

MATERIAL AND PRODUCT.	QUANTITY.		
	1914	1909	1904
Cotton seed crushed, tons (2,000 lbs.).....	255,075	186,352	168,454
Crude products manufactured:			
Oil, gallons.....	8,202,003	6,817,974	6,384,073
Meal and cake, tons (2,000 lbs.).....	118,003	78,600	67,417
Hulls, tons (2,000 lbs.).....	72,778	62,200	62,264
Linters, pounds.....	20,753,751	9,584,227	7,160,060

The total quantity of cotton seed crushed increased from 168,454 tons in 1904 to 255,075 tons in 1914, or 51.4 per cent. Of the 60 mills reported in 1914 as crushing cotton seed, 9 crushed less than 1,000 tons per mill during the census year; 6 crushed from 1,000 to 2,000 tons; 18 crushed from 2,000 to 5,000 tons; 25 crushed from 5,000 to 10,000 tons; and 2 crushed 10,000 tons and over.

The quantities of the various products obtained in 1914 per ton of seed, as received at the mill, were as follows: Crude oil, 32.5 gallons; cake and meal, 932 pounds; hulls, 571 pounds; and linters, 81 pounds. The ratio which the several products bore to the total weight of the seed when received at the mill were as follows: Crude oil, 12.2 per cent; cake and meal, 46.6 per cent; hulls, 28.6 per cent; and linters, 4.1 per cent. It will be observed that there has been an increase in the actual weights of all products, but that hulls now represent a smaller proportion of the total than formerly, due, in part, to the installation of cold-process machinery, which expresses the oil without hulling the seed, the resulting cake thus containing the hulls.

**Petroleum, refining.**—Measured by value of products, this industry, which in 1909 was eleventh in the state, now ranks third, while Oklahoma ranks eighth among the states. The following table gives the statistics for 1914 in comparison with 1909:

	1914	1909
<b>MATERIALS.</b>		
Total cost .....	\$9,590,737	\$575,473
Crude petroleum: <sup>1</sup>		
Barrels (42 gallons).....	9,986,176	1,078,286
Cost.....	\$8,746,159	\$489,552
Sulphuric acid, sulphur, and caustic soda, cost .....	\$104,500	\$22,060
Containers and materials therefor, cost.....	\$34,932	\$8,185
All other materials, cost.....	\$705,146	\$55,676
<b>PRODUCTS.</b>		
Total value.....	\$13,014,372	\$1,055,011
Naphthas and lighter products:		
Gasoline (from crude petroleum)—		
Barrels (50 gallons).....	21,621,998	
Value.....	\$5,824,332	125,179
All other—		
Barrels.....	401,434	\$350,167
Value.....	\$1,074,237	

<sup>1</sup> Marketed production of crude petroleum—Oklahoma, 1914: 73,931,724 barrels; 1909, 47,850,218 barrels.

<sup>2</sup> Includes some partly refined oils and waxes and some natural gas used by the refineries.

<sup>3</sup> In addition, there were produced at the wells in 1914, 345,551 barrels (50 gallons) of casing-head gasoline, valued at \$1,113,059.

**Table 23—Continued.**

	1914	1909
PRODUCTS—continued.		
Illuminating oils:		
Barrels.....	1,754,883	245,109
Value.....	\$2,235,898	\$309,662
Fuel oils:		
Distillates—		
Barrels.....	383,858	
Value.....	\$522,159	
Gas oils—		
Barrels.....	195,833	409,284
Value.....	\$151,508	\$242,957
Residual fuel oil—		
Barrels.....	4,165,136	
Value.....	\$2,380,808	
Lubricating oils:		
Barrels.....	87,591	113,110
Value.....	\$341,256	\$33,396
Residuum or tar:		
Barrels.....	159,508	43,804
Value.....	\$85,489	\$23,119
Greases:		
Barrels.....	335	
Value.....	\$3,281	
Paraffin wax:		
Barrels.....	16,598	\$35,710
Value.....	\$65,340	
All other products, value.....	\$327,064	
EQUIPMENT.		
Stills, number.....	181	30
Steam—		
Number.....	56	10
Capacity (barrels, 42 gallons).....	24,372	2,895
Fire—		
Number.....	125	20
Capacity.....	57,425	6,650
Agitators.....	47	12
Storage tanks for:		
Crude petroleum—		
Number.....	61	33
Capacity (gallons).....	28,826,000	1,794,000
Refined petroleum products—		
Number.....	412	112
Capacity.....	48,791,000	5,477,000
Fuel oil—		
Number.....	76	
Capacity.....	30,600,000	
Other storage tanks—		
Number.....	138	
Capacity.....	1,598,000	

<sup>1</sup> Includes some partly refined oils and waxes and some natural gas used by the refineries.

The total production of refined oils in 1914 was 8,610,533 barrels, of which fuel oils constituted 55.1 per cent, gasoline and naphthas 23.5 per cent, illuminating oils 20.4 per cent, and lubricating oils 1 per cent. In 1909 the oil production aggregated 792,682 barrels, of which fuel oils formed 51.6 per cent, gasoline and naphthas 15.8 per cent, illuminating oils 30.9 per cent, and lubricating oils 1.7 per cent.

**Printing and publishing.**—The number and aggregate circulation per issue of the various classes of publications in Oklahoma in 1914, 1909, and 1904, are given in Table 24.

**Table 24**

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1914	1909	1904	1914	1909	1904
Total.....	596	593	453	1,081,933	857,959	533,063
Daily.....	50	67	44	242,305	185,479	74,451
Sunday.....	12	11	8	117,158	77,323	43,802
Weekly <sup>1</sup> .....	500	500	389	504,695	513,979	369,013
Monthly <sup>2</sup> .....	25	15	12	217,875	81,175	54,797

<sup>1</sup> Includes semiweeklies—three in 1914, one in 1909, and two in 1904.

<sup>2</sup> Includes in 1914 one quarterly and four semimonthly publications; in 1909 three, and in 1904 two, semimonthly publications.

The number of daily newspapers decreased by eight during the five-year period 1909–1914, but their circulation increased by 56,826, or 30.6 per cent, during

that time. The weekly newspapers were by far the most important class at each census, measured either by number of publications or by aggregate circulation per issue. In circulation, however, this class decreased 9,384, or 1.8 per cent, from 1909 to 1914, and was the only class to show a decrease in circulation at either five-year period. The Sunday publications and the combined monthly, semimonthly, and quarterly publications are the only ones showing increases in both number and circulation; the great increase—168.4 per cent—shown for the combined circulation of these last three mentioned publications in 1914, as compared with 1909, is due to a number of semimonthly agricultural publications.

All the publications in 1914, except three German weeklies of small circulation, were in the English language.

**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 Oklahoma for 1914 and 1909.

**Table 25**

	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase, <sup>1</sup> 1909–1914.
	1914	1909	
Number of establishments.....	101	93	
Persons engaged.....	1,632	1,301	25.4
Proprietors and firm members.....	115	105	9.5
Salaries and wages.....	101	95	
Wage earners (average number).....	1,416	1,101	28.6
Primary horsepower.....	1,766	1,494	19.0
Capital.....	\$986,074	\$781,531	26.2
Salaries and wages.....	753,997	593,885	33.8
Salaries.....	100,677	75,690	33.0
Wages.....	653,320	487,995	33.9
Paid for contract work.....	674	541	24.6
Rent and taxes.....	53,506	33,695	59.1
Cost of materials.....	359,743	200,679	79.3
Amount received for work done.....	1,669,721	1,197,978	39.4

<sup>1</sup> Percentages are omitted where base is less than 100.

In 1914 Oklahoma ranked twenty-first among the states in amount received for work done and twenty-fifth in number of persons engaged in the industry, having advanced since 1909 from twenty-second and twenty-sixth places, respectively. The table shows increases in all the items given, those in receipts for work done and in average number of wage earners amounting to 39.4 per cent and 28.6 per cent, respectively. In character of organization individual ownership formed the largest class at both censuses, 49 establishments being reported in 1914 as against 47 in 1909. The number of establishments under corporate ownership increased from 19 in 1909 to 25 in 1914, while the number under "all other" forms of ownership showed no change, being 27 in both years. In the amount received for work done each class showed an increase, but the percentage of increase reported by corporations was much the greatest, 99.6 per cent as against 13 per cent for individuals, and 8.1 per cent for all other forms.

Table 26 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 year.

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January.....	1,326	993	87.8	84.2
February.....	1,332	995	88.2	84.4
March.....	1,352	1,022	89.5	86.7
April.....	1,370	1,040	91.3	88.2
May.....	1,393	1,084	92.2	90.2
June.....	1,459	1,099	96.6	93.2
July.....	1,510	1,160	100.0	98.4
August.....	1,492	1,187	98.8	99.0
September.....	1,486	1,179	98.4	100.0
October.....	1,452	1,171	96.2	99.3
November.....	1,417	1,151	93.8	97.0
December.....	1,398	1,167	92.4	99.0

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

POWER.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
	1914	1909	Amount.		Percent of increase, <sup>1</sup> 1909-1914.
			1914	1909	
Primary power, total.....	212	250	1,706	1,484	19.0
Owned.....	88	184	1,345	1,248	7.8
Steam engines and turbines.....	76	179	1,255	1,195	5.0
Internal-combustion engines.....	10	8	82	53	.....
Water wheels, turbines, and motors.....	2	.....	8	.....	.....
Rented.....	124	66	421	236	78.4
Electric.....	124	66	421	231	82.3
Other.....	.....	.....	.....	5	.....
Electric.....	129	69	443	244	81.6
Rented.....	124	66	421	236	78.4
Generated by establishment reporting.....	5	3	22	8	.....

<sup>1</sup> Percentages are omitted where base is less than 100.

KIND.	Unit.	QUANTITY.		Per cent of increase, <sup>1</sup> 1909-1914.
		1914	1909	
Anthracite coal.....	Ton, 2,240 lbs. ....	1,202	696	85.6
Bituminous coal.....	Ton, 2,000 lbs. ....	9,161	9,377	-2.3
Coke.....	Ton, 2,000 lbs. ....	550	.....	.....
Oil, including gasoline.....	Barrels.....	188	1,346	-86.0
Gas.....	1,000 cubic feet....	1,220,414	224,175	444.4

<sup>1</sup> A minus sign (-) denotes decrease.

GENERAL TABLES.

Table 29 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 30 presents, for 1914, in the state as a whole and in the cities with 50,000 inhabitants or more, statistics in detail for each industry that can be shown without the disclosure of individual operations, and the statistics for all industries combined for each of the cities in the state having from 10,000 to 50,000 inhabitants.

TABLE 29.—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.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horsepower.	Wages.	Cost of materials.	Value of products.

THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

All industries.....	1914	2,518	17,443	97,308	\$11,011	\$70,970	\$102,066	Clothing, men's, including shirts.	1914	6	207	68	\$84	\$262	\$417
	1909	2,310	13,143	71,139	7,240	34,153	53,682		1909	3	113	18	42	126	194
	1904	1,123	5,466	29,008	2,799	16,394	24,469	Coffee, roasting and grinding.	1914	6	60	171	28	618	757
Bread and other bakery products.	1914	342	697	569	381	1,581	2,774		1909	4	18	69	9	429	500
	1909	252	418	223	252	909	1,794	Confectionery.....	1914	37	57	86	32	165	295
	1904	121	167	27	88	410	692		1909	11	39	28	16	59	115
Brick.....	1914	23	402	3,231	217	129	466		1904	6	23	9	7	60	89
	1909	38	730	3,733	378	220	1,029	Copper, tin, and sheet-iron work.	1914	72	141	94	99	241	474
	1904	50	491	3,029	186	128	510		1909	62	233	46	184	411	799
Brooms, from broom corn.	1914	36	97	115	53	107	227		1904	18	69	.....	52	107	215
	1909	23	76	51	43	145	248	Flour-mill and grist-mill products.	1914	253	700	14,050	420	14,367	16,689
	1904	12	42	20	19	31	72		1909	295	842	16,400	473	16,493	19,144
Butter.....	1914	14	46	282	28	673	809		1904	108	617	9,013	331	10,187	12,019
	1909	19	62	427	36	928	1,150	Food preparations, not elsewhere specified.	1914	11	41	470	18	143	220
	1904	3	11	81	6	66	89		1909	8	40	556	24	104	175
Cars and general shop construction and repairs by steam-railroad companies.	1914	13	1,718	954	1,155	956	2,270	Foundry and machine-shop products.	1914	2 122	886	2,443	676	1,674	3,173
	1909	8	1,412	957	942	642	1,702		1909	64	457	1,113	320	687	1,371
	1904	4	274	130	184	322	528		1904	26	121	332	77	76	233

<sup>1</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.  
<sup>2</sup> Includes "automobile repairing"; "gas machines and gas and water motors"; "hardware"; "hardware, saddlery"; "pumps, steam"; and "structural ironwork, not made in steel works or rolling mills."

TABLE 29.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Ice, manufactured.....	1914 1909 1904	97 77 44	528 449 197	15,195 10,359 5,348	\$353 270 107	\$402 307 121	\$1,604 1,273 528	Petroleum, refining.....	1914 1909	23 9	516 75	3,304 231	\$432 54	\$9,591 575	\$13,014 1,055
Lumber and timber products.	1914 1909 1904	284 342 60	2,651 3,175 458	12,799 12,307 2,361	1,308 1,269 245	1,685 1,487 437	4,114 4,439 1,017	Printing and publish- ing.	1914 1909 1904	624 598 423	1,619 1,698 1,139	2,288 1,664 652	1,022 1,044 574	923 1,004 473	4,024 3,989 2,101
Marble and stone work.	1914 1909 1904	55 41 11	142 147 63	453 257 95	96 111 34	122 187 34	340 418 106	Saddlery and harness...	1914 1909 1904	30 15 14	54 66 65	39 26	43 62 45	240 225 153	368 375 280
Mattresses and spring beds.	1914 1909	11 7	75 49	250 151	42 30	164 99	208 153	Smelting and refining, zinc.	1914 1909	6 3	1,641 566	4,143 1,181	1,310 343	7,879 2,133	9,939 3,002
Mineral and soda waters.	1914 1909 1904	108 105 67	122 143 121	222 183 108	70 64 49	210 145 90	472 455 284	Wall plaster.....	1914 1909 1904	6 11 5	151 259 77	1,347 1,721 395	89 142 34	104 165 34	313 435 131
Oil, cottonseed, and cake.	1914 1909 1904	60 39 24	851 581 496	16,315 10,720 6,065	360 235 182	6,283 4,245 2,353	7,500 5,187 3,109	All other industries.....	1914 1909 1904	279 276 127	4,041 1,495 1,125	18,411 8,630 1,993	2,895 897 579	22,451 2,461 1,312	31,359 4,680 2,466

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

OKLAHOMA CITY— All industries.	1914 1909 1904	195 171 80	2,226 1,398 720	0,172 4,132 .....	\$1,353 973 422	\$16,232 5,146 2,362	\$20,726 7,868 3,671	OKLAHOMA CITY— Continued.	1914 1909 1904	5 8 4	85 150 71	389 277	\$60 106 34	\$140 193 142	\$215 388 232
Bread and other bakery products.	1914 1909 1904	16 17 0	283 85 29	229 30	130 59	502 214 49	848 365 88	Lumber, planing-mill products, including wooden-box factories.	1914 1909 1904	6 4	85 150 71	389 277	\$60 106 34	\$140 193 142	\$215 388 232
Flour-mill and gristmill products.	1914 1909 1904	0 7 3	81 75 47	1,195 1,187	60 56	2,468 1,839 1,049	2,746 2,087 1,227	Patent medicines and compounds and druggists' preparations.	1914 1909 1904	6 8 3	27 11 8	34 8	17 6 3	48 9 6	111 35 24
Foundry and machine-shop products.	1914 1909 1904	17 7 6	133 87 55	265 185	82 63 35	227 97 37	482 222 96	Printing and publish- ing.	1914 1909 1904	2 44 18	53 428 116	505 347	256 288 70	349 419 80	1,289 1,289 828
All other industries.....	1914 1909 1904	85 80 46	1,191 623 394	6,555 2,089	748 395 233	12,498 2,375 999	15,055 3,502 1,676								

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

CHICKASHA.....	1914 1909	29 30	337 364	1,033 1,438	\$235 242	\$1,277 1,285	\$1,720 1,807	MUSKOGEE.....	1914 1909	80 64	828 381	2,220 1,421	\$560 241	\$1,573 1,478	\$2,755 2,276
ENID.....	1914 1909	45 65	283 303	1,715 1,722	175 191	2,048 1,807	2,611 2,453	SAPULPA.....	1914	30	433	670	228	235	604
GUTHRIE.....	1914 1909 1904	30 34 34	195 282 333	1,211 1,281	116 163 186	563 948 701	853 1,443 1,201	SHAWNEE.....	1914 1909	46 40	845 806	2,059 1,831	533 473	1,808 1,165	2,598 1,941
MCALESTER.....	1914 1909	33 29	171 180	1,111 895	101 101	298 195	574 451	TULSA.....	1914 1909	103 53	845 462	3,030 1,586	684 315	2,170 874	3,888 1,563

<sup>1</sup> Includes "boxes, wooden packing" and "lumber, planing-mill products, not including planing mills connected with sawmills."

<sup>2</sup> Includes "bookbinding and blank-book making" and "engraving, steel and copper plate, including plate printing."

<sup>3</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.

<sup>4</sup> Includes "automobile repairing"; "gas machines and gas and water meters"; "hardware"; and "structural ironwork, not made in steel works or rolling mills."

<sup>5</sup> Includes "perfumery and cosmetics."

<sup>6</sup> Figures do not agree with those published because certain establishments revised their reports for that census.

MANUFACTURES—OKLAHOMA.

TABLE 30.—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.	10 and over.			Under 10.	
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.		Male.	Female.
								Maximum month.	Minimum month.						

