

MISSISSIPPI.

INDUSTRIES IN GENERAL.

General character of the state.—Mississippi, with a gross area of 46,865 square miles, of which 503 represent water surface, ranks thirty-first in area among the states and territories of continental United States. Its population in 1910 was 1,797,114, as compared with 1,551,270 in 1900 and 1,289,600 in 1890. It ranked twenty-first among the 49 states and territories as regards population in 1910 and twentieth in 1900. The density of population for the entire state is 38.8 per square mile, the corresponding figure for 1900 being 33.5. Eleven and five-tenths per cent of the entire population of the state resided in incorporated cities having a population of 2,500 inhabitants or over in 1910, as against 7.7 per cent in 1900.

The state has five cities having a population of over 10,000: Hattiesburg, Jackson, Meridian, Natchez, and Vicksburg. These five cities contain only 4.9 per cent of the total population of the state, and are credited with 14.8 per cent of the total value of its manufactures.

The transportation facilities are good, as the state has direct connection with several large railroad systems of the Middle West and is bordered for practically its entire length by the Mississippi River, and the prox-

imity to the port of New Orleans by means of this river places the state in a favorable position for domestic or foreign shipments.

Importance and growth of manufactures.—Though Mississippi is not preeminently a manufacturing state, its manufactures have somewhat more than kept pace with the growth of the population. During 1849 an average of 3,154 wage earners, representing five-tenths of 1 per cent of the total population, was employed in manufactures, while in 1909 an average of 50,384 wage earners, or 2.8 per cent of the total population, were so engaged. During this period the gross value of products per capita of the total population of the state increased from \$5 to \$45. At each census from 1849 to 1909 the manufactures of the state have represented about the same proportion of the total value of products of the manufacturing industries of the country. This proportion in 1849 was three-tenths of 1 per cent; in 1909 it was four-tenths of 1 per cent.

The following table gives the most important figures relative to all classes of manufactures combined for 1909, 1904, and 1899, together with the percentages of increase from census to census:

	NUMBER OR AMOUNT.			PER CENT OF INCREASE.	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments.....	2,598	1,520	1,294	70.9	17.5
Persons engaged in manufactures.....	56,761	42,966	(1)	32.1	.....
Proprietors and firm members.....	2,974	1,588	(1)	87.3	.....
Salaried employees.....	3,403	2,688	1,260	26.6	113.3
Wage earners (average number).....	50,384	38,690	26,799	30.2	44.4
Primary horsepower.....	206,222	110,338	65,738	86.9	67.8
Capital.....	\$72,393,000	\$50,256,000	\$22,712,000	44.0	121.3
Expenses.....	68,707,000	49,074,000	27,461,000	40.0	78.7
Services.....	22,422,000	17,417,000	9,003,000	28.7	98.5
Salaries.....	3,654,000	2,598,000	1,093,000	40.6	137.7
Wages.....	18,768,000	14,819,000	7,910,000	26.6	87.3
Materials.....	36,926,000	25,801,000	16,543,000	43.1	56.0
Miscellaneous.....	9,359,000	5,856,000	1,915,000	59.8	205.8
Value of products.....	80,555,000	57,451,000	33,718,000	40.2	70.4
Value added by manufacture (value of products less cost of materials).....	43,629,000	31,650,000	17,175,000	37.8	84.3

Figures not available.

In 1909 the state of Mississippi had 2,598 manufacturing establishments which gave employment to an average of 56,761 persons during the year and paid out \$22,422,000 in salaries and wages. Of the persons employed, 50,384 were wage earners. These establishments turned out products to the value of \$80,555,000, to produce which materials costing \$36,926,000 were used. The value added by manufacture was thus

\$43,629,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of Mississippi have developed rapidly during the 10-year period 1899-1909, the figures for 1909 for practically every item shown in the table being considerably more than twice as great as

that for 1899. During the period from 1904 to 1909 the number of establishments increased 70.9 per cent, the average number of wage earners 30.2 per cent, and the amount paid in wages 26.6 per cent, while the value of products increased 40.2 per cent and the value added by manufacture 37.8 per cent. For the earlier five-year period the percentages of increase in general were much greater. As pointed out in the Introduction, it would

be improper to infer that manufactures increased in volume to the full extent indicated by these figures regarding values, since the increase shown is certainly due, in part, to the increase that has taken place in the price of commodities.

The relative importance and growth of the leading manufacturing industries of the state are shown in the following table:

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. ¹			
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All industries.....	2,598	50,384	100.0	\$80,555,000	100.0	\$43,629,000	100.0	40.2	70.4	37.8	84.3
Lumber and timber products.....	1,647	33,397	66.3	42,793,000	53.1	28,580,000	65.5	63.6	57.0	49.2	94.7
Oil, cottonseed, and cake.....	87	2,503	5.0	15,966,000	19.8	3,797,000	8.7	26.8	88.4	50.9	45.7
Cars and general shop construction and repairs by steam-railroad companies.....	10	2,572	5.1	3,233,000	4.0	1,811,000	4.2	12.0	116.8	16.5	79.2
Cotton goods, including cotton small wares.....	14	2,645	5.2	3,102,000	3.8	1,060,000	2.4	25.9	67.2	30.2	15.3
Fertilizers.....	10	449	0.9	2,125,000	2.6	740,000	1.7	90.4	119.5	228.9	49.0
Turpentine and rosin.....	64	2,573	5.1	1,475,000	1.8	1,126,000	2.6	-37.7	33.5	-42.9	83.6
Printing and publishing.....	225	736	1.5	1,308,000	1.6	1,008,000	2.3	42.8	26.7	39.8	25.2
Foundry and machine-shop products.....	50	583	1.2	1,088,000	1.4	616,000	1.4	18.3	87.8	9.2	93.8
Bread and other bakery products.....	79	285	0.6	878,000	1.1	362,000	0.8	76.0	195.3	52.1	197.5
Ice, manufactured.....	51	341	0.7	866,000	1.1	653,000	1.5	43.6	120.1	42.6	119.1
Canning and preserving.....	11	847	1.7	824,000	1.0	316,000	0.7	-45.3	66.0	-33.3	64.0
Brick and tile.....	73	939	1.9	794,000	1.0	590,000	1.4	1.4	50.0	-2.6	43.8
Clothing, men's, including shirts.....	6	482	1.0	775,000	1.0	236,000	0.5	-38.6	.....	-52.9	.....
Carrriages and wagons and materials.....	41	365	0.7	642,000	0.8	368,000	0.8	30.0	63.6	31.0	64.3
Furniture and refrigerators.....	8	259	0.5	392,000	0.5	198,000	0.5	9.2	.....	-9.2	.....
Gas, illuminating and heating.....	8	101	0.2	256,000	0.3	170,000	0.4	104.8	52.4	97.7	32.3
Marble and stone work.....	11	71	0.1	176,000	0.2	97,000	0.2	.....	.....	.....	.....
Shipbuilding, including boat building.....	15	91	0.2	161,000	0.2	95,000	0.2	-34.0	110.3	-34.5	107.1
Flour-mill and gristmill products.....	13	18	(²)	153,000	0.2	21,000	(²)	39.1	-73.3	40.0	-68.4
Confectionery.....	10	50	0.1	123,000	0.2	48,000	0.1	-54.1	165.3	-66.2	389.7
All other industries.....	165	1,077	2.1	3,425,000	4.3	1,731,000	4.0	.....	.....	.....	.....

¹ Percentages are based on figures in Table I; a minus sign (-) denotes decrease. Where the percentages are omitted, comparable figures can not be given.

² Less than one-tenth of 1 per cent.

It should be borne in mind, in considering this table, that the value of products in some of the industries involves a certain amount of duplication due to the use of the product of one establishment in the industry as material for another establishment. Although a few industries predominate in importance, it will be seen from Table II that on the whole there is considerable diversity in the manufacturing activities of the state. The most important industries listed in the table given above, in which they are arranged in the order of the value of products, call for brief consideration.

Lumber and timber products.—This industry embraces establishments engaged in logging operations and also sawmills, planing mills, and establishments manufacturing wooden packing boxes. It is one of the oldest industries in the state and by far the most important, and shows a decided growth from 1899 to 1909. In 1909 it gave employment to 33,397 wage earners, or 66.3 per cent of the total average number of wage earners reported by the manufacturing industries of the state, as against 22,431, or 58 per cent, in 1904. The extraordinary increase in the number of establishments reported, from 664 in 1904 to 1,647 in 1909, is due largely to a more complete enumeration of the smaller rural mills in 1909. The value of prod-

ucts, which was \$42,793,000 in 1909, represented 53.1 per cent of the total value of products of all manufacturing industries in the state.

Oil, cottonseed, and cake.—The statistics presented include those for all establishments engaged primarily in extracting oil from cotton seed or in refining the oil. Measured either by value of products or by value added by manufacture, this industry is the second in importance in the state. The state ranked third among the states in this industry in value of products in 1909 and fourth in 1904. Prior to 1890 the industry was of little importance in the state, and its growth is of particular interest, because it is based so largely on the profitable utilization of what was at one time practically a waste product. The value of products in 1909 was \$15,966,000, as compared with \$12,587,000 in 1904 and \$6,681,000 in 1899.

Cars and general shop construction and repairs by steam-railroad companies.—Although there were only 10 railroad repair shops reported in 1909, as compared with 15 in 1904, the value of their products, which is equivalent to the cost of repairs to rolling stock and equipment, increased from \$2,886,000 in 1904 to \$3,233,000 in 1909. This industry represents the repair work and construction done in shops operated by

steam-railroad companies, but does not include minor repairs made in roundhouses.

Cotton goods, including cotton small wares.—The number of establishments reported for this industry was the same in 1909 as in 1904; but the industry shows a considerable advance in the value of its operations, the value of products having increased from \$2,463,000 in 1904 to \$3,102,000 in 1909. The capital invested, the amount paid in wages, and the value of products all more than doubled during the decade 1899-1909.

Fertilizers.—This classification includes establishments engaged primarily in the manufacture of fertilizers. A number of cottonseed-oil mills produce fertilizers as by-products, and therefore the statistics for the independent establishments do not fully represent the statistics for the industry. The increase in value of products during the 10 years 1899-1909 has more than trebled.

Turpentine and rosin.—There was a decrease in the value of products of this industry from \$2,366,000 in 1904 to \$1,475,000 in 1909. This decrease was due largely to unfavorable market conditions and destructive storms. Mississippi ranked fourth among the states in the production of turpentine and rosin both in 1904 and in 1909.

Measured by value added by manufacture the six industries treated above hold generally the same relative rank as when measured by value of products, although the turpentine and rosin industry becomes fourth, displacing the cotton-goods industry, which falls to fifth place, and the fertilizer industry drops to seventh place.

This table shows also the percentages of increase for the leading industries in respect to value of products and value added by manufacture. The gas industry showed a greater rate of increase from 1904 to 1909 in value of products than any other of the industries shown separately, namely, 104.8 per cent, and the fertilizer industry the greatest rate of increase in value added by manufacture, 228.9 per cent. The fertilizer, bakery, and the lumber industries showed the next largest relative increases in value of products.

It will be noticed that from 1904 to 1909 there were five of the industries listed separately which decreased in value of products and seven (including these five) which decreased in value added by manufacture. During the preceding five years the flour-mill and gristmill industry, which showed a decrease in both of these particulars, was the only one reporting a decrease in either item.

In addition to the industries presented separately in the preceding table, there are three others of importance in the state which are included with all other industries because the returns do not properly present the true condition, as they are more or less interwoven with one or more other industries of similar character. These industries are the manufacture of food preparations, mineral and soda waters, and the preserving of wood.

Persons engaged in manufacturing industries.—The following table shows, for 1909, the distribution of the number of persons engaged in manufactures, the average number of wage earners being distributed by sex and age. It should be borne in mind, however, that 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 Introduction.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes.....	56,761	54,057	2,704
Proprietors and officials.....	4,665	4,003	62
Proprietors and firm members.....	2,974	2,918	56
Salaries officers of corporations.....	305	302	3
Superintendents and managers.....	1,386	1,383	3
Clerks.....	1,712	1,556	156
Wage earners (average number).....	50,384	47,898	2,486
16 years of age and over.....	49,326	47,257	2,069
Under 16 years of age.....	1,058	611	447

The average number of persons engaged in manufactures during 1909 was 56,761, of whom 50,384 were wage earners. Of the remainder, 4,665 were proprietors and officials and 1,712 were clerks. Corresponding figures for individual industries will be found in Table II.

The following table shows, for 1909, the percentage of proprietors and officials, clerks, and wage earners, respectively, among the total number of persons employed in manufactures. It covers all industries combined and 12 important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries.....	56,761	8.2	3.0	88.8
Bread and other bakery products.....	417	27.1	4.6	68.3
Brick and tile.....	1,088	12.1	1.6	86.3
Canning and preserving.....	904	8.5	2.3	89.7
Cars and general shop construction and repairs by steam-railroad companies.....	2,709	1.8	3.2	94.9
Cotton goods, including cotton small wares.....	2,720	1.6	1.1	97.2
Fertilizers.....	524	5.5	8.8	85.7
Foundry and machine-shop products.....	711	12.2	5.8	82.0
Ice, manufactured.....	477	19.5	9.0	71.5
Lumber and timber products.....	37,118	7.9	2.2	90.0
Oil, cottonseed, and cake.....	3,014	8.7	3.2	88.0
Printing and publishing.....	1,132	28.0	0.4	65.0
Turpentine and rosin.....	2,811	5.3	3.1	91.5
All other industries.....	3,135	13.8	0.0	80.2

Of the total number of persons engaged in all manufacturing industries, 8.2 per cent were proprietors and officials, 3 per cent clerks, and 88.8 per cent wage earners. In the printing and publishing and the bakery industries, owing to the fact that a majority of the establishments are small, as compared with other industries in the state, the work is done to a large extent by the proprietors or their immediate representatives, so that the proportion of persons engaged in these two industries falling in the class of proprietors

and officials is much higher than for other industries, or for all industries combined. In the manufactured-ice, foundry and machine-shop, and brick and tile industries, also, the proportion of proprietors and officials is considerably above the average, but in these industries the condition is due largely to the employment of a relatively large number of managers and superintendents, who are classed as officials.

In the cotton-goods industry and in railroad repair shops, on the other hand, proprietors and officials constitute only 1.6 per cent and 1.8 per cent, respectively, and wage earners form a greater proportion than in any of the other industries. This is due to the fact that the average establishment in each of these industries is comparatively large. In the case of railroad repair shops not only are the establishments operated by corporations which report no proprietors, but the general officials are not, as a rule, assigned to this particular branch of work.

The following table shows, in percentages, for 1909, for all industries combined, the distribution of the average number of wage earners by age periods, and for those 16 years of age and over by sex, calculated in the manner described in the Introduction. It also shows for some of the important industries separately a similar distribution of wage earners as reported for December 15, or the nearest representative day. As a means of judging the importance of the several industries the average total number employed for the year is also given in each case.

INDUSTRY.	WAGE EARNERS.			
	Average number. ¹	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
All industries.....	50,384	93.9	4.0	2.1
Bread and other bakery products.....	285	90.2	4.9	4.9
Brick and tile.....	939	94.2	.....	5.8
Canning and preserving.....	847	40.1	38.3	21.6
Cars and general shop construction and repairs by steam-railroad companies.....	2,572	99.9	0.1	.....
Cotton goods, including cotton small wares..	2,645	38.0	41.7	20.3
Fertilizers.....	449	100.0	.....	.....
Foundry and machine-shop products.....	588	100.0	.....	.....
Ice, manufactured.....	341	94.7	.....	5.3
Lumber and timber products.....	33,397	99.6	(?)	0.4
Oil, cottonseed, and cake.....	2,503	99.6	0.4	.....
Printing and publishing.....	736	81.7	13.3	5.0
Turpentine and rosin.....	2,573	97.6	0.6	1.7
All other industries.....	2,514	79.5	18.4	2.1

¹ For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

² Less than one-tenth of 1 per cent.

For all industries combined, 93.9 per cent of the average number of wage earners were males 16 years of age and over, 4 per cent females 16 years of age and over, and 2.1 per cent persons under 16 years of age. The larger part of the women and children employed were in the cotton mills and in the canning and preserving industry. In each of these industries women constituted about 40 per cent of the total

number of wage earners and children under 16 years about 20 per cent.

In order to compare the distribution of persons engaged in manufactures in 1909 with that shown at the census of 1904, it is necessary to use the classification employed at the earlier census. (See Introduction.) The following table makes this comparison according to occupational status:

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				Percent of increase, 1904-1909.
	1909		1904		
	Number.	Percent distribution.	Number.	Percent distribution.	
Total.....	56,761	100.0	42,966	100.0	32.1
Proprietors and firm members.....	2,974	5.2	1,588	3.7	87.3
Salaried employees.....	3,403	6.0	2,688	6.3	24.6
Wage earners (average number)....	50,384	88.8	38,690	90.0	30.2

Comparable figures are not obtainable for 1899. The table shows that the greatest percentage of increase was among proprietors and firm members.

The following table shows the average number of wage earners, distributed according to age periods, and in the case of those 16 years of age and over, according to sex, for 1909, 1904, and 1899. The averages for 1909 are estimated on the basis of the actual number reported for a single representative day. (See Introduction.)

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	50,384	100.0	38,690	100.0	26,799	100.0
16 years of age and over..	49,326	97.9	37,418	90.7	26,784	99.2
Male.....	47,287	93.9	35,364	91.4	24,336	90.8
Female.....	2,039	4.0	2,054	5.3	1,448	5.4
Under 16 years of age....	1,058	2.1	1,272	3.3	1,015	3.8

This table indicates that although the number of women and children employed in all industries has decreased since 1904, the number employed in 1909 was still somewhat in excess of the number in 1899. The proportion of both women and children in the total number of wage earners, however, decreased throughout the decade. In 1909 males 16 years of age and over formed 93.9 per cent of all wage earners, as compared with 91.4 per cent in 1904 and 90.8 per cent in 1899.

Wage earners employed, by months.—The following table gives the number of wage earners employed on the 15th of each month during the year 1909 for all industries combined; it gives also the percentage which the number reported for each month is of the greatest number reported for any month. In Table II, page 632, are shown for practically all of the important industries in the state, the largest number and the smallest

number of wage earners reported for any month. The figures are for the 15th day, or the nearest representative day, of the month.

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	49,148	87.1	July.....	47,237	83.7
February.....	49,511	87.7	August.....	50,341	89.2
March.....	49,839	88.3	September.....	53,105	94.3
April.....	47,851	84.8	October.....	55,387	98.1
May.....	45,178	80.1	November.....	59,436	109.0
June.....	45,198	80.1	December.....	55,285	98.0

For all industries combined the maximum employment occurred in November and the minimum in May. Table II shows that the total number of wage earners in the lumber industry in May, the month of minimum employment, was 83.3 per cent of the number reported for November, the month of maximum employment. This industry, therefore, which in 1909

reported nearly two-thirds of the total number of wage earners in the state, shows a little less variation than all industries combined. Both in May and in June the total number of wage earners employed in the manufacturing industries of the state was 80.1 per cent of the number in November. The cottonseed-oil industry is the most important seasonal industry, the number of wage earners varying from 871 in July to 4,276 in November, but their number was too small to affect greatly the totals for all industries combined.

Prevailing hours of labor.—In the following table wage earners have been classified according to the hours of labor prevailing in the establishments in which they are employed. In making this classification the average number of wage earners employed during the year 1909 is used, and the number employed in each establishment is classified as a total according to the hours prevailing in that establishment, even though a few employees work a greater or less number of hours.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS GROUPED ACCORDING TO PREVAILING HOURS OF WORK PER WEEK.								
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries.....	50,384	2,794	982	2,924	1,555	22,957	16,810	1,998	864
Bread and other bakery products.....	285	12		14	8	93	36	28	94
Brick and tile.....	939	35		27		850	15	12	
Canning and preserving.....	847	11		125	32	581	98		
Carriages and wagons and materials.....	395			8	67	214	76		
Cars and general shop construction and repairs by steam-railroad companies.....	2,572		522	1,577		430	37		
Clothing, men's, including shirts.....	482	20	93	73		296			
Confectionery.....	50	1		22		28		1	
Cotton goods, including cotton small wares.....	2,645				118	1,434	1,093		
Fertilizers.....	449	1				448			
Foundry and machine-shop products.....	583		13	184		377	8		
Furniture and refrigerators.....	259			8		251			
Gas, illuminating and heating.....	101						41	4	56
Ice, manufactured.....	341					39	37	84	181
Lumber and timber products.....	93,397	487	311	496	1,241	16,323	14,477	62	
Marble and stone work.....	71		9	28		35			
Oil, cottonseed, and cake.....	2,503					50	632	1,785	33
Printing and publishing.....	736	337	7	117	24	247	3	1	
Shipbuilding, including boat building.....	91	2		83		6			
Turpentine and rosin.....	2,573	1,830	24			621	98		
All other industries.....	1,095	57	3	164	65	629	159	18	

It is evident from these figures that the prevailing hours of labor for nearly half of the wage earners employed in the manufacturing industries of Mississippi are 60 a week, and that a large proportion work between 60 and 72 hours a week. Only 16.4 per cent of the total number are employed less than 60 hours a week and only 4.7 per cent 72 hours or more.

In the lumber industry, as in all industries combined, nearly one-half the employees work 60 hours a week, and the greater part of the remainder work between 60 and 72 hours per week. In the cottonseed-oil industry the prevailing hours of labor per week are 72; in the car shops they are 54 hours per week; and in the turpentine and rosin industry the greater part of the employees work 48 hours a week or less.