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

1	All industries.....	2,518	22,700	2,464	1,105	1,353	335	17,443	18,088	10,902	(*)	(*)	(*)	(*)	(*)	\$65,477,654
2	Artificial stone products.....	43	126	48	1	.....	2	75	My 109	Ja 35	120	120	.....	.....	.....	168,311
3	Automobile repairing.....	16	71	21	3	1	2	44	Au 53	Ja 35	51	51	.....	.....	.....	84,303
4	Awnings, tents, and sails.....	12	45	14	3	.....	1	27	Jy 42	Fe 15	32	22	10	.....	.....	30,455
5	Bookbinding and blank-book making.....	3	11	2	1	1	.....	7	De 4	Fe 5	8	4	4	.....	.....	11,598
6	Boxes, wooden packing.....	3	40	1	4	1	.....	34	De 4	Je 33	36	32	.....	4	.....	39,035
7	Bread and other bakery products.....	342	1,155	409	8	15	26	697	Au 725	Fe 656	753	570	170	3	1	1,304,776
8	Brick.....	23	464	7	34	17	4	402	Je 534	De 206	607	606	.....	1	.....	1,484,030
9	Brooms, from broom corn.....	36	149	44	2	4	2	97	No 4	Jy 83	112	107	5	.....	.....	130,406
10	Butter.....	14	75	9	9	6	5	46	Je 4	Ja 39	47	40	7	.....	.....	553,799
11	Canning, fruits and vegetables.....	3	18	1	2	.....	.....	15	Au 58	De 0	01	10	81	.....	.....	7,635
12	Carpets, rag.....	3	5	4	.....	.....	.....	1	De 4	Au 0	4	4	.....	.....	.....	1,375
13	Carriages, wagons, and repairs.....	13	64	17	1	1	.....	45	Jy 4	Ja 48	47	47	.....	.....	.....	65,389
14	Cars and general shop construction and repairs by electric-railroad companies.....	7	72	.....	7	7	.....	58	No 4	Je 56	59	59	.....	.....	.....	145,826
15	Cars and general shop construction and repairs by steam-railroad companies.....	13	1,833	1	39	69	6	1,718	Au 2,065	Ja 1,390	1,653	1,649	4	.....	.....	1,622,741
16	Coffee, roasting and grinding.....	6	79	2	8	8	1	60	De 71	Ja 55	71	37	84	.....	.....	191,192
17	Confectionery and ice cream.....	88	301	107	17	15	6	159	.....	.....	196	170	26	.....	.....	481,642
18	Confectionery.....	37	111	42	3	6	3	57	Jy 60	My 55	67	44	23	.....	.....	92,925
19	Ice cream.....	51	190	66	14	9	3	99	Jy 104	De 53	129	126	3	.....	.....	388,717
20	Copper, tin, and sheet-iron work.....	72	247	87	9	7	3	141	Ap 155	No 124	148	144	4	.....	.....	270,480
21	Explosives.....	6	96	2	11	7	3	73	Ja 103	De 38	74	74	.....	.....	.....	649,167
22	Flour-mill and gristmill products.....	253	1,265	269	100	159	37	700	Se 761	My 660	772	772	.....	.....	.....	6,568,081
23	Food preparations, not elsewhere specified.....	11	61	9	5	3	3	41	.....	.....	63	51	10	2	.....	133,803
24	Cereals and table foods, macaroni, and other food products for human consumption.....	6	38	6	3	2	2	25	Se 86	Fe 16	30	19	9	2	.....	74,662
25	For animals and fowls.....	5	23	3	2	1	1	16	Au 4	Ja 2	33	32	1	.....	.....	59,141
26	Foundry and machine-shop products.....	99	1,031	82	57	88	19	785	.....	.....	703	700	1	2	.....	3,036,825
27	Machine shops.....	87	957	70	55	57	18	727	Ap 819	No 625	708	705	1	2	.....	2,942,272
28	Boiler shops.....	3	33	10	.....	.....	1	22	Se 27	De 15	20	20	.....	.....	.....	19,320
29	Foundries.....	4	41	2	2	1	.....	36	Je 4	Ja 25	35	35	.....	.....	.....	75,233
30	Furniture, metal, and store and office fixtures.....	6	50	4	4	3	.....	39	Fe 4	Se 34	39	37	2	.....	.....	73,201
31	Gas, illuminating and heating.....	5	60	.....	6	8	2	44	Je 47	Oc 39	46	46	.....	.....	.....	1,478,718
32	Glass.....	12	1,321	6	21	15	9	1,270	Ap 1,793	Au 633	1,805	1,702	102	.....	.....	1,650,679
33	Ice, manufactured.....	97	783	60	123	56	10	528	Jy 907	Ja 242	759	751	3	5	.....	3,714,982
34	Line.....	3	21	4	.....	.....	.....	17	Mh 4	Au 14	24	24	.....	.....	.....	39,451
35	Lumber and timber products.....	226	2,622	245	52	76	4	2,245	Fe 2,421	De 1,971	3,124	3,123	.....	1	.....	3,386,558
36	Lumber, planing-mill products, not including planing mills connected with sawmills.....	55	472	58	28	11	3	372	Je 440	De 306	352	348	4	.....	.....	816,559
37	Marble and stone work.....	55	233	71	3	17	.....	142	Je 158	Ja 123	147	145	1	1	.....	425,607
38	Mattresses and spring beds.....	11	101	8	10	5	3	75	De 91	Au 59	101	85	15	1	.....	188,282
39	Mineral and soda waters.....	108	268	130	8	7	1	122	Au 4	Ja 56	188	171	3	14	.....	403,945
40	Oil, cottonseed, and cake.....	60	1,110	11	155	83	10	851	De 1,718	Je 190	1,730	1,730	.....	.....	.....	6,465,224
41	Patent medicines and compounds.....	13	37	9	0	3	.....	16	No 4	Je 15	17	10	6	1	.....	31,525
42	Paving materials.....	3	118	3	8	7	.....	100	Je 130	Ja 00	120	126	.....	.....	.....	51,483
43	Perfumery and cosmetics.....	3	7	2	.....	.....	.....	5	(e) 5	(e) 5	5	4	1	.....	.....	6,800
44	Petroleum, refining.....	23	736	.....	78	129	13	510	Ja 601	My 495	520	520	.....	.....	.....	8,556,725
45	Photo-engraving.....	3	21	3	.....	.....	.....	18	Mh 19	My 17	18	17	.....	.....	.....	17,077
46	Printing and publishing, book and job.....	76	452	69	36	34	21	292	De 313	Au 273	322	256	58	8	.....	758,106
47	Printing and publishing, newspapers and periodicals.....	542	2,226	528	133	171	76	1,318	.....	.....	1,374	1,083	186	91	4	2,845,391
48	Printing and publishing.....	15	427	10	28	79	27	283	De 294	Jy 273	286	261	23	2	.....	690,544
49	Printing, publishing, and job printing.....	494	1,747	499	96	82	41	1,029	Oc 1,068	Fe 979	1,080	824	163	89	4	2,130,406
50	Publishing without printing.....	38	52	19	9	10	8	6	De 4	Jy 3	8	8	.....	.....	.....	24,441
51	Saddlery and harness.....	30	100	32	5	9	.....	54	No 57	Jy 52	59	59	.....	.....	.....	163,288
52	Smelting and refining, zinc.....	6	1,702	.....	13	45	3	1,641	Se 1,770	Je 1,575	1,711	1,711	.....	.....	.....	5,054,062
53	Tobacco, cigars.....	38	137	44	3	2	.....	88	De 4	Jy 74	115	64	48	3	.....	69,737
54	Wall plaster.....	6	187	.....	13	18	5	161	Ja 178	Oc 131	142	142	.....	.....	.....	913,551
55	All other industries*.....	72	2,728	45	72	245	49	2,317	.....	.....	.....	.....	.....	.....	.....	11,439,394

\* Owned power only.

² Includes rented power, other than electric.

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

\* All other industries embrace—

Agricultural implements.....	2
Artificial limbs.....	1
Automobile bodies and parts.....	3
Baking powders.....	1
Bluing.....	1
Bone and carbon black.....	1
Boots and shoes (leather leggings).....	1

Boxes and cartons, paper.....	1
Carriage and wagon materials.....	3
Cars, steam-railroad, not including operations of railroad companies.....	1
Cement.....	2
Clothing, men's and youths'.....	3
Cordage and twine.....	1
Druggists' preparations.....	1

Engraving, steel and copper plate, including plate printing.....	2
Furnishing goods, men's.....	1
Gas and electric fixtures.....	1
Gas machines and gas and water meters.....	1
Hair work.....	1
Hand stamps.....	2

Hardware.....	2
Hardware, saddlery.....	1
Hats, fur-felt.....	1
Hats, wool-felt.....	1
House-furnishing goods, not elsewhere specified.....	1
Iron and steel, steel works and rolling mills.....	1

MANUFACTURES—OKLAHOMA.

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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 construct 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. <sup>1</sup>	Internal-combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

\$1,700,418	\$1,495,914	\$11,011,043	\$307,886	\$358,704	\$551,025	\$68,152,836	\$2,816,914	\$102,005,693	\$31,035,943	97,308	70,803	16,181	256	10,068	13,692	1
1,200	300	34,897	.....	625	2,035	56,097	541	137,301	80,753	90	.....	.....	.....	17	.....	2
3,700	1,180	29,285	200	7,502	1,602	36,919	2,036	119,746	80,791	79	.....	69	.....	70	.....	3
3,300	600	12,298	50	2,585	397	41,875	476	70,506	37,155	14	.....	9	.....	14	.....	4
1,200	400	4,472	.....	1,110	112	4,475	199	14,535	9,361	8	.....	.....	.....	8	.....	5
5,280	720	31,664	.....	340	897	19,119	487	67,316	47,710	95	.....	75	.....	20	.....	6
9,330	32,741	331,488	.....	61,326	15,692	1,519,691	61,105	2,773,811	1,193,015	569	.....	10	.....	523	.....	7
41,975	18,073	216,602	.....	1,106	7,434	34,826	94,628	495,903	366,449	3,231	.....	2,230	833	168	799	8
2,274	5,800	52,734	.....	3,054	1,634	105,308	1,848	227,224	120,068	115	.....	2	53	60	.....	9
14,939	8,860	27,616	79	2,900	2,111	684,980	8,317	808,978	135,681	282	.....	185	4	93	.....	10
280	.....	2,752	.....	65	4,117	.....	107	10,708	6,484	51	.....	51	.....	.....	.....	11
.....	.....	330	10	110	28	415	97	2,925	2,418	18	.....	8	.....	10	.....	12
1,800	600	32,072	.....	2,249	900	22,010	1,797	84,678	60,871	81	.....	12	22	47	.....	13
3,195	978	48,310	.....	.....	1,766	41,204	1,380	98,215	55,631	125	.....	.....	.....	125	.....	14
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
57,281	73,347	1,155,357	.....	.....	20,359	873,502	82,243	2,270,374	1,314,629	954	463	76	.....	415	40	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8,750	16,959	27,531	.....	3,510	3,768	615,381	2,985	756,677	138,311	171	8	2	.....	166	.....	16
21,125	11,978	90,030	541	19,762	6,070	516,009	25,145	931,257	389,503	1,386	900	97	.....	389	54	17
3,450	5,029	31,811	8	12,658	1,139	161,475	3,394	294,504	129,635	89	.....	.....	.....	36	.....	18
17,675	6,949	58,819	533	7,104	4,931	355,134	21,751	636,753	259,868	1,300	900	97	.....	303	54	19
7,459	4,635	98,669	726	10,836	3,126	238,778	2,604	474,484	233,102	94	2	21	.....	71	.....	20
21,952	10,253	79,523	.....	2,646	5,495	317,416	2,703	538,015	217,896	477	477	.....	.....	350	.....	21
150,002	197,187	420,049	120	3,865	57,097	14,206,700	160,260	16,688,690	2,321,724	14,050	8,927	3,428	90	1,605	591	22
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,400	4,671	17,596	18	2,418	1,769	138,712	3,849	219,522	76,961	470	325	100	.....	45	.....	23
3,450	3,651	8,518	.....	2,055	629	45,153	1,033	84,739	38,553	78	50	.....	.....	28	.....	24
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2,010	1,020	9,078	18	363	1,140	93,559	2,816	134,783	38,408	392	275	100	.....	17	.....	25
102,307	106,178	605,442	4,075	13,955	23,312	1,450,102	64,523	2,856,571	1,341,946	2,209	426	523	.....	1,260	36	26
100,183	104,775	567,974	3,604	13,146	22,678	1,433,840	60,835	2,770,362	1,276,687	2,106	426	508	.....	1,172	36	27
.....	480	15,008	.....	798	270	6,703	3,449	35,902	31,843	19	.....	.....	.....	19	.....	28
2,184	923	22,400	471	21	364	9,559	3,239	47,214	34,416	84	.....	15	.....	69	.....	29
5,500	2,020	27,465	.....	1,246	184	63,368	1,976	109,570	44,236	113	35	55	.....	23	.....	30
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
6,032	6,689	23,088	.....	7,405	8,688	43,268	43,268	146,795	94,839	352	308	.....	.....	46	40	31
32,159	16,303	901,958	.....	7,361	645,137	74,071	74,071	2,005,736	1,285,928	1,291	630	525	.....	136	535	32
123,594	37,988	353,447	2,196	1,023	40,697	163,558	238,570	1,604,146	1,202,018	15,195	14,063	813	.....	319	589	33
2,169	3,866	.....	.....	254	5,566	3,735	3,735	16,880	7,379	65	65	.....	.....	.....	.....	34
83,544	56,042	949,505	185,418	880	44,231	847,070	26,881	2,729,391	1,855,434	11,124	10,957	54	113	389	.....	35
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
33,560	13,166	326,735	2,310	8,373	10,396	781,802	9,897	1,316,815	525,116	1,580	431	239	.....	910	145	36
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
5,241	8,120	96,287	9,328	3,202	4,188	114,603	7,326	339,575	217,586	453	313	53	.....	87	80	37
12,016	3,980	42,269	400	2,817	1,828	160,848	3,229	268,373	104,301	259	.....	65	.....	194	.....	38
7,225	5,030	69,877	175	8,491	5,514	204,756	4,822	472,235	262,657	222	11	89	3	119	.....	39
220,013	70,158	359,958	1,395	1,310	74,052	6,121,638	161,765	7,589,313	1,306,410	16,315	15,690	366	50	209	133	40
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
2,762	2,080	9,790	.....	2,023	353	25,340	107	62,636	36,539	7	.....	6	.....	1	.....	41
12,780	6,898	48,481	.....	11,055	921	11,990	10,873	90,796	67,933	625	545	80	.....	.....	.....	42
.....	.....	3,940	.....	750	570	9,125	55	22,900	13,720	2	.....	.....	.....	.....	.....	43
220,478	166,763	432,005	13,624	1,354	59,328	9,348,984	241,753	13,014,372	3,423,635	3,304	1,887	1,352	.....	65	471	44
.....	.....	15,055	.....	1,500	111	2,900	534	27,684	24,250	21	.....	.....	.....	21	.....	45
56,616	45,595	212,912	8,935	32,498	7,422	199,681	9,688	760,477	551,108	449	80	8	.....	361	.....	46
201,379	193,810	803,255	48,952	106,340	33,053	661,736	43,693	3,237,734	2,532,255	1,829	25	582	.....	1,222	6	47
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
62,090	84,621	162,547	750	18,936	8,574	227,774	7,210	903,701	668,717	344	.....	2	.....	342	.....	48
127,855	101,822	638,392	14,187	85,580	24,234	427,266	36,427	2,237,832	1,774,139	1,485	25	580	.....	880	6	49
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
11,434	7,364	2,316	34,015	1,818	245	6,746	56	96,201	89,399	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8,820	12,916	42,814	.....	10,356	2,717	238,365	1,241	367,701	128,095	39	.....	2	.....	37	.....	51
32,600	57,791	1,309,506	26,633	.....	19,227	6,874,339	1,005,115	9,938,743	2,059,239	4,143	2,467	1,531	.....	145	2,780	52
2,483	2,050	43,109	.....	4,168	15,369	79,361	697	182,765	102,707	.....	.....	.....	.....	.....	.....	53
20,002	22,653	88,960	.....	4,623	65,450	38,103	38,103	313,216	209,663	1,347	1,145	202	.....	.....	42	54
137,081	270,342	1,387,474	2,700	21,216	37,562	20,610,183	371,585	27,731,609	6,749,841	14,004	8,061	4,878	.....	1,065	6,532	55

<sup>1</sup> Same number reported for one or more other months.

<sup>2</sup> None reported for one or more other months.

<sup>3</sup> Same number reported throughout the year.

Jewelry..... 1	Printing and publishing, music..... 1	Stoves, gas and oil..... 1	Vinegar and cider..... 2
Looking-glass and picture frames..... 1	Pumps, steam..... 1	Structural ironwork, not made in steel works or rolling mills..... 2	Washing machines and clothes wringers..... 2
Mirrors, framed and unframed..... 1	Roofing materials, other than metal..... 2	Shirts..... 3	Wirework..... 2
Models and patterns, not including paper patterns..... 1	Signs, other than electric..... 1	Tinware, not elsewhere specified..... 1	Wood preserving..... 1
Paints..... 1	Slaughtering and meat packing..... 4	Trunks and valises..... 2	Wood, turned and carved..... 1
Poultry, killing and dressing..... 2	Soap..... 1		

MANUFACTURES—OKLAHOMA.

TABLE 30.—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—		Male.	Female.	Male.	Female.		
								Maximum month.							Minimum month.

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

1	OKLAHOMA CITY—All industries.	195	2,968	150	176	308	102	2,229	Oc	2,410	Fe	2,135	2,414	2,065	343	0	.....	\$0,002,332
2	Artificial stone products.....	3	9	4	.....	.....	.....	5	(3)	5	(4)	5	5	5	.....	.....	.....	57,700
3	Bread and other bakery products.....	16	330	24	4	7	12	283	Jy	291	Fe	271	202	165	127	.....	.....	521,025
4	Confectionery and ice cream.....	7	62	4	0	7	2	43	Jy	60	De	31	49	44	5	.....	.....	220,462
5	Copper, tin, and sheet-iron work.....	5	27	4	.....	.....	.....	18	Je	20	Ja	10	20	20	.....	.....	.....	29,190
6	Flour-mill and gristmill products.....	6	127	2	12	20	0	81	Se	88	My	78	81	81	.....	.....	.....	1,120,592
7	Food preparations, not elsewhere specified.	5	20	3	3	2	2	10	Je	16	Ja	4	17	12	5	.....	.....	50,431
8	Foundry and machine-shop products.	13	154	10	15	18	7	104	Au	120	Ja	77	108	108	.....	.....	.....	406,129
9	Ice, manufactured.....	5	54	.....	11	7	2	84	Jy	60	Ja	7	62	62	.....	.....	.....	427,129
10	Lumber, planing-mill products, including wooden box factories.	5	109	3	9	2	1	85	Au	107	Fe	69	91	91	.....	.....	.....	267,538
11	Marble and stone work.....	3	10	3	.....	.....	.....	7	Ja	10	Ap	5	6	6	.....	.....	.....	28,050
12	Mattresses and spring beds.....	3	44	.....	0	2	2	34	Ja	42	Au	29	38	33	5	.....	.....	102,578
13	Mineral and soda waters.....	7	27	8	.....	.....	.....	19	Au	22	Ja	15	20	20	.....	.....	.....	96,927
14	Patent medicines and compounds.....	9	24	7	1	3	.....	13	(5)	13	(3)	13	13	7	5	1	.....	14,145
15	Printing and publishing, job work only.	29	263	27	23	22	15	176	Oc	102	Fe	157	182	156	22	4	.....	479,451
16	Printing and publishing, newspapers and periodicals.	21	368	10	29	58	24	247	Oc	254	Jy	232	243	222	20	1	.....	545,957
17	Tobacco, cigars.....	6	22	0	.....	.....	.....	13	De	16	Se	12	17	15	2	.....	.....	6,717
18	All other industries*.....	52	1,327	34	57	154	28	1,054	.....	.....	.....	.....	1,170	1,018	162	.....	.....	4,622,311

\* All other industries embrace—

1	Artificial limbs.....	1	Bookbinding and blank-book making.....	1	Carriages and wagons.....	1	Druggists' preparations.....	1
2	Automobile bodies and parts.....	2	Boxes and cartons, paper.....	1	Cars and general shop construction and repairs by electric-railroad companies.....	1	Engraving, steel and copper plate, including plate printing.....	2
1	Automobile repairing.....	1	Brick.....	1	.....	1	Gas, illuminating and heating.....	1
2	Awnings, tents, and sails.....	2	Brooms, from broom corn.....	2	.....	1	Gas machines and gas and water meters.....	1
1	Baking powders.....	1	Butter.....	1	Clothing, men's and youths'.....	1	.....	1
1	Bluing.....	1	Carpets, rag.....	1	Coffee, roasting and grinding.....	4	.....	1

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

1	CHICKASHA.....	29	430	27	17	44	5	337	Oc	406	Ja	243	419	405	14	.....	.....	\$1,315,095	
2	ENID.....	45	390	33	25	40	9	283	No	315	Fe	238	340	303	36	1	.....	1,607,279	
3	GUTHRIE.....	30	261	29	15	20	12	185	Oc	206	Ap	162	217	160	38	10	.....	612,226	
4	MCALESTER.....	33	237	27	19	14	6	171	Ja	190	Mh	150	224	209	12	8	.....	984,934	
5	MUSKOGEE.....	80	1,046	61	63	75	19	828	Au	895	Fe	737	950	822	84	4	.....	1,710,337	
6	SAPULPA.....	30	503	32	13	21	4	433	Je	488	No	390	441	415	15	11	.....	468,785	
7	SHAWNEE.....	46	996	39	40	37	5	845	Au	991	Ja	560	899	774	109	16	.....	1,534,261	
8	TULSA.....	103	1,141	90	52	115	30	845	Ap	939	Au	784	910	803	43	3	1	.....	3,165,262

<sup>1</sup> Owned power only.

<sup>2</sup> 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. <sup>1</sup>	Internal combustion engines. <sup>1</sup>	Water wheels and motors. <sup>1</sup>	

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

\$209,057	\$427,606	\$1,352,568	\$34,186	\$89,283	\$62,110	\$16,041,650	\$190,139	\$20,725,811	\$4,494,022	9,172	6,781	314	.....	2,077	2,021	1
.....	.....	3,339	.....	.....	1,045	5,050	24	13,674	3,600	2	.....	.....	.....	2	.....	2
4,950	25,210	129,086	.....	4,166	5,045	489,317	12,617	848,467	346,533	229	.....	.....	.....	229	.....	3
11,000	6,951	31,051	.....	3,270	2,779	164,503	16,711	315,259	134,045	883	880	.....	.....	3	50	4
.....	125	15,960	500	1,350	298	27,013	310	53,255	25,932	11	.....	.....	.....	11	.....	5
22,900	47,006	59,593	.....	502	7,088	2,448,619	19,203	2,745,630	277,814	1,195	975	120	.....	100	275	6
2,000	1,880	4,227	18	1,653	339	32,399	753	53,927	20,775	45	.....	.....	.....	45	.....	7
20,550	31,545	62,179	532	7,290	3,629	144,321	5,817	362,231	212,093	197	.....	23	.....	174	.....	8
13,148	5,227	22,546	.....	48	3,012	10,433	14,348	90,782	66,001	1,351	1,350	.....	.....	1	101	9
10,340	2,420	59,960	410	1,400	2,780	137,451	2,678	215,202	75,073	389	125	.....	.....	204	125	10
.....	.....	4,095	.....	300	481	12,800	508	22,936	9,628	33	.....	.....	.....	33	.....	11
8,906	1,680	18,653	.....	1,020	1,327	94,145	1,175	147,018	51,698	93	.....	40	.....	53	.....	12
.....	.....	12,468	.....	1,504	880	23,136	1,116	59,211	34,909	14	.....	.....	.....	14	.....	13
180	2,080	9,094	.....	1,311	212	21,427	77	51,894	30,390	7	.....	6	.....	1	.....	14
40,430	33,870	127,007	6,479	18,914	5,168	126,535	5,474	447,004	314,995	204	.....	.....	.....	204	.....	15
61,966	63,747	127,369	24,073	20,237	7,498	209,019	5,788	811,444	596,637	295	.....	.....	.....	295	.....	16
.....	.....	6,267	.....	206	2,096	14,415	157	29,775	15,203	.....	.....	.....	.....	.....	.....	17
96,841	205,265	668,734	2,174	25,212	18,483	12,081,017	103,333	14,458,096	2,273,696	4,224	3,451	125	.....	648	1,380	18

Hand stamps.....	1	Oil, cottonseed, and cake.....	3	Roofing materials, other than metal..	2	Soap.....	1
Hardware.....	1	Paints.....	1	Saddlery and harness.....	2	Structural ironwork, not made in	1
Jewelry.....	1	Perfumery and cosmetics.....	3	Shirts.....	1	steel works or rolling mills.....	1
Mirrors, framed and unframed.....	1	Petroleum refining.....	1	Signs, other than electric.....	1	Wirework, barbed wire.....	1
Models and patterns, not including paper patterns.....	1	Photo-engraving.....	2	Slaughtering and meat packing.....	1		

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

\$23,826	\$44,364	\$234,605	.....	\$4,492	\$11,486	\$1,231,861	\$44,777	\$1,719,676	\$443,038	1,633	1,313	62	2	256	40	1
33,366	44,949	175,439	.....	11,166	14,753	1,998,703	49,749	2,610,533	662,081	1,715	1,247	102	.....	366	125	2
25,038	19,672	115,738	22	6,014	9,074	547,008	15,976	853,485	290,501	1,211	970	5	.....	236	20	3
26,536	14,249	101,126	280	5,898	9,771	272,632	24,918	573,511	275,911	1,111	964	16	.....	131	.....	4
88,253	83,880	500,181	4,106	22,802	38,987	1,505,562	67,630	2,754,811	1,181,619	2,220	1,162	159	.....	899	.....	5
21,480	17,314	227,795	725	6,289	4,420	219,385	15,188	604,457	369,884	670	579	13	.....	78	.....	6
57,952	34,312	533,011	950	9,341	11,880	1,760,787	46,755	2,597,966	790,423	2,059	1,243	10	.....	806	4	7
111,884	131,316	684,129	5,936	30,236	24,776	2,112,684	56,896	3,868,326	1,698,746	3,030	1,546	327	.....	1,157	130	8

<sup>1</sup> Same number reported throughout the year.

<sup>2</sup> Same number reported for one or more other months.

# OREGON.

By EDWIN CARLSON.

## GENERAL STATISTICS.

**General character of the state.**—Oregon was admitted to the Union in 1859. With a gross area of 96,699 square miles, of which 95,607 represent land surface, it ranks ninth in size among the states. In 1914 there were in Oregon 24,953 square miles in unappropriated and unreserved public lands of the United States, 24,345 square miles in national forests, and 1,889 square miles in Indian reservations. At the census of 1900 the population of the state was 413,536; at the census of 1910, 672,765; and its estimated population in 1914 was 783,000. In total population Oregon ranked thirty-fifth among the states in 1910, and in density of population it ranked forty-first, with seven inhabitants per square mile, the corresponding number in 1900 being 4.3.

The urban population in 1910—that is, the population residing in incorporated places of 2,500 inhabitants or more—was 307,060, or 45.6 per cent of the total, as against 32.2 per cent in 1900. There were in Oregon in 1914 five cities—Astoria, Eugene, Medford, Portland, and Salem—each having an estimated population of more than 10,000. These cities, whose aggregate population formed 40 per cent of the total estimated population of the state in that year, reported 58.4 per cent of the value of its manufactured products. Portland alone, which is estimated to have contained 33.3 per cent of the population of Oregon in 1914, reported 50.7 per cent of the value of the state's manufactured products.

The steam-railway mileage in 1914 was 2,912, and the electric-railway mileage in 1912 was 464. The Columbia River, with its tributaries and canal connections, provides important transportation facilities for the northwestern part of the state.

Agriculture is the leading industry. The value of all farm crops grown in 1909 amounted to \$49,040,725, and the value of domestic animals sold or slaughtered on farms during the same year was \$17,433,774.

**Importance and growth of manufactures.**—Oregon's manufactured products in 1914 were valued at \$109,761,951, and the average number of wage earners employed in its manufacturing industries was 28,829. In that year and also in 1909 the state ranked thirty-third in the former respect and thirty-fifth in the latter. The output of manufactured products in Oregon in 1914 represented five-tenths of 1 per cent of the total for the United States, as measured by value; the corresponding proportion for both 1909 and 1904 was four-tenths of 1 per cent.

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

With the exception of proprietors and firm members which show a small decrease for the period 1909–1914 there is an increase for each successive census in all items, the per cent of increase, however, being greater for the five-year period 1904–1909.

	MANUFACTURING INDUSTRIES.				PER CENT OF INCREASE. <sup>1</sup>		
	1914	1909	1904	1899	1909-1914	1904-1909	1899-1904
Number of establishments.....	2,320	2,246	1,602	1,406	3.3	40.2	13.9
Persons engaged.....	35,449	34,722	22,018	( <sup>2</sup> )	2.1	57.7	.....
Proprietors and firm members.....	2,189	2,499	1,726	( <sup>2</sup> )	-12.4	44.8	.....
Salaried employees.....	4,431	3,473	1,769	1,143	27.6	96.3	54.8
Wage earners (average number).....	28,829	28,760	18,523	14,459	0.3	55.2	28.1
Primary horsepower.....	219,222	175,019	81,348	60,005	25.3	115.1	35.6
Capital.....	\$139,500,379	\$39,031,873	\$44,023,548	\$28,369,089	59.6	102.4	55.2
Salaries and wages.....	26,614,328	23,949,428	13,578,026	8,044,171	11.1	76.4	68.8
Salaries.....	5,682,751	4,047,494	2,132,514	1,222,160	40.4	89.8	74.5
Wages.....	20,931,577	19,901,934	11,445,512	6,822,011	5.2	73.9	67.7
Paid for contract work.....	725,562	576,699	459,571	( <sup>2</sup> )	25.8	25.5	.....
Rent and taxes (including internal revenue).....	2,135,047	1,418,564	888,500	( <sup>2</sup> )	50.5	.....	.....
Cost of materials.....	63,257,821	50,552,470	30,596,763	20,788,833	25.1	65.2	47.2
Value of products.....	109,761,951	93,004,845	55,525,123	36,592,714	18.0	67.5	51.7
Value added by manufacture (value of products less cost of materials).....	46,504,130	42,452,375	24,928,360	15,803,881	9.5	70.3	57.7

<sup>1</sup> A minus sign (—) denotes decrease.

<sup>2</sup> Figures not available.

<sup>3</sup> Exclusive of internal revenue.

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. <sup>1</sup>								
	Number of establishments.	Wage earners.		Value of products.		Value added by manufacture.		Wage earners (average number).			Value of products.			Value added by manufacture.		
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	1909-1914	1904-1909	1899-1904	1909-1914	1904-1909	1899-1904	1909-1914	1904-1909	1899-1904
All industries.....	2,320	28,820	100.0	\$109,761,951	100.0	\$46,504,130	100.0	0.3	55.2	28.1	18.0	67.5	51.7	0.5	70.3	57.7
Lumber and timber products.....	526	13,888	48.2	30,920,407	28.2	16,521,410	35.5	-7.8	76.0	41.3	2.4	95.9	30.1	7.1	86.0	62.3
Flour-mill and gristmill products.....	95	450	1.6	11,192,573	10.2	1,365,342	2.9	14.2	-0.3	-6.0	25.0	6.0	38.0	11.5	9.7	16.7
Slaughtering and meat packing.....	14	442	1.5	7,486,920	6.8	1,284,465	2.8	20.8	48.8	43.0	102.3	77.5	48.6	67.3	85.3	
Butter, cheese, and condensed milk.....	118	434	1.5	6,567,949	6.0	1,065,647	2.3	3.3	.....	.....	33.5	.....	10.1	.....	.....	
Printing and publishing.....	377	1,556	5.4	6,010,357	5.5	4,446,350	9.6	6.6	43.3	21.2	10.2	81.6	55.8	13.0	85.9	89.1
Canning and preserving.....	71	709	2.8	4,738,067	4.3	1,647,647	3.5	20.9	25.0	-33.1	47.7	10.2	46.0	61.6	0.3	46.1
Foundry and machine-shop products.....	169	1,254	4.3	3,822,590	3.5	2,206,960	4.7	18.9	34.1	36.3	21.9	97.4	87.3	32.9	78.0	81.7
Bread and other bakery products.....	163	700	2.4	3,325,789	3.0	1,446,261	3.1	14.2	42.6	77.0	17.6	88.1	93.1	19.7	92.0	100.3
Copper, tin, and sheet-iron products.....	62	469	1.6	2,674,524	2.4	1,017,800	2.2	8.1	.....	.....	66.0	.....	.....	31.2	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	14	1,601	5.6	2,583,653	2.4	1,564,346	3.4	100.0	-10.5	23.8	122.2	-8.1	23.3	130.1	-25.6	62.2
Coffee, roasting and grinding.....	9	99	0.3	2,049,844	1.9	517,724	1.1	.....	.....	.....	43.7	76.0	.....	55.6	112.1	.....
Liquors, malt.....	10	189	0.6	1,810,440	1.6	1,302,267	2.8	-7.4	35.1	11.0	2.5	68.1	56.6	-7.2	103.6	27.4
Woolen goods.....	7	643	2.3	1,701,587	1.6	768,601	1.6	38.2	-17.1	-15.8	83.2	-10.2	15.1	88.8	-25.3	24.5
Confectionery.....	26	326	1.2	1,580,785	1.4	768,448	1.7	18.7	112.8	24.3	30.1	226.6	81.3	15.3	179.8	110.6
Gas, illuminating and heating.....	9	385	1.3	1,628,060	1.4	1,124,032	2.4	48.1	.....	.....	68.1	98.9	.....	58.5	90.1	.....
Furniture.....	21	673	2.3	1,335,380	1.2	701,182	1.7	21.0	20.9	114.6	22.0	38.5	164.2	20.7	35.0	232.4
Leather goods.....	48	202	0.7	1,078,016	1.0	402,477	0.9	-42.8	30.7	4.7	-34.0	70.1	42.3	37.2	67.1	46.7
Food preparations, not elsewhere specified.....	18	79	0.3	877,544	0.8	262,780	0.5	.....	.....	.....	51.4	63.4	.....	11.0	105.4	.....
Cars and general shop construction and repairs by electric-railroad companies.....	4	225	0.8	536,237	0.5	231,733	0.5	.....	.....	.....	.....	.....	.....	109.8	333.1	.....
Brick and tile, terra-cotta, and other clay products.....	42	382	1.3	521,368	0.5	355,992	0.8	-0.8	45.8	20.0	-22.8	114.3	38.8	-31.5	106.3	32.6
Awnings, tents and sails.....	5	84	0.3	492,871	0.4	305,265	0.7	.....	.....	.....	7.3	272.2	.....	.....	.....	.....
Confectionery (ice cream).....	9	66	0.2	445,159	0.4	187,936	0.4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco, cigars.....	63	154	0.5	383,048	0.3	234,864	0.5	-17.7	14.7	129.6	-10.2	19.7	171.2	-22.4	39.6	152.3
Ice, manufactured.....	27	106	0.4	375,607	0.3	257,273	0.6	.....	.....	.....	46.3	18.4	87.1	42.0	2.8	81.4
Marble and stone work.....	24	88	0.3	346,127	0.3	200,038	0.4	.....	.....	.....	10.5	.....	.....	8.7	.....	.....
Shipbuilding, including boat building.....	20	162	0.6	332,074	0.3	217,626	0.5	-23.1	25.4	.....	-30.4	60.6	.....	-20.1	56.9	.....
Stoves, hot-air furnaces, and ranges.....	10	80	0.3	289,037	0.3	159,759	0.3	.....	.....	.....	-17.7	162.5	.....	-27.6	85.7	.....
All other industries.....	359	3,280	11.4	14,758,488	13.5	5,887,892	12.7	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> Percentages are based on figures in Table 2; 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 27 industries, or industry groups, for each of which products valued at more than \$250,000 were reported for 1914. These industries include 1 with products exceeding \$30,000,000; and 1 exceeding \$10,000,000, 3 with products between \$5,000,000 and \$10,000,000, 12 with products between \$1,000,000 and \$5,000,000, and 10 with products valued at less than \$1,000,000. Among those included under the head of "all other industries" are the following which have products in excess of those shown in the table, but for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments: Bags, other than paper; boots and shoes, including cut stock and findings; clothing, men's, including shirts; cordage and twine; oil, linseed; paper and wood pulp; soap; wood preserving; and wool pulling.

The industries in this table are arranged in the order of their importance as shown by value of products, but the arrangement would vary considerably from that given if based on average number of wage earners or value added by manufacture. Lumber and timber products is the only industry which ranked alike in all three respects. Among the industries showing the greatest differences in rank when based on each of the three factors shown in the table are flour-mill and

gristmill products, which is second in value of products, seventh in value added by manufacture, and tenth in the number of wage earners; slaughtering and meat packing, third in value of products, was ninth in value added by manufacture and eleventh in number of wage earners; butter, cheese, and condensed milk, fourth in value of products, was eleventh in value added by manufacture and twelfth in number of wage earners; printing and publishing, fifth in value of products, was second in value added by manufacture and third in number of wage earners.

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, flour-mill and gristmill products, slaughtering and meat packing, canning and preserving, foundry and machine-shop products, and bread and other bakery products held the same rank in value of products at both censuses. Butter, cheese, and condensed milk advanced from fifth place in 1909 to fourth in 1914, having exchanged positions with printing and publishing. Liquors, malt, and leather goods, ranking ninth and tenth in 1909, dropped to twelfth and seventeenth, respectively, in 1914. Copper, tin, and sheet-iron products and cars and general shop construction and repairs by steam-railroad companies,

ranking ninth and tenth in 1914, were eleventh and thirteenth in 1909. For the remainder of the industries slight changes from census to census are noticeable.

*Lumber and timber products.*—This industry, embracing logging camps, sawmills, planing mills, wooden-box factories, and the manufacture of window and door screens, is by far the most important industry in the state, not only as to value of products but also in number of wage earners employed. During the period from 1909 to 1914 while the number of establishments decreased 187 and the number of wage earners 1,178, the value of products increased \$720,550, which is probably due to the advance in price of lumber and commodities. The decrease in the number of establishments and of wage earners is due in part to the fact that during the period between the censuses some of the smaller mills were merged with the larger plants or discontinued operations.

*Flour-mill and gristmill products.*—This industry, second in importance in the state, as measured by value of products, excludes custom mills grinding exclusively for tolls or local consumption. There was a slight decrease from 1909 to 1914 in the number of establishments, which is probably due to a greater centralization of the industry, causing the abandonment of some small local gristmills. During the five-year period, however, the value of products increased \$2,301,572, or 25.9 per cent; the value added by manufacture, 11.5 per cent, and the number of wage earners, 14.2 per cent.

In considering the statistics for the lumber mills and gristmills it should be remembered that mills engaged exclusively in custom sawing and 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 enumeration in regard to these establishments on uniform lines in all sections of the country at different censuses.

*Slaughtering and meat packing.*—This industry, which is third in importance in value of products, does not include the operations of retail butcher shops. The value of products increased \$1,607,305, or 27.3 per cent, the value added by manufacture, \$419,696, or 48.6 per cent, and the average number of wage earners, 20.8 per cent.

*Butter, cheese, and condensed milk.*—Fourth in importance in value of products in the state, this industry showed a marked increase from 1909 to 1914. During the five-year period the value of products increased \$1,647,487, or 33.5 per cent, and the number of establishments, 24.2 per cent.

*Printing and publishing.*—This industry includes job printing; the printing and publishing of books, newspapers, and periodicals; bookbinding and blank-book making; engraving, steel and copper plate, including plate printing; and lithographing. Measured by value of products this industry ranked fourth in

1909, but dropped to fifth place in 1914. Notwithstanding its change in rank during the five-year period 1909-1914, the industry shows increases in all items. The value of products increased 19.2 per cent, the value added by manufacture, 13 per cent, and the number of establishments, 16.4 per cent.

*Canning and preserving.*—In value of products this industry ranked sixth at the last two censuses, and includes canning and preserving fruits and vegetables, fish and oysters, and the manufacture of pickles, preserves, and sauces. The increase in value of products for 1909-1914 was \$1,531,007, or 47.7 per cent; that of value added by manufacture, \$628,019, or 61.6 per cent; and that of average number of wage earners, 138, or 20.9 per cent.

**Persons engaged in the 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."

CLASS.	Census year.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.			Per cent of total. <sup>1</sup>	
		Total.	Male.	Female.	Male.	Female.
All classes.....	1914	35,449	32,025	2,324	92.0	8.0
	1909	34,722	31,840	2,373	91.7	8.3
Proprietors and officials.....	1914	3,630	3,545	85	97.7	2.3
	1909	3,710	3,067	52	98.6	1.4
Proprietors and firm members..	1914	2,189	2,117	72	96.7	3.3
	1909	2,499	2,453	46	98.2	1.8
Salaried officers of corporations..	1914	537	527	10	98.1	1.9
	1909	344	340	4	98.8	1.2
Superintendents and managers..	1914	904	901	3	99.7	0.3
	1909	870	874	2	99.8	0.2
Clerks and other subordinate salaried employees.	1914	2,990	2,315	675	77.4	22.6
	1909	2,253	1,702	551	75.5	24.5
Wage earners (average number)....	1914	28,829	26,765	2,064	92.8	7.2
	1909	28,750	26,480	2,270	92.1	7.9
16 years of age and over.....	1914	28,742	26,728	2,014	93.0	7.0
	1909	28,652	26,406	2,246	92.2	7.8
Under 16 years of age.....	1914	87	37	50		
	1909	98	74	24		

<sup>1</sup> Percentages are omitted where base is less than 100.

In 1914 the number of persons engaged in manufactures was 35,449, of whom 28,829, or about eight-tenths, were wage earners, 3,630 were proprietors and officials, and 2,990 were clerks and other subordinate salaried employees. Of the wage earners 16 years of age and over, 26,728, or 93 per cent, were males, and 2,014, or 7 per cent, were females. Figures for individual industries will be found in Table 29.

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.

As shown by the table, there was a slight increase during the five-year period in the total of all classes

and decreases in the number of "proprietors and officials," and in the subclass "proprietors and firm members." The largest percentage of increase for any class, 56.1, is shown for salaried officers of corpora-

tions. Wage earners 16 years of age and over represented 81.1 per cent of the total number of persons engaged in manufacturing industries in the state in 1914 and 82.5 per cent in 1909.

Table 4

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.								
	Per cent of increase, <sup>1</sup> 1909-1914.			Per cent distribution.					
	Total.	Male.	Female.	Total.		Male.		Female.	
				1914	1909	1914	1909	1914	1909
All classes.....	2.1	2.4	-1.7	100.0	100.0	100.0	100.0	100.0	100.0
Proprietors and officials.....	-2.4	-3.3	.....	10.2	10.7	10.9	11.5	3.0	1.8
Proprietors and firm members.....	-12.4	-13.7	.....	6.2	7.2	6.5	7.7	2.6	1.6
Salaried officers of corporations.....	56.1	55.0	.....	1.5	1.0	1.6	1.1	0.4	0.1
Superintendents and managers.....	3.2	3.1	.....	2.5	2.5	2.8	2.7	0.1	0.1
Clerks and other subordinate salaried employees.....	32.7	36.0	22.5	8.4	6.5	7.1	5.3	23.0	19.2
Wage earners (average number).....	0.3	1.1	-0.1	81.3	82.8	82.0	83.1	73.1	79.0
16 years of age and over.....	0.3	1.2	-10.3	81.1	82.5	81.9	82.9	71.3	78.2
Under 16 years of age.....	.....	.....	.....	0.2	0.3	0.1	0.2	1.8	0.8

<sup>1</sup> 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.

CLASS.	PERSONS ENGAGED IN MANUFACTURING INDUSTRIES.								
	Number.			Per cent distribution.			Per cent of increase. <sup>1</sup>		
	1914	1909	1904	1914	1909	1904	1909-1914	1904-1909	.....
Total.....	35,449	34,722	22,018	100.0	100.0	100.0	2.1	57.7	.....
Proprietors and firm members.....	2,189	2,499	1,726	6.2	7.2	7.8	-12.4	44.8	.....
Salaried employees.....	4,431	3,473	1,769	12.5	10.0	8.0	27.0	96.3	.....
Wage earners (average).....	28,829	28,760	18,523	81.3	82.8	84.1	0.3	55.2	.....

<sup>1</sup> A minus sign (-) denotes decrease.

During the decade ending with 1914 there was a substantial increase in the number of persons engaged in the manufactures of the state, but the rate of increase was most rapid during the first five-year period. The decrease of 12.4 per cent in the number of proprietors and firm members for the period from 1909 to 1914 was due to the decrease in the number of small mills and also to the fact that some establishments operated by individuals or firms in 1909 became incorporated during the period between the censuses and were reported as corporations in 1914. It is probable that some of the persons reported as proprietors or firm members of such establishments in 1909 were returned as salaried officials of corporations in 1914.