Location of establishments.—The next table shows the extent to which the manufactures of Mississippi are carried on in cities with a population of 10,000 or over. (See Introduction.) The statistics for 1904 are

omitted from this table, because there was no Federal census of population for that year, and it was impossible to determine the cities that came within the group having 10,000 inhabitants or over.

ITEM.	Year.	Total.	LOCATION OF ESTABLISHMENTS.		PER CENT OF TOTAL.	
			In cities with population of 10,000 and over.	Outside districts.	In cities with population of 10,000 and over.	Outside districts.
Population.....	1910	1,797,114	88,885	1,708,229	4.9	95.1
	1900	1,551,270	41,094	1,510,176	2.6	97.4
Number of establishments.....	1909	2,598	202	2,396	7.8	92.2
	1899	1,294	82	1,212	6.3	93.7
Average number of wage earners.....	1909	50,384	4,601	45,783	9.1	90.9
	1899	26,799	2,469	24,330	9.2	90.8
Value of products.....	1909	\$80,555,410	\$11,944,730	\$68,610,680	14.8	85.2
	1899	33,718,517	4,407,113	29,311,404	13.1	86.9
Value added by manufacture.....	1909	43,629,823	5,040,255	38,589,573	11.6	88.4
	1899	17,175,488	1,995,613	15,179,875	11.6	88.4

While the greater part of the industrial activity of the state was carried on outside of cities of 10,000 and over, it may be noted that the average size of establishments located in such cities was larger than in the rest of the state, and that 14.8 per cent of the total value of products of the state was reported from these cities, although they contained but 4.9 per cent of the total population. The figures indicate that between 1899 and 1909 the relative importance of the industries located in cities of 10,000 inhabitants or over has increased—which may be explained chiefly by the fact that two cities, Hattiesburg and Jackson, which had less than 10,000 inhabitants in 1900, were added to this group in 1910.

The population, for 1910 and 1900, of the five cities which had 10,000 inhabitants or over in 1910, is given in the following statement:

CITY.	1910	1900
Meridian.....	23,285	14,050
Jackson.....	21,262	7,816
Vicksburg.....	20,814	14,834
Natchez.....	11,791	12,210
Hattiesburg.....	11,733	4,175

The relative importance in manufacturing industry of each of these five cities is shown in the following table, in which the value of products and average number of wage earners are shown separately for 1909, 1904, and 1899:

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
Meridian.....	1,524	1,346	834	\$4,237,476	\$3,267,600	\$1,924,465
Jackson.....	799	(¹)	(¹)	3,112,931	(¹)	(¹)
Vicksburg.....	1,202	1,031	987	2,229,844	1,887,924	1,367,832
Hattiesburg.....	648	(¹)	(¹)	1,250,892	(¹)	(¹)
Natchez.....	428	316	648	1,114,087	819,729	1,114,816

¹ Figures not available.

The three cities for which comparative figures are available show increases in value of products from 1904 to 1909, while Meridian and Vicksburg show increases from 1899 to 1904. In Meridian, which was the leading manufacturing city of the state in 1909, the cottonseed-oil industry was the most important, the manufacture of fertilizers, the steam-railroad repair shops, and the lumber industry ranking next in importance as measured by value of products. In Jackson also the cottonseed-oil industry ranked first, the lumber industry and the manufacture of fertilizers, and printing and publishing following in order. In Vicksburg steam-railroad repair work, cottonseed-oil mills, and the manufacture of furniture were the leading industries, while the fertilizer industry was the most important in Hattiesburg and the manufacture of cottonseed products in Natchez.

Character of ownership.—The table that follows has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually. In order to avoid disclosing the operations of individual concerns, it is necessary to omit several important industries from this table and the one following.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909.....	2,598	50,384	\$80,555,410	\$43,629,828
1904.....	1,520	38,690	57,451,445	31,650,580
Individual:				
1909.....	1,353	9,770	11,674,333	8,169,366
1904.....	672	5,694	7,597,644	5,282,232
Firm:				
1909.....	685	7,126	10,137,093	6,697,408
1904.....	396	5,882	7,639,517	5,290,976
Corporation:				
1909.....	555	33,467	58,719,054	28,742,295
1904.....	447	27,085	42,169,292	21,045,146
Other:				
1909.....	5	12	23,130	20,789
1904.....	5	29	45,092	26,207
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Individual:				
1909.....	52.1	19.4	14.5	18.7
1904.....	44.2	14.7	13.2	16.7
Firm:				
1909.....	26.4	14.1	12.6	15.4
1904.....	26.1	15.2	13.3	18.7
Corporation:				
1909.....	21.4	66.4	72.9	65.9
1904.....	29.4	70.0	73.4	66.5
Other:				
1909.....	0.2	(¹)	(¹)	(¹)
1904.....	0.3	0.1	0.1	0.1
Foundry and machine-shop products, 1909.....	50	583	\$1,088,324	\$615,897
Individual.....	24	131	232,023	161,931
Firm.....	13	123	188,572	129,333
Corporation.....	13	329	667,729	334,633
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	48.0	22.5	21.3	24.7
Firm.....	26.0	21.1	17.3	21.0
Corporation.....	26.0	56.4	61.4	54.3
Lumber and timber products, 1909.....	1,647	33,397	\$42,792,844	\$28,586,246
Individual.....	920	7,803	8,413,371	6,216,909
Firm.....	507	5,612	7,540,553	5,324,757
Corporation.....	220	19,982	26,838,920	17,044,580
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	55.9	23.4	19.7	21.7
Firm.....	30.8	16.8	17.0	18.6
Corporation.....	13.4	59.8	62.7	59.6
Printing and publishing, 1909.....	225	736	\$1,307,004	\$1,007,511
Individual.....	159	439	721,005	558,451
Firm.....	37	152	262,614	187,748
Corporation.....	24	133	299,055	240,623
Other.....	5	12	28,130	20,789
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	70.7	59.8	55.2	55.4
Firm.....	16.4	20.7	20.1	18.6
Corporation.....	10.7	18.1	22.9	23.9
Other.....	2.2	1.6	1.8	2.1
Turpentine and rosin, 1909.....	64	2,573	\$1,474,639	\$1,125,520
Individual.....	15	242	159,349	118,976
Firm.....	22	388	251,589	197,364
Corporation.....	27	1,943	1,063,691	809,180
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	23.4	9.4	10.8	10.6
Firm.....	34.4	15.1	17.1	17.5
Corporation.....	42.2	75.5	72.1	71.9

¹ Less than one-tenth of 1 per cent.

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 21.4 per cent of the total number of establishments were in 1909 under corporate ownership, as against 78.6 per cent under all other forms. The corresponding figures for 1904 were 29.4 per cent and 70.6 per cent, respectively. There was, on the other hand, an increase in the proportion of establishments operated by individuals from 44.2 per cent in 1904 to 52.1 per cent in 1909, while the proportion under firm ownership remained approximately the same. Special conditions in the lumber industry, which contributed nearly two-thirds of the total number of establishments in 1909, are largely responsible for the increase in individual ownership. In 1904 this industry showed a relatively high percentage of establishments under individual ownership, and in 1909 the proportion had increased to 55.9 per cent, owing largely to the enumeration in that year of many establishments not reported in 1904. Leaving the lumber industry out of consideration, the remaining industries show a slight increase in the proportion of establishments under corporate ownership (from 34.2 per cent in 1904 to 35.2 per cent in 1909) instead of the considerable decrease noted above for all industries, including the lumber industry. The establishments under individual ownership, too, in these remaining industries show only the small increase from 43.6 per cent in 1904 to 45.6 per cent in 1909, while the proportion under firm ownership decreased from 21.7 per cent in 1904 to 18.7 per cent in 1909.

For all industries combined, the proportion of the total value of products reported by corporations was 72.9 per cent in 1909, as compared with 73.4 per cent in 1904; the proportion reported by firms also decreased slightly, while that reported by individual concerns increased from 13.2 per cent to 14.5 per cent. The situation referred to as existing in connection with the figures for the lumber industry was of course largely responsible for these changes. It will be observed that the average value of output per establishment was much greater for establishments under corporate ownership than for those under any other form of ownership.

Individual ownership predominates in number of establishments in each of the four industries shown separately in the table, with the exception of the turpentine and rosin industry, in which establishments under corporate ownership are the most numerous. In all of these industries except printing and publishing, however, by far the larger part of the total value of products is reported by establishments operated by corporations. The steam-railroad repair shops, cotton-goods, and cottonseed-oil industries, are among the leading industries, but are carried on so largely by a single class, corporations, that they are not presented in the table by character of ownership.

Size of establishment.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization. In order to throw some light upon it, the following table groups the establishments according to the value of their products:

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909	2,598	50,384	\$80,555,410	\$48,629,828
1904	1,520	38,690	57,461,445	31,650,560
Less than \$5,000:				
1909	1,156	3,200	2,573,208	1,918,351
1904	466	1,045	1,172,488	871,560
\$5,000 and less than \$20,000:				
1909	785	6,838	8,089,215	5,717,616
1904	519	4,351	5,561,093	3,872,381
\$20,000 and less than \$100,000:				
1909	467	12,679	19,633,830	12,336,122
1904	383	11,458	16,350,354	10,266,820
\$100,000 and less than \$1,000,000:				
1909 ¹	190	27,667	50,259,150	23,657,739
1904 ¹	152	21,836	34,377,512	16,649,799
Per cent of total:				
1909	100.0	100.0	100.0	100.0
1904	100.0	100.0	100.0	100.0
Less than \$5,000:				
1909	44.5	6.5	3.2	4.4
1904	30.7	2.7	2.0	2.8
\$5,000 and less than \$20,000:				
1909	30.2	13.6	10.0	13.1
1904	34.1	11.2	9.7	12.2
\$20,000 and less than \$100,000:				
1909	18.0	25.2	24.4	28.3
1904	25.2	29.6	28.5	32.4
\$100,000 and less than \$1,000,000:				
1909 ¹	7.3	54.8	62.4	54.2
1904 ¹	10.0	56.4	59.8	52.6
Average per establishment:				
1909		19	\$31,007	\$16,794
1904		25	37,797	20,822
Foundry and machine-shop products, 1909	50	583	\$1,088,324	\$615,897
Less than \$5,000	14	20	84,920	24,429
\$5,000 and less than \$20,000	23	151	248,505	160,665
\$20,000 and less than \$100,000	13	412	804,899	424,803
Per cent of total:				
1909	100.0	100.0	100.0	100.0
Less than \$5,000	28.0	3.4	3.2	4.0
\$5,000 and less than \$20,000	46.0	25.9	22.8	27.1
\$20,000 and less than \$100,000	26.0	70.7	74.0	68.9
Average per establishment:		12	\$21,768	\$12,318
Lumber and timber products, 1909	1,647	33,397	\$42,792,844	\$28,586,246
Less than \$5,000	805	2,610	1,698,245	1,319,164
\$5,000 and less than \$20,000	455	4,644	4,768,790	3,814,496
\$20,000 and less than \$100,000	299	8,480	12,495,679	8,879,012
\$100,000 and less than \$1,000,000	88	17,683	23,832,230	14,973,574
Per cent of total:				
1909	100.0	100.0	100.0	100.0
Less than \$5,000	48.9	7.8	4.0	4.6
\$5,000 and less than \$20,000	27.6	13.9	11.1	12.6
\$20,000 and less than \$100,000	18.2	25.3	29.2	30.4
\$100,000 and less than \$1,000,000	5.3	52.9	55.7	52.4
Average per establishment:		20	\$25,982	\$17,357
Printing and publishing, 1909	225	736	\$1,307,604	\$1,007,511
Less than \$5,000	154	266	354,289	270,188
\$5,000 and less than \$20,000	57	240	459,131	354,838
\$20,000 and less than \$100,000	14	230	404,184	382,485
Per cent of total:				
1909	100.0	100.0	100.0	100.0
Less than \$5,000	68.4	36.1	27.1	26.8
\$5,000 and less than \$20,000	5.3	32.6	35.1	35.2
\$20,000 and less than \$100,000	6.2	31.2	37.8	38.0
Average per establishment:		3	\$5,812	\$4,478
Turpentine and rosin, 1909	64	2,573	\$1,474,629	\$1,125,520
Less than \$5,000	13	47	42,164	24,195
\$5,000 and less than \$20,000	32	526	372,174	284,150
\$20,000 and less than \$100,000	16	839	552,123	401,729
\$100,000 and less than \$1,000,000	3	1,111	508,168	355,506
Per cent of total:				
1909	100.0	100.0	100.0	100.0
Less than \$5,000	20.3	1.8	2.9	2.1
\$5,000 and less than \$20,000	50.0	20.4	25.2	25.2
\$20,000 and less than \$100,000	25.0	34.6	37.4	41.0
\$100,000 and less than \$1,000,000	4.7	43.2	34.5	31.6
Average per establishment:		40	\$23,041	\$17,586

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

² Includes the group "\$100,000 and less than \$1,000,000."

The table also shows the average size of the establishment for all industries combined and for important industries separately, as measured by number of wage earners, value of products, and value added by manufacture. The totals for all industries are shown for the last two censuses, while for certain important industries figures are given for 1909 only.

This table shows that, in 1909, of the 2,598 establishments only 190, or 7.3 per cent, had a value of product exceeding \$100,000. These establishments, however, employed an average of 27,607 wage earners, or 54.8 per cent, of the total number in all establishments, and reported 62.4 per cent of the total value of products and 54.2 per cent of the total value added by manufacture.

On the other hand, the very small establishments—that is, those having a value of products less than \$5,000—constituted a considerable proportion (44.5 per cent) of the total number of establishments, but the value of their products amounted to only 3.2 per cent of the total.

The proportion of the total value of products reported from establishments having products valued at between \$20,000 and \$100,000 decreased from 28.5 per cent in 1904 to 24.4 per cent in 1909, while the proportion reported for each of the other classes increased, the largest increase being shown for those having products valued at not less than \$100,000. The average value of products per establishment decreased from \$37,797 in 1904 to \$31,007 in 1909 and the value added by manufacture from \$20,823 to \$16,794. The average number of wage earners per establishment decreased during the same period from 25 to 19. This decrease in the average size of the establishment is confined almost entirely to the lumber industry, where, as elsewhere explained, there has been a marked increase in the number of small establishments reported.

In the lumber industry 48.9 per cent of the 1,647 establishments had a product valued at less than \$5,000, and only 5.3 per cent a product valued at

\$100,000 or over; the 88 establishments included in the latter group, however, reported 55.7 per cent of the total value of products of the industry.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of establishments to bring out the feature of size is a classification according to the number of wage earners employed. The next table shows, for 1909, such a classification for all industries combined and for 12 important industries individually, and gives not only the number of establishments falling in each group but also the average number of wage earners employed.

The per cent distribution of the number of establishments is not shown in this table. Of the 2,598 establishments reported for all industries, 2.7 per cent employed no wage earners; 50 per cent, from 1 to 5; 29.9 per cent, 6 to 20; and only 1.2 per cent employed more than 250 wage earners. The most numerous single group consists of the 1,299 establishments employing from 1 to 5 wage earners, and the next of the 777 establishments employing from 6 to 20 wage earners. There were 22 establishments that employed between 250 and 500 wage earners, and 1 which employed over 1,000.

Of the total number of wage earners, 45.9 per cent were in establishments employing over 100 wage earners. The single group having the largest number of employees was the group of establishments employing from 21 to 50 wage earners. This group employed 9,131 wage earners, or 18.1 per cent of the total. Ten of the 14 cotton mills employed over 100 wage earners each, totaling 91.4 per cent of all the wage earners in the industry, while in the railroad repair shop industry 76.4 per cent of all wage earners were in shops employing over 250 wage earners each. In the cottonseed-oil industry, on the other hand, 81.7 per cent of the wage earners were in mills employing not more than 50 wage earners each.

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—								
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
NUMBER OF ESTABLISHMENTS.										
All industries.....	2,598	71	1,299	777	286	80	53	22	9	1
Bread and other bakery products.....	79	7	56	16	11	1	1	1	1	1
Brick and tile.....	73	1	20	31	2	3	2	1	1	1
Canning and preserving.....	11	1	1	2	2	3	2	1	1	1
Cars and general shop construction and repairs by steam-railroad companies.....	10	1	1	1	1	2	2	2	2	2
Cotton goods, including cotton small wares.....	14	1	1	1	1	3	7	3	3	3
Fertilizers.....	10	1	1	2	3	3	1	1	1	1
Foundry and machine-shop products.....	50	1	24	19	5	5	1	1	1	1
Ice, manufactured.....	51	1	32	18	1	1	1	1	1	1
Lumber and timber products.....	1,047	19	797	540	182	53	35	14	0	1
Oil, cottonseed, and cake.....	87	6	27	47	7	7	1	1	1	1
Printing and publishing.....	225	25	173	24	3	3	3	1	1	1
Turpentine and rosin.....	64	2	9	27	18	3	3	1	1	1
All other industries.....	277	10	171	69	13	5	2	1	1	1
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	50,384	3,592	8,872	9,131	5,699	8,467	8,038	5,467	1,118	1,118
Bread and other bakery products.....	285	140	145	383	100	243	284	1,101	1,101	1,118
Brick and tile.....	939	98	358	57	239	243	284	1,101	1,101	1,118
Canning and preserving.....	847	4	20	57	239	243	284	1,101	1,101	1,118
Cars and general shop construction and repairs by steam-railroad companies.....	2,572	8	29	174	395	865	1,101	1,101	1,118	1,118
Cotton goods, including cotton small wares.....	2,645	9	27	107	218	1,227	1,101	1,101	1,118	1,118
Fertilizers.....	449	1	27	107	189	125	150	150	150	150
Foundry and machine-shop products.....	583	54	215	104	125	150	150	150	150	150
Ice, manufactured.....	341	116	195	30	30	30	30	30	30	30
Lumber and timber products.....	33,397	2,325	9,083	5,044	3,804	5,560	5,149	3,711	1,118	1,118
Oil, cottonseed, and cake.....	2,503	25	413	1,006	459	459	459	459	459	459
Printing and publishing.....	736	408	242	86	86	86	86	86	86	86
Turpentine and rosin.....	2,573	13	375	591	164	522	253	655	655	655
All other industries.....	2,514	408	779	434	382	245	296	296	296	296
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0	7.1	17.6	18.1	11.3	16.8	16.0	10.9	2.2	2.2
Bread and other bakery products.....	100.0	49.1	59.9	40.8	10.6	28.2	33.5	42.8	42.8	42.8
Brick and tile.....	100.0	10.4	38.1	6.7	28.2	28.7	33.5	42.8	42.8	42.8
Canning and preserving.....	100.0	0.5	2.4	6.7	28.2	28.7	33.5	42.8	42.8	42.8
Cars and general shop construction and repairs by steam-railroad companies.....	100.0	0.3	1.1	6.8	15.4	33.6	42.8	42.8	42.8	42.8
Cotton goods, including cotton small wares.....	100.0	0.3	0.3	23.9	8.2	48.4	45.0	45.0	45.0	45.0
Fertilizers.....	100.0	0.2	0.3	23.9	42.1	27.8	25.7	25.7	25.7	25.7
Foundry and machine-shop products.....	100.0	9.3	36.9	23.1	23.1	25.7	25.7	25.7	25.7	25.7
Ice, manufactured.....	100.0	34.0	57.2	8.8	8.8	8.8	8.8	8.8	8.8	8.8
Lumber and timber products.....	100.0	7.0	18.2	16.9	11.4	16.9	15.4	11.1	3.3	3.3
Oil, cottonseed, and cake.....	100.0	1.0	16.5	64.2	18.3	18.3	18.3	18.3	18.3	18.3
Printing and publishing.....	100.0	55.4	32.9	11.7	11.7	11.7	11.7	11.7	11.7	11.7
Turpentine and rosin.....	100.0	0.5	14.6	23.0	6.4	20.3	9.8	23.5	23.5	23.5
All other industries.....	100.0	16.2	31.0	17.3	14.0	9.7	11.8	11.8	11.8	11.8

Expenses.—As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total.

The following table shows, in percentages, for 1909, the distribution of expenses among the classes indicated for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II, page 632.

This table shows that, for all industries combined, 53.7 per cent of the total expense was incurred for materials, 32.6 per cent for services—that is, salaries and wages—and but 13.6 per cent for other purposes.

As would be expected, these proportions vary greatly in the different industries.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	5.3	27.3	53.7	13.6
Bread and other bakery products.....	2.4	17.9	72.0	7.7
Brick and tile.....	10.3	45.7	32.4	11.6
Canning and preserving.....	9.9	13.0	68.0	9.1
Cars and general shop construction and repairs by steam-railroad companies.....	4.6	48.2	44.0	3.3
Cotton goods, including cotton small wares.....	3.6	23.6	69.2	3.6
Fertilizers.....	4.1	8.0	79.1	8.7
Foundry and machine-shop products.....	9.8	31.6	50.7	7.9
Ice, manufactured.....	14.2	31.3	35.3	19.2
Lumber and timber products.....	5.1	35.3	39.9	19.7
Oil, cottonseed, and cake.....	3.9	5.8	84.2	6.2
Printing and publishing.....	13.1	41.1	31.9	13.9
Turpentine and rosin.....	10.8	47.4	28.5	13.3
All other industries.....	7.4	20.3	64.2	8.1

Engines and power.—The following table shows, for all industries combined, the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current) and their total horsepower at the censuses of 1909, 1904, and 1899. It also shows separately the number and horsepower of electric motors, including those operated by current generated in the manufacturing establishments.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 ¹	1909	1904	1899 ¹	1909	1904	1899
Primary power, total	3,251	1,534	1,137	206,222	110,338	65,738	100.0	100.0	100.0
Owned.....	2,924	1,534	1,137	203,661	109,805	65,236	98.8	99.5	99.2
Steam.....	2,747	1,475	1,102	202,307	109,418	64,731	98.1	99.2	98.5
Gas.....	166	53	17	1,077	220	144	0.5	0.2	0.2
Water wheels.....	11	3	18	238	65	361	0.1	0.1	0.5
Water motors.....		3	(²)		12	(²)		(²)	(²)
Other.....				39	90		(²)	0.1	
Rented.....	327	(²)	(²)	2,561	533	502	1.2	0.5	0.8
Electric.....	327	(²)	(²)	2,496	508	382	1.2	0.5	0.6
Other.....				65	25	120	(²)	(²)	0.2
Electric motors	517	50	15	7,627	1,367	590	100.0	100.0	100.0
Run by current generated by establishment.....	190	50	15	5,131	859	208	67.3	62.8	35.3
Run by rented power.....	327	(²)	(²)	2,496	508	382	32.7	37.2	64.7

¹ Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.