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

Table 6

INDUSTRY.	Census year.	WAGE EARNERS.			
		Average number. <sup>1</sup>	Per cent of total.		
			16 years of age and over.		Under 16 years of age.
			Male.	Female.	
All industries.....	1914	28,829	92.7	7.0	0.3
	1909	28,760	91.8	7.8	0.4
	1904	18,523	90.9	8.0	1.1
Bread and other bakery products.....	1914	700	74.8	24.6	0.6
	1909	613	71.1	28.5	0.3
Brick and tile, terra-cotta, and other clay products.....	1914	382	100.0	.....	.....
	1909	385	99.2	.....	0.8
Butter, cheese, and condensed milk.....	1914	434	92.6	6.9	0.5
	1909	420	91.4	7.6	1.0
Canning and preserving.....	1914	799	59.6	41.9	1.5
	1909	661	59.0	36.0	3.5
Cars and general shop construction and repairs by steam-railroad companies.....	1914	1,601	99.9	.....	0.1
	1909	777	100.0	.....	.....
Confectionery.....	1914	336	30.9	68.5	0.6
	1909	283	32.2	67.8	.....
Copper, tin, and sheet-iron products.....	1914	466	98.3	1.7	.....
	1909	431	92.3	7.7	.....
Flour-mill and gristmill products.....	1914	450	100.0	.....	.....
	1909	394	99.7	0.3	.....
Foundry and machine-shop products.....	1914	1,254	99.9	.....	0.1
	1909	1,055	100.0	.....	.....
Furniture.....	1914	673	99.1	0.9	.....
	1909	552	93.7	1.3	.....
Gas, illuminating and heating.....	1914	385	100.0	.....	.....
	1909	280	100.0	.....	.....
Leather goods.....	1914	292	97.5	2.5	.....
	1909	353	96.6	3.4	.....
Liquors, malt.....	1914	139	100.0	.....	.....
	1909	204	100.0	.....	.....
Lumber and timber products.....	1914	13,888	99.5	0.4	0.1
	1909	15,086	99.6	0.3	0.1
Printing and publishing.....	1914	1,556	84.5	14.3	1.2
	1909	1,459	83.7	14.3	2.0
Shipbuilding, including boat building.....	1914	163	100.0	.....	.....
	1909	212	100.0	.....	.....
Slaughtering and meat packing.....	1914	442	96.4	3.6	.....
	1909	366	99.2	0.8	.....
Tobacco, cigars.....	1914	154	85.1	13.0	1.9
	1909	186	85.5	12.9	1.6
Woolen goods.....	1914	648	61.4	37.7	0.9
	1909	466	59.2	37.4	3.4
All other industries.....	1914	4,107	83.0	16.3	0.7
	1909	4,607	78.7	21.1	0.2

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

For all industries combined, the proportion of male wage earners 16 years of age and over has been slightly greater at each successive census, while the proportion of females 16 years of age and over and children under 16 years of age has decreased. Men predominate in all the industries shown in the table except confectionery. For six of the industries no females were reported at either 1914 or 1909.

**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.

The table shows that the period of greatest activity in employment in the manufactures of the state ranges from April to October. In 1914 the maximum number of wage earners appeared for May and the minimum for December. In 1909 the maximum month was September and the minimum January, and in 1904 the maximum number was employed in July and the minimum in February. The greatest actual difference between the maximum and minimum numbers employed

in any one of the three census years was 7,624, or 24.6 per cent of the maximum, in 1909.

**Table 7**

MONTH.	WAGE EARNERS IN MANUFACTURING INDUSTRIES.					
	Number. <sup>1</sup>			Per cent of maximum.		
	1914	1909	1904	1914	1909	1904
January.....	26,154	23,354	15,930	82.8	75.4	77.0
February.....	26,715	24,833	15,867	84.6	80.2	76.7
March.....	28,527	26,859	16,693	90.3	86.7	80.7
April.....	30,806	29,179	18,607	97.5	94.2	89.9
May.....	31,596	30,302	19,679	100.0	97.8	95.1
June.....	31,640	30,806	20,543	99.8	99.4	99.3
July.....	31,095	30,175	20,856	98.4	97.4	100.0
August.....	30,505	30,269	20,356	95.6	97.7	98.4
September.....	29,243	30,973	20,425	92.6	100.0	98.7
October.....	28,421	30,402	18,981	90.0	98.1	91.8
November.....	26,531	29,423	17,711	84.0	95.0	85.6
December.....	24,815	28,416	16,797	78.5	91.7	81.2

<sup>1</sup> 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 8 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 five cities having more than 10,000 inhabitants.

**Table 8**

INDUSTRY AND CITY.	Average number employed during year.	WAGE EARNERS: 1914.												Per cent minimum is of maximum.
		[Month of maximum employment for each industry is indicated by boldface figures and that of minimum by <i>italic</i> figures.]												
		Number employed on 15th day of the month or nearest representative day.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	28,829	<b>26,154</b>	26,715	28,527	30,806	<b>31,596</b>	31,540	31,095	30,505	29,243	28,421	26,531	<i>24,815</i>	78.5
Bread and other bakery products.....	700	703	702	702	700	699	711	720	711	700	710	670	672	93.1
Brick and tile, terra-cotta, and other clay products.....	382	243	205	202	437	535	531	606	604	441	345	200	175	28.9
Butter, cheese, and condensed milk.....	434	<i>354</i>	357	394	482	519	581	511	471	428	398	386	377	66.7
Canning and preserving.....	799	350	417	<i>246</i>	315	497	1,191	1,255	1,128	1,380	1,495	894	420	16.5
Cars and general shop construction and repairs by steam-railroad companies.....	1,601	1,620	1,404	<i>1,409</i>	1,618	1,616	1,563	1,702	1,724	1,701	1,680	1,598	1,583	81.4
Confectionery.....	336	330	308	320	343	351	353	326	<i>298</i>	351	367	353	332	81.2
Copper, tin, and sheet-iron products.....	466	367	420	471	401	507	508	638	564	484	445	381	346	54.2
Flour-mill and gristmill products.....	450	477	426	413	<i>566</i>	395	374	414	447	539	538	518	493	67.9
Foundry and machine-shop products.....	1,254	1,184	1,319	1,357	1,342	1,201	1,204	1,194	1,168	1,088	<i>1,063</i>	1,424	<i>1,504</i>	70.7
Furniture.....	673	723	711	695	683	667	668	625	<i>614</i>	656	683	684	667	84.9
Gas, illuminating and heating.....	385	360	396	413	503	468	421	376	<i>306</i>	357	338	325	357	60.8
Leather goods.....	189	202	201	209	215	212	214	213	201	190	188	192	187	87.0
Liquors, malt.....	189	171	170	181	190	201	208	208	206	200	187	172	174	81.7
Lumber and timber products.....	13,888	11,792	12,482	14,105	15,727	<b>16,317</b>	15,951	15,395	15,265	13,972	13,005	<b>11,835</b>	<b>10,810</b>	65.2
Printing and publishing.....	1,556	1,547	1,539	1,548	1,566	1,564	1,531	<i>1,528</i>	<b>1,584</b>	1,562	1,579	1,567	1,567	96.5
Shipbuilding, including boat building.....	163	162	208	223	196	208	165	155	146	126	121	140	106	47.5
Slaughtering and meat packing.....	442	465	436	430	428	400	411	427	438	441	465	465	498	80.3
Tobacco, cigars.....	154	161	160	148	146	146	155	154	164	164	160	160	147	86.0
Woolen goods.....	648	705	691	694	712	707	651	641	572	567	628	616	598	78.8
All other industries.....	4,107	4,238	4,163	4,313	4,376	<b>4,386</b>	4,199	4,007	3,894	3,922	4,027	3,951	<b>3,803</b>	86.8
Total for cities.....	13,474	13,031	12,916	13,050	13,682	13,713	14,227	14,363	13,786	13,583	13,480	13,242	<i>12,615</i>	87.8
ASTORIA.....	1,172	1,056	1,062	1,133	1,206	1,269	1,286	1,353	1,285	1,223	1,096	1,103	953	73.4
EUGENE.....	238	228	230	238	249	242	244	268	270	232	219	215	221	79.6
MEDFORD.....	59	50	51	52	56	69	51	71	69	70	66	54	40	69.0
PORTLAND.....	11,273	10,998	10,863	11,004	11,615	11,545	11,731	11,936	11,386	11,243	11,172	11,068	<i>10,555</i>	89.3
SALEM.....	732	699	710	563	566	588	615	735	776	816	927	802	697	60.0

Of the selected industries, canning and preserving shows the greatest degree of fluctuation in the number of wage earners employed each month, the number in March being but 16.5 per cent of the number in October. The greatest stability of employ-

ment is shown for printing and publishing, for which industry the proportion the minimum number formed of the maximum was 96.5 per cent. Of the five cities, the greatest variation in numbers employed appears for Salem, for which the minimum number

is 60 per cent of the maximum, while Portland shows the least variation, the minimum number forming 89.3 per cent of the maximum.

**Prevailing hours of labor.**—In Table 9 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 a smaller number of hours.

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 1909	28,829 28,750	3,970 3,396	775 762	6,917 8,880	1,324 1,030	14,839 17,861	528 1,485	420 194	47 142
Bread and other bakery products.....	1914 1909	700 613	61 50	191 31	314 108	16 221	101 161	15 32	2 0	4
Brick and tile, terra-cotta, and other clay products.....	1914 1909	382 385	59 43	7	154 96	2 8	160 238			
Butter, cheese, and condensed milk.....	1914 1909	434 420	21 34	7 12	81 72	38 36	88 96	198 108	1	2
Canning and preserving.....	1914 1909	769 661	59 65	32 28	477 134	23	141 280	64 172	1	3 31
Cars and general shop construction and repairs by steam-railroad companies.....	1914 1909	1,601 777	56 19		1,414 697		30 21	101 40		
Confectionery.....	1914 1909	336 283	24 19	89 75	129 24	93 127	1 87	1		
Copper, tin, and sheet-iron products.....	1914 1909	466 431	183 183	4 1	279 98		137			
Flour-mill and gristmill products.....	1914 1909	450 394	50 7	3	14		383 280	15	80	1
Foundry and machine-shop products.....	1914 1909	1,254 1,055	150 36	15 122	968 802	12 17	41 78	66	2	
Furniture.....	1914 1909	673 552	240		13 9	119 8	301 499			
Gas, illuminating and heating.....	1914 1909	385 260	380		19	8		1		7 11
Leather goods.....	1914 1909	202 353	10 10	2 4	167 281	3 7	20 51			
Liquors, malt.....	1914 1909	189 204	176 170		9 2		4 12	1		
Lumber and timber products.....	1914 1909	13,888 15,066	107 360	42 105	1,113 243	313 186	12,253 13,766	393		13
Printing and publishing.....	1914 1909	1,550 1,469	1,305 1,188	48 81	128 166		13 13	2 4		
Shipbuilding, including boat building.....	1914 1909	163 212	154 181		8 27		1 2			
Slaughtering and meat packing.....	1914 1909	442 366	9	7	5	14	395 340	11 5	5	1 16
Tobacco, cigars.....	1914 1909	154 186	149 183		5		1			
Woolen goods.....	1914 1909	648 466			25	226	397 496			
All other industries.....	1914 1909	4,107 4,607	696 893	328 263	1,595 1,110	457 139	510 1,382	70 664	415 102	36 64
Total for cities.....	1914	13,474	2,355	668	4,510	627	4,489	300	20	5
ASTORIA.....	1914	1,172	91		199	5	847	30		
EUGENE.....	1914	238	48	12	51	92	32	3		
MEDFORD.....	1914	59	22		21		4	12		
PORTLAND.....	1914	11,273	2,558	629	3,987	386	3,433	255	20	5
SALEM.....	1914	732	136	27	252	144	173			

The figures in this table, for the state as a whole and for most of the selected industries, emphasize the tendency toward a shortening of the working day of wage earners. In 1909, 19,682, or more than two-thirds of the total average number of wage earners for all in-

dustries combined, were employed in establishments where the prevailing hours of labor were 60 or more per week, while but 15,834, or about four-sevenths, 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 per week increased from 9,068 in 1909 to 12,995 in 1914, forming 31.5 and 45.1 per cent, respectively, of the total.

In 1914 the lumber and timber industry reported 48.2 per cent of the total average number of wage earners in the state, and 88.2 per cent of them were in establishments where the prevailing hours of labor were 60 per week; for the combined industries in the state 82.6 per cent were so employed. In the printing and publishing industry, the prevailing hours for 87.7 per cent of the wage earners were 48 or under.

In 1914 the combined total average number of wage earners for the five cities having a population of 10,000 or over was 13,474, and of this number 8,660, or about two-thirds, were in establishments where the prevailing hours were fewer than 60 per week, while only 325 were in establishments in which the hours were more than 60 per week.

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

Table 10	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		5		4				1				
	1910		2		1				1				
	1900		1				1						
Population <sup>1</sup> .....	1914	783,239	313,577	40.0	52,976	6.8			280,601	33.3	469,662	60.0	
	1910	672,705	221,308	32.9	14,094	2.1			207,214	30.8	451,457	67.1	
	1900	413,536	90,426	21.9			90,426	21.9			323,110	78.1	
Number of establishments.....	1914	2,320	1,016	43.8	179	7.7			837	36.1	1,304	56.2	
	1909	2,246	711	31.7	62	2.8			649	28.9	1,535	68.3	
	1899	1,406	408	29.0			408	29.0			998	71.0	
Average number of wage earners.....	1914	28,829	13,474	46.7	2,201	7.6			11,273	39.1	15,355	53.3	
	1909	28,750	12,811	44.6	597	2.1			12,214	42.5	15,939	55.4	
	1899	14,459	5,380	37.2			5,380	37.2			9,079	62.8	
Value of products.....	1914	\$109,761,951	\$34,123,954	58.4	\$8,426,514	7.7			\$55,697,440	50.7	\$45,637,997	41.6	
	1909	93,004,845	49,068,798	52.8	2,208,031	2.4			46,800,707	50.4	43,938,047	47.2	
	1899	36,592,714	16,903,707	46.2			\$16,903,707	46.2			19,689,007	53.8	
Value added by manufacture.....	1914	46,504,130	25,466,346	54.8	3,667,559	7.9			21,798,787	46.9	21,037,784	45.2	
	1909	42,452,375	21,815,981	51.4	1,030,830	2.4			20,785,151	49.0	20,636,394	48.6	
	1899	15,803,881	6,726,379	42.6			6,726,379	42.6			9,077,502	57.4	

<sup>1</sup> Census estimates of population for 1914.

In accepting the statistics in this table, it must be remembered that some of the cities—Astoria, Eugene, and Medford—that had a population of 10,000 and over at the census of 1914, were included with those for the outside districts at prior censuses. The table shows, however, that for 1914 the cities, which represented 40 per cent of the estimated population of the state, reported 58.4 per cent of the total value of products, 54.8 per cent of the total value added by manufacture, 46.7 per cent of the total average number of wage earners, and 43.8 per cent of the total number of establishments.

**Character of ownership.**—Table 12 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.

This table shows, for all industries combined, an increase from 1909 to 1914 in the number of establishments under corporate and individual ownership, and a decrease in all other forms of ownership, which includes general and limited partnerships and cooperative associations. Although corporate ownership comprised in 1914 only 30.6 per cent of the total number of establishments in the state, they reported 83.2 per cent of the total value of products, and 83.4 per cent of the total average number of wage earners; in 1909 and 1904 the corresponding proportions were 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.

The number of establishments under individual ownership represented 45.8 per cent of the total number of establishments in the state in 1914, and all other forms of ownership, 23.6 per cent. The proportion of the total average number of wage earners and value of products under individual ownership have decreased at each successive census.

**Table 11**

INDUSTRY AND CITY.	Census year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Total.	In establishments owned by—			Per cent of total. <sup>1</sup>			Total.	Of establishments owned by—			Per cent of total.						
						Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.				
All industries <sup>1</sup> .....	1914	1,062	710	548	28,829	2,078	24,047	2,104	0.3	83.4	7.3	\$109,761,951	\$9,800,214	\$91,351,338	\$8,550,399	9.0	83.2	7.8				
	1909	1,031	640	575	28,750	3,552	22,063	3,135	12.4	76.7	10.9	93,004,845	11,482,192	70,781,269	10,741,384	12.3	76.1	11.5				
	1904	746	409	447	18,523	2,919	13,037	2,567	15.8	70.4	13.8	55,525,123	8,414,059	40,034,288	7,076,770	15.2	72.1	12.7				
Bread and other bakery products.	1914	116	11	30	700	108	401	131	24.0	57.3	18.7	3,325,789	811,144	1,775,375	739,270	24.4	53.4	22.2				
	1909	110	7	34	613	173	320	111	28.2	53.7	18.1	2,820,423	923,641	1,315,510	590,277	32.0	40.5	20.9				
Butter, cheese, and condensed milk.	1914	37	36	45	434	49	288	97	11.3	66.4	22.3	6,567,949	853,620	3,825,075	1,889,254	13.0	58.2	28.8				
	1909	29	34	32	420	53	290	61	12.6	72.9	14.5	4,920,462	928,188	2,761,391	1,230,883	18.9	56.1	25.0				
Canning and preserving...	1914	18	42	11	799	70	652	77	8.8	81.6	9.6	4,738,067	108,466	4,083,334	486,267	3.6	86.2	10.2				
	1909	23	34	14	661	82	505	74	12.4	76.4	11.2	3,207,060	181,270	2,820,570	205,211	5.7	87.9	6.4				
Cars and general shop construction and repairs by steam-railroad companies.	1914	14			1,601		1,601		100.0			2,583,653		2,583,653		100.0						
	1909	8			777		777		100.0			1,163,395		1,163,395		100.0						
Confectionery.....	1914	12	6	8	336	30	268	38	8.9	76.8	11.3	1,580,735	138,088	1,320,732	115,915	8.7	83.9	7.3				
	1909	9	6	4	283	34	218	31	12.0	77.0	11.0	1,215,250	109,450	890,028	217,872	8.8	73.3	17.9				
Copper, tin, and sheet-iron products.	1914	31	15	16	466	101	332	33	21.7	71.2	7.1	2,674,524	234,632	2,310,607	123,385	8.8	86.6	4.6				
	1909	20	5	14	431	175	201	55	40.6	46.0	12.8	1,611,244	585,838	805,795	219,611	36.4	50.0	13.6				
Flour-mill and gristmill products.	1914	34	40	21	450	46	372	32	10.2	82.7	7.1	11,192,573	1,050,684	9,586,401	555,488	9.4	85.7	4.9				
	1909	45	45	24	394	88	259	47	22.3	65.7	11.9	8,801,001	1,845,411	6,039,597	1,005,993	20.8	67.9	11.3				
Foundry and machine-shop products.	1914	67	62	40	1,254	263	873	118	21.0	69.6	9.4	3,322,590	680,466	2,700,496	441,628	17.8	70.6	11.6				
	1909	31	33	18	1,055	170	800	85	16.1	75.8	8.1	2,135,068	562,277	2,337,800	234,931	17.0	74.6	7.5				
Furniture.....	1914	9	8	4	673	14	655	4	2.1	97.3	0.6	1,335,380	39,393	1,256,000	39,387	2.9	94.1	3.0				
	1909	5	9	5	552	34	492	26	6.2	89.1	4.7	1,093,743	62,522	972,284	58,937	5.7	88.9	5.4				
Gas, illuminating and heating.	1914		9		385		385		100.0			1,523,060		1,523,060		100.0						
	1909		8		200		280		100.0			909,115		909,115		100.0						
Leather goods.....	1914	33	8	7	202	54	125	23	26.7	61.9	11.4	1,075,010	251,757	714,245	109,014	23.4	66.5	10.1				
	1909	28	9	11	353	82	235	36	23.2	66.6	10.2	1,029,441	349,444	1,087,063	192,934	21.5	67.7	11.8				
Lumber and timber products.	1914	198	162	160	13,888	744	12,306	838	5.4	88.6	6.0	30,020,407	1,226,810	28,000,632	1,683,965	4.0	90.6	5.4				
	1909	263	204	246	15,066	1,178	12,304	1,684	7.8	81.7	10.5	30,199,857	2,068,739	25,212,397	2,918,721	8.8	83.5	9.7				
Printing and publishing..	1914	221	87	60	1,556	334	1,095	127	21.4	70.4	8.2	6,010,857	1,184,288	4,287,003	538,666	19.7	71.3	9.0				
	1909	200	69	55	1,459	375	912	172	25.7	62.5	11.8	5,040,523	1,108,857	3,410,957	511,769	22.0	67.8	10.2				
Woolen goods.....	1914		7		648		648		100.0			1,701,587		1,701,587		100.0						
	1909		6		466		466		100.0			918,804		918,804		100.0						
Total for cities.....	1914	412	380	224	13,474	1,301	11,109	974	9.7	83.1	7.2	64,123,954	5,101,995	54,518,579	4,563,380	8.0	85.0	7.0				
ASTORIA.....	1914	23	23	12	1,172	69	1,059	44	5.9	90.4	3.7	4,587,301	227,979	4,187,168	172,154	5.0	91.3	3.7				
EUGENE.....	1914	14	9	14	238	54	135	40	22.7	56.7	20.6	810,346	167,382	358,578	254,380	20.7	47.9	31.4				
MEDFORD.....	1914	12	6	2	59	17	42	12	128.8	71.2		183,023	156,622	126,401	130.9	69.1						
PORTLAND.....	1914	336	325	176	11,273	1,077	9,467	729	9.5	84.0	6.5	55,997,440	4,263,753	48,151,708	3,281,979	7.7	86.4	5.9				
SALEM.....	1914	29	18	20	732	84	496	152	11.5	67.7	20.8	2,845,844	380,259	1,664,724	794,861	13.6	58.5	27.9				

<sup>1</sup> Includes the group "all others."

In 1914, measured by value of products and wage earners, the largest proportions for each of the 14 industries for which separate statistics are given are shown for corporate ownership.

Size of establishments.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is indicated by the statistics given in Table 12.

**Table 12**

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904	1914	1909	1904
All classes.....	2,320	2,246	1,602	28,829	28,750	18,523	\$109,761,951	\$93,004,845	\$55,525,123	\$46,504,130	\$42,452,375	\$24,928,360
Less than \$5,000.....	907	789	584	927	957	747	2,220,810	1,026,913	1,529,491	1,522,173	1,343,938	1,040,739
\$5,000 to \$20,000.....	752	786	567	2,613	3,214	2,820	7,809,972	8,203,981	5,821,749	4,684,557	5,082,474	3,658,379
\$20,000 to \$100,000.....	451	482	332	5,549	7,104	5,228	19,682,477	21,453,056	14,162,072	8,990,230	10,826,549	6,969,113
\$100,000 to \$1,000,000.....	197	181	114	10,447	15,110	8,620	51,902,863	47,022,873	26,138,494	24,344,165	20,766,801	11,579,967
\$1,000,000 and over.....	13	8	5	3,288	2,365	1,108	25,145,829	14,398,817	7,873,317	6,963,005	4,632,613	1,680,162
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.....	39.1	35.1	36.5	3.2	3.3	4.0	2.0	2.1	2.8	3.3	3.2	4.2
\$5,000 to \$20,000.....	32.4	35.0	35.4	9.1	11.2	15.2	7.1	8.8	10.5	10.1	12.0	14.7
\$20,000 to \$100,000.....	19.4	21.5	20.7	19.2	24.7	28.2	18.0	23.1	25.5	19.3	25.0	28.0
\$100,000 to \$1,000,000.....	8.5	8.1	7.1	57.1	52.6	46.5	50.0	50.6	47.1	52.3	48.9	46.5
\$1,000,000 and over.....	0.6	0.4	0.3	11.4	8.2	6.0	22.9	15.5	14.2	15.0	10.9	6.7

For 1914, 210 establishments, or 9.1 per cent of the total number in the state, each reported products exceeding \$100,000 in value, as compared with 189, or 8.5 per cent of the total, in 1909, and 119, or 7.4 per cent, in 1904. For 1914 these establishments reported 19,735 wage earners, or 68.5 per cent of the total for the state, 72.9 per cent of the total value of products, and 67.3 per cent of the total added by manufacture. In the same year the small establishments, those having products less than \$5,000 in value, represented 39.1 per cent of the total number of establishments, but reported only 2 per cent of the total value of products.

The statistics indicate that the relative importance of larger establishments, those with an annual product of \$100,000 and over, has been constantly increasing. In 1904 the establishments of this class gave employment to 52.5 per cent of the wage earners, and their products formed 61.3 per cent of the total for all establishments. By 1914 these proportions had increased to 68.5 and 72.9 per cent, respectively.

Table 13 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 12 for all industries combined.

**Table 13**

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.		AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1914	1909	1914	1909	Per cent distribution.		1914	1909	Per cent distribution.		1914	1909	Per cent distribution.	
					1914	1909			1914	1909			1914	1909
<b>BUTTER, CHEESE, AND CONDENSED MILK</b>	118	95	434	420	100.0	100.0	\$9,567,949	\$4,920,462	100.0	100.0	\$1,065,647	\$968,242	100.0	100.0
Less than \$5,000	17	16	5	6	1.2	1.4	45,166	45,021	0.7	0.9	9,135	9,500	0.9	1.0
\$5,000 to \$20,000	35	27	35	33	8.1	7.9	446,356	345,779	6.8	7.0	63,357	54,003	5.9	5.6
\$20,000 to \$100,000	54	40	176	104	40.6	24.8	2,539,422	1,834,374	38.7	37.3	375,426	248,958	35.2	25.7
\$100,000 and over <sup>1</sup>	12	12	218	277	50.2	66.0	3,537,005	2,695,288	53.8	54.8	617,729	655,781	58.0	67.7
<b>CANNING AND PRESERVING</b>	71	71	799	661	100.0	100.0	4,738,067	3,207,060	100.0	100.0	1,647,647	1,019,628	100.0	100.0
Less than \$5,000	21	25	39	36	4.0	5.4	46,981	59,234	1.0	1.8	21,537	26,195	1.3	2.6
\$5,000 to \$20,000	12	17	47	98	5.9	14.8	130,054	194,061	2.7	6.1	60,373	78,701	3.1	7.7
\$20,000 to \$100,000	20	19	184	264	23.0	39.9	328,423	1,025,182	17.5	32.0	234,604	355,999	14.2	34.9
\$100,000 to \$1,000,000	18	10	629	263	66.2	39.8	3,732,009	1,928,583	78.8	60.1	1,341,133	558,733	81.4	54.8
<b>FLOUR-MILL AND GRISTMILL PRODUCTS</b>	95	114	450	304	100.0	100.0	11,192,573	8,891,001	100.0	100.0	1,365,342	1,224,265	100.0	100.0
Less than \$5,000	10	8	3	6	0.7	1.5	31,958	27,503	0.3	0.3	7,192	7,632	0.5	0.6
\$5,000 to \$20,000	31	35	28	28	6.2	7.1	394,850	445,286	3.5	5.0	72,103	98,225	5.3	8.0
\$20,000 to \$100,000	35	55	83	134	18.4	34.0	1,582,655	2,782,902	14.1	31.3	244,268	528,851	17.9	43.2
\$100,000 to \$1,000,000	16	16	141	226	31.3	57.4	3,833,184	5,635,250	34.3	63.4	530,752	589,557	38.9	48.2
\$1,000,000 and over	3		195		43.4		5,349,926		47.8		511,027		37.4	
<b>FOUNDRY AND MACHINE-SHOP PRODUCTS</b>	169	82	1,254	1,055	100.0	100.0	3,822,590	3,135,068	100.0	100.0	2,206,966	1,663,469	100.0	100.0
Less than \$5,000	66	15	70	11	5.6	1.0	186,881	32,724	4.9	1.0	138,836	20,548	6.3	1.2
\$5,000 to \$20,000	34	29	242	111	19.3	10.5	677,214	331,415	17.7	10.6	455,887	207,063	20.6	12.4
\$20,000 to \$100,000	83	30	489	387	39.0	36.7	1,397,271	1,047,323	36.6	33.4	784,028	597,345	35.5	35.9
\$100,000 to \$1,000,000	6	8	453	546	36.1	51.8	1,561,224	1,723,600	40.8	55.0	830,215	838,513	37.6	50.4
<b>LUMBER AND TIMBER PRODUCTS</b>	526	713	13,888	15,066	100.0	100.0	30,920,407	30,199,857	100.0	100.0	16,521,419	17,786,420	100.0	100.0
Less than \$5,000	230	284	374	484	2.7	3.2	486,728	646,974	1.6	2.1	381,993	521,251	2.3	2.9
\$5,000 to \$20,000	144	224	838	1,382	6.0	9.2	1,462,430	2,210,788	4.7	7.3	1,022,166	1,614,397	6.2	9.1
\$20,000 to \$100,000	80	139	1,605	3,493	11.6	23.2	3,131,226	6,210,660	10.1	20.6	1,890,100	4,219,587	11.5	23.7
\$100,000 to \$1,000,000	69	63	9,768	8,538	70.3	56.7	21,042,175	17,390,242	68.1	57.6	11,221,643	9,563,243	67.9	53.8
\$1,000,000 and over	3	3	1,303	1,169	9.4	7.8	4,797,848	3,732,193	15.5	12.4	1,996,517	1,867,937	12.1	10.5
<b>PRINTING AND PUBLISHING</b>	377	324	1,556	1,459	100.0	100.0	6,010,857	5,040,523	100.0	100.0	4,448,350	3,937,110	100.0	100.0
Less than \$5,000	201	171	157	168	10.1	11.5	508,733	437,672	8.5	8.7	413,031	348,614	9.2	8.9
\$5,000 to \$20,000	121	117	343	430	22.0	29.5	1,239,068	1,212,096	20.6	24.0	1,004,334	971,398	22.6	24.7
\$20,000 to \$100,000	49	30	494	396	31.8	27.1	1,828,460	1,174,676	30.4	23.3	1,404,184	874,804	31.6	22.2
\$100,000 and over <sup>1</sup>	6	6	562	465	36.1	31.9	2,434,596	2,216,079	40.5	44.0	1,626,801	1,742,294	36.6	44.3

<sup>1</sup> Includes the group "\$1,000,000 and over."

Table 14 presents, for 1914, for all industries combined, for each of the five cities having more than 10,000 inhabitants, statistics similar to those given in Table 12 for the state as a whole.

The totals for Astoria, Portland, and Salem show the same general condition shown by Table 12 as prevailing in the totals for all industries in the state, namely, a preponderance as to value of products for establish-

ments in the group "\$100,000 and over." For these cities the products of the establishments in this class represented 84.9 per cent, 77 per cent, and 67.2 per cent of the totals for the three cities, respectively. For Eugene and Medford, however, the greatest value of products, 76.1 per cent and 55.4 per cent, appears for the group of establishments reporting products valued at \$20,000 to \$100,000.

**Table 14**

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
ASTORIA.....	57	1,172	100.0	\$4,587,301	100.0	\$1,938,410	100.0	PORTLAND.....	837	11,273	100.0	\$55,097,440	100.0	\$21,798,787	100.0
Less than \$5,000.....	14	12	1.0	41,457	0.9	26,532	1.4	Less than \$5,000.....	255	174	1.5	657,053	1.2	462,266	2.1
\$5,000 to \$20,000.....	16	42	3.6	157,235	3.4	87,251	4.5	\$5,000 to \$20,000.....	305	985	8.7	3,273,643	5.9	2,161,799	9.0
\$20,000 to \$100,000.....	14	133	11.4	494,982	10.8	232,438	12.0	\$20,000 to \$100,000.....	189	2,509	22.3	8,888,311	15.9	4,527,428	20.8
\$100,000 to \$1,000,000.....	13	985	84.0	3,393,627	84.0	1,592,198	82.1	\$100,000 to \$1,000,000.....	80	5,778	51.3	21,979,901	41.9	10,812,123	49.6
								\$1,000,000 and over.....	8	1,827	16.2	17,897,542	32.1	3,835,171	17.0
EUGENE.....	37	238	100.0	810,346	100.0	403,099	100.0	SALEM.....	97	732	100.0	2,845,844	100.0	1,208,620	100.0
Less than \$5,000.....	11	10	4.2	34,944	4.3	20,498	5.1	Less than \$5,000.....	22	17	2.3	56,767	2.0	29,544	2.4
\$5,000 to \$20,000.....	14	40	19.3	158,500	19.6	93,530	23.2	\$5,000 to \$20,000.....	18	58	7.9	183,409	6.4	93,902	7.8
\$20,000 and over.....	12	182	76.6	616,842	76.1	289,038	71.7	\$20,000 to \$100,000.....	17	177	24.2	694,690	24.4	309,566	24.9
								\$100,000 to \$1,000,000.....	10	480	65.6	1,010,978	67.2	784,683	64.9
MEDFORD.....	18	59	100.0	183,023	100.0	117,445	100.0								
Less than \$5,000.....	7	11	18.6	23,267	12.7	12,553	10.7								
\$5,000 to \$20,000.....	9	18	30.5	53,393	31.0	30,177	25.7								
\$20,000 to \$100,000.....	3	30	50.9	101,363	55.4	74,715	63.6								

<sup>1</sup> Includes the group "\$100,000 to \$1,000,000."

Table 15 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 and 19 of the more important industries, for the state as a whole; and for all industries combined in

each of the five cities having more than 10,000 inhabitants. Table 16 presents, for 1914, percentages based on the figures in Table 15, and for 1909, similar percentages for all industries combined and for individual industries in the state as a whole.

**Table 15**

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—							
			No wage earners.		1 to 5 wage earners.		6 to 20 wage earners.		21 to 50 wage earners.	
	Estab-lish-ments.	Wage earners (average number).	Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	
All industries.....	2,320	28,829	362	1,343	2,926	388	4,002	105	3,323	
Bread and other bakery products.....	163	700	30	104	192	13	115	5	160	
Brick and tile, terra-cotta, and other clay products.....	42	382	1	25	78	12	128	2	53	
Butter, cheese, and condensed milk.....	118	434	11	92	169	10	99	4	110	
Canning and preserving.....	71	709	3	35	80	22	250	3	224	
Cars and general shop construction and repairs by steam-railroad companies.....	14	1,601	.....	1	4	2	16	2	62	
Confectionery.....	26	336	2	13	25	7	60	2	84	
Copper, tin, and sheet-iron products.....	62	466	11	40	104	9	87	1	36	
Flour-mill and gristmill products.....	95	450	13	67	127	11	105	2	71	
Foundry and machine-shop products.....	169	1,254	11	107	217	36	389	9	319	
Furniture.....	21	673	3	11	20	1	13	1	31	
Gas, illuminating and heating.....	9	385	.....	5	16	3	31	.....	.....	
Leather goods.....	48	202	7	31	41	7	76	3	85	
Liquors, malt.....	10	189	.....	2	7	6	63	1	32	
Lumber and timber products.....	526	13,888	32	291	704	69	1,040	38	1,273	
Printing and publishing.....	377	1,556	123	197	406	48	405	5	164	
Shipbuilding, including boat building.....	20	163	6	8	14	3	35	2	54	
Slaughtering and meat packing.....	14	442	1	8	23	4	38	.....	.....	
Tobacco, cigars.....	63	164	25	33	80	4	52	1	22	
Woolen goods.....	7	648	.....	.....	.....	2	25	1	28	
All other industries.....	465	4,107	74	273	630	86	888	18	515	
Total for cities.....	1,016	13,474	173	516	1,215	214	2,268	57	1,704	
ASTORIA.....	57	1,172	5	33	85	11	124	4	93	
EUGENE.....	37	238	4	22	55	10	103	.....	.....	
MEDFORD.....	18	59	3	12	29	3	30	.....	.....	
PORTLAND.....	837	11,273	152	417	987	171	1,790	49	1,491	
SALEM.....	97	732	9	32	59	19	211	4	120	

Table 15—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.	
	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
All industries.....	60	4,447	43	6,861	17	6,120	2	1,141		
Bread and other bakery products.....	2	127	2	233						
Brick and tile, terra-cotta, and other clay products.....	1	65								
Butter, cheese, and condensed milk.....	3	245								
Canning and preserving.....	6	425	1	127	1	413	1	555		
Cars and general shop construction and repairs by steam-railroad companies.....	2	167								
Confectionery.....	2	147	1	239						
Copper, tin, and sheet-iron products.....	2	138	1	191						
Flour-mill and gristmill products.....	3	216	2	393						
Foundry and machine-shop products.....					1	338				
Furniture.....										
Gas, illuminating and heating.....	1	87								
Leather goods.....	26	1,907	28	4,387	11	3,931	1	586		
Liquors, malt.....	2	163	2	328						
Lumber and timber products.....	1	60			1	381				
Printing and publishing.....										
Shipbuilding, including boat building.....	1	80	3	615						
Slaughtering and meat packing.....	3	500	3	448	3	1,006				
Tobacco, cigars.....										
Woolen goods.....										
All other industries.....										
Total for cities.....	30	2,200	18	2,900	7	2,513	1	555		
ASTORIA.....	1	78	2	353	1	439				
EUGENE.....	1	80								
MEDFORD.....										
PORTLAND.....	27	2,017	14	2,359	6	2,074	1	555		
SALEM.....	1	85	2	267						

There were 362 establishments for which no wage earners are shown. In these establishments all the work is done by the proprietors or members of their families, firm members, or persons classed as salaried employees. For some of them the number of wage earners employed was so small and the term of employment so short that in computing the average, as described in the "Explanation of terms," the number was less than 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 74.6 per cent of the total for the state, but gave employment to only 24 per cent of the total wage earners reported. The groups of establishments having more than 100 wage earners, although representing only 2.7 per cent of the total number of establishments in the state, gave employment to 49.1 per cent of the total wage earners.

Table 16

INDUSTRY AND CITY.	Cen-sus year.	PER CENT OF TOTAL AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS EMPLOYING SPECIFIED NUMBER.								INDUSTRY AND CITY.	Cen-sus 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			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 1909	10.1 10.2	13.9 16.5	11.5 16.4	15.4 14.7	23.8 20.7	21.3 15.1			4.0 6.3		Leather goods.....	1914 1909	20.3 10.5	37.0 13.9	42.1 49.9				
Bread and other bakery products.....	1914 1909	27.4 28.2	16.4 21.9	22.9 9.8		33.3 29.0				Liquors, malt.....	1914 1909	3.7 7.8	33.3 48.5	17.0 11.3	46.0 32.4							
Brick and tile, terra-cotta, and other clay products.....	1914 1909	19.9 27.0	33.0 41.6	13.9 31.4	33.2					Lumber and timber products.....	1914 1909	5.1 5.7	7.5 12.7	9.2 15.8	14.1 15.1	31.6 20.5	28.3 24.8	4.2 5.3				
Butter, cheese, and condensed milk.....	1914 1909	36.9 30.2	22.8 26.2	25.3 13.8	15.0 29.8					Printing and publishing.....	1914 1909	20.1 28.6	31.8 34.1	10.5 8.1	10.5 14.3	21.1 15.1						
Canning and preserving.....	1914 1909	10.0 17.9	31.3 34.5	23.0 26.0	30.7 21.6					Shipbuilding, including boat building.....	1914 1909	8.6 11.8	21.5 8.0	33.1 80.2	36.8							
Cars and general shop construction and repairs by steam-railroad companies.....	1914 1909	0.3 2.4	0.9 14.7	3.9 14.7	26.5 18.4	7.9 15.1	25.8 64.5	34.7		Slaughtering and meat packing.....	1914 1909	5.2 6.8	8.6 9.6				86.2 73.8					
Confectionery.....	1914 1909	7.4 8.1	17.9 34.0	25.0 31.1	49.7 26.1					Tobacco, cigars.....	1914 1909	51.9 31.7	33.8 33.3	14.3 35.0								
Copper, tin, and sheet-iron products.....	1914 1909	22.3 12.5	18.7 22.3	7.7 34.1		51.3 31.1				Woolen goods.....	1914 1909		3.9 13.1	4.3 13.7	12.3 73.2	79.5						
Flour-mill and gristmill products.....	1914 1909	28.2 45.7	23.3 21.8	15.8 18.5	32.7 14.0					All other industries.....	1914 1909	15.3 12.1	21.6 17.3	12.5 12.0	13.7 13.2	10.9 27.0	26.0 7.0	11.4				
Foundry and machine-shop products.....	1914 1909	17.3 9.0	31.0 28.5	25.5 23.4	11.0 18.4	15.2 20.7				Total for cities.....	1914	9.0	16.8	12.6	16.8	22.0	18.7	4.1				
Furniture.....	1914 1909	3.0 3.4	1.9 8.5	4.6 12.0	32.1 25.2	58.4 50.9				ASTORIA.....	1914	7.2	10.0	7.9	6.7	30.1	37.5					
Gas, illuminating and heating..	1914 1909	4.1 6.5	8.1 3.5				87.8			EUGENE.....	1914	23.1	43.3		33.6							
										MEDFORD.....	1914	49.2	50.8									
										PORTLAND.....	1914	8.8	15.9	13.2	17.9	20.9	18.4	4.9				
										SALEM.....	1914	8.1	28.5	16.4	11.6	35.1						

Among the cities, the highest percentages of the total number of wage earners are reported by establishments employing more than 100 wage earners.

**Engines and power.**—Table 17 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 44,203 horsepower, or 25.3 per cent, from 1909 to 1914. This increase is due largely to the increase in rented power. The use of rented power, almost wholly electric, has greatly increased since 1904, when 4,727 horsepower, representing 5.8 per cent of the total primary power, was reported. In 1909 the amount of such power had increased to 14,811 horsepower, or 8.4 per cent of the total, and, in 1914, to 44,010 horsepower, or 20.1 per cent of the total. 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.

**Table 17**

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1914	1909	1904	1914	1909	1904	1914	1909	1904
Primary power, total.....	5,188	3,442	1,318	219,222	175,019	81,348	100.0	100.0	100.0
Owned.....	1,710	1,921	1,318	175,155	100,110	78,543	79.0	61.5	94.1
Steam engines and turbines <sup>1</sup> .....	1,308	1,572	1,008	118,591	112,244	55,512	53.2	64.1	68.2
Internal-combustion engines.....	133	81	58	1,289	428	371	0.0	0.2	0.5
Water wheels, turbines, and motors.....	278	268	252	57,275	47,438	20,660	26.1	27.1	25.4
Rented.....	3,469	1,521	( <sup>2</sup> )	44,007	14,009	4,805	20.1	8.5	5.9
Electric.....	3,469	1,521	( <sup>2</sup> )	44,010	14,811	4,727	20.1	8.4	5.8
Other.....				67	98	78		0.1	0.1
Electric.....	3,937	1,745		53,730	20,802	5,223	100.0	100.0	100.0
Rented.....	3,469	1,521	( <sup>2</sup> )	44,010	14,811	4,727	81.0	71.2	90.5
Generated by establishments reporting.....	468	224	31	9,720	5,991	496	18.1	28.8	9.5

<sup>1</sup> Figures for horsepower include for 1909 and 1904 the amount reported under the head of "other" owned power.