² Not reported.

³ Less than one-tenth of 1 per cent.

The table indicates that the increase in primary power was mainly in power generated by steam, which constituted 98.1 per cent of the total in 1909. Among the minor sources of power, an increased use of gas

engines is shown, the number being 166 in 1909 as against 53 in 1904, and 17 in 1899. The figures also show that the practice of renting power is on the increase, 1.2 per cent of the total being rented in 1909, as against but five-tenths of 1 per cent in 1904. The use of electric motors for the purpose of applying the power generated within the establishments is also shown to be rapidly becoming more common, the horsepower of such motors having increased from 208 in 1899 to 859 in 1904 and 5,131 in 1909.

Fuel.—Closely related to the question of kind of power employed is that of the fuel consumed in generating this power, or otherwise used as material in the manufacturing processes. The following table shows the quantity of each kind of fuel used in 1909, by totals, for all industries combined and for certain selected industries:

INDUSTRY.	An-thra-cite coal (tons).	Bitu-minous coal (tons).	Coke (tons).	Wood (cords).	Oil, in-cluding gasoline (bar-rels).	Gas (1,000 feet).
All industries	3,762	409,390	5,254	88,325	10,908	11,282
Bread and other bakery products.....		597	150		85	127
Brick and tile.....		41,897	295	4,184	4	
Canning and preserving.....		1,996	18	1,794	158	434
Cars and general shop construction and repairs by steam-rail-road companies.....						
Cotton goods, including cotton small wares.....		31,574	649		2,391	
Fertilizers.....		31,103		9,990		
Foundry and machine-shop products.....		18,089	23	1,540		
Gas, illuminating and heating.....	1,269	8,050	1,766	463	669	
Ice, manufactured.....		12,734	1,767		5,306	
Lumber and timber products.....		45,437		8,630	14	
Oil, cottonseed, and cake.....		51,135	100	10,582	1,009	
Printing and publishing.....		720	147,191		859	
Turpentine and rosin.....		1	484	23	62	456
All other industries.....	72	10,044	463	3,611	584	10,000

NOTE.—In addition, there were 981 tons of other varieties of fuel reported.

SUPPLEMENTARY DATA REGARDING IMPORTANT INDUSTRIES.

(With statistics for laundries and custom sawmills and gristmills.)

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantity and cost of materials and the quantity and value of products, and the number and kind of machines used in manufactures which do not appear on the general schedule. Certain data of this character for six important industries in Mississippi are here presented.

Lumber.—The lumber industry showed a considerable growth from 1899 to 1909. A statement of the principal products of the sawmill branch of the industry as reported at the censuses of 1909 and 1899 is given in the following statement:

PRODUCT.	QUANTITY.	
	1909	1899
Rough lumber.....M feet b. m.	2,572,669	1,206,265
Lath.....thousands..	90,926	6,083
Shingles.....thousands..	151,303	32,027

The production of rough lumber increased from 1,206,265 M feet board measure in 1899 to 2,572,669 M feet board measure in 1909. Of the entire cut for 1909, 82.2 per cent was yellow pine. The other principal varieties sawed, in the order of their importance, were oak, gum, cottonwood, cypress, poplar, hickory, ash, tupelo, and elm, ranging in quantity from 168,508 M feet to 6,090 M feet board measure.

Oil, cottonseed, and cake.—This industry, which ranks second in the state in value of products, shows a substantial increase for the decade. The following table shows in detail the quantity of cotton seed crushed and the quantities of crude products manufactured for the census years 1909, 1904, and 1899:

MATERIAL OR PRODUCT.	QUANTITY.		
	1909	1904	1899
Cotton seed, crushed.....tons..	559,367	556,396	304,078
Crude products manufactured:			
Oil.....gallons..	24,386,289	22,975,991	15,033,565
Meal and cake.....tons..	244,733	228,122	141,529
Hulls.....tons..	181,797	198,464	185,000
Linters.....pounds..	24,237,536	17,418,633	9,199,737

The figures presented include all cotton seed crushed, whether by establishments where the exclusive or chief products were those obtained from cotton seed,

or by such mills as were primarily engaged in the manufacture of other products but incidentally crushed some cotton seed. 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.

Of the 89 cottonseed-oil mills reported in 1909 as crushing seed, 6 crushed less than 1,000 tons each during the census year; 5 crushed 1,000 but less than 2,000 tons; 27 crushed 2,000 but less than 5,000 tons; 34 crushed 5,000 but less than 10,000 tons; and 17 crushed 10,000 tons but less than 20,000 tons.

In 1909 the ratios which the weight of the several products bore to the total weight of the seed when received at the mill were: Crude oil, 16.3 per cent; meal and cake, 43.8 per cent; hulls, 32.5 per cent; and linters, 2.2 per cent; whereas in 1904 the proportions were: Crude oil, 15.5 per cent; meal and cake, 41 per cent; hulls, 35.7 per cent; and linters, 1.6 per cent. It is interesting to note that from 1899 to 1909 there was an increase of 2 in the percentage of oil, 7.9 in that for meal and cake, and 1 in that for linters, while in the percentage for hulls there was a decrease of 14.4. The reduction in the weight of hulls may be accounted for by the closer delinting of the seed, which permits a better segregation of the meats from the hulls, and also by the introduction of cold-process mills which extract the oil from the seed without hulling, the resulting cake being disposed of as cake and meal.

Cotton goods.—The growth of cotton manufactures in the South is one of the most important features of recent industrial development. The progress of the industry in Mississippi during the past 10 years is shown in the next table, which gives statistics in regard to materials, products, and machinery for 1909, 1904, and 1899.

The principal material used is domestic cotton, of which 16,371,192 pounds were consumed in 1909, as compared with 10,363,458 pounds in 1899. The principal product is bleached and unbleached sheetings and shirtings, the output of which increased from 3,797,382 square yards in 1899 to 17,225,461 square yards in 1909, or 353.6 per cent. The quantities of drills, ticks, denims, and stripes, and of yarns manufactured for sale reported were all smaller in 1909 than in 1904.

The number of producing spindles increased from 75,122 in 1899 to 153,804 in 1909, and the number of looms from 2,464 to 4,733.

MATERIAL, PRODUCT, OR MACHINE.	1909	1904	1899
Materials used, total cost.....	\$2,042,150	\$1,648,842	\$767,327
Cotton, domestic:			
Pounds.....	16,371,192	13,007,625	10,363,458
Cost.....	\$1,797,222	\$1,404,662	\$623,576
Starch.....	\$12,769	\$12,272	\$7,275
Chemicals and dyestuffs.....	\$31,042	\$39,363	\$43,912
Fuel and rent of power and heat.....	\$101,557	\$93,388	\$45,709
All other materials.....	\$99,560	\$99,157	\$46,855
Products, total value.....	\$3,102,398	\$2,462,808	\$1,472,835
Brown or bleached sheetings and shirtings:			
Square yards.....	17,225,461	7,740,785	3,797,332
Value.....	\$903,094	\$337,979	\$363,764
Drills:			
Square yards.....	7,705,349	8,883,605	4,436,078
Value.....	\$437,721	\$472,705	\$281,240
Ticks, denims, and stripes:			
Square yards.....	3,000,420	4,611,716	.....
Value.....	\$226,838	\$395,688	.....
Yarns, for sale:			
Pounds.....	1,119,504	1,401,411	1,039,493
Value.....	\$220,920	\$273,667	\$126,766
Cotton waste, for sale:			
Pounds.....	1,018,718	868,038	1,181,763
Value.....	\$28,556	\$37,581	\$14,366
All other products.....	\$1,280,269	\$945,188	\$686,709
Machinery:			
Spindles (producing, not including doubling and twisting spindles), number.....	153,804	125,352	75,122
Looms, number.....	4,733	3,472	2,464

Fertilizers.—The principal products manufactured during 1909 and 1904, by kind, quantity, and value, are shown in the following statement:

PRODUCT.	1909	1904
Total value.....	\$2,125,029	\$1,082,387
Superphosphates from minerals, bones, etc.:		
Tons.....	59,902	5,976
Value.....	\$540,200	\$62,746
Complete fertilizers:		
Tons.....	72,193	50,153
Value.....	\$1,167,632	\$811,394
Other fertilizers:		
Tons.....	1,006	4,243
Value.....	\$17,424	\$59,737
All other products.....	\$399,773	\$148,510

The table does not include fertilizers to the value of \$616,052 made in 13 establishments in 1909, of which 12 were engaged primarily in the manufacture of cottonseed oil and cake and 1 in the manufacture of food preparations. A total of 33,971 tons of fertilizers was made by these establishments, representing 21,030 tons of complete fertilizers, 8,936 tons of ammoniated fertilizers, 1,512 tons of concentrated phosphates, and 2,493 tons of other fertilizers.

Both the total quantity and value of all kinds of fertilizers shown in the above table practically doubled during the period 1904-1909. Complete fertilizers was the chief product both as to quantity and value in both years, representing more than one-half of the total quantity and value of all fertilizer products in 1909 and about three-fourths in 1904.

Turpentine and rosin.—The recent decline in this industry is brought out in the following table, which gives the quantities and values of the different products for 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$1,474,629	\$2,365,720	\$1,772,435
Spirits of turpentine:			
Gallons.....	1,588,786	3,160,371	3,277,617
Value.....	\$732,334	\$1,473,630	\$1,253,934
Rosin:			
Barrels (280 pounds).....	192,508	362,835	409,809
Value.....	\$739,799	\$892,028	\$461,165
All other products.....	\$2,490	\$102	\$57,336

The working unit in turpentine operations is called a crop, which consists of 10,500 boxes or cups. In 1909 there were 1,053 crops produced in the state, of which 271 were from virgin trees, 301 from the second-year trees, 328 from the third-year trees, and 153 from older trees.

Of the total number of crops worked, 182 were gathered through the new cup system, comprising 90 crops from virgin trees, 49 from second-year trees, 40 from third-year trees, and 3 from older trees.

Printing and publishing.—The following table, containing statistics of the newspaper and periodical branch of the printing and publishing industry for 1899, 1904, and 1909, shows the number of publications, with the total circulation, classified according to frequency of issue:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total.....	219	207	181	315,731	222,028	168,942
Daily.....	18	14	13	47,492	22,250	16,343
Sunday.....	7	4	3	36,322	12,800	(1)
Semiweekly.....	5	4	2	6,000	4,050	11,582
Weekly.....	132	176	156	221,492	107,903	142,702
Monthly.....	5	6	4	3,025	7,725	6,510
All other classes.....	2	3	2	1,400	7,300	1,700

¹ Included in circulation of dailies.

² Includes one triweekly.

Except in the case of the monthlies and the publications included under the head of "All other classes," the table indicates a considerable growth. Particularly interesting is the increase in the circulation of daily papers.

In 1909 there were 5 morning papers with a circulation of 18,200 and 13 evening papers with a circulation of 29,292, as compared with 3 morning papers with a circulation of 5,750 and 11 evening papers with a circulation of 16,500 in 1904. The increase for the five-year period 1904-1909 in the total daily circulation was 113.4 per cent and in the circulation of the Sunday papers 183.8 per cent. Mississippi is one of the four states in the United States to report no publications in any foreign language in 1909.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. In 1909 there were 30 such establishments in Mississippi.

The following statement summarizes the statistics:

Number of establishments.....	30
Persons engaged in the industry.....	603
Proprietors and firm members.....	32
Salaried employees.....	42
Wage earners (average number).....	529
Primary horsepower.....	821
Capital.....	\$332,302
Expenses.....	318,354
Services.....	201,908
Materials.....	80,973
Miscellaneous.....	35,473
Amount received for work done.....	440,579

Fourteen establishments were operated by individuals, 9 by firms, and 7 by corporations. Five establishments had receipts for the year's business of less than \$5,000; 15, receipts of \$5,000 but less than \$20,000; and 10, receipts of \$20,000 but less than \$100,000.

The number of wage earners employed each month and the per cent which this number represented of the greatest number employed in any month were as follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	495	88.2	July.....	501	100.0
February.....	498	88.8	August.....	554	98.8
March.....	507	90.4	September.....	545	97.7
April.....	530	94.5	October.....	524	93.4
May.....	542	96.6	November.....	521	92.9
June.....	548	97.9	December.....	513	91.4

The different kinds of primary power, the number of engines or motors, and the total horsepower used in 1909 are shown in the following tabular statement:

KIND.	Number of engines or motors.	Horsepower.
Primary power, total		821
Owned—Steam.....	29	765
Rented:		
Electric.....	5	35
Other.....		20

The kind and amount of fuel used are shown in the following statement:

KIND.	Unit.	Quantity.
Bituminous coal.....	Tons.....	7,048
Wood.....	Cords.....	3,184
Oil.....	Barrels.....	106
Gas.....	1,000 feet.....	366

Custom sawmills and gristmills.—Statistics for custom sawmills and gristmills are not included in the general tables or in the totals for manufacturing industries, but are presented in the following summary:

	Custom sawmills.	Custom gristmills.
Number of establishments.....	27	596
Persons engaged in the industry.....	95	1,495
Proprietors and firm members.....	35	837
Salaried employees.....		10
Wage earners (average number).....	60	648
Primary horsepower.....	603	15,852
Capital.....	\$26,600	\$475,776
Expenses.....	13,809	1,120,279
Services.....	10,133	34,489
Materials.....	933	1,073,848
Miscellaneous.....	2,743	11,942
Value of products.....	28,769	1,268,318

¹ Includes estimate of all grain ground. A similar estimate for value of lumber sawed by custom sawmills is impracticable.

MANUFACTURES—MISSISSIPPI.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaries employed employees.	Wage earners (average number).							
Expressed in thousands.													
STATE—All industries.....	1909 1904 1899	2,598 1,520 1,294	56,761 42,966	2,974 1,588	3,408 2,688	50,384 38,690 26,799	206,222 110,338 65,738	\$72,393 50,256 22,712	\$3,654 2,598 1,093	\$18,768 14,819 7,910	\$36,926 25,801 16,543	\$80,555 57,451 33,718	\$43,629 31,550 17,176
Bread and other bakery products.....	1909 1904 1899	79 57 22	417 237 92	105 62 23	27 15 2	285 160 67	92 141	287 184 57	17 5 2	128 69 27	516 261 89	878 490 169	862 238 80
Brick and tile.....	1909 1904 1899	73 74 74	1,088 1,054 1,040	73 85 94	70 88 38	939 2,308 908	3,053 2,308 1,483	1,288 847 495	65 45 20	287 272 201	204 177 99	794 783 522	590 606 423
Canning and preserving.....	1909 1904 1899	11 111 8	904 827 672	2 13 6	55 57 16	847 757 650	378 550 214	674 980 328	74 31 17	97 172 123	508 1,032 618	824 1,506 907	316 474 289
Carriages and wagons and materials.....	1909 1904 1899	41 24 30	454 375	50 24	39 33 9	365 318 228	1,350 1,003 211	649 473 183	41 31 7	154 132 88	274 213 131	642 494 302	368 281 171
Cars and general shop construction and repairs by steam-railroad companies.	1909 1904 1899	10 15 9	2,709 2,755 1,579	.....	137 102 45	2,572 2,053 1,534	2,232 1,010 1,040	1,412 1,337 742	147 108 41	1,568 1,421 808	1,422 1,332 464	3,233 2,889 1,331	1,811 1,554 867
Clothing, men's, including shirts.....	1909 1904 1899	6 7	532 743	.....	50 65	482 678	119 220	572 1,235	57 49	115 169	539 762	775 1,263	236 601
Confectionery.....	1909 1904 1899	10 9 6	71 135	10 5	11 15 5	50 115 44	109 54	112 119 50	8 16 3	16 43 15	75 126 72	133 263 101	48 142 29
Cotton goods, including cotton small wares.....	1909 1904 1899	14 14 6	2,720 2,225 1,723	.....	75 64 46	2,645 5,867 1,675	8,045 4,820 3,365	5,336 4,820 2,210	105 79 60	695 518 340	2,042 1,649 767	3,102 2,463 1,473	1,060 814 706
Fertilizers.....	1909 1904 1899	10 5 3	524 371 109	.....	75 23 15	449 348 94	1,323 645	2,607 1,049 353	72 28 19	141 79 33	1,385 857 342	2,125 1,082 493	740 225 151
Flour-mill and gristmill products.....	1909 1904 1899	13 9 8	37 38	14 10	5 8 2	18 20 34	909 71	71 71 60	2 5 1	5 7 11	132 95 303	153 110 412	21 15 49
Foundry and machine-shop products.....	1909 1904 1899	50 35 30	711 622 392	53 45 27	75 61 24	583 516 341	1,372 782 622	1,082 875 390	92 73 31	295 260 159	472 350 199	1,088 920 490	616 564 281
Furniture and refrigerators.....	1909 1904 1899	8 6	286 287	5 5	22 20	259 262	638 470	408 405	28 19	96 85	194 141	392 359	198 218
Gas, illuminating and heating.....	1909 1904 1899	8 5 5	139 79 36	.....	38 24 11	101 55 24	148 111 55	661 305 422	25 12 11	39 24 9	86 39 17	250 125 82	170 86 65
Ice, manufactured.....	1909 1904 1899	51 37 21	477 376 192	25 23 12	111 79 26	341 274 154	7,003 4,171 1,874	1,851 1,266 579	85 64 23	180 119 55	213 145 65	806 603 274	653 458 209
Lumber and timber products.....	1909 1904 1899	1,647 904 608	37,118 24,415	2,117 768	1,604 1,216 581	33,397 22,431 15,660	149,715 68,905 41,082	39,455 1,300 10,800	1,818 1,300 497	12,583 9,242 4,558	14,207 7,005 6,826	42,793 26,162 16,664	23,586 19,157 9,838
Marble and stone work.....	1909 1904 1899	11 9 3	98 61	13 9	14 5	71 47	80 34	116 53 8	13 4 2	41 27 6	79 50 12	176 126 29	97 76 17
Oil, cottonseed, and cake.....	1909 1904 1899	87 91 41	3,014 2,956 1,732	17 6 12	494 451 199	2,503 2,499 1,521	24,534 20,156 8,833	10,133 8,552 3,712	562 455 211	833 732 461	12,169 10,070 4,953	15,906 12,587 6,681	3,797 2,517 1,728
Printing and publishing.....	1909 1904 1899	225 211 181	1,132 881 738	249 242 197	147 70 36	736 549 505	496 265	1,173 733 475	123 53 29	387 195 194	900 195 147	1,308 916 723	1,008 721 576
Shipbuilding, including boat building.....	1909 1904 1899	15 13 13	111 139 91	10 14 13	4	91 125 73	301 289 197	58 40 55	3	51 85 40	66 98 46	161 244 116	95 145 70
Turpentine and rosin.....	1909 1904 1899	64 124 145	2,811 3,036 2,033	71 183 198	157 220 147	2,573 2,633 2,288	286 300 10	1,251 598 798	192 146 68	582 737 530	349 394 668	1,475 2,366 1,772	1,120 1,972 1,074
All other industries.....	1909 1904 1899	165 100 81	1,408 1,374	154 91	177 97	1,077 1,186 988	3,239 2,566	2,597 1,795 995	185 75 46	476 372 246	1,694 893 635	3,425 1,689 1,177	1,731 886 542

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

² Figures can not be shown without disclosing individual operations.

³ Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—MISSISSIPPI.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

CITIES OF 10,000 OR MORE INHABITANTS—ALL INDUSTRIES COMBINED.

CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaries employees.	Wage earners (average number).							
Expressed in thousands.													
Hattiesburg.....	1909	29	742	22	72	648	2,273	\$1,341	\$70	\$297	\$625	\$1,251	\$626
	¹ 1904												
	¹ 1899												
Jackson.....	1909	45	965	30	130	799	3,417	1,783	146	377	1,908	3,113	1,145
	¹ 1904												
	¹ 1899												
Meridian.....	1909	54	1,799	45	230	1,524	5,361	3,816	220	702	2,474	4,238	1,764
	1904	53	1,529	55	128	1,346		2,516	126	588	2,052	3,267	1,215
	1899	42			58	834		1,402	62	327	1,115	1,924	809
Natchez.....	1909	27	513	17	68	428	1,481	931	69	169	689	1,114	425
	1904	24	375	15	44	310		632	42	134	503	820	317
	1899	16			38	648		1,243	34	174	581	1,115	534
Vicksburg.....	1909	47	1,364	48	114	1,202	2,037	1,236	125	637	1,148	2,229	1,081
	1904	32	1,148	28	89	1,031		1,255	90	524	693	1,888	895
	1899	24			55	987		1,145	55	421	716	1,368	652

¹ Figures not available.

MANUFACTURES—MISSISSIPPI.

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.				
					Male.	Female.	Average number.	Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	2,698	56,761	2,974	1,891	1,556	156	50,384	No 56,436	My 45,178	(1)	(1)	(1)	(1)	(1)	206,222		
2 Artificial stone.....	6	25	4	2	1	18	Se 28	Mh 3	27	26	1	1	20				
3 Bread and other bakery products.....	79	417	105	8	16	3	No 294	Ap 2 278	290	262	14	14	92				
4 Brick and tile.....	73	1,088	73	59	15	2	My 1,234	Fe 445	1,350	1,273	77	77	3,653				
5 Canning and preserving.....	11	904	2	30	19	6	De 1,358	My 140	1,371	550	524	140	378				
6 Carriages and wagons and materials.....	41	454	50	20	18	1	No 420	Mh 308	1,489	1,488	1	1	1,350				
7 Cars and general shop construction and repairs by steam-railroad companies.....	10	2,709	.....	49	78	10	No 3,059	Je 1,967	3,044	3,041	3	.....	2,232		
8 Cars and general shop construction and repairs by street-railroad companies.....	6	51	.....	8	3	1	Je 43	Ap 2 87	38	38	.....	.....	48	
9 Clothing, men's, including shirts.....	6	532	.....	17	32	1	De 526	Ja 434	528	101	425	.....	119		
10 Confectionery.....	10	71	10	2	8	1	No 2 62	My 2 42	55	42	12	1	109				
11 Copper, tin, and sheet-iron products.....	15	143	17	5	2	.....	Je 134	Ja 107	118	116	2	.....	.....		
12 Cotton goods, including cotton small wares.....	14	2,720	44	25	0	Mh 2,792	De 2,506	2,716	1,031	1,134	201	350	8,045			
13 Fertilizers.....	10	524	.....	29	41	5	Mh 811	Je 216	523	523	.....	.....	1,823	
14 Flour-mill and gristmill products.....	13	37	14	3	3	.....	De 19	Jy 2 18	19	19	.....	.....	609	
15 Foundry and machine-shop products.....	50	711	53	34	35	6	No 608	Fe 550	620	620	.....	.....	1,372		
16 Furniture and refrigerators.....	8	286	5	14	6	2	De 303	Mh 2 217	295	282	3	10	638				
17 Gas, illuminating and heating.....	8	139	.....	14	20	4	Oc 110	Au 90	102	102	.....	.....	148	
18 Ice, manufactured.....	51	477	23	68	37	6	Au 500	Je 185	409	388	.....	21	7,003			
19 Lumber and timber products.....	1,647	37,118	2,117	798	747	59	No 36,622	My 30,403	41,281	41,128	8	145	149,715				
20 Marble and stone work.....	11	98	13	6	6	2	Je 76	Oc 64	71	71	.....	.....	80		
21 Mattresses and spring beds.....	6	53	8	3	1	1	De 2 49	Mh 33	49	41	8	.....	161			
22 Oil, cottonseed, and cake.....	87	3,014	17	246	240	8	No 4,276	Jy 871	4,142	4,124	18	.....	24,534			
23 Printing and publishing.....	225	1,132	249	75	52	20	De 765	My 712	776	634	103	38	1	496			
24 Shipbuilding, including boat building.....	15	111	16	2	2	.....	Ja 106	Oc 71	96	96	.....	.....	301	
25 Tobacco manufactures.....	5	14	4	1	.....	.....	Ja 11	De 2 8	10	5	1	4	.....			
26 Turpentine and rosin.....	64	2,811	71	79	88	.....	My 2,663	Fe 2,413	2,862	2,794	18	50	286			
27 All other industries.....	127	1,122	121	75	62	12	.....	.....	.....	.....	.....	.....	3,070

¹ No figures given for reasons explained in the Introduction.
² Same number reported for one or more other months.
³ All other industries embrace—

Agricultural implements.....	2	Coffee and spice, roasting and grinding.....	1	Flavoring extracts.....	1
Awnings, tents, and sails.....	1	Coffins, burial cases, and undertakers' goods.....	1	Food preparations.....	2
Brooms.....	2	Cooperage and wooden goods, not elsewhere specified.....	1	Hats, fur-felt.....	1
Cars, steam-railroad, not including operations of railroad companies.....	1	Cordage and twine and jute and linen goods.....	3	Hosiery and knit goods.....	1
				Leather goods.....	7

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES, CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

CITY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	16 and over.			Under 16.	Male.	Female.	Male.	Female.		
								Male.	Female.								
1 HATTIESBURG.....	29	742	22	27	34	11	648	645	3	710	707	3	.....	2,273		
2 JACKSON.....	45	965	36	49	72	9	739	768	15	1,001	960	19	22	3,417			
3 MERIDIAN.....	54	1,799	45	104	113	13	1,524	1,306	120	1,697	1,521	133	21	5,361			
4 NATCHEZ.....	27	513	17	30	34	4	428	393	72	548	426	92	18	1,481			
5 VICKSBURG.....	47	1,364	48	47	56	11	1,202	1,172	17	1,376	1,341	19	15	2,087			

MANUFACTURES—MISSISSIPPI.

633

THE STATE, BY INDUSTRIES: 1909.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$72,393,465	\$68,706,842	\$2,275,683	\$1,377,961	\$18,767,723	\$1,271,788	\$35,653,794	\$111,763	\$693,167	\$2,591,240	\$5,963,723	\$80,555,410	\$43,629,828
2 31,634	24,732	1,800	1,200	9,368	225	10,360	75	57	800	897	30,500	19,915
3 286,748	716,466	8,060	8,859	128,430	14,411	601,449	17,954	2,571	.....	34,762	878,353	362,493
4 1,287,689	629,339	58,379	8,440	287,491	169,015	35,029	268	8,004	10,172	54,541	794,145	590,101
5 673,900	746,074	58,975	15,020	97,131	14,439	493,403	420	5,799	.....	61,787	824,233	316,301
6 645,606	535,943	22,189	19,265	164,105	5,539	268,205	3,100	3,850	16,500	43,190	641,957	308,213
7 1,412,480	3,233,288	75,864	71,412	1,557,533	57,126	1,304,406	.....	16,883	9,161	80,903	3,233,288	1,811,756
8 174,308	59,169	6,940	1,200	21,152	860	22,381	.....	4,700	.....	1,876	59,169	35,928
9 572,087	754,790	21,685	35,173	114,942	4,420	534,418	2,600	2,997	25	38,530	775,029	236,101
10 111,685	108,001	3,440	4,090	16,197	1,498	73,910	1,100	1,227	.....	5,033	122,511	47,097
11 105,755	181,148	5,700	1,860	99,125	495	90,757	1,539	1,327	.....	10,345	210,993	110,741
12 5,336,477	2,949,375	69,456	35,975	695,456	101,557	1,040,593	.....	24,701	250	81,387	3,102,398	1,000,248
13 2,606,692	1,749,831	42,456	29,910	140,899	45,769	1,339,189	600	24,509	.....	126,529	2,125,029	740,071
14 70,571	141,018	1,365	1,000	4,981	3,156	128,380	.....	677	.....	1,559	153,010	21,474
15 1,682,380	932,342	54,718	37,112	294,773	36,365	480,062	1,754	9,945	.....	61,613	1,088,324	615,897
16 408,090	342,064	19,432	8,804	95,645	5,455	188,654	900	2,320	.....	20,854	391,845	197,736
17 660,874	189,732	14,179	39,119	58,672	27,196	27,196	.....	8,808	.....	30,746	255,552	169,814
18 1,860,644	602,083	54,190	31,158	188,610	135,985	70,708	1,115	22,544	1,004	90,769	866,358	653,665
19 39,454,659	85,634,040	1,129,169	689,046	12,582,847	154,362	14,052,246	21,163	388,912	2,527,222	4,089,083	42,792,844	28,586,246
20 116,266	145,772	7,160	5,580	40,081	1,957	70,916	1,332	698	.....	11,448	176,441	97,568
21 62,211	100,099	1,832	585	26,456	1,346	65,230	720	450	125	3,349	117,506	50,924
22 10,132,964	14,456,188	367,245	194,890	833,355	392,607	11,778,064	12,730	129,497	8,079	741,721	15,965,543	3,706,872
23 1,172,781	940,064	75,002	47,952	386,737	21,274	278,819	29,841	9,623	15,950	74,866	1,307,604	1,007,511
24 57,960	124,529	1,200	1,530	51,223	506	65,065	932	433	.....	3,640	161,416	95,845
25 3,028	11,296	240	.....	3,730	30	5,071	436	1,245	.....	544	12,558	7,457
26 1,250,971	1,225,748	70,719	55,333	581,532	915	348,194	130	6,018	.....	150,907	1,474,629	1,125,520
27 2,232,175	2,172,731	100,288	60,855	346,235	43,914	1,455,077	13,064	15,412	1,952	135,944	2,094,145	1,495,154

*All other industries embrace—Continued.

Mineral and soda waters.....	79	Saws.....	1	Vinegar and cider.....	1
Patent medicines and compounds and druggists' preparations.....	6	Scales and balances.....	1	Washing machines and clothes wringers.....	1
Pottery, terra-cotta, and fire-clay products.....	3	Stoves and furnaces, including gas and oil stoves.....	1	Wood preserving.....	3
		Upholstering materials.....	1	Wood, turned and carved.....	5

AND TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909.

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

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$1,341,168	\$1,080,060	\$36,207	\$33,835	\$296,001	\$42,039	\$582,730	\$0,200	\$11,548	.....	\$70,480	\$1,250,892	\$626,123
2 1,783,089	2,699,555	70,203	69,853	376,847	60,352	1,890,112	16,299	22,591	.....	158,188	3,112,031	1,144,407
3 3,315,592	3,627,197	131,634	88,227	701,880	89,800	2,384,517	4,091	41,043	.....	182,885	4,237,470	1,703,159
4 890,787	1,030,927	38,642	30,100	168,879	34,274	654,254	4,542	12,860	.....	87,126	1,114,087	425,559
5 1,285,743	2,062,001	60,841	57,931	637,052	63,270	1,085,127	14,024	27,883	1,715	108,203	2,229,344	1,080,947

This page was intentionally left blank.

MISSOURI.

INDUSTRIES IN GENERAL.

General character of the state.—Missouri, located in the central part of the Mississippi Basin, with a gross area of 69,420 square miles, of which 693 represent water surface, ranks eighteenth in size among the states and territories of continental United States. Its population was 3,293,335 in 1910, as compared with 3,106,665 in 1900 and 2,679,185 in 1890. It ranked seventh in population in 1910 and fifth in 1900 among the 49 states and territories. The increase in population during the last decade was due largely to the growth of the cities of St. Louis and Kansas City and to gains in a number of the smaller cities and towns, the increases in these places being sufficient to offset the decreases which were reported for a large number of the counties of the state and for the city of St. Joseph. The density of population for the state in 1910 was 47.9 persons per square mile, the corresponding figure for 1900 being 45.2.

In 1910 three cities in the state each had a population of over 50,000—St. Louis, with 687,029; Kansas City, with 248,381; and St. Joseph, with 77,403. There were also seven cities having a population of over 10,000 but less than 50,000, as follows: Springfield, Joplin, Hannibal, Sedalia, Jefferson City, Webb City, and Moberly. Forty-two and five-tenths per cent of the entire population of the state resided in incorporated places having a population of 2,500 inhabitants or over, as against 36.3 per cent in 1900. Apart from the 10 cities having over 10,000 inhabitants only 7.6 per cent of the population resided in incorporated places reporting over 2,500 inhabitants. With numerous steam-railroad systems having a total mileage of 8,045,¹ and more miles of navigable rivers on and within its borders than any other state,² Missouri is excellently equipped with transportation facilities.

Importance and growth of manufactures.—Missouri ranks high as an agricultural, mining, and manufacturing state. Its prominent position in manufacturing is due largely to the activity of the industries of St. Louis and Kansas City. The state ranked well as a manufacturing state as early as 1849, in which year it ranked tenth among the states in value of products, and in 1909 it held the same relative position. The growth of population in the state, although considerably less in proportion, has been closely related to the increase in the importance of its manufactures.

In 1849 the 2,923 manufacturing establishments gave employment to an average of 15,808 wage earners, representing 2.3 per cent of the total population of the state, and reported a total value of manufactured products of \$24,324,000. In 1909 the number of establishments had increased to 8,375, employment was given to 152,993 wage earners, representing 4.6 per cent of the population of the state, and the value of products reached a total of \$574,111,000. During this period, the gross value of products per capita of the total population of the state increased from \$36 to \$174.

The state contains large deposits of bituminous coal and other minerals accessible for industrial purposes, which fact has resulted in the development of such industries as smelting and refining, copper, lead, and zinc; marble and stone work; iron and steel, blast furnaces; kaolin and ground earths; glass; and paints. Extensive timber areas have provided abundant material for the development of the lumber and kindred industries. The location of the cities of the state in the midst of a great agricultural region, and their proximity and access to raw materials, as well as their excellent shipping facilities, are factors favorable to the growth of their manufacturing industries.

The table on page 636 gives the most important figures relative to all classes of manufactures combined for the state as returned at the censuses of 1909, 1904, and 1899, together with the percentages of increase from census to census.

In 1909 the state of Missouri had 8,375 manufacturing establishments, which gave employment to an average of 185,705 persons during the year and paid out \$109,837,000 in salaries and wages. Of the persons employed, 152,993 were wage earners. These establishments turned out products to the value of \$574,111,000, to produce which materials costing \$354,411,000 were used. The value added by manufacture was thus \$219,700,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, the table shows a considerable development in the manufactures of Missouri during the decade. While the number of establishments was smaller in 1904 than in 1899, showing a decrease of 5.7 per cent, there was a net increase of 1,522, or 22.2 per cent, for the decade. During the period 1904-1909 the number of wage earners increased 14.9 per cent, wages

¹ Statistics of Railways in the United States, Interstate Commerce Commission, 1909.

² Official Manual of the State of Missouri, 1909-1910.

21.3 per cent, total expenses 34.8 per cent, and the value of products 30.6 per cent, as compared with increases of 23.6 per cent in the average number of wage earners, 42.7 per cent in wages, 39.4 per cent in the total expenses, and 39 per cent in the value of products for the period 1899-1904. The percentages of increase for most of the items were larger from 1899

to 1904 than from 1904 to 1909. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the full extent indicated by these figures representing values, since the increase shown is certainly due, in part, to the increase that has taken place in recent years in the price of commodities.

	NUMBER OR AMOUNT.			PER CENT OF INCREASE. ¹	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments.....	8,375	6,464	6,853	29.6	-5.7
Persons engaged in manufactures.....	185,705	156,585	(²)	18.6	.....
Proprietors and firm members.....	8,226	6,299	(²)	30.6	.....
Salaried employees.....	24,486	17,119	12,474	43.0	37.2
Wage earners (average number).....	152,993	133,167	107,704	14.9	23.6
Primary horsepower.....	340,467	247,861	189,117	37.4	31.1
Capital.....	\$444,343,000	\$379,369,000	\$223,781,000	17.1	69.5
Expenses.....	522,276,000	387,427,000	277,839,000	34.8	39.4
Services.....	109,837,000	85,646,000	60,009,000	28.2	42.7
Salaries.....	28,994,000	19,002,000	13,295,000	52.6	42.9
Wages.....	80,843,000	66,644,000	46,714,000	21.3	42.7
Materials.....	354,411,000	252,253,000	184,189,000	40.5	37.0
Miscellaneous.....	58,028,000	49,523,000	33,641,000	17.2	47.2
Value of products.....	574,111,000	439,549,000	316,304,000	30.6	39.0
Value added by manufacture (value of products less cost of materials).....	219,700,000	187,291,000	132,115,000	17.3	41.8

¹ A minus sign (—) denotes decrease.

² Figures not available.

The relative importance and growth of the leading manufacturing industries of the state are shown in the table on page 637.

It should be borne in mind, in considering this table, that the value of products in some of the industries involves a certain amount of duplication, due to the use of the products of one establishment in the industry as material for another establishment.

Although a few industries greatly predominate in importance, it will be seen from Table II that there is on the whole considerable diversity in the manufacturing activities of the state. The most important industries listed in the next table, in which they are arranged in the order of the value of products, call for brief consideration.

Slaughtering and meat packing.—The state is located in the center of a hog-raising area; it is one of the great corn-growing states and has extensive feeding and grazing areas for cattle in the prairies of northern Missouri and for sheep in the Ozarks of southern Missouri. These features have been very important factors in the development of slaughtering and meat packing in the state. Measured by value of products, this is the leading industry of the state, with products in 1909 valued at \$79,581,000, or 13.9 per cent of the total of all manufactured products.

From 1899 to 1909 the average number of wage earners increased 49.6 per cent and the value of products 84.4 per cent. When measured by the average number of wage earners and the value added by manufacture this industry is exceeded by several industries of the state. The stockyards at South St. Joseph and

those at St. Louis centralize in a large degree the activity in this form of production.

Boots and shoes, including cut stock and findings.—This industry, which was second in importance in the state in 1909, when measured by value of products, has shown a remarkable development, having advanced from sixth place in 1904 and eighth place in 1899. The value of products more than doubled during each of the two five-year periods shown. As a result of this pronounced growth Missouri has become second in the industry among the states, ranking fourth in 1904 and eighth in 1899. This industry gave employment to more wage earners than any other in the state and was exceeded by only two in value added by manufacture. In number of establishments there was a decrease from 57 to 39 for the earlier five-year period, but the loss was more than made up during the later period. In value of products there was an increase of 325.5 per cent during the 10-year period.

Flour-mill and gristmill products.—This is one of the most important industries in the state, occupying third place in value of products in 1909. The number of wage earners and the value added by manufacture are both comparatively small, due to the fact that much of the labor is performed by the proprietors or their immediate representatives and also that the processes involved in the manufacture are simple and to a large extent mechanical. In an agricultural state as highly developed as Missouri the growth of this industry depends largely upon the crop conditions, although the general rise in the value of cereal products should be considered in this connection. Most of the

mills are small and are located in the rural districts, but there are several very large mills in the cities of the state.