<sup>2</sup> 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 18 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 18**

INDUSTRY AND CITY.	COAL.					INDUSTRY AND CITY.	COAL.				
	An-thra-cite (tons, 2,240 lbs.).	Bitu-minous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, in-cluding gasoline (barrels).	Gas (1,000 cubic feet).		An-thra-cite (tons, 2,240 lbs.).	Bitu-minous (tons, 2,000 lbs.).	Coke (tons, 2,000 lbs.).	Oil, in-cluding gasoline (barrels).	Gas (1,000 cubic feet).
All industries.....	1,821	14,437	6,106	940,377	61,988	Ice, manufactured.....		1,090		45,382	
Bread and other bakery products.....	27	476	716	11,671	10,433	Liquors, malt.....	1,220	440	697	14,065	
Brick and tile, terra-cotta, and other clay products.....		3,382		59,370		Lumber and timber products.....				53,587	
Butter, cheese, and condensed milk.....		315		5,630		Printing and publishing.....	25	478		1,465	13,194
Canning and preserving.....		60		16,208	327	Slaughtering and meat packing.....	40	113	4	25,369	
Cars and general shop construction and repairs by steam-railroad companies.....	329	700		60,965		Woolen goods.....		520		17,668	
Coffee, roasting and grinding.....		50			10,111	All other industries.....	68	2,172	864	253,007	5,183
Confectionery and ice cream.....	21	399	6	7,614	7,793	Total for cities.....	1,737	7,177	4,567	258,330	59,373
Copper, tin, and sheet-iron products.....		67	20	47	8,110	ASTORIA.....	1,247	154	100	14,410	644
Flour-mill and gristmill products.....		183		3,628		EUGENE.....		10	88		786
Food preparaters.....		34		10,933	2,520	MEDFORD.....			4		6
Foundry and machine-shop products.....	101	411	2,528	9,315	4,317	PORTLAND.....		4,994	3,395	237,430	59,779
Furniture.....		286		3,226		SAREM.....	62	2,019	980	6,481	1,159
Gas, illuminating and heating.....		3,261	1,371	341,230							

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 five important industries in Oregon are here presented, followed by statistics for laundries.

Flour-mill and gristmill products.—Table 19 gives the quantity and value of flour-mill and gristmill products for 1914, 1909, and 1904.

Table 19	1914	1909	1904
Products, total value.....	\$11,192,573	\$8,891,001	\$8,467,613
Wheat flour:			
Barrels.....	1,791,334	1,360,281	1,740,849
Value.....	\$7,749,619	\$6,015,845	\$6,324,932
Rye flour:			
Barrels.....	4,127	1,299	285
Value.....	\$16,220	\$5,502	\$1,300
Barley meal:			
Pounds.....	1,836,918	1,095,604	2,693,000
Value.....	\$34,800	\$17,963	\$32,750
Corn meal and corn flour:			
Barrels.....	2,807	559	685
Value.....	\$14,050	\$2,236	\$3,395
Bran and middlings:			
Tons.....	51,758		
Value.....	\$1,185,918		
Feed and offal:			
Tons.....	71,254	104,262	98,747
Value.....	\$1,892,079	\$2,688,095	\$2,061,170
Breakfast foods:			
Pounds.....	5,396,437		
Value.....	\$188,715	\$58,554	\$4,900
All other cereal products, value.....	\$93,469		
All other products, value.....	\$17,697	\$102,806	\$39,166

Wheat flour constituted 69.2 per cent of the total value of products in 1914 and 67.7 per cent in 1909, and increased in production for the five-year period 431,053 barrels, or 31.7 per cent, and in value \$1,733,-774, or 28.8 per cent.

The 95 establishments reporting in 1914 show a total equipment of 481 stands of rolls, 53 runs of stone, and 66 attrition mills, and 4 establishments reported the manufacture of sacks.

Slaughtering and meat packing.—Table 20 presents statistics in regard to the quantity and value of specified products reported by slaughtering and meat-packing establishments for 1914, 1909, and 1904.

The statistics given in this table represent the products of the wholesale slaughtering and meat-packing establishments. Beef and pork are the principal products of the industry. In addition to the products for which separate quantities and values are given, the total for "all other products" included pickled beef and other cured, meat puddings, scrapple, etc., lard compounds and substitutes, tallow, soap stock, sausage casings, fertilizer materials, glue, and wool. The growth of the industry during the census period 1909 to 1914 was not so remarkable as that from 1904 to 1909, when the value of products increased 102.2 per cent. The only decrease in pork products shown for the period 1909-1914 is in lard,

which decreased 2,117,728 pounds, or 37.1 per cent. This is due in large part to the increased manufacture and use of lard compounds and substitutes.

Table 20	1914	1909	1904
Products, total value.....	\$7,486,920	\$5,879,615	\$2,907,154
Fresh meat:			
Beef—			
Pounds.....	18,550,133	28,759,934	13,525,565
Value.....	\$2,237,855	\$2,235,816	\$882,814
Veal—			
Pounds.....	162,928	851,558	293,930
Value.....	\$19,888	\$88,603	\$19,822
Mutton and lamb—			
Pounds.....	7,242,761	3,866,798	3,785,414
Value.....	\$633,165	\$351,170	\$223,207
Pork—			
Pounds.....	10,635,553	4,256,595	2,148,669
Value.....	\$1,213,633	\$517,974	\$185,657
All other fresh meat—			
Pounds.....	1,737,778	72,535	
Value.....	\$153,971	\$8,303	
Pork, pickled and other cured:			
Pounds.....	7,817,795	5,123,483	9,247,347
Value.....	\$1,102,045	\$752,137	\$898,605
Sausage:			
Pounds.....	2,180,304	2,069,163	1,041,720
Value.....	\$307,761	\$250,822	\$79,150
Lard:			
Pounds.....	3,591,540	5,709,268	2,449,740
Value.....	\$419,179	\$635,623	\$220,023
Hides and pelts:			
Cattle—			
Number.....	33,431		
Pounds.....	2,456,098		
Value.....	\$324,068	56,421	26,493
Calves—			
Number.....	1,188	3,390,352	1,533,083
Pounds.....	16,108	\$427,179	\$131,603
Value.....	\$2,569		
Sheep—			
Number.....	141,892	92,038	13,267
Value.....	\$103,960	\$52,589	\$9,996
All other products, value.....	\$873,180	\$559,334	\$256,277

Butter, cheese, and condensed milk.—This is a comparatively new industry in Oregon. Its growth is emphasized by the fact that in 1889 only 12 establishments were reported as engaged in the manufacture of butter, cheese, and condensed milk, while in 1914 the number had increased to 118 establishments, reporting a total product of \$6,567,949.

Table 21 gives the quantity and value of the products of the industry for 1914, 1909, and 1904.

The production of butter increased during the decade by 6,102,338 pounds, or 120.1 per cent. The quantity of cheese manufactured increased during the same period by 4,059,165 pounds, or 180 per cent. It is impossible to give the figures for the manufacture of condensed milk in the state for 1904 without disclosing the operations of individual establishments. The increase in the manufacture of this product, however, from 1909 to 1914 was 1,368,477 pounds, or 6.3 per cent. Butter constituted 50.3 per cent of the total value of the product for 1914 for the industry as a whole; cheese, 14.5 per cent; and condensed milk, 21.2 per cent. The total production of butter in 1914 was 11,182,937 pounds, and of this, 66.8 per cent was put up in prints or rolls.

The manufacture of cheese and condensed milk is practically confined to that of "full-cream cheese" and unsweetened and evaporated milk.

	1914	1909	1904 <sup>1</sup>
Products, total value.....	\$6,567,949	\$4,920,402	\$1,029,343
Butter:			
Pounds.....	11,182,937	8,472,660	5,080,599
Value.....	\$3,306,464	\$2,682,106	\$1,266,891
Packed solid—			
Pounds.....	3,714,736	992,102	855,962
Value.....	\$1,022,496	\$298,721	\$193,601
Prints or rolls—			
Pounds.....	7,468,201	7,480,558	4,224,637
Value.....	\$2,283,938	\$2,383,385	\$1,073,200
Cream sold:			
Pounds.....	2,300,099	1,019,230	477,218
Value.....	\$276,591	\$132,097	\$40,798
Cheese:			
Pounds.....	6,314,757	4,218,953	2,255,592
Value.....	\$952,101	\$640,868	\$249,376
Full cream—			
Pounds.....	6,236,185	4,166,038	2,214,067
Value.....	\$942,824	\$631,259	\$244,621
Part cream—			
Pounds.....	11,270	37,415	.....
Value.....	\$1,247	\$5,369	.....
Other kinds—			
Pounds.....	67,322	15,500	41,525
Value.....	\$8,030	\$4,240	\$4,755
Condensed and evaporated milk, un-sweetened: <sup>2</sup>			
Pounds.....	23,157,414	21,788,637	.....
Value.....	\$1,392,698	\$1,164,360	.....
All other butter, cheese, and condensed milk, factory products, value.....	\$386,474	\$22,253	\$17,792
All other products, value.....	\$253,651	\$278,778	\$64,480

<sup>1</sup> Excludes two establishments, to avoid disclosure of individual operations.  
<sup>2</sup> Includes one establishment in 1909 reporting condensed milk, sweetened.  
<sup>3</sup> Includes skimmed milk, buttermilk, and casing sold.

**Printing and publishing.**—The printing and publishing industry in Oregon shows a decided growth during the last semidecade, measured by both number of publications and aggregate circulation. The following table shows the number of publications and aggregate circulation per issue, classified according to period of issue, for the years 1914, 1909, and 1904.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1914	1909	1904	1914	1909	1904
Total.....	289	254	221	617,840	735,363	445,946
Daily.....	34	31	23	218,449	150,500	92,171
Sunday.....	7	6	8	140,975	93,142	58,809
Semitweekly.....	14	11	18	30,009	26,725	27,330
Weekly.....	201	170	152	349,393	229,595	189,395
Monthly.....	22	27	16	108,850	219,351	81,400
All other classes.....	11	3	4	64,200	16,000	5,850

<sup>1</sup> Includes two triweeklies. <sup>2</sup> Includes one triweekly.  
<sup>3</sup> Includes four semimonthlies, six quarterlies, and one semiannual.

Increases from 1909 to 1914 are shown for all classes of publications, both in number and aggregate circulation, except monthlies. Weeklies showed the greatest increase for both items. In 1914, 22 of the 34 daily papers, with an aggregate circulation of 140,823, were evening editions. All of the publications were printed in the English language, except 1 daily in Japanese; 8 weeklies, of which 2 each were in German, Italian, and Finnish, and 1 each in Danish-and-Norwegian and English-and-German; and 1 semiannual in Finnish.

**Canning and preserving.**—Table 23 gives the quantity and value of the principal products reported in 1914, 1909, and 1904.

This is one of the important and distinctive industries of Oregon. The increase in value of products

from 1909 to 1914 was \$1,531,007, or 47.7 per cent, and from 1904 to 1909, \$295,696, or 10.2 per cent.

	1914	1909	1904
Products, total value <sup>1</sup> .....	\$4,738,067	\$3,207,060	\$2,911,304
Canned vegetables.....	\$27,863	\$48,219	\$30,045
Beans—			
Cases.....	9,292	12,831	4,000
Value.....	\$10,231	\$26,179	\$10,892
All other—			
Cases.....	6,099	10,565	9,209
Value.....	\$11,632	\$22,040	\$19,153
Canned fruits.....	\$539,676	\$177,818	\$214,303
Apples—			
Cases.....	24,872	8,557	15,943
Value.....	\$40,148	\$15,918	\$35,170
Blackberries—			
Cases.....	2,219	4,408	4,694
Value.....	\$4,114	\$9,321	\$8,935
Cherries—			
Cases.....	38,479	22,770	27,340
Value.....	\$112,026	\$49,203	\$72,465
Pears—			
Cases.....	20,702	14,508	14,174
Value.....	\$78,204	\$42,842	\$48,304
Raspberries—			
Cases.....	29,641	9,658	4,342
Value.....	\$91,187	\$23,200	\$15,549
Strawberries—			
Cases.....	15,194	3,490	9,757
Value.....	\$55,692	\$10,361	\$30,324
All other—			
Cases.....	50,061	14,033	3,430
Value.....	\$157,404	\$26,967	\$8,756
Dried fruits:			
Pounds.....	12,893,680	14,028,251	893,000
Value.....	\$40,900	\$473,008	\$31,000
Prunes—			
Pounds.....	12,621,817	14,099,597	813,000
Value.....	\$822,837	\$470,911	\$28,000
All other—			
Pounds.....	241,872	18,654	50,000
Value.....	\$27,063	\$2,097	\$3,000
Canned fish, clams, etc.....	\$2,366,075	\$1,352,281	\$1,694,762
Salmon—			
Cases.....	376,492	.....	.....
Value.....	\$2,314,771	\$1,341,481	\$1,694,762
All other—			
Cases.....	14,062	.....	.....
Value.....	\$51,304	\$10,800	.....
Salted fish:			
Pounds.....	3,672,277	5,333,674	7,004,081
Value.....	\$473,458	\$731,000	\$689,484
Smoked or dried fish:			
Pounds.....	189,620	137,700	.....
Value.....	\$21,507	\$20,800	.....
All other products, including pickles, preserves, and sauces, value.....	\$450,580	\$403,334	\$251,710

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

The products of the industry have been divided into seven general classes, as follows: Canned vegetables; canned fruits; dried fruits; canned fish, clams, etc.; salted fish; smoked and dried fish; and all other products, the latter classification including pickles, preserves, and sauces. The value of canned vegetables formed only six-tenths of 1 per cent of the total value of products for the industry in 1914, 1.5 per cent in 1909, and 1 per cent in 1904; that of canned fruits, 11.4 per cent in 1914, 5.5 per cent in 1909, and 7.4 per cent in 1904; that of dried fruits, 17.9 per cent in 1914, 14.7 per cent in 1909, and 1.1 per cent in 1904; that of fish products, 60.4 per cent in 1914, 65.6 per cent in 1909, and 81.9 per cent in 1904; and that of all other products, 9.7 per cent in 1914, 12.6 per cent in 1909, and 8.6 per cent in 1904.

**Laundries.**—Statistics for power laundries are not included in the general tables or in the totals for all manufacturing industries. Table 24, however, summarizes these statistics for Oregon for 1914 and 1909.

**Table 24**

	POWER LAUNDRIES.		
	Number or amount.		Per cent of increase, 1909-1914 <sup>1</sup>
	1914	1909	
Number of establishments.....	78	58	.....
Persons engaged.....	1,969	1,674	17.6
Proprietors and firm members.....	74	54	.....
Salaried employees.....	150	163	-8.0
Wage earners (average number).....	1,745	1,457	19.8
Primary horsepower.....	2,338	1,585	47.5
Capital.....	\$1,669,317	\$991,017	68.4
Salaries and wages.....	1,136,059	845,314	34.4
Salaries.....	174,382	160,547	40.4
Wages.....	961,677	684,767	8.6
Rent and taxes.....	49,055	33,217	47.7
Cost of materials.....	385,166	263,593	46.1
Amount received for work done.....	2,146,868	1,569,982	36.7

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

In both 1914 and 1909 Oregon ranked eighteenth among the states in amount received for work done, and twenty-first in 1914 in number of persons engaged in the industry. The table shows an increase for all items given, with the exception of salaried employees, which shows a small decrease. In 1914, 27, and in 1909, 22 laundries were reported as under corporate ownership, these establishments reporting 75.5 and 74.5 per cent, respectively, of the amount received for work done.

Table 25 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 the number reported for each month formed of the greatest number reported for any month of the same year.

Table 26 shows 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 27 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 25**

MONTH.	WAGE EARNERS.			
	Number.		Per cent of maximum.	
	1914	1909	1914	1909
January.....	1,820	1,371	100.0	90.7
February.....	1,793	1,374	98.5	90.9
March.....	1,804	1,392	99.1	92.1
April.....	1,796	1,411	98.7	93.3
May.....	1,786	1,439	98.1	95.2
June.....	1,757	1,482	96.5	98.0
July.....	1,807	1,504	99.3	99.5
August.....	1,747	1,499	96.0	99.1
September.....	1,690	1,497	92.8	99.0
October.....	1,688	1,512	92.7	100.0
November.....	1,638	1,505	90.0	99.5
December.....	1,619	1,497	89.0	99.0

**Table 26**

KIND.	NUMBER OF ENGINES OR MOTORS.		HORSEPOWER.		
			Amount.		Per cent of increase, 1909-1914. <sup>1</sup>
	1914	1909	1914	1909	
Primary power, total.....	102	65	2,338	1,585	47.5
Owned.....	67	52	2,133	1,486	43.5
Steam engines and turbines.....	63	49	2,095	1,406	49.0
Internal-combustion engines.....	2	2	26	70	.....
Water wheels, turbines, and motors.....	2	1	12	10	.....
Rented.....	35	13	205	99	.....
Electric.....	35	13	205	96	.....
Other.....	.....	.....	.....	3	.....
Electric—Generated by establishments reporting.....	88	.....	277	.....	.....

<sup>1</sup> Percentages are omitted where base is less than 100.

**Table 27**

KIND.	Unit.	QUANTITY.		Per cent of increase, 1909-1914. <sup>1</sup>
		1914	1909	
Anthracite coal.....	Tons (2,240 lbs.)....	200	11	.....
Bituminous coal.....	Tons (2,000 lbs.)....	1,525	729	109.2
Coke.....	Tons (2,000 lbs.)....	150	.....	.....
Oil.....	Barrels.....	53,969	21,888	146.6
Gas.....	1,000 cubic feet.....	3,325	2,732	21.7

<sup>1</sup> Percentages are omitted where base is less than 100.

GENERAL TABLES.

Table 28 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 cities having 50,000 inhabitants or more; and for cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

Table 29 presents, for 1914, in the state as a whole and in cities having 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, for all industries combined.

TABLE 28.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904.

INDUSTRY AND CITY.	Cen-sus year.	Number of estab-lish-ments.	Wage earners (aver-age num-ber).	Primary horse-power.	Expressed in thousands.			INDUSTRY AND CITY.	Cen-sus year.	Number of estab-lish-ments.	Wage earners (aver-age num-ber).	Primary horse-power.	Expressed in thousands.		
					Wages.	Cost of ma-terials.	Value of prod-ucts.						Wages.	Cost of ma-terials.	Value of prod-ucts.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1914	2,320	28,820	219,222	\$20,932	\$93,258	\$109,762	Gas, illuminating and heating.	1914	9	385	2,482	\$310	\$404	\$1,528
	1909	2,246	28,750	175,019	19,902	60,552	93,005		1909	8	260	1,483	194	200	909
	1904	1,602	18,523	81,348	11,444	30,597	65,525		1904	5	32	203	31	84	467
Awnings, tents, and sails.	1914	5	84	29	45	188	493	Ice, manufactured.....	1914	27	106	2,650	92	118	376
	1909	5	96	23	20	314	459		1909	25	99	1,509	53	70	257
	1904	4	22	.....	12	90	123		1904	20	75	1,416	57	41	217
Bread and other bakery products.	1914	169	700	589	463	1,880	3,326	Leather goods.....	1914	48	202	205	158	673	1,075
	1909	151	613	336	441	1,021	2,829		1909	48	353	173	202	989	1,629
	1904	93	430	253	221	875	1,504		1904	20	270	71	173	642	925
Brick and tile, terra-cotta, and other clay products.	1914	42	382	2,894	201	165	521	Liquors, malt.....	1914	10	189	2,028	228	508	1,810
	1909	61	385	1,922	266	155	675		1909	18	204	2,018	206	454	1,857
	1904	43	204	766	132	63	315		1904	24	151	1,001	137	429	1,118
Butter, cheese, and condensed milk.	1914	118	434	1,827	325	5,502	6,508	Lumber and timber prod-ucts.	1914	526	13,888	101,832	9,942	14,399	30,920
	1909	95	420	1,935	290	3,952	4,920		1909	713	15,090	95,213	10,172	12,413	30,200
	1904	98	130	715	81	1,361	1,620		1904	477	8,558	43,304	6,450	8,856	15,418
Canning and preserving...	1914	71	799	1,655	339	3,000	4,738	Marble and stone work...	1914	24	88	278	85	146	346
	1909	71	901	1,318	315	2,187	3,207		1909	23	76	159	75	113	207
	1904	48	529	1,247	250	1,894	2,911		1904	8	38	13	42	77	190
Cars and general shop construction and repairs by steam-railroad companies.	1914	14	1,601	1,370	1,343	1,019	2,584	Printing and publishing..	1914	377	1,556	7,230	1,407	1,503	6,011
	1909	8	777	933	544	500	1,163		1909	324	1,459	1,927	1,438	1,103	5,041
	1904	12	930	955	677	386	1,265		1904	245	1,018	993	724	658	2,776
Coffee, roasting and grind-ing.	1914	9	90	320	61	1,532	2,050	Shipbuilding, including boat building.	1914	20	103	445	158	114	332
	1909	5	72	208	52	1,006	1,427		1909	24	212	237	100	204	477
	1904	4	45	.....	23	654	811		1904	11	109	70	122	123	207
Confectionery.....	1914	20	336	293	157	813	1,581	Slaughtering and meat packing.	1914	14	442	1,344	309	6,202	7,487
	1909	19	283	217	138	549	1,215		1909	14	366	752	280	5,015	5,880
	1904	13	133	59	57	141	379		1904	10	240	327	155	2,390	2,907
Copper, tin, and sheet-iron products.	1914	62	466	438	333	1,657	2,675	Stoves, hot-air furnaces, and ranges.	1914	10	80	88	75	120	289
	1909	39	431	253	354	835	1,011		1909	11	86	183	79	130	351
	1904	15	128	13	99	121	300		1904	3	30	28	26	20	139
Flour-mill and gristmill products.	1914	95	450	8,565	330	9,827	11,193	Tobacco, cigars.....	1914	63	154	2	109	148	383
	1909	114	394	11,541	278	7,607	8,801		1909	55	186	.....	171	170	471
	1904	105	395	9,993	271	7,352	8,468		1904	54	163	3	92	179	396
Food preparations, not elsewhere specified.	1914	18	70	633	53	625	878	Woolen goods.....	1914	7	648	1,670	373	943	1,702
	1909	8	50	275	30	352	580		1909	6	406	1,553	201	522	919
	1904	6	61	153	31	244	355		1904	7	566	955	220	496	1,034
Foundry and machine-shop products.	1914	169	1,254	4,238	1,035	1,016	3,823	All other industries.....	1914	372	3,571	74,434	2,579	9,453	15,738
	1909	82	1,055	2,709	892	1,472	3,135		1909	309	4,159	46,430	2,913	7,979	13,511
	1904	42	787	1,172	596	643	1,588		1904	211	2,028	16,700	1,532	5,540	9,213

1 Excludes statistics for two establishments, to avoid disclosure of individual operations.  
 2 Includes "pickles, preserves, and sauces."  
 3 Includes "tinware, not elsewhere specified."  
 4 Excludes statistics for one establishment, to avoid disclosure of individual operations.  
 5 Includes "automobile repairing;" "engines, steam, gas, and water;" "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."  
 6 Includes "pocketbooks;" "saddlery and harness;" and "trunks and valises."  
 7 Includes "boxes, wooden packing;" "lumber, planing-mill products, not including planing mills connected with sawmills;" and "window and door screens."  
 8 Includes "bookbinding and blank-book making," and "engraving, steel and copper plate, including plate printing."