The general statistics for the industry do not include the operations of custom gristmills, figures for which are presented separately on page 652.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. ¹			
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All Industries.....	8,375	152,993	100.0	\$574,111,000	100.0	\$219,700,000	100.0	30.6	39.0	17.3	41.8
Slaughtering and meat packing.....	45	4,074	3.1	79,581,000	13.9	7,883,000	3.4	32.4	39.3	22.8	51.0
Boots and shoes, including out stock and findings.....	59	17,396	11.4	49,751,000	8.5	14,211,000	6.5	107.1	105.5	65.5	157.7
Flour-mill and gristmill products.....	680	2,198	1.4	44,508,000	7.8	5,682,000	2.6	17.0	50.0	11.5	34.2
Printing and publishing.....	1,322	10,790	7.1	20,651,000	3.5	21,024,000	9.6	21.5	47.6	19.4	53.6
Liquors, malt.....	31	5,046	3.7	27,447,000	4.8	19,879,000	9.0	13.6	75.3	11.0	67.2
Lumber and timber products.....	1,098	13,522	8.8	23,261,000	4.0	12,647,000	5.8	25.8	11.7	6.0	39.4
Foundry and machine-shop products.....	329	7,443	4.9	19,975,000	3.5	10,819,000	4.9	36.0	.....	25.5	.....
Bread and other bakery products.....	954	4,743	3.1	18,524,000	3.2	7,695,000	3.5	46.2	74.0	42.7	58.6
Clothing, men's, including shirts.....	84	7,094	5.2	15,407,000	2.7	6,336,000	2.9	49.2	5.4	32.4	11.1
Coffee and spice, roasting and grinding.....	40	730	0.5	12,062,000	2.1	2,370,000	1.3	66.1	37.9	35.4	120.0
Cars and general shop construction and repairs by steam-railroad companies.....	35	8,121	5.3	9,812,000	1.7	5,684,000	2.6	12.5	33.7	23.4	31.5
Carriages and wagons and materials.....	243	3,302	2.2	8,409,000	1.5	3,609,000	1.6	10.3	19.1	5.6	2.8
Copper, tin, and sheet-iron products.....	207	2,637	1.7	7,827,000	1.4	3,229,000	1.5	36.3	.....	32.8	.....
Patent medicines and compounds and druggists' preparations.....	185	980	0.6	7,039,000	1.3	5,103,000	2.3	38.6	10.8	44.7	1.0
Furniture and refrigerators.....	99	3,427	2.2	7,380,000	1.3	4,053,000	1.8	52.6	26.1	42.2	23.7
Paint and varnish.....	32	685	0.4	6,828,000	1.2	2,130,000	1.0	6.7	40.5	28.1	36.0
Stoves and furnaces, including gas and oil stoves.....	20	2,013	1.3	6,713,000	1.2	3,867,000	1.8	13.2	.....	0.5	.....
Confectionery.....	61	1,882	1.2	6,669,000	1.2	2,725,000	1.2	43.8	-0.2	36.4	13.8
Leather goods.....	106	1,814	1.2	6,508,000	1.1	2,714,000	1.2	21.4	50.6	9.7	50.8
Clothing, women's.....	68	2,760	1.8	5,439,000	0.9	2,259,000	1.0	63.7	6.3	48.3	9.9
Food preparations.....	37	471	0.3	5,384,000	0.9	1,130,000	0.5	79.3	10.0	19.7	20.9
Iron and steel, steel works and rolling mills.....	4	2,227	1.5	5,013,000	0.9	2,154,000	1.0	67.2	-0.3	52.7	-11.5
Soap.....	10	554	0.4	4,719,000	0.8	1,664,000	0.8	51.6	.....	34.0	.....
Gas, illuminating and heating.....	29	941	0.6	4,038,000	0.8	3,415,000	1.6	-17.0	94.1	-10.3	79.5
Pottery, terra-cotta, and fire-clay products.....	29	3,133	2.1	4,069,000	0.7	2,993,000	1.4	32.0	85.5	28.4	80.4
Brick and tile.....	120	2,909	2.0	3,676,000	0.6	2,604,000	1.2	41.4	30.7	38.0	27.3
Chemicals.....	9	619	0.4	3,940,000	0.6	1,416,000	0.6	11.0	81.8	27.9	130.5
Marble and stone work.....	109	1,342	0.9	3,441,000	0.6	1,994,000	0.9	49.3	86.5	42.3	93.5
Wirework, including wire rope and cable.....	14	710	0.5	3,396,000	0.6	1,662,000	0.8	45.4	94.0	50.8	140.6
Electrical machinery, apparatus, and supplies.....	20	1,060	0.7	3,251,000	0.6	2,147,000	1.0	86.7	91.1	89.2	104.1
Cooperage and wooden goods, not elsewhere specified.....	43	1,088	0.7	3,079,000	0.5	1,177,000	0.5	-17.1	77.9	-18.7	55.5
Butter, cheese, and condensed milk.....	56	159	0.1	2,959,000	0.5	460,000	0.2	125.2	204.2	63.7	172.8
Brass and bronze products.....	18	207	0.2	2,221,000	0.4	567,000	0.3	45.4	19.4	65.3	10.6
Ice, manufactured.....	92	761	0.5	2,084,000	0.4	1,417,000	0.6	84.4	70.3	93.8	76.1
Leather, tanned, curried, and finished.....	9	220	0.1	2,035,000	0.4	436,000	0.2	80.4	38.1	10.7	51.5
Glass.....	4	1,755	1.1	1,993,000	0.3	1,046,000	0.5	11.9	132.5	-2.5	100.9
Awnings, tents, and sails.....	18	420	0.3	1,784,000	0.3	577,000	0.3	44.2	25.6	39.7	-8.8
Automobiles, including bodies and parts.....	17	308	0.2	1,677,000	0.3	652,000	0.3	.....	.....	.....	.....
Milinery and lace goods.....	35	934	0.6	1,647,000	0.3	762,000	0.3	207.6	-1.8	202.9	20.0
Canning and preserving.....	222	952	0.6	1,574,000	0.3	569,000	0.3	19.0	.....	20.0	.....
Coffins, burial cases, and undertakers' goods.....	11	540	0.4	1,595,000	0.3	789,000	0.4	25.6	60.8	31.9	111.3
Photographic apparatus and materials.....	4	248	0.2	1,415,000	0.2	831,000	0.4	-0.9	39.7	-2.3	90.8
Boxes, fancy and paper.....	27	1,113	0.7	1,376,000	0.2	707,000	0.3	78.7	57.8	73.7	25.6
Cars and general shop construction and repairs by street-railroad companies.....	7	905	0.6	1,204,000	0.2	703,000	0.3	-0.6	124.3	-2.5	132.6
Lime.....	31	692	0.5	1,031,000	0.2	570,000	0.3	30.2	.....	20.5	.....
Agricultural implements.....	26	438	0.3	981,000	0.2	477,000	0.2	-8.1	11.9	-22.6	12.6
Mattresses and spring beds.....	33	345	0.2	959,000	0.2	502,000	0.2	-15.9	86.3	-12.8	130.4
Paper goods, not elsewhere specified.....	11	435	0.3	922,000	0.2	475,000	0.2	54.2	.....	43.1	.....
Jewelry.....	19	376	0.2	873,000	0.1	550,000	0.2	48.2	77.4	65.4	57.3
Brooms and brushes.....	61	226	0.1	849,000	0.1	366,000	0.2	60.8	-13.0	25.8	-2.0
Gas and electric fixtures and lamps and reflectors.....	10	232	0.2	642,000	0.1	315,000	0.1	40.8	35.3	16.7	26.2
Liquors, distilled.....	28	34	(*)	613,000	0.1	512,000	0.2	197.6	123.9	253.1	116.4
Blacking and cleansing and polishing preparations.....	32	110	0.1	600,000	0.1	297,000	0.1	255.0	40.8	253.6	5.0
Cutlery and tools, not elsewhere specified.....	22	289	0.2	600,000	0.1	307,000	0.1	46.7	297.1	42.1	213.0
Photo-engraving.....	18	137	0.1	450,000	0.1	368,000	0.2	119.5	173.3	115.2	163.1
Batting and hose, leather.....	7	47	(*)	445,000	0.1	155,000	0.1	40.8	41.1	42.2	84.7
Hats and caps, other than felt, straw, and wool.....	14	182	0.1	440,000	0.1	222,000	0.1	33.3	38.1	54.2	2.9
Show cases.....	8	209	0.1	433,000	0.1	263,000	0.1	-20.7	144.8	-22.4	151.1
Pipes, tobacco.....	7	307	0.2	396,000	0.1	227,000	0.1	20.4	20.1	23.4	10.8
All other industries.....	1,347	22,307	14.6	103,596,000	18.0	38,243,000	17.4	.....	.....	.....	.....

¹ Percentages are based on figures in Table I; a minus sign (-) denotes decrease. Where the percentages are omitted, comparable figures can not be given.
² Less than one-tenth of 1 per cent.

Printing and publishing.—This classification includes the printing and publishing of books, newspapers, periodicals, and music; bookbinding and blank-book

making; engraving on steel and copper plate, including plate printing; lithographing; and job printing. The industry shows a substantial growth in value of prod-

ucts during the decade, most of which occurred during the earlier five-year period. The industry was first in the state in 1909 in number of establishments, first in value added by manufacture, and third in average number of wage earners.

Liquors, malt.—Although the value of products for the brewery industry practically doubled during the decade, the increase from 1904 to 1909 was slight. The average number of wage earners employed in 1909 was 5,646, while the value added by manufacture, \$19,879,000, was larger than that shown for any other industry in the state, with the single exception of printing and publishing.

Lumber and timber products.—This classification includes logging camps, sawmills other than small custom mills, planing mills, and establishments which manufacture wooden packing-boxes. The logging and milling operations are confined largely to the wooded Ozark region of southern Missouri, while many of the planing mills and box factories were reported from the cities. With the exception of the boot and shoe factories, this industry gave employment to more persons than any other industry in the state. The value of products shows a substantial increase from 1904 to 1909.

Foundry and machine-shop products.—In addition to the foundries and machine shops, this industry embraces such manufactures as bells, gas machines and gas and water meters, hardware, plumbers' supplies, steam fittings, and structural ironwork. Comparable figures for 1899 are not available because of the inclusion under this classification at that census of statistics for important establishments which in 1904 and 1909 were shown under other classifications. The industry was really of greater importance in the state than is indicated by the statistics, as some machine shops manufactured distinctive products and were assigned to other classifications.

Clothing, men's, and clothing, women's.—These two industries are closely allied. Combined they gave employment in 1909 to an average number of 10,744 wage earners and turned out products valued at \$20,846,000. Included with men's clothing are establishments which manufacture shirts.

Coffee and spice, roasting and grinding.—This industry, which is of considerable importance in Missouri, is centered largely in St. Louis. The processes involved in the industry are simple, and many wholesale and retail grocery and drug establishments, not included in the census reports, engage in this form of manufacture; consequently, the statistics do not fully indicate the importance of the industry.

Bread and other bakery products.—This industry is common to all centers of population in the states. In 1909 the bakeries of Missouri gave employment to an average of 4,743 wage earners, and reported products valued at \$18,524,000.

Cars and general shop construction and repairs by steam-railroad companies.—This class of manufacture represents the work done in the car repair shops of steam-railroad companies, and is practically confined to repairs to the rolling stock and equipment of their own roads. The statistics do not include minor repairs made in roundhouses. This industry gave employment to an average of 8,121 wage earners in 1909, ranking fourth in this respect among the manufacturing industries of the state.

Pipes, tobacco.—This is one of the distinctive industries of the state in that the world's supply of corncob pipes is manufactured largely here. In 1909 there were seven establishments which gave employment to 307 wage earners and reported products valued at \$396,000.

In addition to the industries presented separately, there are 40 industries each of which had a value of products in 1909 in excess of \$300,000. They are included under the head of "All other industries" in the table because in some instances the operations of individual establishments would be disclosed if they were shown separately; in others, because the returns do not properly represent the true condition of the industry, as it is interwoven with one or more other industries; while for others comparable statistics for the different census years can not be presented on account of changes in classification. The most important of these industries are: Babbit metal and solder; bags, other than paper; cars, steam-railroad, not including operations of railroad companies; cars, street-railroad, not including operations of railroad companies; cement; cordage and twine and jute and linen goods; explosives; furnishing goods, men's; galvanizing; iron and steel, blast furnaces; mineral and soda waters; oil, cottonseed, and cake; petroleum, refining; smelting and refining, lead; smelting and refining, zinc; tobacco manufactures; and window shades and fixtures.

This table also shows the percentages of increase for these leading industries in respect to value of products and value added by manufacture in all cases where comparative statistics can be presented. Many of the industries show widely varying rates of increase for the two periods. The millinery and lace-goods industry showed a greater rate of increase from 1904 to 1909 in value of products than any of the other industries shown in the table, namely, 267.6 per cent, followed by the manufacture of blacking and cleansing and polishing preparations, with 255 per cent, and the manufacture of distilled liquors, with 197.6 per cent. For an industry already so extensive, the boot and shoe industry shows very large gains for both periods in value of products and value added by manufacture. During the five-year period 1904-1909, the highest rates of increase in value added by manufacture were those for the millinery and lace-goods industry, 262.9 per cent; the manufacture of blacking and cleansing and polishing preparations, 253.6 per cent;

the distillery industry, 253.1 per cent; the photo-engraving industry, 115.2 per cent; the manufactured-ice industry, 93.8 per cent; and the manufacture of electrical machinery, apparatus, and supplies, 89.2 per cent. None of the industries listed separately in the table showed a decrease in value of products or in value added by manufacture for both five-year periods. Seven industries decreased in value of products from 1904 to 1909, while four decreased during the earlier period 1899-1904. Eight industries decreased in value added by manufacture from 1904 to 1909, while only three decreased in this respect during the first half of the decade.

Slaughtering and meat packing, the leading industry in the state in value of products, becomes seventh when measured by value added by manufacture. The printing and publishing and malt-liquor industries, which are fourth and fifth, respectively, in value of products, rank first and second, respectively, in value added by manufacture.

Persons engaged in manufacturing industries.—The following table shows, for 1909, the distribution of the number of persons engaged in manufactures, the average number of wage earners being distributed by sex and age. It should be borne in mind, however, that 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 Introduction.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes.....	185,705	150,750	34,955
Proprietors and officials.....	14,820	14,423	397
Proprietors and firm members.....	8,226	7,989	237
Salaried officers of corporations.....	3,010	2,924	86
Superintendents and managers.....	3,584	3,510	74
Clerks.....	17,892	14,061	3,831
Wage earners (average number).....	152,993	122,296	30,727
16 years of age and over.....	149,175	119,080	29,195
Under 16 years of age.....	3,818	2,280	1,532

The average number of persons engaged in manufactures during 1909 was 185,705, of whom 152,993 were wage earners. Of the remainder, 14,820 were proprietors and officials, and 17,892 were clerks. Corresponding figures for individual industries will be found in Table II, page 660.

The following table shows, for 1909, the percentages of proprietors and officials, clerks, and wage earners, respectively, among the total number of persons employed in manufactures. It covers all industries combined and 20 important industries individually.

Of the total number of persons engaged in all manufacturing industries, 8 per cent were proprietors and officials, 9.6 per cent clerks, and 82.4 per cent wage earners. The proportions vary greatly in the different

industries. The percentage of proprietors and officials in the flour-mill and gristmill industry was 30.3, the highest shown in the table. This is due to the fact that there are a large number of small establishments in this industry, many of which are operated by the proprietors or their immediate representatives, or with the assistance of only one or two wage earners. Many small establishments in which much of the labor is performed by proprietors are also reported for the bakery, patent medicine and compound, printing and publishing, lumber and timber, carriage and wagon, and copper, tin, and sheet-iron products industries. The result is that the proportion of persons engaged in these industries falling in the class of proprietors and officials is higher than for other industries or for all industries combined. On the other hand, on account of the large average number of wage earners to an establishment, the proportion of proprietors and officials in the boot and shoe industry was only 1.3 per cent; that in the railroad repair shops, 1.6 per cent; in the men's clothing industry, 1.9 per cent; in the steel works and rolling mills, 1.2 per cent; in the breweries, 2.2 per cent; and in the slaughtering and meat-packing industry, 2.3 per cent.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries.....	185,705	8.0	9.6	82.4
Boots and shoes, including cut stock and findings.....	18,665	1.3	5.5	93.2
Bread and other bakery products.....	6,797	16.6	13.6	69.8
Carriages and wagons and materials.....	3,940	11.2	4.9	83.8
Cars and general shop construction and repairs by steam-railroad companies.....	8,620	1.6	4.2	94.2
Clothing, men's, including shirts.....	3,667	1.9	5.8	92.2
Clothing, women's.....	3,122	4.5	7.4	88.1
Confectionery.....	2,337	5.1	14.3	80.6
Copper, tin, and sheet-iron products.....	3,228	10.2	8.1	81.7
Flour-mill and gristmill products.....	3,602	30.3	8.7	61.0
Foundry and machine-shop products.....	9,051	7.8	9.9	82.2
Furniture and refrigerators.....	3,977	6.3	7.5	86.2
Iron and steel, steel works and rolling mills.....	2,379	1.2	5.2	93.6
Leather goods.....	2,308	9.2	12.2	78.6
Liquors, malt.....	6,348	2.2	8.9	88.9
Lumber and timber products.....	15,814	11.4	3.1	85.5
Paint and varnish.....	1,034	9.9	23.9	66.2
Patent medicines and compounds and druggists' preparations.....	1,957	16.5	33.5	50.1
Printing and publishing.....	15,792	13.3	18.4	68.3
Slaughtering and meat packing.....	6,629	2.3	13.1	84.6
Stoves and furnaces, including gas and oil stoves.....	2,430	3.7	13.4	82.8
All other industries.....	60,108	3.6	10.3	81.1

The following table shows, for 1909, in percentages, for all industries combined, the distribution of the average number of wage earners by age periods, and for those 16 years of age and over by sex, calculated in the manner described in the Introduction. It also shows, for some of the important industries separately, a similar distribution of wage earners as reported for December 15, or the nearest representative day. As a means of judging the importance of the several industries the average number employed for the year in all industries is also given in each case.

INDUSTRY.	WAGE EARNERS.			
	Average number. ¹	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
All industries.....	152,993	78.4	19.1	2.5
Boots and shoes, including cut stock and findings.....	17,306	60.6	31.8	7.6
Bread and other bakery products.....	4,743	68.1	29.0	2.8
Carriages and wagons and materials.....	3,302	97.5	2.2	0.4
Cars and general shop construction and repairs by steam-railroad companies.....	8,121	99.9	0.1	.....
Clothing, men's, including shirts.....	7,994	21.5	76.4	2.1
Clothing, women's.....	2,750	18.7	79.1	2.2
Confectionery.....	1,882	38.0	59.4	2.1
Copper, tin, and sheet-iron products.....	2,037	91.8	6.8	1.4
Flour-mill and gristmill products.....	2,198	99.3	0.4	0.4
Foundry and machine-shop products.....	7,443	98.8	0.4	0.8
Furniture and refrigerators.....	3,427	95.0	2.4	2.6
Iron and steel, steel works and rolling mills.....	2,227	99.6	.....	0.4
Leather goods.....	1,814	89.7	9.5	0.8
Liquors, malt.....	5,046	90.5	8.5	1.1
Lumber and timber products.....	13,522	97.6	0.5	1.8
Paint and varnish.....	685	92.0	6.4	1.0
Patent medicines and compounds and druggists' preparations.....	980	40.3	57.7	2.0
Printing and publishing.....	10,790	71.5	26.0	2.5
Slaughtering and meat packing.....	4,674	96.0	3.3	0.1
Stoves and furnaces, including gas and oil stoves.....	2,013	99.1	0.1	0.8
All other industries.....	49,749	80.6	16.9	2.5

¹ For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

For all industries combined, 78.4 per cent of the average number of wage earners were males 16 years of age and over; 19.1 per cent females 16 years of age and over; and 2.5 per cent children under 16 years of age. In the women's clothing industry nearly four-fifths of the wage earners were women 16 years of age and over; in the men's clothing industry the proportion was more than three-fourths; and in the confectionery industry and the manufacture of patent medicines and compounds, nearly three-fifths. The boot and shoe, the bakery, and the printing and publishing industries also show large proportions of adult female wage earners. The highest proportions of men employed are shown for railroad repair shops, steel works and rolling mills, flour mills and gristmills, and stove and furnace establishments. The proportion of children under 16 years of age was larger in the boot and shoe industry than in any of the other industries shown in the table.

In order to compare the distribution of persons engaged in manufactures in 1909 with that shown at the census of 1904 it is necessary to use the classification employed at the earlier census. (See Introduction.) The following table makes this comparison according to occupational status:

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				
	1909		1904		Per cent of increase, 1904-1909.
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total.....	185,705	100.0	156,585	100.0	18.6
Proprietors and firm members.....	8,226	4.4	6,290	4.0	30.6
Salaried employees.....	24,480	13.2	17,119	10.9	43.0
Wage earners (average number)	152,993	82.4	133,167	85.0	14.9

Comparable figures are not obtainable for 1899. The table shows the greatest percentage of increase in the salaried employees. While the number of wage earners increased, their proportion of the total number employed was less in 1909 than in 1904.

The following table shows the average number of wage earners, distributed according to age periods, and in the case of those 16 years of age and over according to sex, for 1909, 1904, and 1899. The averages for 1909 are estimated on the basis of the actual number reported for a single representative day. (See Introduction.)

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	152,993	100.0	133,167	100.0	107,704	100.0
16 years of age and over.....	149,175	97.5	128,696	96.6	103,974	96.5
Male.....	119,980	78.4	105,927	79.5	84,084	78.1
Female.....	29,195	19.1	22,769	17.1	19,890	18.5
Under 16 years of age.....	3,818	2.5	4,471	3.4	3,730	3.5

This table indicates that for all industries combined there was a decrease during the 10 years in the proportion of children under 16 years of age. The total number of children employed in 1909 was slightly larger than in 1899, and somewhat less than in 1904. The proportion of adult female wage earners decreased from 18.5 per cent in 1899 to 17.1 per cent in 1904, but increased to 19.1 per cent in 1909, while the actual number of such wage earners employed in manufactures increased throughout the decade. In 1909 males 16 years of age and over formed 78.4 per cent of all wage earners, as compared with 79.5 per cent in 1904 and 78.1 per cent in 1899.

Wage earners employed, by months.—The following table gives the number of wage earners employed on the 15th of each month during the year 1909 for all industries combined; it also gives the percentage which the number reported for each month is of the greatest number reported for any month. In Table II, page 660, are shown for practically all of the important industries in the state, the largest number and the smallest number of wage earners reported for any month. The figures are for the 15th day, or the nearest representative day, of the month.

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	141,268	86.4	July.....	150,969	92.3
February.....	145,022	88.7	August.....	157,351	96.2
March.....	148,776	91.0	September.....	163,514	100.0
April.....	147,979	90.5	October.....	161,110	98.5
May.....	143,053	90.5	November.....	161,540	98.8
June.....	150,028	91.8	December.....	160,294	98.0

There are no seasonal industries of importance in Missouri which give employment to a large number of persons at certain periods of the year only. On the contrary, all of the more important industries show comparatively little fluctuation in the number of wage earners employed. For all industries combined the number employed in January, the month of least activity, represented a variation of only 13.6 per cent from the number in September, the month of greatest activity. For nine months of the year the variation from the maximum was less than 10 per cent, and for three of these nine months it was 2 per cent or less. Fluctuation in employment in such industries as canning and preserving, manufactured

ice, and the manufacture of millinery and lace goods, was considerable, but the number of wage earners employed was not sufficiently large to influence to any great extent the variation shown for all industries combined.

Prevailing hours of labor.—In the following table wage earners have been classified according to the hours of labor prevailing in the establishments in which they are employed. In making this classification the average number of wage earners employed during the year is used, and the number employed in each establishment is classified as a total according to the hours prevailing in that establishment, even though a few employees work a greater or less number of hours.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS GROUPED ACCORDING TO PREVAILING HOURS OF WORK PER WEEK.								
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All Industries.....	152,993	23,276	10,671	36,711	28,934	46,446	3,350	1,737	1,898
Agricultural implements.....	438	6	128	43	261	.....	.....	.....	.....
Automobiles, including bodies and parts.....	368	25	3	289	27	24	.....	.....	.....
Awnings, tents, and sails.....	429	90	16	92	27	204	.....	.....	.....
Blacking and cleansing and polishing preparations.....	110	11	28	40	21	10	.....	.....	.....
Boots and shoes, including out stock and findings.....	17,396	4	.....	2,464	9,917	5,011	.....	.....	.....
Bones, fancy and paper.....	1,113	52	120	343	468	95	30	.....	.....
Brass and bronze products.....	297	4	7	286	.....	.....	.....	.....	.....
Bread and other bakery products.....	4,743	252	181	1,122	215	2,870	66	21	16
Brick and tile.....	2,990	17	5	42	26	2,814	33	62	.....
Brooms and brushes.....	226	42	12	70	14	88	.....	.....	.....
Butter, cheese, and condensed milk.....	159	12	.....	5	.....	53	35	4	.....
Canning and preserving.....	952	217	23	23	30	661	8	.....	.....
Carriages and wagons and materials.....	3,302	471	182	881	417	1,220	130	1	.....
Cars and general shop construction and repairs by steam-railroad companies.....	8,121	1,897	.....	5,237	539	280	647	.....	21
Cars and general shop construction and repairs by street-railroad companies.....	905	.....	3	614	.....	271	2	.....	16
Chemicals.....	619	.....	374	7	.....	210	.....	28	.....
Clothing, men's, including shirts.....	7,994	2,174	3,024	2,180	503	113	.....	.....	.....
Clothing, women's.....	2,760	184	956	1,158	462	40	.....	.....	.....
Coffee and spice, roasting and grinding.....	730	2	96	203	174	255	.....	.....	.....
Coffins, burial cases, and undertakers' goods.....	540	.....	101	21	.....	418	.....	.....	.....
Confectionery.....	1,882	289	123	432	237	799	2	.....	.....
Cooperage and wooden goods, not elsewhere specified.....	1,088	114	28	224	465	257	.....	.....	.....
Copper, tin, and sheet-iron products.....	2,037	593	128	443	860	613	.....	.....	.....
Cutlery and tools, not elsewhere specified.....	239	1	171	85	9	23	.....	.....	.....
Electrical machinery, apparatus, and supplies.....	1,060	27	239	686	150	8	.....	.....	.....
Flour-mill and gristmill products.....	2,198	119	6	32	6	949	368	709	9
Food preparations.....	471	29	3	88	12	336	.....	3	.....
Foundry and machine-shop products.....	7,443	200	561	4,661	664	1,357	.....	.....	.....
Furniture and refrigerators.....	3,427	488	392	727	260	1,570	.....	.....	.....
Gas and electric fixtures and lamps and reflectors.....	232	37	45	71	.....	79	.....	.....	.....
Gas, illuminating and heating.....	941	4	.....	1	6	13	71	33	813
Glass.....	1,755	.....	102	.....	224	.....	1,066	363	.....
Hats and caps, other than felt, straw, and wool.....	182	53	7	53	64	.....	.....	.....	.....
Ice, manufactured.....	761	13	.....	.....	14	147	37	41	509
Iron and steel, steel works and rolling mills.....	2,227	846	.....	.....	.....	1,381	.....	.....	.....
Jewelry.....	376	4	81	286	.....	.....	5	.....	.....
Leather goods.....	1,814	6	34	275	1,043	455	.....	1	.....
Leather, tanned, curried, and finished.....	220	.....	.....	.....	11	209	.....	.....	.....
Lime.....	602	4	.....	87	.....	530	14	15	72
Liquors, malt.....	5,646	4,755	4	789	7	78	.....	.....	13
Lumber and timber products.....	13,522	1,155	720	1,677	223	9,677	67	2	1
Marble and stone work.....	1,342	320	28	410	41	540	.....	5	.....
Mattresses and spring beds.....	345	35	.....	113	16	181	.....	.....	.....
Millinery and lace goods.....	934	191	30	524	.....	189	.....	.....	.....
Paint and varnish.....	685	16	28	130	15	432	.....	.....	64
Paper goods, not elsewhere specified.....	435	37	5	57	284	62	.....	.....	.....
Patent medicines and compounds and druggists' preparations.....	980	204	348	253	118	52	.....	.....	.....
Photographic apparatus and materials.....	248	.....	.....	.....	248	.....	.....	.....	.....
Photo-engraving.....	187	184	1	2	.....	.....	.....	.....	.....
Pipes, tobacco.....	307	.....	.....	140	103	4	.....	.....	.....
Pottery, terra-cotta, and fire-clay products.....	3,138	65	.....	241	1,708	1,126	.....	.....	.....
Printing and publishing.....	10,790	6,457	974	1,833	856	614	5	1	.....
Show cases.....	209	1	.....	89	.....	119	.....	.....	.....
Slaughtering and meat packing.....	4,674	4	.....	1,960	59	2,650	.....	1	.....
Soap.....	554	2	46	310	.....	155	.....	.....	.....
Stoves and furnaces, including gas and oil stoves.....	2,013	72	502	512	99	828	.....	.....	.....
Wirework, including wire rope and cable.....	710	4	.....	40	232	434	.....	.....	.....
All other industries.....	22,888	2,037	808	4,375	7,710	5,962	714	447	336

For nearly three-fourths of the wage earners employed in the manufacturing industries of Missouri the prevailing hours of labor range from 54 to 60 a week. Twenty-two and two-tenths per cent of the total are employed in establishments where the prevailing hours are less than 54 a week and 4.5 per cent in establishments where they are more than 60 a week.

In only seven of the industries shown separately in the table, chief among which are the men's clothing, malt-liquor, printing and publishing, and patent-medicine industries, do most of the wage earners work less than 54 hours per week. Of the wage earners in breweries, 84.2 per cent, and of those in printing and publishing establishments, 59.8 per cent, work 48 hours or under

per week. Most of the wage earners in the gas, glass, and manufactured-ice industries and nearly one-half of those in the flour mills and gristmills are in plants where the prevailing hours are over 60 per week, while for the majority of the wage earners in 14 of the industries shown separately the prevailing hours are 60 per week.

Location of establishments.—The next table shows the extent to which the manufactures of Missouri are centralized in cities of 10,000 population and over. (See Introduction.) The statistics for 1904 are omitted from this table because there was no Federal census of population for that year, from which to determine the cities that came within the group having over 10,000 inhabitants.

ITEM.	Year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 AND OVER.						DISTRICTS OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 AND OVER.	
			Total.		10,000 to 25,000.		25,000 and over.		Number or amount.	Per cent of total.
			Number or amount.	Per cent of total.	Number or amount.	Per cent of total.	Number or amount.	Per cent of total.		
Population.....	1910 1900	3,293,335 3,100,666	1,150,840 919,270	34.9 29.6	70,753 51,278	2.1 1.6	1,080,087 867,992	32.8 27.9	2,142,405 2,187,395	65.1 70.4
Number of establishments.....	1909 1899	8,375 6,553	4,247 3,602	50.7 53.4	232 202	2.8 2.9	4,015 3,460	47.9 50.5	4,128 3,191	49.3 46.6
Average number of wage earners.....	1909 1899	152,993 107,704	116,250 84,165	76.0 78.1	5,885 3,857	3.8 3.6	110,365 80,308	72.1 74.6	36,743 23,539	24.0 21.9
Value of products.....	1909 1899	\$574,111,070 \$16,304,095	\$427,078,288 238,424,508	74.4 75.4	\$16,734,760 7,415,910	2.9 2.3	\$410,343,528 231,008,598	71.5 73.0	\$147,032,732 77,879,587	25.6 24.6
Value added by manufacture.....	1909 1899	219,669,019 132,115,065	180,678,818 111,156,471	82.2 84.1	5,945,511 3,016,240	2.8 2.3	174,733,307 108,141,231	79.5 81.9	39,021,101 20,958,594	17.8 15.9

With but 34.9 per cent of the total population in 1910, the cities having 10,000 inhabitants and over reported 50.7 per cent of the total number of establishments, 76 per cent of the average number of wage earners, and 74.4 per cent of the total value of products in 1909. The figures indicate that on the whole the industries located outside of such cities have gained slightly on those of the cities, in spite of the fact that the proportion of the total population living outside of such cities decreased during the 10 years. The proportion of manufactures reported from the districts outside is due, in part, to the development of the slaughtering and meat-packing industry at South St. Joseph, adjacent to St. Joseph, the establishments of which place reported over 65 per cent of the total value of products of this industry in the state.

The population in 1900 was used as the basis in making the classification for 1899 and that of 1910 for the 1909 grouping. The fluctuations in the population of different cities have affected somewhat the grouping in the table. In 1900 Springfield was included in the group of cities having from 10,000 to 25,000 inhabitants, but during the following decade its population increased to such an extent that it is

now included with those cities having 25,000 inhabitants and over. At the census of 1900 a population of less than 10,000 was reported for Jefferson City, Moberly, and Webb City, so that these cities were included with the districts outside in 1899. Principally as a result of the addition of these three cities to the group, the manufacturing industries of cities having from 10,000 to 25,000 inhabitants show a slight increase in relative importance as measured by average number of wage earners and value of products in 1909, as compared with 1899. Of the total value of products reported for the state in 1909, 2.9 per cent was reported from the five cities having from 10,000 to 25,000 inhabitants, and 71.5 per cent from the five cities having 25,000 inhabitants and over.

The population, for 1910 and 1900, of the 10 cities which had 10,000 inhabitants or over in 1910 is given in the following statement.

CITY.	1910	1900	CITY.	1910	1900
St. Louis	687,029	575,238	Hannibal	18,341	12,780
Kansas City	248,381	163,752	Sedalia	17,822	15,231
St. Joseph	77,403	102,979	Jefferson City	11,850	9,664
Springfield	35,201	23,267	Webb City	11,817	9,201
Joplin	32,073	26,023	Moberly	10,923	8,012

The relative importance in manufacturing industry of each of the 10 cities having a population of 10,000 and over in 1910 is shown in the following table, in which the value of products and average number of wage earners are shown separately for 1909, 1904, and 1899.

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
St. Louis.....	87,371	82,698	64,832	\$328,495,313	\$267,307,038	\$103,732,788
Kansas City.....	14,643	11,039	9,609	54,704,510	35,573,049	23,588,063
St. Joseph.....	5,390	4,663	5,095	17,625,082	11,573,720	11,361,939
Hannibal.....	2,445	1,811	1,238	6,195,120	3,563,842	2,608,720
Jefferson City.....	1,336	262	299	5,445,518	3,926,632	3,061,438
Springfield.....	2,131	2,168	1,710	5,382,098	5,293,315	3,433,800
Joplin.....	830	680	682	4,135,925	3,006,203	2,325,218
Sedalia.....	935	974	909	2,333,072	1,691,727	1,233,300
Moberly.....	999	496	656	1,933,971	800,509	791,978
Webb City.....	170	138	126	777,070	637,965	353,566

¹ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

Every city shows an increase in value of products both from 1904 to 1909 and from 1899 to 1904. The greatest relative gain made from 1904 to 1909 by any of the 10 cities, 147.8 per cent, is shown for Moberly, due chiefly to the establishment of the boot and shoe industry in the city since 1904.

St. Louis, the largest and most important city in the state, showed an increase in 1909, as compared with 1904, of 22.9 per cent in the value of products, and 5.6 per cent in the average number of wage earners. St. Louis occupied fourth place in value of manufactured products among the cities of the United States in 1909 and in 1904. The manufacturing industries of St. Louis gave employment to 57.1 per cent of the total average number of wage earners employed in manufactures in the state in 1909, 62.1 per cent in 1904, and 60.2 per cent in 1899. The value of products for the city amounted to 57.2 per cent of the total value of manufactured products for the state in 1909, 60.8 per cent in 1904, and 61.2 per cent in 1899. In 1909 St. Louis occupied third place among the cities of the United States in the manufacture of boots and shoes, having advanced from fourth place in 1904 and sixth place in 1899. Over two-thirds of the total value of the products of the state in the boot and shoe industry, which includes the manufacture of cut stock and findings, was reported from this city in 1909. All of the tanneries and the baking-powder establishments of the state and practically all of the soap works were located here, and more than nine-tenths of the total value of the tobacco products and over eight-tenths of the value of malt liquors in Missouri were reported from St. Louis. In 1909 the boot and shoe industry was the leading industry in the city, having displaced tobacco manufactures, which occupied first place in 1904 and 1899. This latter industry ranked

second in importance in 1909, displacing the brewery industry, which dropped to fourth place, while slaughtering and meat packing advanced to third place.

The total value of the manufactured products of Kansas City more than doubled during the decade, and shows an increase of 53.8 per cent from 1904 to 1909. The leading industries of the city in 1909 were printing and publishing, bakeries, flour mills and grist-mills, and the lumber and timber industry. In 1909 the value of products of the manufacturing establishments of Kansas City formed 9.5 per cent of the total for the state, as compared with 8.1 per cent in 1904. Nine and six-tenths per cent of the total number of wage earners engaged in manufactures in the state were employed in this city in 1909 and 8.3 per cent in 1904.

In St. Joseph, which shows an increase of 52.3 per cent in total value of products from 1904 to 1909, the most important industries were men's clothing, the bakeries, and flour mills and gristmills. The manufacture of boots and shoes was the leading industry in Hannibal, Jefferson City, and Moberly, while the flour-mill and gristmill industry was important in Joplin, Jefferson City, Hannibal, Springfield, and Webb City, being of first importance in the two last-named cities. The smelting of lead was the chief industry of Joplin, and in Sedalia the manufacture of men's clothing and the steam-railroad repair shops.

Character of ownership.—The next table has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined, comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually. In order to avoid disclosing the operations of individual concerns it is necessary to omit several important industries from this table and the one following.

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 29.2 per cent of the total number of establishments were under corporate ownership in 1909, as against 70.8 per cent under all other forms. The corresponding figures for 1904 were 28.6 per cent and 71.4 per cent, respectively. In respect to value of products, however, the establishments operated by corporations in 1909 reported 88.6 per cent of the total value, as against 11.4 per cent for those under all other forms of ownership, while in 1904 the corresponding figures were 86.3 per cent and 13.7 per cent, respectively. There was a decrease from 1904 to 1909 in the proportion of establishments operated by firms, this being 18.2 per cent of the total number of establishments in 1909, as compared with

This table shows that, of the total of 8,375 establishments reported in 1909 only 94, or 1.1 per cent, had a value of products exceeding \$1,000,000 each. The establishments in this group, however, employed an average of 48,148 wage earners, or 31.5 per cent of the total number in all establishments, and reported 47.3 per cent of the total value of products and 37.9 per cent of the total value added by manufacture. In 1904, of a total of 6,464 establishments, 68, or 1.1 per cent, reported products valued at more than \$1,000,000. These establishments employed an average of 34,923 wage earners, or 26.2 per cent of the total, reported 43.1 per cent of the total value of products, and 35.3 per cent of the total value added by manufacture. The value of products of the establishments of this class averaged \$2,889,318 in 1909 and \$2,784,364 in 1904.

The largest value added by manufacture, for both years, is shown for that class of establishments having products of \$100,000 but less than \$1,000,000 in value. This class also employed a larger number of wage earners than any other class and was second in value of products in both years. In 1909 the three classes of smaller establishments combined, while constituting 90.7 per cent of the total number, contributed but 17.1 per cent of the total value of products, and added only 23.5 per cent of the value accruing from processes of manufacture. For all classes of establishments combined the average number of wage earners per establishment was 18, a decrease of 3 since 1904; the average value of products, \$68,551, a slight increase since the previous census; and the average value added by manufacture, \$26,233, a decrease of \$2,741 during the five-year period. Of the industries shown separately in the table, the boot and shoe, malt-liquor, and slaughtering and meat-packing industries were conducted principally in large establishments, while in general the others were conducted in small establishments.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of estab-

lishments to bring out the feature of size is a classification according to the number of wage earners employed. The next table shows, for 1909, such a classification for all industries combined and for 20 important industries individually, and gives not only the number of establishments falling into each group but also the average number of wage earners employed.

Of the 8,375 establishments reported for all industries, 13.4 per cent employed no wage earners; 56.5 per cent, from 1 to 5 wage earners; 17.3 per cent, 6 to 20; 6.3 per cent, 21 to 50; and only 6.4 per cent, 51 or over. The most numerous single group consists of the 4,736 establishments employing from 1 to 5 wage earners and the next of the 1,447 employing from 6 to 20 wage earners. There were 1,123 establishments employing no wage earners. Of a total of 115 establishments employing over 250 wage earners, 13 employed over 1,000 wage earners. Only 3.6 per cent of the establishments employed more than 100 wage earners each.

Of the total number of wage earners, 60.8 per cent were reported by establishments employing more than 100, and 17.2 per cent by those employing fewer than 21. The single group having the largest number of wage earners was the group comprising the establishments employing from 101 to 250, and the group next in importance was made up of the establishments employing from 251 to 500. These groups employed, respectively, 29,048 and 26,584 wage earners, or 19 per cent and 17.4 per cent of the total.

Each of the steel works and rolling mills employed over 250 wage earners. Only 3.1 per cent of all wage earners in the boot and shoe industry were employed in establishments employing less than 100 wage earners. The corresponding figure for car repair shops was 5 per cent; for breweries, 9.7 per cent; for the slaughtering and meat-packing industry, 10 per cent; and for the stove and furnace industry, 16.6 per cent. In the flour mills and gristmills 86.2 per cent of all wage earners worked in establishments employing less than 50 wage earners.

INDUSTRY.	ESTABLISHMENTS EMPLOYING—									
	Total.	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.
NUMBER OF ESTABLISHMENTS.										
All industries.....	8,375	1,123	4,738	1,447	529	235	190	78	24	13
Boots and shoes, including cut stock and findings.....	50	3	4	5	1	5	14	19	6	2
Bread and other bakery products.....	954	217	670	37	10	3	4	3	1	
Carriages and wagons and materials.....	243	22	130	61	16	9	4		1	
Cars and general shop construction and repairs by steam-railroad companies.....	35		1	7	2	3	12	6	1	3
Clothing, men's, including shirts.....	84	3	15	15	22	8	12	6	2	1
Clothing, women's.....	68	2	6	20	17	7	6	1		
Confectionery.....	61	4	28	11	6	4	8			
Copper, tin, and sheet-iron products.....	207	9	131	41	14	5	7			
Flour-mill and gristmill products.....	680	131	468	66	12	3	1			
Foundry and machine-shop products.....	329	19	137	101	32	20	17	3		
Furniture and refrigerators.....	9	5	21	20	20	12	5	1		
Iron and steel, steel works and rolling mills.....	40							2		
Leather goods.....	106	8	59	20	9	4	8			
Liquors, malt.....	31	1	5	13	3	4		1		1
Lumber and timber products.....	1,008	35	666	258	33	35	14	7	3	
Paint and varnish.....	32	1	13	13	2	1	1	1		
Patent medicines and compounds and druggists' preparations.....	185	51	103	19	6	6				
Printing and publishing.....	1,322	282	778	172	48	24	12	5	1	
Slaughtering and meat packing.....	45	5	17	10	5	2	1	2	2	1
Stoves and furnaces, including gas and oil stoves.....	20		4	3	4	2	4	3		
All other industries.....	2,713	325	1,471	541	208	78	62	18	5	5
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	152,993	10,334	15,953	16,974	16,845	20,048	26,584	16,961	20,294	
Boots and shoes, including cut stock and findings.....	17,396	13	74	23	457	2,600	6,419	4,380	3,450	
Bread and other bakery products.....	4,745	1,191	400	302	194	569	1,232	855		
Carriages and wagons and materials.....	3,303	334	643	555	629	603		538		
Cars and general shop construction and repairs by steam-railroad companies.....	8,121	5	89	70	234	1,546	2,342	539	3,290	
Clothing, men's, including shirts.....	7,094	48	171	691	557	1,968	2,234	1,317	1,008	
Clothing, women's.....	2,750	23	437	561	553	898	280			
Confectionery.....	1,882	73	101	173	328	1,202				
Copper, tin, and sheet-iron products.....	2,637	341	423	331	1,110					
Flour-mill and gristmill products.....	2,108	558	695	342	202	1,011				
Foundry and machine-shop products.....	7,443	844	1,173	977	1,464	2,589	896			
Furniture and refrigerators.....	3,427	53	342	967	1,859	860	340			
Iron and steel, steel works and rolling mills.....	2,227						715	1,512		
Leather goods.....	1,814	123	243	236	820	886				
Liquors, malt.....	5,046	16	133	96	301		488	2,188	2,424	
Lumber and timber products.....	13,522	1,604	2,819	2,014	2,465	1,977	2,043			
Paint and varnish.....	685	25	147	64	64	127	253			
Patent medicines and compounds and druggists' preparations.....	980	210	167	196	407					
Printing and publishing.....	10,700	1,844	1,721	1,591	1,681	1,714	1,525	714		
Slaughtering and meat packing.....	4,674	38	128	176	125	134	998	1,418	1,663	
Stoves and furnaces, including gas and oil stoves.....	2,013	9	41	150	134	760	919			
All other industries.....	48,749	3,182	6,008	6,753	5,554	9,406	5,891	3,502	8,453	
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0	6.8	10.4	11.1	11.0	19.0	17.4	11.1	13.3	
Boots and shoes, including cut stock and findings.....	100.0	0.1	0.4	0.1	2.5	14.9	36.9	25.2	19.8	
Bread and other bakery products.....	100.0	25.1	8.4	6.4	4.1	12.0	26.0	18.0		
Carriages and wagons and materials.....	100.0	10.1	19.6	16.8	19.0	18.3		16.3		
Cars and general shop construction and repairs by steam-railroad companies.....	100.0	0.1	1.1	0.9	2.9	19.0	28.8	6.0	40.6	
Clothing, men's, including shirts.....	100.0	0.6	2.1	8.6	7.0	24.6	27.9	16.5	12.6	
Clothing, women's.....	100.0	0.8	15.0	20.4	20.1	32.6	10.2			
Confectionery.....	100.0	3.9	5.4	9.5	17.4	63.9				
Copper, tin, and sheet-iron products.....	100.0	12.9	16.0	16.4	12.6	42.1				
Flour-mill and gristmill products.....	100.0	39.0	31.6	15.6	9.2	4.6				
Foundry and machine-shop products.....	100.0	4.6	15.8	13.1	19.7	34.8	12.0			
Furniture and refrigerators.....	100.0	1.5	10.0	28.2	25.1	25.1	10.1			
Iron and steel, steel works and rolling mills.....	100.0						32.1	67.9		
Leather goods.....	100.0	6.8	13.4	13.0	18.0	48.3				
Liquors, malt.....	100.0	0.3	2.4	1.7	5.3		8.6	38.8	42.6	
Lumber and timber products.....	100.0	11.9	20.8	19.3	18.2	14.6	15.1			
Paint and varnish.....	100.0	3.6	21.5	9.3	9.3	18.5	37.7			
Patent medicines and compounds and druggists' preparations.....	100.0	21.4	17.0	20.0	41.5					
Printing and publishing.....	100.0	17.1	15.9	14.7	15.6	15.9	14.1	6.6		
Slaughtering and meat packing.....	100.0	0.8	2.7	3.8	2.7	2.9	21.3	30.3	35.6	
Stoves and furnaces, including gas and oil stoves.....	100.0	0.4	2.0	7.5	6.7	37.8	45.7			
All other industries.....	100.0	6.5	12.3	13.9	11.4	19.3	12.1	7.2	17.3	

Expenses.—As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total.