TABLE 28.—COMPARATIVE SUMMARY FOR 1914, 1909, AND 1904—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Primary horse- power.	Wages.	Cost of ma- terials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Primary horse- power.	Wages.	Cost of ma- terials.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
PORTLAND—All industries.	1914	837	11,273	36,188	\$8,542	\$33,899	\$55,697	Food preparations .....	1914	18	79	633	\$53	\$625	\$878
	1909	649	12,214	32,122	8,979	26,076	46,861		1909	8	50	275	35	352	580
	1904	437	8,171	.....	5,342	17,024	28,651		1904	6	61	.....	81	244	355
Awnings, tents and sails..	1914	5	84	29	45	188	493	Foundry and machine- shop products.	1914	114	1,012	3,323	854	1,311	3,193
	1909	5	95	23	29	314	459		1909	44	799	2,080	704	1,222	2,527
	1904	4	22	.....	12	90	123		1904	21	601	.....	481	455	1,200
Bread and other bakery products.	1914	60	536	438	354	1,441	2,527	Furniture.....	1914	12	608	1,460	389	508	1,247
	1909	63	511	297	363	1,275	2,196		1909	11	478	1,207	283	458	993
	1904	40	353	.....	178	701	1,182		1904	11	360	.....	205	322	720
Butter, cheese, and con- densed milk.	1914	9	124	589	92	1,444	1,726	Ice, manufactured.....	1914	7	54	1,213	46	61	178
	1909	8	139	860	105	1,102	1,431		1909	4	16	575	14	45	108
	1904	6	38	.....	25	432	521		1904	6	45	.....	38	26	137
Canning and preserving..	1914	6	135	192	72	316	585	Leather goods.....	1914	24	170	180	130	583	911
	1909	8	133	77	49	250	464		1909	26	304	136	220	868	1,386
	1904	7	120	.....	41	240	352		1904	15	242	.....	154	488	800
Coffee, roasting and grind- ing.	1914	9	99	329	61	1,532	2,050	Lumber and timber prod- ucts.	1914	35	2,557	14,180	1,957	4,628	7,847
	1909	5	72	293	52	1,096	1,427		1909	42	3,669	13,998	2,672	5,067	10,111
	1904	4	45	.....	23	654	811		1904	28	2,072	.....	1,455	3,101	5,435
Confectionery.....	1914	17	301	260	137	743	1,451	Marble and stonework....	1914	11	67	226	64	111	204
	1909	11	268	203	130	519	1,128		1909	7	38	90	38	71	175
	1904	10	115	.....	50	126	342		1904	4	26	.....	31	64	149
Copper, tin, and sheet- iron products.	1914	45	430	389	311	1,506	2,447	Printing and publishing..	1914	149	1,029	1,505	975	1,260	4,336
	1909	28	378	253	311	732	1,419		1909	132	952	1,402	1,036	847	3,736
	1904	.....	.....	.....	.....	.....	.....		1904	78	534	.....	458	491	1,943
Flourmill and grist mill products.	1914	6	183	1,925	135	4,699	5,229	All other industries.....	1914	310	3,805	9,355	2,897	12,943	20,335
	1909	5	73	1,222	54	1,179	1,337		1909	242	4,230	9,120	2,883	10,079	17,384
	1904	5	88	.....	60	2,457	2,713		1904	192	3,436	.....	2,100	7,133	11,868

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

SALEM.....	1914	67	732	3,185	\$404	\$1,637	\$2,846	SALEM (Continued) .....	1909	62	597	1,688	\$367	\$1,177	\$2,208
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<sup>1</sup> Includes "pickles, preserves, and sauces."  
<sup>2</sup> Includes "tinware, not elsewhere specified."  
<sup>3</sup> Figures can not be shown without disclosing individual operations.  
<sup>4</sup> Includes "automobile repairing;" "engines, steam, gas, and water;" "hardware;" "hardware, saddlery;" and "structural ironwork, not made in steel works or rolling mills."  
<sup>5</sup> Includes "saddlery and harness," and "trunks and valises."  
<sup>6</sup> Includes "boxes, wooden packing," "lumber, planing-mill products, not including planing mills connected with sawmills," and "window and door screens."  
<sup>7</sup> Excludes statistics for one establishment, to avoid disclosure of individual operations.  
<sup>8</sup> Includes "bookbinding and blank-book making;" "engraving, steel and copper plate, including plate printing;" and "lithographing."  
<sup>9</sup> Excludes statistics for two establishments, to avoid disclosure of individual operations.

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.						WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clarks, etc.		Wage earners.			Total.	10 and over.			Under 10.	
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.		Male.	Female.
								Maximum month.	Minimum month.						

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

1	All industries.....	2,320	35,449	2,189	1,441	2,315	675	28,829	My	31,596	De	24,815	(*)	(*)	(*)	(*)	(*)	\$139,500,379
2	Agricultural implements.....	3	9	2	1	.....	.....	6	Jy	9	No	5	8	8	.....	.....	.....	30,805
3	Artificial stone products.....	19	66	17	7	.....	2	40	Jy	55	Ja	20	55	55	.....	.....	.....	131,550
4	Automobile bodies and parts.....	6	46	6	3	1	1	35	Au	38	Ja	31	32	32	.....	.....	.....	47,065
5	Automobile repairing.....	55	273	46	20	13	9	185	Jy	212	Ja	164	187	186	.....	1	.....	220,048
6	Awnings, tents, and sails.....	5	116	3	7	15	7	84	Jy	90	De	68	84	23	61	.....	.....	345,590
7	Baskets, and rattan and willow ware.....	3	21	1	3	.....	3	16	Jy	21	De	13	13	13	.....	.....	.....	35,557
8	Bookbinding and blank-book making.....	6	75	4	4	4	2	60	Au	82	No	51	57	23	34	.....	.....	44,346
9	Boxes and cartons, paper.....	4	104	2	8	2	2	90	Oc	102	Jo	74	81	30	51	.....	.....	165,236
10	Boxes, wooden packing.....	16	363	16	18	6	1	327	Se	444	Fe	185	303	344	16	3	.....	617,108
11	Brass and bronze products.....	6	48	5	4	4	.....	35	Ap	38	No	32	32	32	.....	.....	.....	135,048
12	Bread and other bakery products.....	163	1,093	207	23	105	65	700	Jy	720	No	670	658	492	162	1	3	1,614,972
13	Brick and tile, terra-cotta and fire-clay products.....	42	455	37	18	16	2	382	.....	.....	.....	.....	514	514	.....	.....	.....	1,704,121
14	Building brick.....	34	359	33	11	8	.....	307	Jy	528	No	142	390	390	.....	.....	.....	1,091,132
15	Sewerpipe and drain tile.....	8	96	4	7	8	2	75	Oc	111	Do	28	124	124	.....	.....	.....	672,989
16	Brooms.....	5	53	1	14	2	1	35	Oc	39	Jy	29	38	35	3	.....	.....	75,498
17	Butter.....	72	477	47	56	68	46	260	Jy	297	Ja	226	262	234	18	.....	.....	1,326,556
18	Canning and preserving, fish.....	25	425	3	40	73	8	301	Jy	535	Fe	80	578	522	55	1	.....	3,850,595
19	Canning and preserving, fruits and vegetables.....	37	497	24	28	19	9	417	.....	.....	.....	.....	1,450	480	922	5	37	737,313
20	Canned vegetables and fruits.....	13	248	7	10	7	6	218	Jo	672	Ap	20	772	171	559	5	37	362,363
21	Dried fruits.....	24	249	17	18	12	3	199	Oc	652	Jo	19	678	315	363	.....	.....	434,020
22	Canning and preserving, oysters.....	5	35	4	2	.....	.....	29	My	51	Ja	7	41	21	20	.....	.....	20,501
23	Carriages, wagons, and repairs.....	18	77	24	.....	4	.....	49	.....	.....	.....	.....	49	49	.....	.....	.....	63,520
24	Carriages and wagons.....	11	52	19	.....	4	.....	32	Jo	37	Fe	28	31	31	.....	.....	.....	30,020
25	Repair work only.....	7	25	8	.....	.....	.....	17	Jo	19	Ja	14	18	18	.....	.....	.....	33,500
26	Cars and general shop construction and repairs by electric-railroad companies.....	4	256	.....	5	23	3	225	Ja	287	Do	170	170	168	2	.....	.....	701,318
27	Cars and general shop construction and repairs by steam-railroad companies.....	14	1,705	.....	49	53	2	1,601	Au	1,724	Mh	1,403	1,664	1,653	.....	1	.....	1,348,651
28	Cheese.....	41	115	23	41	1	.....	50	Jo	77	Ja	19	58	57	1	.....	.....	140,684
29	Coffee, roasting and grinding.....	9	193	1	17	64	12	99	Au	109	Mh	91	96	53	42	1	.....	756,657
30	Coffins, and burial cases, and undertakers' goods.....	3	9	1	.....	1	.....	7	My	8	Fe	6	8	6	2	.....	.....	25,787
31	Condensed milk and milk products, other than butter and cheese.....	5	141	.....	8	5	4	124	My	160	Se	104	114	103	9	1	1	812,625
32	Confectionery and ice cream.....	35	551	33	21	72	23	402	.....	.....	.....	.....	417	136	261	.....	20	1,353,318
33	Confectionery, including chewing gum.....	26	456	26	15	64	15	336	Oc	367	Au	298	367	114	251	.....	2	1,040,256
34	Ice cream.....	9	95	7	6	8	8	60	Jy	85	Ja	46	50	22	10	.....	.....	313,682
35	Cooperage, hogheads and barrels.....	6	35	7	3	1	.....	24	Jy	30	Ja	15	21	21	.....	.....	.....	96,836
36	Copper, tin, and sheet-iron products.....	62	614	65	21	43	19	466	Ja	638	Do	346	390	380	10	.....	.....	5,407,663
37	Engraving steel and copper plate, including plate printing.....	7	52	2	5	8	1	36	Ja	39	Se	33	36	28	8	.....	.....	58,122
38	Flavoring extracts.....	4	8	3	1	1	1	2	.....	.....	.....	.....	2	1	.....	.....	.....	9,423
39	Flour-mill and gristmill products.....	95	696	80	74	75	17	450	Se	539	Ap	366	497	497	13	.....	.....	9,075,946
40	Food preparations, not elsewhere specified.....	18	128	15	11	20	3	79	.....	.....	.....	.....	91	76	.....	2	.....	633,148
41	Breadstuff preparations, macaroni, and meat products.....	9	73	7	4	10	.....	52	Oc	57	My	48	55	42	11	2	.....	247,245
42	All other preparations for human consumption.....	9	55	8	7	10	3	27	My	39	Mh	20	36	34	2	.....	.....	385,903
43	Foundry and machine-shop products.....	68	860	32	63	41	14	660	Fe	718	No	591	628	628	.....	.....	.....	2,400,472
44	Fur goods.....	6	54	5	3	6	6	35	Do	51	My	21	51	19	32	.....	.....	153,084
45	Furniture.....	21	751	17	25	25	11	673	.....	.....	.....	.....	609	603	6	.....	.....	1,874,131
46	Wood, other than rattan and willow.....	16	647	15	19	18	11	584	Jo	621	Au	529	591	585	6	.....	.....	1,720,538
47	Metal, including store and office fixtures.....	5	104	2	6	7	.....	89	Ja	102	No	77	78	78	.....	.....	.....	153,593
48	Gas and electric fixtures.....	4	38	1	4	9	3	21	Ap	24	No	17	19	19	.....	.....	.....	96,836
49	Gas, illuminating and heating.....	9	570	.....	18	149	18	385	Ap	593	Au	306	357	357	.....	.....	.....	12,930,138
50	Glass, cutting, staining, and ornamenting.....	4	26	1	2	1	1	21	Fe	23	Jo	17	23	21	2	.....	.....	155,788
51	Hand stamps.....	3	18	2	1	6	2	7	Se	8	Ja	5	7	7	.....	.....	.....	9,475
52	Ice, manufactured.....	27	163	22	21	9	5	106	Au	155	De	71	101	101	.....	.....	.....	1,224,047
53	Jewelry.....	8	59	9	1	1	3	45	Ja	49	Jy	42	43	43	.....	.....	.....	28,620
54	Leather, tanned, curried, and finished.....	5	40	4	1	1	.....	34	Fe	38	Se	30	31	31	.....	.....	.....	177,494
55	Lime.....	3	19	1	3	1	.....	14	Ap	23	Do	6	24	24	.....	.....	.....	179,586
56	Liquors, malt.....	10	246	4	16	33	4	189	Jy	208	Fe	170	185	185	.....	.....	.....	3,615,803
57	Looking-glass and picture frames.....	3	8	5	.....	1	1	1	De	3	Fe	0	3	3	.....	.....	.....	10,318
58	Lumber and timber products.....	439	14,030	500	324	311	66	12,829	My	15,186	De	9,939	14,988	14,936	45	6	1	41,025,901

1 Owned power only.

2 Includes rented power, other than electric.

3 No figures shown for reasons given in "Explanation of terms."

MANUFACTURES—OREGON.

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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. <sup>1</sup>	Internal combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

\$2,700,425	\$2,922,326	\$20,931,577	\$725,562	\$878,709	\$1,250,338	\$61,199,376	\$2,058,445	\$109,761,051	\$40,504,130	219,222	116,591	1,346	57,275	44,010	9,729	1
1,200	7,985	5,410	400	378	8,725	681	29,447	20,041	28	28	28	28	28	28	28	2
7,985	1,844	33,471	3,376	1,192	40,647	2,257	146,039	103,135	252	252	47	47	47	47	47	3
4,920	2,340	32,042	7,200	158	49,485	921	115,261	64,855	42	42	42	42	42	42	42	4
29,570	19,606	178,288	44,816	2,208	135,219	10,756	533,961	387,986	293	293	8	8	8	8	8	5
14,678	22,288	44,923	9,741	2,500	186,575	1,028	492,871	305,268	29	29	29	29	29	29	29	6
3,000	257	10,043	576	158	9,112	264	27,826	18,450	8	8	8	8	8	8	8	7
10,800	5,502	34,274	30	5,558	869	1,168	98,302	75,039	63	63	63	63	63	63	63	8
17,940	3,273	48,720	9,330	1,198	17,418	1,653	219,202	140,131	50	50	40	40	40	40	40	9
24,020	9,900	196,256	716	2,190	3,675	545,799	3,156	1,027,246	478,291	1,263	878	10	10	10	10	10
8,760	2,040	33,688	1,915	780	55,165	4,093	139,647	80,389	138	138	138	138	138	138	138	11
47,239	144,264	463,320	255	64,378	18,005	1,812,565	66,963	3,325,789	1,446,261	589	164	39	3	383	30	12
22,885	18,643	200,751	3,012	2,805	9,840	27,292	138,084	521,368	2,894	2,894	2,220	50	3	615	10	13
12,250	9,910	154,219	2,517	2,050	5,577	12,088	111,162	395,449	272,199	2,411	1,819	57	2	535	14	14
10,635	8,733	46,532	495	755	4,203	15,204	26,922	125,910	83,793	483	401	2	2	80	10	15
3,400	1,700	17,947	1,987	88	65,893	451	102,680	36,336	74	74	62	62	62	12	150	16
65,832	72,290	202,760	6,990	23,312	7,709	3,532,998	46,504	4,268,652	689,150	1,408	456	28	34	890	17	17
72,115	71,007	171,679	118,903	17,741	29,659	1,847,006	27,889	2,929,657	1,054,162	1,016	796	55	3	162	4	18
20,564	10,648	131,764	254	7,076	5,982	1,047,425	10,734	1,552,077	493,918	567	403	5	5	159	19	19
11,014	4,815	81,743	254	5,026	2,453	341,287	4,994	663,566	317,285	338	261	5	5	77	20	20
15,550	6,333	50,021	2,050	3,529	706,138	5,740	888,511	176,633	229	142	5	5	5	82	21	21
1,680	8,069	201	201	201	201	201	42,076	15,076	20	20	20	20	20	20	20	22
2,760	42,630	351	9,307	1,525	35,519	4,596	152,969	109,854	95	51	5	5	5	90	23	23
2,760	24,623	351	6,124	1,085	17,133	2,420	88,264	68,711	51	51	51	51	51	51	51	24
18,007	18,007	3,183	440	21,386	2,176	64,705	41,143	44	44	44	44	44	44	44	44	25
10,020	24,900	196,136	648	25	300,858	3,640	530,237	231,733	737	200	200	200	200	537	20	20
77,992	52,795	1,343,158	1,090	939,667	79,040	2,583,653	1,564,346	1,370	689	22	659	27	27	27	27	27
7,573	240	40,073	865	1,486	1,189	815,028	7,910	906,599	80,661	132	132	132	132	329	28	28
46,520	132,108	61,354	2,403	17,372	7,020	1,521,754	10,360	2,049,844	517,724	320	320	320	320	27	29	29
294	5,390	960	149	13,506	484	37,168	484	37,168	23,178	27	27	27	27	27	27	30
15,935	8,320	76,215	9,704	1,070,998	25,864	1,392,698	295,836	287	180	107	2	31	31	31	31	31
51,200	108,955	207,856	120	36,440	15,236	1,059,142	30,368	2,025,894	930,384	713	125	4	3	581	32	32
34,388	95,845	156,645	120	27,315	13,332	797,950	14,337	1,680,735	768,448	293	40	3	3	250	33	33
16,872	13,110	51,211	9,125	1,904	261,192	16,031	445,159	167,936	420	85	4	33	33	33	34	34
3,600	1,000	24,658	724	1,400	1,449	39,350	853	108,152	65,949	76	5	5	5	63	5	35
60,942	52,892	332,624	2,815	18,813	13,983	1,646,350	10,374	2,674,524	1,017,800	438	438	438	438	438	438	36
13,649	8,186	38,235	60	7,356	360	14,041	1,306	95,991	80,344	17	17	17	17	17	17	37
897	526	364	50	390	49	4,701	59	10,468	5,703	8,565	534	212	3,453	4,366	57	38
120,065	100,410	329,948	423	40,400	48,438	9,726,888	100,343	11,192,673	1,365,342	633	515	118	118	600	40	39
15,824	25,721	52,733	270	6,944	4,114	610,996	13,768	877,544	252,780	574	505	69	69	600	41	40
4,624	10,367	35,081	2,350	2,767	382,108	8,939	539,550	148,503	574	505	574	505	574	69	600	41
11,200	15,354	17,652	270	4,594	1,357	228,888	4,829	337,994	104,277	59	10	49	49	49	49	42
103,887	41,155	543,159	4,476	27,966	23,039	730,292	50,000	1,870,540	1,090,248	2,573	70	151	62	2,290	43	43
2,750	15,215	29,261	15,120	1,438	59,222	544	189,564	129,788	8	8	8	8	8	8	8	44
65,403	41,332	421,732	75	9,330	10,447	526,675	17,523	1,335,380	791,182	1,074	563	21	32	1,058	520	45
52,143	31,553	352,433	75	1,770	9,924	453,041	15,214	1,123,050	654,795	1,492	473	21	32	966	520	46
13,260	9,779	69,299	7,560	523	73,634	2,309	212,330	136,387	182	90	90	90	90	90	90	47
11,591	11,742	17,797	3,471	1,448	108,875	1,619	167,297	68,803	30	30	30	30	30	30	30	48
40,990	126,207	309,895	102,307	60,113	343,015	1,528,060	343,015	1,528,060	1,124,032	2,482	2,449	8	8	25	1,112	49
2,400	480	13,597	300	1,340	1,501	8,994	1,092	43,585	33,709	48	48	48	48	48	48	50
1,500	5,520	4,988	807	1,844	131	5,541	196	28,722	22,985	4	4	4	4	4	4	51
32,440	9,296	92,488	450	15,919	9,062	35,771	82,563	375,607	257,273	2,650	1,490	248	248	912	75	52
650	2,001	32,787	180	4,429	190	20,927	536	86,575	65,112	34	34	34	34	34	34	53
1,200	720	20,090	1,080	144,510	3,247	137,602	3,247	137,602	39,845	163	49	114	114	114	114	54
1,848	403	8,200	288	5,674	8,688	25,661	8,688	25,661	11,401	48	48	48	48	48	48	55
41,470	48,702	228,313	320	237,426	449,341	58,832	1,810,440	1,302,267	2,028	1,391	1,391	1,391	1,391	1,391	1,391	56
832	1,120	1,120	1,200	73	2,403	172	9,550	6,975	3	3	3	3	3	3	3	57
714,269	450,298	9,198,082	336,009	45,316	439,330	12,392,084	96,984	27,509,638	15,020,570	95,928	86,371	184	3,855	5,518	6,894	58

<sup>1</sup> Same number reported for one or more months.