The next table shows, for 1909, in percentages, the distribution of expenses among the classes indicated for all industries combined and for certain impor-

tant industries separately. The figures on which the percentages are based appear in Table II.

This table shows that, for all industries combined, 67.9 per cent of the total expenses was incurred for materials, 21.1 per cent for services—that is, salaries and wages—and 11.1 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

For the flour-mill and gristmill and slaughtering and

This table shows that, of the total of 8,375 establishments reported in 1909 only 94, or 1.1 per cent, had a value of products exceeding \$1,000,000 each. The establishments in this group, however, employed an average of 48,148 wage earners, or 31.5 per cent of the total number in all establishments, and reported 47.3 per cent of the total value of products and 37.9 per cent of the total value added by manufacture. In 1904, of a total of 6,464 establishments, 68, or 1.1 per cent, reported products valued at more than \$1,000,000. These establishments employed an average of 34,923 wage earners, or 26.2 per cent of the total, reported 43.1 per cent of the total value of products, and 35.3 per cent of the total value added by manufacture. The value of products of the establishments of this class averaged \$2,889,318 in 1909 and \$2,784,364 in 1904.

The largest value added by manufacture, for both years, is shown for that class of establishments having products of \$100,000 but less than \$1,000,000 in value. This class also employed a larger number of wage earners than any other class and was second in value of products in both years. In 1909 the three classes of smaller establishments combined, while constituting 90.7 per cent of the total number, contributed but 17.1 per cent of the total value of products, and added only 23.5 per cent of the value accruing from processes of manufacture. For all classes of establishments combined the average number of wage earners per establishment was 18, a decrease of 3 since 1904; the average value of products, \$68,551, a slight increase since the previous census; and the average value added by manufacture, \$26,233, a decrease of \$2,741 during the five-year period. Of the industries shown separately in the table, the boot and shoe, malt-liquor, and slaughtering and meat-packing industries were conducted principally in large establishments, while in general the others were conducted in small establishments.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of estab-

lishments to bring out the feature of size is a classification according to the number of wage earners employed. The next table shows, for 1909, such a classification for all industries combined and for 20 important industries individually, and gives not only the number of establishments falling into each group but also the average number of wage earners employed.

Of the 8,375 establishments reported for all industries, 13.4 per cent employed no wage earners; 56.5 per cent, from 1 to 5 wage earners; 17.3 per cent, 6 to 20; 6.3 per cent, 21 to 50; and only 6.4 per cent, 51 or over. The most numerous single group consists of the 4,736 establishments employing from 1 to 5 wage earners and the next of the 1,447 employing from 6 to 20 wage earners. There were 1,123 establishments employing no wage earners. Of a total of 115 establishments employing over 250 wage earners, 13 employed over 1,000 wage earners. Only 3.6 per cent of the establishments employed more than 100 wage earners each.

Of the total number of wage earners, 60.8 per cent were reported by establishments employing more than 100, and 17.2 per cent by those employing fewer than 21. The single group having the largest number of wage earners was the group comprising the establishments employing from 101 to 250, and the group next in importance was made up of the establishments employing from 251 to 500. These groups employed, respectively, 29,048 and 26,584 wage earners, or 19 per cent and 17.4 per cent of the total.

Each of the steel works and rolling mills employed over 250 wage earners. Only 3.1 per cent of all wage earners in the boot and shoe industry were employed in establishments employing less than 100 wage earners. The corresponding figure for car repair shops was 5 per cent; for breweries, 9.7 per cent; for the slaughtering and meat-packing industry, 10 per cent; and for the stove and furnace industry, 16.6 per cent. In the flour mills and gristmills 86.2 per cent of all wage earners worked in establishments employing less than 50 wage earners.

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—								
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
NUMBER OF ESTABLISHMENTS.										
All industries.....	8,375	1,123	4,796	1,447	529	285	190	78	24	13
Boots and shoes, including out stock and findings.....	59	3	4	5	1	5	14	19	6	2
Bread and other bakery products.....	954	217	679	37	10	3	4	3	1	.....
Carriages and wagons and materials.....	243	22	130	61	16	9	4	1	1	.....
Cars and general shop construction and repairs by steam-railroad companies.....	35	1	7	2	2	3	12	6	2	3
Clothing, men's, including shirts.....	84	3	15	15	22	8	12	6	1	1
Clothing, women's.....	68	2	6	29	17	7	6	1	.....	.....
Confectionery.....	61	4	26	11	6	4	8	.....	.....	.....
Copper, tin, and sheet-iron products.....	207	9	131	41	14	5	7	.....	.....	.....
Flour-mill and gristmill products.....	680	131	468	65	12	3	1	.....	.....	.....
Foundry and machine-shop products.....	329	10	137	101	32	17	3	.....	.....	.....
Furniture and refrigerators.....	99	5	21	26	29	12	5	.....	.....	.....
Iron and steel, steel works and rolling mills.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leather goods.....	106	8	59	26	6	4	6	.....	.....	.....
Liquors, malt.....	31	1	5	13	3	.....	.....	.....	.....	.....
Lumber and timber products.....	1,098	35	666	258	83	35	14	7	3	1
Paint and varnish.....	32	1	13	13	2	1	1	.....	.....	.....
Patent medicines and compounds and druggists' preparations.....	185	51	103	19	6	.....	.....	.....	.....	.....
Printing and publishing.....	1,322	282	778	172	48	24	12	5	1	.....
Slaughtering and meat packing.....	45	5	17	10	5	2	1	2	2	1
Stoves and furnaces, including gas and oil stoves.....	20	3	4	3	4	2	4	3	.....	.....
All other industries.....	2,713	325	1,471	541	208	78	62	18	5	5
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	162,993	10,334	15,953	16,974	16,845	29,048	26,584	16,961	20,394	.....
Boots and shoes, including out stock and findings.....	17,396	13	74	23	437	2,600	6,419	4,380	3,450	.....
Bread and other bakery products.....	4,743	1,191	400	302	194	569	1,232	855	.....	.....
Carriages and wagons and materials.....	3,302	334	643	555	629	603	.....	538	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	8,121	5	89	70	234	1,546	2,342	530	3,296	.....
Clothing, men's, including shirts.....	7,994	48	171	61	557	1,068	2,231	1,317	1,008	.....
Clothing, women's.....	2,750	23	437	501	553	896	280	.....	.....	.....
Confectionery.....	1,852	73	101	178	328	1,202	.....	.....	.....	.....
Copper, tin, and sheet-iron products.....	2,637	341	423	432	331	1,110	.....	.....	.....	.....
Flour-mill and gristmill products.....	2,198	858	695	342	202	101	.....	.....	.....	.....
Foundry and machine-shop products.....	7,443	844	1,173	977	1,464	2,589	896	.....	.....	.....
Furniture and refrigerators.....	3,427	63	342	907	859	800	346	.....	.....	.....
Iron and steel, steel works and rolling mills.....	2,227	.....	.....	.....	.....	.....	715	.....	.....	.....
Leather goods.....	1,814	123	243	236	320	886	.....	1,512	.....	.....
Liquors, malt.....	5,646	16	133	96	301	.....	488	2,188	2,424	.....
Lumber and timber products.....	18,522	1,604	2,819	2,614	2,465	1,977	2,043	.....	.....	.....
Paint and varnish.....	685	25	147	64	84	127	258	.....	.....	.....
Patent medicines and compounds and druggists' preparations.....	980	210	187	198	407	.....	.....	.....	.....	.....
Printing and publishing.....	10,790	1,844	1,721	1,591	1,681	1,714	1,525	714	.....	.....
Slaughtering and meat packing.....	4,074	38	128	175	125	134	998	1,416	1,663	.....
Stoves and furnaces, including gas and oil stoves.....	2,013	9	41	150	134	700	819	.....	.....	.....
All other industries.....	48,740	3,182	6,008	6,763	5,554	9,406	5,891	3,502	3,463	.....
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0	6.8	10.4	11.1	11.0	19.0	17.4	11.1	13.3	.....
Boots and shoes, including out stock and findings.....	100.0	0.1	0.4	0.1	2.5	14.9	36.9	25.2	10.8	.....
Bread and other bakery products.....	100.0	25.1	8.4	6.4	4.1	12.0	20.0	18.0	.....	.....
Carriages and wagons and materials.....	100.0	10.1	19.5	16.8	19.0	18.3	.....	16.3	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	100.0	0.1	1.1	0.9	2.9	19.0	28.8	6.6	40.6	.....
Clothing, men's, including shirts.....	100.0	0.6	2.1	8.6	7.0	24.6	27.9	10.5	12.6	.....
Clothing, women's.....	100.0	0.8	15.9	20.4	20.1	32.6	10.2	.....	.....	.....
Confectionery.....	100.0	3.9	5.4	9.5	17.4	63.9	.....	.....	.....	.....
Copper, tin, and sheet-iron products.....	100.0	12.9	16.0	16.4	12.6	42.1	.....	.....	.....	.....
Flour-mill and gristmill products.....	100.0	39.0	31.6	15.6	9.2	4.6	.....	.....	.....	.....
Foundry and machine-shop products.....	100.0	4.6	15.3	13.1	19.7	84.8	12.0	.....	.....	.....
Furniture and refrigerators.....	100.0	1.5	10.0	28.2	25.1	25.1	10.1	.....	.....	.....
Iron and steel, steel works and rolling mills.....	100.0	.....	.....	.....	.....	.....	32.1	67.9	.....	.....
Leather goods.....	100.0	6.8	13.4	13.0	18.0	48.8	.....	.....	.....	.....
Liquors, malt.....	100.0	0.3	2.4	1.7	5.3	.....	8.6	38.8	42.9	.....
Lumber and timber products.....	100.0	11.9	20.8	19.3	18.2	14.6	15.1	.....	.....	.....
Paint and varnish.....	100.0	3.6	21.5	9.3	9.3	18.5	37.7	.....	.....	.....
Patent medicines and compounds and druggists' preparations.....	100.0	21.4	17.0	20.0	41.5	.....	.....	.....	.....	.....
Printing and publishing.....	100.0	17.1	15.9	14.7	15.6	15.9	14.1	6.6	.....	.....
Slaughtering and meat packing.....	100.0	0.8	2.7	3.8	2.7	2.9	21.3	30.3	35.6	.....
Stoves and furnaces, including gas and oil stoves.....	100.0	0.4	2.0	7.5	6.7	37.8	45.7	.....	.....	.....
All other industries.....	100.0	6.5	12.3	13.9	11.4	19.3	12.1	7.2	17.3	.....

Expenses.—As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total.

The next table shows, for 1909, in percentages, the distribution of expenses among the classes indicated for all industries combined and for certain impor-

tant industries separately. The figures on which the percentages are based appear in Table II.

This table shows that, for all industries combined, 67.9 per cent of the total expenses was incurred for materials, 21.1 per cent for services—that is, salaries and wages—and 11.1 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

For the flour-mill and gristmill and slaughtering and

meat-packing industries the cost of materials constituted over 90 per cent of the total expenses, due to the fact that the manufacturing operations in these industries are comparatively simple and do not add greatly to the value of the materials treated. On the other hand, in the malt-liquor and printing and publishing industries the cost of materials was less than 35 per cent of the total expenses. In the latter industry the cost for services was high, while in the former the largest item was miscellaneous expenses, which included internal-revenue taxes and cost of advertising. The manufacture of patent medicines and compounds also reported large miscellaneous expenses, the greater part of which was for advertising.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	5.6	15.5	67.9	11.1
Boots and shoes, including out stock and findings.....	3.1	17.5	74.2	5.1
Bread and other bakery products.....	6.1	15.4	67.2	11.2
Carriages and wagons and materials.....	6.0	23.3	63.6	7.1
Cars and general shop construction and repairs by steam-railroad companies.....	4.8	51.9	42.1	1.2
Clothing, men's, including shirts.....	5.4	21.6	65.5	7.5
Clothing, women's.....	6.7	22.6	63.1	7.7
Confectionery.....	8.7	12.9	66.1	12.3
Copper, tin, and sheet-iron products.....	6.6	21.1	65.3	7.0
Flour-mill and gristmill products.....	1.5	2.5	93.5	2.4
Foundry and machine-shop products.....	9.5	27.7	52.1	10.6
Furniture and refrigerators.....	9.1	29.3	50.9	10.7
Iron and steel, steel works and rolling mills.....	4.2	26.2	56.8	12.8
Leather goods.....	7.8	17.7	64.8	9.7
Liquors, malt.....	5.8	17.4	33.8	42.9
Lumber and timber products.....	5.7	30.1	54.3	10.0
Paint and varnish.....	8.1	5.9	75.7	10.3
Patent medicines and compounds and druggists' preparations.....	16.9	7.0	43.0	33.0
Printing and publishing.....	16.9	26.3	34.3	22.5
Slaughtering and meat packing.....	1.1	3.4	92.2	3.3
Stoves and furnaces, including gas and oil stoves.....	10.5	25.0	50.0	14.5
All other industries.....	6.1	14.9	65.8	13.2

Engines and power.—The next table shows, for all industries combined, the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current), and their total horsepower at the censuses of 1909, 1904, and 1899. It also shows separately the number and horsepower of electric motors, including those operated by current generated in the manufacturing establishments.

The table indicates that the increase in owned primary power was mostly in that generated by steam engines, although the percentage which such power constituted of the total horsepower decreased from 91.6 in 1899 to 89.2 in 1904 and to 82.4 in 1909. Power generated by water wheels shows a slight decrease from 1904 to 1909, while the forms of owned power included under the head of "Other" have practically disappeared. The table shows a decided tendency toward the more general use of gas engines, the number of such engines reported having increased from 432 in 1899 to 658 in 1904 and 1,200 in 1909. The figures also show that the practice of renting electric power is increasing, 12.9 per cent of the total power being of this character in 1909, as compared with 5.6 per cent in 1904 and 3 per cent in 1899. The

use of electric motors for the purpose of applying the power generated within the establishments is also shown to be rapidly increasing, the horsepower of such motors having increased from 7,101 in 1899 to 23,706 in 1904 and 62,885 in 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 ¹	1909	1904	1899 ¹	1909	1904	1899
Primary power, total.....	11,545	4,083	4,151	340,467	247,861	189,117	100.0	100.0	100.0
Owned.....	5,140	4,083	4,151	295,391	232,566	180,194	86.8	93.8	95.3
Steam.....	3,802	3,257	3,575	280,499	221,215	173,271	82.4	89.2	91.6
Gas.....	1,200	658	432	11,159	4,960	3,279	3.3	2.0	1.7
Water wheels.....	121	141	144	3,532	3,581	3,113	1.0	1.4	1.6
Water motors.....	17	27	(?)	206	146	(?)	0.1	0.1	(?)
Other.....				5	2,064	531	(?)	1.1	0.3
Rented.....	6,405	(?)	(?)	45,076	15,265	8,023	13.2	6.2	4.7
Electric.....	6,405	(?)	(?)	44,056	13,965	5,624	12.9	6.6	3.0
Other.....				1,020	1,300	3,299	0.3	0.5	1.7
Electric motors.....	11,534	2,382	597	106,941	37,671	12,725	100.0	100.0	100.0
Run by current generated by establishment.....	5,129	2,382	597	62,885	23,706	7,101	53.8	62.9	55.8
Run by rented power.....	6,405	(?)	(?)	44,056	13,965	5,624	41.2	37.1	44.2

¹ Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.
² Not reported. ³ Less than one-tenth of 1 per cent.

Fuel.—Closely related to the question of kind of power employed is that of the fuel consumed in generating this power or otherwise used as material in the manufacturing processes. The table following shows the quantity of each kind of fuel used in 1909 for all industries combined and for certain selected industries.

INDUSTRY.	Anthracite coal (tons).	Bituminous coal (tons).	Coke (tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
All industries.....	19,631	2,918,358	167,966	196,636	1,032,443	2,766,006
Boots and shoes, including out stock and findings.....	184	50,555	2		44	8,989
Bread and other bakery products.....	2,794	25,377	6,028	14,038	35,898	160,475
Brick and tile.....	97	287,021	2,104	30,877	38	598,609
Carriages and wagons and materials.....	172	14,056	165	1,105	467	3,442
Cars and general shop construction and repairs by steam-railroad companies.....	1,454	155,228	1,580	102	34,797	
Clothing, men's, including shirts.....	9	8,196		2	477	10,279
Clothing, women's.....	32	1,329			12	1,843
Confectionery.....		12,842	709		18	23,135
Copper, tin, and sheet-iron products.....	77	5,921	538	99	295	12,155
Flour-mill and gristmill products.....	326	137,614	98	41,428	27,101	21,999
Foundry and machine-shop products.....	2,795	57,053	25,471	1,021	15,313	412,927
Furniture and refrigerators.....	97	16,111	971	410	319	14,514
Gas, illuminating and heating.....	3,147	220,558	3,568		283,744	60
Glass.....		169,028	30	100	27,000	
Ice, manufactured.....		224,498		1,487	60,373	280,374
Iron and steel, steel works and rolling mills.....	3	77,885	3,153		143,482	7,750
Leather goods.....	99	5,484	8	33	54	11,811
Lime.....		32,980		51,827	453	7,597
Liquors, malt.....	188	238,098	4,944	633	84,273	150,654
Lumber and timber products.....	204	34,871		172	1,169	4,874
Paint and varnish.....	2	20,414	310	30	40	3,601
Patent medicines and compounds and druggists' preparations.....	243	5,085	47	24	8	6,415
Pottery, terra-cotta, and fire-clay products.....		284,316	30	307	6,091	500
Printing and publishing.....	2,106	28,071	30	1,494	3,442	7,006
Slaughtering and meat packing.....	2,533	187,072		1,440	6,586	365,289
Stoves and furnaces, including gas and oil stoves.....	47	12,923	3,653	36		7,332
All other industries.....	2,932	606,775	114,526	49,965	300,850	681,916

NOTE.—In addition, there were 23,980 tons of other varieties of fuel reported.

SUPPLEMENTARY DATA REGARDING IMPORTANT INDUSTRIES.

(With statistics for laundries and custom sawmills and gristmills.)

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

Slaughtering and meat packing.—The following table shows the quantities and cost of the principal materials used, together with the quantities and values of the principal products, at the censuses of 1909, 1904, and 1899:

MATERIAL OR PRODUCT.	1909	1904	1899
Materials used, total cost.....	\$72, 198, 264	\$54, 098, 762	\$39, 181, 599
Beeves slaughtered:			
Number.....	530, 356	573, 887	346, 827
Cost.....	\$24, 832, 919	\$22, 047, 750	\$14, 968, 243
Calves slaughtered:			
Number.....	81, 551	52, 044	22, 825
Cost.....	\$821, 820	\$389, 123	\$163, 031
Sheep slaughtered:			
Number.....	546, 649	504, 784	252, 015
Cost.....	\$2, 059, 215	\$2, 224, 718	\$1, 031, 346
Hogs slaughtered:			
Number.....	2, 471, 058	2, 120, 932	1, 857, 953
Cost.....	\$30, 011, 941	\$23, 253, 132	\$19, 075, 986
All other animals slaughtered.....	\$2, 024	\$3, 500	\$11, 725
Fuel and rent of power.....	\$363, 710	\$316, 168	\$159, 999
All other materials.....	\$7, 100, 026	\$5, 864, 365	\$3, 770, 309
Products, total value.....	\$79, 581, 294	\$60, 110, 427	\$43, 162, 335
Beef, fresh:			
Pounds.....	273, 808, 501	315, 665, 100	165, 944, 314
Value.....	\$20, 038, 884	\$10, 171, 944	\$11, 993, 514
Beef, salted or cured:			
Pounds.....	1, 068, 474	904, 603	17, 978, 683
Value.....	\$168, 055	\$55, 570	\$1, 075, 431
Veal, fresh:			
Pounds.....	8, 831, 469	5, 421, 809	1, 728, 989
Value.....	\$767, 841	\$386, 800	\$178, 041
Mutton, fresh:			
Pounds.....	21, 890, 982	23, 555, 769	10, 238, 198
Value.....	\$2, 209, 306	\$1, 834, 520	\$782, 005
Pork, fresh:			
Pounds.....	138, 974, 435	118, 797, 174	106, 701, 224
Value.....	\$13, 492, 069	\$8, 444, 749	\$6, 848, 027
Pork, salted or cured:			
Pounds.....	222, 224, 021	195, 757, 702	179, 503, 067
Value.....	\$24, 769, 411	\$15, 512, 309	\$11, 607, 022
Sausage, fresh or cured.....	\$1, 632, 370	\$1, 383, 767	\$729, 839
All other fresh meat:			
Pounds.....	10, 867, 868	2, 630, 218	(¹)
Value.....	\$1, 450, 509	\$120, 690	(¹)
Lard:			
Pounds.....	48, 835, 133	33, 215, 290	52, 305, 408
Value.....	\$5, 595, 047	\$2, 313, 586	\$2, 947, 453
Tallow, oleo stook, and stearin:			
Pounds.....	14, 122, 291	(¹)	(¹)
Value.....	\$1, 156, 139	(¹)	(¹)
Fertilizers and fertilizer materials:			
Tons.....	19, 482	42, 249	18, 665
Value.....	\$504, 335	\$617, 080	\$347, 309
Hides:			
Number.....	567, 275	612, 670	369, 652
Pounds.....	32, 406, 006	37, 971, 555	19, 907, 122
Value.....	\$4, 427, 484	\$3, 349, 715	\$2, 166, 640
Pelts:			
Number.....	281, 627	580, 261	(¹)
Value.....	\$330, 199	\$547, 801	(¹)
All other products.....	\$2, 979, 596	\$9, 371, 761	\$4, 424, 854

¹ Figures not available.