<sup>2</sup> 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.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

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

1	Lumber, planing-mill products, not including planing mills connected with sawmills.	69	905	62	50	52	9	732	Ap	804	De	025	733	733					\$2,823,421
2	Marble and stone work.	24	135	25	8	11	3	88	My	106	De	74	91	91					240,640
3	Mattresses and spring beds.	8	77	8	4	4	2	59	Oc	08	Je	49	04	55	0				105,700
4	Mineral and soda waters.	33	105	37	7	2	2	57	So	66	Mh	45	57	54	3				167,801
5	Models and patterns, not including paper patterns.	0	20	9			1	10	Ap	14	Au	8	9	9					14,273
6	Musical instruments, drums, violins, and other stringed instruments.	6	8	7				1		41		41	1	1					6,170
7	Optical goods.	5	23	3	6	3		11	Oc	13	Ja	10	12	11			1		33,031
8	Paints.	5	30	4	3	4	1	18	Oc	23	De	17	18	16	2				392,610
9	Patent medicines and compounds.	20	97	39	6	7	3	42	Ja	49	Au	36	55	45	10				112,362
10	Printing materials.	4	35	2	5	2		20	My	61	De	3	44	44					227,781
11	Printing and publishing, book and job.	112	764	111	54	47	27	515					527	441	80	5	1		1,250,941
12	Job printing.	105	699	100	53	33	22	491	Ap	503	Je	474	503	417	80	5	1		1,157,180
13	Book printing, publishing, and linotype work.	7	55	11	1	14	5	24	Oc	26	De	22	24	24					93,752
14	Printing and publishing, newspapers and periodicals.	251	1,880	242	95	457	141	945					961	846	103	11	1		2,870,700
15	Printing and publishing.	12	408	7	18	100	20	233	No	251	Jy	221	232	223	8	1			503,281
16	Printing, publishing and job printing.	189	1,240	105	53	210	70	712	My	727	Ja	693	720	623	95	10	1		2,210,544
17	Publishing, without printing.	50	172	40	24	57	51												150,884
18	Saddlery and harness.	41	250	45	10	20	6	103	My	173	Oc	148	103	161	2				743,410
19	Shipbuilding, wooden, including boat building.	20	199	31	2	2	1	163					161	161					435,190
20	New vessels.	9	160	14	1	2	1	148	Mh	205	De	91	140	140					398,088
21	Small boats, including repair work.	11	33	17	1			15	Mh	18	Se	12	12	12					37,111
22	Signs and advertising novelties, other than electric.	13	55	13	1	3	2	36	Ap	40	Fe	33	38	37	1				181,016
23	Slaughtering and meat packing.	14	563	8	25	78	10	442	De	498	My	400	500	482	18				3,477,041
24	Stoves, hot-air furnaces, and ranges.	10	104	7	12	3	2	80	My	93	Ja	53	82	82					301,875
25	Structural ironwork not made in steel works or rolling mills.	7	193	5	11	15	1	161	Oc	200	Je	110	154	154					598,009
26	Tobacco, cigars.	63	232	72	3	3		154	Au	164	De	141	167	142	22	3			157,106
27	Vinagar and elder.	5	26	1	3	2	1	16	De	41	Ap	7	42	42					110,208
28	Wirework, including wire rope and cable.	4	11	4	1			9	Mh	9	Se	3	7	7					17,460
29	Wood, turned and carved.	4	23	1	1			21	Ap	24	Au	19	21	21					35,827
30	Wooden goods, not elsewhere specified.	5	24	7				17	My	31	Ja	4	26	26					14,280
31	Woolen goods.	7	604		15	27	4	648	Ap	712	Se	561	633	380	238		6		1,867,937
32	All other industries*.	151	3,388	121	130	275	83	2,770											27,718,300

* All other industries embrace:	Carrilago and wagon materials.	3	Engraving and die slaking.	2	Hosiery and knit goods.	1
Artificial limbs.	Charcoal.	2	Fertilizers.	2	Instruments, professional and scientific.	2
Babbitt metal and solder.	Cleansing preparations.	1	Furnishing goods, men's.	2	Iron and steel, stool works and rolling mills.	1
Bags, other than paper.	Clothing, men's.	1	Furs, dressed.	1	Iron and steel, bolts, nuts, washers, and rivets.	2
Baking powders and yeast.	Cordage and twine.	1	Galvanizing.	1	Iron and steel, cast-iron pipe.	1
Belted leather.	Cordials and flavoring sirups.	2	Gloves and mittens, leather.	1	Labels and tags.	1
Blaeking, stains, and dressings.	Dairymen's and poultrymen's supplies.	2	Groce and tallow, soap stock.	1	Lapidary work.	2
Bluing.	Druggists' preparations.	1	Hardware.	2	Lead, bar, pipe, and sheet.	1
Boots and shoes.	Dyeing and finishing textiles.	1	Hardware, saddlery.	2	Leather goods not elsewhere specified.	1
Boxes, cigar.	Electrical machinery, apparatus, and supplies.	1	Hats and caps other than felt, straw, and wool.	2		
Brushes, toilet.	Engines, steam, gas, and water.	3	Hats, fur-felt.	2		
Buttons.						
Carpets, rag.						

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

PORTLAND—All industries.		837	14,421	716	664	1,300	408	11,273	Jy	11,936	De	10,655	11,875	10,404	1,419	15	37	\$48,670,058
1	Artificial stone products.	11	34	11	3			20	Ap	20	Ja	8	34	34				57,261
2	Automobile bodies and parts.	6	46	6	3	1	1	35	Au	38	Ja	31	32	32				47,965
3	Automobile repairing.	40	255	39	19	12	9	176	Jy	197	Ja	153	177	176		1		180,370
4	Awnings, tents, and sails.	5	113	3	7	15	7	84	Jy	99	De	68	84	23	61			345,596
5	Boxes and cartons, paper.	4	104	2	8	2	2	90	Oc	102	Je	74	81	30	51			158,236
6	Bread and other bakery products.	60	774	71	22	99	46	536	Ja	553	No	509	487	358	129			1,222,775
7	Brick and tile, terra-cotta, and fire-clay products.	7	143	4	4	8	1	126	Au	165	De	81	201	201				840,591
8	Butter, cheese, and condensed milk.	9	221	7	18	48	24	124	Je	140	Fe	110	113	99	14			675,589
9	Canning and preserving.	6	168	4	8	17	4	135	Jy	373	Fe	53	325	79	226	5	15	267,749
10	Carrilagoes, wagons, and repairs.	13	62	18		4		40	Je	10	De	4	36	36				43,931
11	Coffee, roasting and grinding.	9	193	1	17	64	12	99	Au	109	Mh	91	96	53	42	1		756,657
12	Confectionery.	17	409	17	14	64	13	301	Oc	336	Au	262	330	96	232		2	637,545
13	Copper, tin, and sheet-iron products.	45	556	45	20	43	18	430	Jy	603	De	326	332	323	9			5,292,511
14	Engraving, steel and copper-plate, including plate printing.	7	52	2	5	8	1	30	Ja	39	Se	33	36	28	8			56,122
15	Flavoring extracts.	4	8	3	1	1	1			42		42	2	1	1			9,423

<sup>1</sup> Owned power only.

<sup>2</sup> 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 horse-power 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. <sup>1</sup>	Internal combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$78,233	\$71,070	\$547,807	\$11,125	\$18,707	\$20,826	\$1,322,160	\$30,389	\$2,378,642	\$1,020,093	4,033	2,295	1	70	2,207	1
13,490	13,120	85,001	474	0,090	1,532	141,540	4,554	346,127	200,033	278	20			249	2
0,000	5,508	40,386	100	0,343	1,104	112,484	2,226	210,885	96,175	171				171	3
7,640	4,360	30,706	401	5,124	2,272	82,071	2,926	211,094	125,497	135	25	6	3	101	4
	00	11,220		1,754	80	4,201	750	32,815	27,858	47				47	5
		1,248		1,008	46	5,477	203	17,132	11,452	4				4	6
5,280	2,200	10,139		3,708	103	21,084	171	63,560	42,311	11				11	7
5,500	5,060	13,454		2,353	1,783	120,720	1,726	100,935	38,480	137				137	8
3,920	5,709	21,813		5,705	376	107,973	740	216,714	108,001	25	20	3		2	9
4,765	1,740	21,858	491	2,020	89,976	7,728	7,728	130,752	33,048	1,201	716			485	10
112,365	74,824	471,639	33,648	77,779	8,107	525,167	20,115	1,088,827	1,143,545	080		2	2	670	11
110,285	67,341	438,026	24,170	75,593	7,756	513,840	18,040	1,578,300	1,046,062	067		2	2	663	12
2,080	17,483	32,613	0,409	2,188	351	11,327	1,711	110,521	97,483	13				13	13
188,741	640,709	803,263	185,897	102,367	23,234	935,639	42,961	4,120,752	3,148,152	6,470		72	30	6,308	14
52,010	177,774	220,797	2,304	24,907	4,159	290,059	9,122	1,074,898	775,717	441		2		430	15
102,724	280,324	633,460	12,288	63,254	18,487	611,278	33,359	2,519,620	1,874,983	6,026		70	30	5,920	16
33,107	85,611	135,582	171,275	14,136	588	34,302	480	532,234	407,452	3				3	17
17,432	28,010		328	21,840	4,822	607,130	4,228	952,304	341,027	100	41			149	18
5,000	3,070	157,000		4,300	3,734	111,557	2,891	332,074	217,020	445	247	51		147	19
3,600	3,070	142,081		3,500	3,005	95,652	2,481	292,105	194,032	324	213	7		104	20
1,460		15,270		893	720	15,905	410	39,909	23,504	121	34	44		43	21
2,080	5,230	30,777		12,064	395	50,922	141	152,027	101,504	0				6	22
66,100	98,577	308,717		7,750	9,528	6,142,410	60,045	7,480,020	1,284,405	1,344	187	0	7	1,144	23
16,712	4,350	74,724		7,403	1,337	125,535	3,743	289,037	159,759	88				88	24
23,553	17,545	140,800	900	10,732	3,338	305,102	0,398	649,604	248,044	195				195	25
4,751	2,040	108,614	114	10,214	23,004	147,238	946	383,048	234,864	2				2	26
7,800	2,645	13,438	458	1,900	346	47,024	580	113,314	64,810	94	30		24	40	27
1,200		5,184		780	216	10,064	300	30,085	10,721	22				22	28
875		11,064	350	1,285	295	13,701	198	30,514	22,015	60	60				29
		12,264		874	21	10,366	454	27,187	16,367	74	25			49	30
20,062	42,009	372,957		1,474	12,898	898,430	44,556	1,701,587	758,601	1,070	353	202	625	490	31
351,993	321,070	1,032,604	10,331	93,394	117,214	7,332,527	540,843	12,640,998	4,767,628	71,462	12,787	111	48,821	9,743	32

Liquors, vinous.....	1	Photographic apparatus.....	2	Saws.....	1	Tobacco, smoking.....	1
Lithographing.....	1	Photoengraving.....	2	Shipbuilding, iron and steel.....	1	Tools.....	2
Lubricating greases.....	1	Pickles and sauces.....	4	Shirts.....	1	Trunks and valises.....	5
Millinery and lace goods.....	2	Pipes, tobacco.....	1	Show cases.....	1	Typewriters and supplies.....	1
Mirrors, framed and unframed.....	1	Plated ware.....	2	Sporting and athletic goods.....	4	Umbrellas and canes.....	2
Mucilage and paste.....	2	Pocketbooks.....	1	Statuary and art goods.....	1	Upholstering materials, excelsior.....	2
Musical instruments, pianos.....	1	Pottery, earthen and stone ware.....	1	Steam fitting and steam and hot water heating apparatus.....	1	Wall plaster.....	1
Musical instruments, piano, materials.....	1	Printing materials.....	1	Steam packing.....	2	Waste.....	1
Needles, pins, and hooks and eyes.....	1	Rice, cleaning and polishing.....	1	Stencils and brands.....	2	Window and door screens.....	2
Oil, linseed.....	1	Roofing materials, metal.....	2	Stereotyping and electrotyping.....	2	Wood distillation.....	1
Oil, fish.....	1	Rubber goods.....	1	Surgical appliances.....	2	Wood preserving.....	3
Paper and wood pulp.....	5	Safes.....	2			Wool pulling.....	1
		Sausage.....	1			Wool scouring.....	1

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

\$1,431,406	\$1,830,081	\$8,541,997	\$239,229	\$668,504	\$517,598	\$33,220,440	\$678,213	\$55,697,440	\$21,798,787	36,188	18,572	58	17,558	1,044	1
3,600	17,468	32,042		3,280	553	25,149	574	84,293	58,570	35		2	33		2
4,920	2,340	32,042		7,260	158	49,485	921	115,261	64,855	42			42		3
28,370	18,606	171,955	7,006	42,676	1,841	128,884	10,278	508,418	369,256	269			269		4
14,678	22,288	44,923		9,741	2,500	186,575	1,028	492,871	305,258	20			20		5
17,940	3,273	48,720		9,330	1,193	71,418	1,653	219,202	146,131	50	40		10		6
46,630	131,935	353,543		36,937	14,748	1,393,541	37,914	2,526,548	1,055,093	438	161	22	255	30	7
6,464	7,824	62,072	967	1,160	6,150	15,728	61,159	212,804	135,917	947	757		100	10	8
39,710	45,361	91,688		14,128	2,819	1,423,156	21,248	1,726,341	281,937	589	95		494		9
15,065	27,686	72,274		6,303	2,184	311,441	4,260	585,493	269,702	192	141		51		10
	2,760	34,124	351	8,350	1,472	20,310	3,590	120,934	91,034	70			70		11
46,520	132,108	61,354	2,462	17,372	7,020	1,521,754	10,360	2,049,844	517,724	329			329		12
32,888	94,805	137,315		19,390	12,744	731,602	11,193	1,450,922	708,037	260	40		220		13
58,992	52,592	311,321	2,710	15,935	13,569	1,496,638	9,082	2,446,524	940,804	389			359		14
13,649	8,186	38,235	60	7,356	350	14,041	1,306	95,691	80,344	17			17		15
897	526	364	50	390	40	4,701	50	10,463	5,703						16

<sup>1</sup> Same number reported for one or more months.

<sup>2</sup> Same number reported throughout the year.



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.				horse-power 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. <sup>1</sup>	Internal combustion engines. <sup>2</sup>	Water wheels and motors. <sup>1</sup>	

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

\$50,884	\$65,478	\$134,085		\$37,890	\$18,097	\$4,651,837	\$47,007	\$5,228,912	\$5,800,068	1,925	10			1,915		1
16,321	26,721	52,733	\$270	6,944	4,114	610,996	13,768	877,544	252,780	638	515			118		2
4,621	10,367	35,081		2,350	2,757	382,108	8,939	539,650	148,503	574	505			69		3
11,200	15,354	17,652	270	4,594	1,357	228,888	4,829	337,994	104,277	59	10			49		4
80,614	32,526	396,659	4,187	21,100	17,498	519,901	32,430	1,383,501	831,260	1,813				1,813		5
2,750	15,215	29,261		15,120	1,438	59,222	544	189,554	129,788	8				8		6
58,122	40,072	388,647		8,750	9,436	492,415	10,033	1,247,005	738,557	1,460	443			1,023	520	7
44,862	30,203	319,348		1,190	8,913	418,781	13,724	1,034,075	602,170	1,284	353			931	520	8
13,260	9,779	69,299		7,560	523	73,634	2,309	212,330	136,387	182	90			92		9
11,591	11,742	17,797		3,471	1,448	106,875	1,619	167,297	58,803	30				30		10
2,400	480	13,597	300	1,340	1,501	8,694	1,092	43,585	33,799	48				48		11
1,500	5,520	4,988	807	1,644	131	5,541	196	28,722	22,985	4				4		12
20,890	5,956	45,610		14,580	4,643	13,601	47,476	177,590	116,423	1,213	900			253	75	13
650	2,001	32,787	130	4,429	100	20,927	536	85,575	65,112	34				34		14
131,677	105,784	1,620,057	10,398	24,449	103,159	3,943,127	14,474	6,589,719	2,629,118	12,181	11,461			720	144	15
41,580	40,727	296,289	323	12,175	9,425	578,827	9,969	1,082,843	494,047	1,793	1,090			703		16
13,490	8,400	64,440	275	7,806	817	107,708	3,569	264,265	152,988	226		29		197		17
800	1,800	12,330		880	128	15,768	347	45,500	29,475	9	2			7		18
	60	11,220		1,754	86	4,201	750	32,815	27,858	47				47		19
		1,248		1,008	46	5,477	203	17,132	11,462	4				4		20
5,280	2,200	10,139		3,708	103	21,084	171	63,566	42,311	11				11		21
107,805	71,634	427,541	31,972	67,822	6,722	483,034	16,841	1,520,306	1,020,431	592				592	20	22
105,725	54,151	394,928	22,503	65,636	6,371	471,707	15,130	1,409,785	922,948	579				579	20	23
2,080	17,483	32,613	0,409	2,186	351	11,327	1,711	110,521	97,483	13				13		24
120,611	424,606	478,684	156,206	57,002	13,675	703,947	18,008	2,634,823	1,912,868	845				845		25
47,990	173,822	216,069	2,023	23,167	3,896	284,952	8,007	1,028,832	735,873	421				421		26
50,484	172,502	262,585	0,412	22,651	0,204	385,053	0,521	1,134,151	739,577	421				421		27
31,137	78,372		147,771	11,784	575	33,942	480	471,840	437,418	8				8		28
14,312	24,880	107,572	326	13,635	2,737	519,840	2,974	790,154	267,340	171	41			130		29
	1,220	37,464		2,074	2,460	18,572	100	79,925	61,193	84	40			38		30
2,080	5,230	39,777		12,964	395	50,922	141	152,627	101,564	6				6		31
23,553	17,545	140,800	900	10,732	3,338	395,162	6,398	649,604	248,044	195				195		32
1,451	2,640	51,785		4,742	9,542	61,357	219	160,358	98,782							33
1,200		5,184	200	780	216	10,064	300	30,085	10,721	22				22		34
380,013	368,264	2,642,915	9,669	131,407	238,028	12,410,738	268,351	10,510,734	6,841,645	9,172	2,770	5		6,397	245	35

Lapidary work.....	2	Musical instruments, piano and organ materials.....	1	Saws.....	1	Tobacco, smoking.....	2
Lead, bar, pipe, and sheet.....	1	Oil, linseed.....	1	Shipbuilding, iron and steel.....	1	Tools.....	1
Leather goods, not elsewhere specified.....	1	Paints.....	4	Shirts.....	1	Trunks and valises.....	5
Leather, tanned, curried, and finished.....	2	Patent medicines and compounds.....	18	Show cases.....	1	Typewriters and supplies.....	1
Liquors, malt.....	3	Photographic apparatus.....	2	Slaughtering and meat packing.....	2	Umbrellas and canes.....	2
Lithographing.....	1	Photoengraving.....	2	Soap.....	4	Vinegar and cider.....	1
Looking-glass and picture frames.....	2	Pipes, tobacco.....	1	Statuary and art goods.....	1	Waste.....	2
Mattresses and spring beds.....	7	Plated ware.....	2	Steam packing.....	1	Window and door screens.....	1
Millinery and lace goods.....	2	Pottery, earthen and stone ware.....	1	Stencils and brands.....	2	Wood preserving.....	1
Mirrors, framed and unframed.....	1	Printing materials.....	1	Stereotyping and electrotyping.....	2	Wood turned, and carved.....	2
Mucilage and paste.....	1	Rice, cleaning and polishing.....	1	Stoves and hot-air furnaces.....	6	Wooden goods.....	3
Musical instruments, pianos.....	1	Roofing materials.....	1	Surgical appliances.....	2	Wool pulling.....	1
	1	Rubber goods.....	1				

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

\$85,396	\$112,029	\$365,633	\$78,690	\$26,226	\$55,138	\$2,603,881	\$45,001	\$4,587,301	\$1,938,419	8,090	6,312	70	3	1,705		1
16,692	22,540	166,770	6,945	12,086	6,318	390,088	17,192	810,346	403,066	1,001	336	50	123	552		2
13,443	6,325	62,180		4,119	3,412	58,171	7,407	183,023	117,445	441	25	40		876		3
70,652	77,215	403,703	6,136	23,661	34,705	1,577,959	59,256	2,845,844	1,208,629	3,185	1,940	245		1,000		4

<sup>1</sup> Same number reported throughout the year.

<sup>2</sup> Same number reported for one or more other months.