The table shows that during the five years from 1899 to 1904 there were decided increases in the production of beef and pork; during the later five-year period the percentage of increase for pork products did not vary greatly from that for the earlier five-year period, but beef products decreased. During this later period the production of mutton, pelts, hides, and fertilizers decreased, while that of veal and lard increased,

the last mentioned practically regaining what it had lost in the earlier period. The number of calves and of hogs slaughtered have increased steadily throughout the decade, but the numbers of beeves and of sheep slaughtered have decreased slightly during the last five years. The cost of materials and the value of products show decided increases for each of the five-year periods.

Flour-mill and gristmill products.—For this industry, which is third in importance in the state when measured by value of products, the following table shows the quantities and values of the different kinds of products reported in 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$44,508,106	\$38,026,142	\$23,831,805
Wheat flour:			
White—			
Barrels.....	5,661,379	6,171,011	5,022,943
Value.....	\$29,995,104	\$28,492,692	\$17,029,182
Graham—			
Barrels.....	10,890	4,530	(¹)
Value.....	\$68,924	\$20,063	(¹)
Corn meal and corn flour:			
Barrels.....	1,020,738	935,318	1,290,866
Value.....	\$3,129,694	\$2,343,395	\$2,265,692
Rye flour:			
Barrels.....	762	1,843	7,016
Value.....	\$3,320	\$8,477	\$20,147
Buckwheat flour:			
Pounds.....	69,440	259,760	977,378
Value.....	\$2,319	\$9,113	\$24,562
Barley meal:			
Pounds.....		208,000	2,500
Value.....		\$1,920	\$58
Hominy and grits:			
Pounds.....	26,726,254	58,814,607	49,638,750
Value.....	\$413,234	\$613,053	\$364,200
Feeds:			
Tons.....	186,202	93,568	145,562
Value.....	\$4,651,980	\$1,776,429	\$2,106,518
Offal:			
Tons.....	239,265	274,309	172,778
Value.....	\$5,050,079	\$4,751,581	\$1,819,280
All other products.....	\$1,104,452	\$8,819	\$202,206

¹ Not reported separately.

In general, this table shows decreases in the quantities and increases in the values reported for the various products from 1904 to 1909. The most important product, white flour, decreased 509,632 barrels, but increased \$1,502,412 in value during this five-year period. Graham flour, corn meal and corn flour, and feed show increased production, while rye flour, buckwheat flour, hominy and grits, and offal show decreases. The decreases noted may be to some extent the result of reporting some of these items under the head of "All other products" in 1909, since this latter item shows an extraordinary increase from 1904 to 1909. In 1909 there were reported 5,032 pairs of rolls and 513 runs of stone, as compared with 5,408 pairs of rolls and 363 runs of stone in 1904. One attrition mill was reported in 1909; 18 of the establishments in the industry manufactured barrels and 9 manufactured sacks.

Butter, cheese, and condensed milk.—The next table shows the quantities and values of the products of the butter, cheese, and condensed-milk factories for 1909, 1904, and 1899.

PRODUCT.	1909	1904	1899
Total value.....	\$2,958,818	\$1,313,958	\$431,936
Butter:			
Packed solid—			
Pounds.....	4,452,602	1,866,507	1,270,604
Value.....	\$1,213,503	\$386,379	\$240,222
Prints or rolls—			
Pounds.....	5,809,274	3,940,217	170,012
Value.....	\$1,045,722	\$806,228	\$34,898
Cream sold:			
Pounds.....	122,357	308,551	102,632
Value.....	\$18,835	\$28,329	\$7,601
All other butter-factory products ¹	\$20,023	\$10,101	\$22,831
Cheese:			
Full-cream—			
Pounds.....	219,119	687,479	1,022,751
Value.....	\$30,122	\$66,830	\$98,163
Other kinds—			
Pounds.....		55,968	50,000
Value.....		\$339	\$4,600
All other cheese-factory products ²	\$200	\$652	\$321
All other products not specified ³	\$27,405	\$5,600	\$23,300

¹ Includes skim milk and casein.

² Includes whey.

³ Includes condensed milk, to avoid disclosure of individual operations.

The most important facts shown by this table are the marked increase in the production of butter and the large decrease in the output of cheese. Combined, the butter packed solid and that sold in prints or rolls increased 4,366,108 pounds, or 303.1 per cent, from 1899 to 1904, and 4,455,152 pounds, or 76.7 per cent, from 1904 to 1909, while full-cream cheese decreased 335,272 pounds, or 32.8 per cent, during the earlier five-year period, and 468,367 pounds, or 68.1 per cent, during the more recent five-year period.

Boots and shoes.—The manufacture of boots and shoes in Missouri is of special interest, because of the rapid development of the industry during recent years and of the important position which the state has assumed in the industry. This development is not confined to the larger cities, but extends to many small cities and towns of the state. The number of pairs of the different classes of footwear made in the three census years 1909, 1904, and 1899 is shown in the following table:

PRODUCT.	NUMBER OF PAIRS.		
	1909	1904	1899
Boots and shoes.....	24,657,160	15,918,052	7,790,448
Men's.....	9,303,028	5,740,729	3,083,759
Boys' and youths'.....	2,087,258	1,819,102	425,979
Women's.....	8,642,965	5,993,114	3,120,911
Misses' and children's.....	4,623,909	2,365,017	1,159,799
Slippers.....	616,229	249,806	202,799
Men's, boys', and youths'.....	27,551	26,500	10,296
Women's, misses', and children's.....	588,678	223,306	192,503
All other.....	657,718	272,000	254,000

This table shows remarkable increases in nearly every item. In 1904 and 1899 the output of women's boots and shoes slightly exceeded that of men's, but in 1909 the output of men's boots and shoes was the larger, having increased 62.1 per cent since 1904. The number of pairs of misses' and children's boots and shoes practically doubled during each of the five-year periods, while the production of boys' and youths' boots and shoes made a remarkable gain between 1899 and 1904,

but the smallest gain of any of the classes during the later five-year period. The number of pairs of slippers increased 366,423, or 146.7 per cent, from 1904 to 1909; most of this increase as well as most of the production consisted of women's, misses', and children's slippers.

In the following table the output of the industry in 1909 is classified according to method of manufacture:

PRODUCT.	NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.			
	Total.	Machine or hand welt.	McKay.	All other classes. ¹
Boots and shoes.....	24,657,160	7,423,545	14,204,733	3,028,882
Men's.....	9,303,028	5,584,054	2,299,792	1,419,182
Boys' and youths'.....	2,087,258	352,802	1,533,708	170,688
Women's.....	8,642,965	1,374,610	6,050,358	1,211,997
Misses' and children's.....	4,623,909	82,079	4,314,815	227,015
Slippers.....	616,229		616,229	
All other.....	657,718		657,718	

¹ Includes turned, wooden-pegged, wire-screw, etc.

The total number of McKay boots and shoes manufactured was nearly double the number of welt shoes. Men's boots and shoes made up more than three-fourths of the total output of welt shoes, and constitute the only class in which the number of welt shoes was greater than that of the McKay, which form the great majority in the other classes.

Printing and publishing.—Although the printing and publishing industry as a whole in Missouri shows considerable growth during the last five years when measured by value of products as shown in Table I, page 655, the number of publications and the aggregate circulation have decreased, which feature is a good index of the present tendency of the industry. The following table shows the number of publications, classified according to the period of issue, and the aggregate circulation per issue of each class for the census years 1909, 1904, and 1899:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total.....	1,003	1,032	973	7,577,639	8,133,162	5,495,802
Daily.....	91	92	92	1,624,621	1,126,760	810,492
Sunday.....	21	24	33	978,377	970,071	(3)
Semiweekly.....	12	19	15	290,739	590,203	320,353
Weekly.....	731	730	695	1,871,835	1,739,457	1,893,856
Monthly.....	117	133	101	2,265,275	3,365,168	1,373,598
All other classes.....	31	34	37	547,042	341,503	1,114,515

¹ Included in circulation of dailies.

With only one exception, and that showing an increase of but a single publication, each of the different classes of publications shows a decrease in number in 1909, as compared with 1904, the greatest decline being in the monthlies. The largest number, 731, or 72.9 per cent of the total, were issued weekly. The greatest aggregate circulation per issue for 1909 is shown for monthly publications. The greatest average circulation shown for any class of publication,

46,589, is reported for Sunday editions. The average circulation of semiweeklies in 1909 was 24,228; of monthlies, 19,361; of dailies, 17,853; and of weeklies, 2,560. From 1904 to 1909, Sunday editions, dailies, weeklies, and the publications included under the head of "All other classes" each showed an increase in aggregate circulation, while semiweeklies and monthlies decreased to such an extent that the total circulation for the state shows a decrease.

In 1909 there were published in the state in the German language 6 dailies, 2 Sunday editions, 1 semi-weekly, 18 weeklies, 1 biweekly, and 9 monthlies; in German-English, 3 weeklies, 1 semimonthly, 3 monthlies, and 1 bimonthly; in Bohemian, 1 semiweekly, 1 weekly, and 1 monthly; in Italian, 2 weeklies; in Polish, 1 weekly; in Spanish, 1 monthly; and in Swedish, 1 weekly.

Lumber and timber products.—The following is a statement of the quantity of the lumber, lath, and shingles produced in the sawmills and shingle mills as reported at the censuses of 1909 and 1899:

PRODUCT.	QUANTITY.	
	1909	1899
Rough lumber..... M feet b. m.	600, 169	723, 754
Lath..... thousands.	19, 831	24, 835
Shingles..... thousands.	51, 932	28, 227

With a large increase in number of mills from 1899 to 1909, the output of rough lumber decreased 63,595 M feet board measure, or 8.8 per cent. Most of the 1909 cut was hardwood, amounting to 482,013 M feet, of which oak constituted 271,623 M feet. Red gum, hickory, elm, and cottonwood in the order named were the other most important hardwoods sawed. The cut of softwoods amounted to 178,146 M feet board measure, of which 142,271 M feet were yellow pine. Practically all of the remainder of the softwood cut was cypress. Lath and shingles are principally minor products of the Missouri mills, and their production depends largely upon local market demands.

Carriages and wagons.—The value of the products of this industry has increased from \$6,446,006 in 1899 to \$7,678,429 in 1904 and \$8,468,856 in 1909. The next table shows the number and value of the different kinds of vehicles manufactured in the three census years.

Family and pleasure carriages showed the greatest value of products in 1899 and 1909, and formed 43.4 per cent and 46.2 per cent, respectively, of the total for the industry. From 1899 to 1909 the number of family and pleasure carriages reported increased 84.5 per cent and their value 39.9 per cent. During the same period the number of wagons decreased 18.2 per cent with but little change in their total value.

PRODUCT.	1909	1904	1899
Total value.....	\$8, 468, 856	\$7, 678, 429	\$6, 446, 006
Carriages (family and pleasure):			
Number.....	97, 444	74, 650	52, 823
Value.....	\$3, 013, 909	\$3, 826, 342	\$2, 797, 118
Wagons:			
Number.....	20, 140	25, 281	24, 621
Value.....	\$1, 388, 099	\$1, 607, 225	\$1, 392, 102
Business—			
Number.....	2, 085	2, 677	(¹)
Value.....	\$304, 360	(¹)	(¹)
Farm—			
Number.....	18, 047	22, 485	(¹)
Value.....	\$1, 021, 853	(¹)	(¹)
Government, municipal, etc.—			
Number.....	8	119	(¹)
Value.....	\$2, 480	(¹)	(¹)
Public conveyances (cabs, hacks, hansom, hotel coaches, omnibuses, etc.)—			
Number.....	98	58	88
Value.....	\$48, 558	\$4, 445	\$24, 650
Sleighs and sleds:			
Number.....	53	6	170
Value.....	\$783	\$153	\$3, 204
All other products, including parts and repair work.....	\$3, 116, 847	\$2, 340, 264	\$2, 220, 032

¹ Figures not available.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. In 1909 there were 171 such establishments in the state of Missouri, 40 of which were in St. Louis, 32 in Kansas City, 8 in Springfield, 7 in Joplin, 6 in St. Joseph, and 3 in Sedalia. The following statement summarizes the statistics:

Number of establishments.....	171
Persons engaged in the industry.....	6, 113
Proprietors and firm members.....	152
Salaried employees.....	528
Wage earners (average number).....	5, 438
Primary horsepower.....	5, 727
Capital.....	\$3, 407, 985
Expenses.....	4, 167, 030
Services.....	2, 564, 005
Materials.....	892, 197
Miscellaneous.....	710, 828
Amount received for work done.....	4, 904, 249

Of the 171 establishments reported for this industry, 62 were operated by individuals, 40 by firms, and 69 by corporations. Thirty-seven establishments had receipts for the year's business of less than \$5,000; 70, receipts of \$5,000 but less than \$20,000; 55, receipts of \$20,000 but less than \$100,000; and 9, receipts of \$100,000 but less than \$1,000,000.

The number of wage earners employed each month and the per cent which this number represented of the greatest number employed in any month were as shown in the statement following.

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	5, 199	91. 4	July.....	5, 041	90. 2
February.....	5, 171	90. 9	August.....	5, 089	100. 0
March.....	5, 235	92. 0	September.....	5, 052	99. 3
April.....	5, 275	92. 7	October.....	5, 556	97. 7
May.....	5, 281	92. 8	November.....	5, 522	97. 1
June.....	5, 525	97. 1	December.....	5, 505	96. 8

MANUFACTURES—MISSOURI.

The different kinds of primary power, the number of engines or motors, and the horsepower used in 1909 are shown in the following tabular statement:

KIND.	Number of engines or motors.	Horsepower.
Primary power, total.....		5,727
Owned:		
Steam.....	155	5,288
Gas.....	15	289
Rented—Electric.....	30	150

The kind and amount of fuel used are shown in the next statement.

KIND.	Unit.	Quantity.
Anthracite coal.....	Tons.....	676
Bituminous coal.....	Tons.....	52,650
Coke.....	Tons.....	10
Wood.....	Cords.....	224
Oil.....	Barrels.....	26,126
Gas.....	1,000 feet.....	207,928

Custom sawmills and gristmills.—The statistics for custom sawmills and gristmills are not included in the general tables or in the totals for manufacturing industries, but are presented in the following summary:

	Custom sawmills.	Custom gristmills.
Number of establishments.....	419	412
Persons engaged in the industry.....	1,135	730
Proprietors and firm members.....	595	547
Salaried employees.....	4	7
Wage earners (average number).....	536	176
Primary horsepower.....	7,060	7,268
Capital.....	\$497,026	\$860,960
Expenses.....	165,370	1,205,800
Services.....	117,407	33,162
Materials.....	13,568	1,155,245
Miscellaneous.....	34,395	17,393
Value of products.....	414,135	1,461,474

For the gristmills an estimate has been made of the cost and value of all grain ground. A similar estimate for value of lumber sawed by the custom sawmills is impracticable.

MANUFACTURES—MISSOURI.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaries employees.	Wage earners (average number).							
Expressed in thousands.													
STATE—All industries.....	1909	8,375	185,705	8,226	24,486	152,993	340,487	\$444,343	\$28,994	\$80,843	\$354,411	\$574,111	\$219,700
	1904	8,464	156,585	6,299	17,119	133,187	247,861	379,369	19,002	66,644	252,253	439,549	187,391
	1899	6,853			12,474	107,704	189,117	223,781	13,295	46,714	184,189	316,804	132,115
Agricultural implements.....	1909	25	532	16	78	438	1,080	1,725	86	210	504	981	477
	1904	21	632	18	89	525	856	1,300	98	261	452	1,068	616
	1899	26	599	25	81	493	937	1,412	102	242	407	954	547
Automobiles, including bodies and parts.....	1909	17	449	6	75	368	184	800	85	252	1,025	1,677	652
	1904	13	37	3	13	21	20	24	5	16	31	63	32
	1899												
Awnings, tents, and sails.....	1909	18	554	5	120	429	217	696	118	193	1,207	1,784	577
	1904	12	378	2	67	309	65	641	74	138	824	1,237	413
	1899	15			72	306		292	49	109	532	985	463
Baling and hose, leather.....	1909	7	80	2	31	47	140	472	41	31	290	445	155
	1904	6	63	2	27	34	60	197	20	19	207	316	109
	1899	4	40	1	14	25		112	15	13	165	224	69
Blacking and cleansing and polishing preparations.	1909	32	194	24	60	110	162	224	64	55	303	600	297
	1904	10	76	8	33	35	100	92	28	14	85	109	84
	1899	10			27	30		46	19	10	40	120	80
Boots and shoes, including cut stock and findings.	1909	59	18,665	14	1,255	17,390	11,113	15,838	1,438	8,164	34,540	48,751	14,211
	1904	37	10,949	8	490	10,451	5,145	8,290	568	4,349	14,959	23,541	8,588
	1899	57			336	5,970		4,218	350	2,070	8,123	11,466	3,333
Boxes, fancy and paper.....	1909	27	1,237	10	114	1,113	657	933	127	372	669	1,376	707
	1904	17	915	5	63	847	303	675	65	240	363	770	407
	1899	12	706	6	42	658		323	48	134	104	488	324
Brass and bronze products.....	1909	18	307	17	53	297	448	1,025	80	106	1,654	2,221	567
	1904	16	257	18	43	196	178	720	59	122	1,184	1,527	343
	1899	15	310	15	30	265		400	37	135	969	1,279	310
Bread and other bakery products.....	1909	954	6,707	1,003	1,051	4,743	3,023	17,043	986	2,487	10,829	18,524	7,695
	1904	614	4,932	649	549	3,704	1,944	7,416	511	1,810	7,281	12,072	5,391
	1899	582	3,263	609	390	2,264		3,748	274	985	3,885	7,284	3,399
Brick and tile.....	1909	120	3,289	121	169	2,990	8,274	7,138	226	1,469	1,012	3,676	2,664
	1904	162	2,079	181	161	2,337	6,945	7,458	179	1,119	669	2,599	1,930
	1899	210	2,797	260	97	2,440	4,378	6,051	113	867	472	1,988	1,516
Brooms and brushes.....	1909	61	328	62	40	226	150	430	35	116	483	849	366
	1904	72	353	88	39	226	87	303	26	102	237	528	291
	1899	98	405	111	30	204		182	24	103	310	607	297
Butter, cheese, and condensed milk.....	1909	56	277	31	87	159	788	701	68	100	2,499	2,959	460
	1904	54	241	42	51	148	573	540	33	69	1,633	1,814	281
	1899	79	104	60	24	74	639	200	5	31	320	432	103
Canning and preserving.....	1909	222	1,705	548	205	952	974	1,781	127	186	1,005	1,574	569
	1904	75	972	78	136	758	1,154	1,018	72	171	849	1,323	474
	1899	155			145	840		704	90	102	983	1,529	546
Carriages and wagons and materials.....	1909	243	3,940	277	361	3,302	5,853	7,883	459	1,781	4,860	8,409	3,609
	1904	248	3,705	263	309	3,193	3,431	5,756	347	1,726	4,261	7,678	3,417
	1899	378			222	2,989		4,587	247	1,471	3,122	6,446	3,324
Cars and general shop construction and repairs by steam-railroad companies.	1909	35	8,020		499	8,121	9,042	7,438	468	5,097	4,128	9,812	5,684
	1904	34	7,174		414	6,790	4,093	2,673	396	4,165	4,112	8,720	4,608
	1899	43	5,823		242	5,581	2,845	3,645	219	3,183	3,020	6,524	3,504
Cars and general shop construction and repairs by street-railroad companies.	1909	7	931		26	905	3,005	1,160	31	620	501	1,204	703
	1904	4	963		28	935		1,391	44	603	490	1,211	721
	1899	4	450		10	440		526	8	290	230	540	310
Chemicals.....	1909	9	845	42	184	619	886	3,950	338	333	2,224	3,040	1,416
	1904	11	827	1	186	640	1,330	4,306	233	310	2,172	3,279	1,107
	1899	8	419	1	78	340	344	1,970	112	162	1,336	1,804	468
Clothing, men's, including shirts.....	1909	84	8,667	52	621	7,994	1,559	8,109	745	2,904	9,071	15,407	6,336
	1904	73	6,500	55	375	6,070	1,322	5,037	438	2,008	6,643	10,329	4,786
	1899	162			448	6,973		5,025	578	1,932	5,494	9,801	4,807
Clothing, women's.....	1909	68	3,122	58	314	2,750	487	2,384	337	1,197	3,180	5,439	2,259
	1904	52	2,113	62	188	1,863	405	1,179	172	673	1,799	3,322	1,523
	1899	48	2,314	56	190	2,068	215	1,019	191	564	1,739	3,125	1,386
Coffee and spice, roasting and grinding.....	1909	40	1,376	15	931	730	2,379	5,273	837	342	9,192	12,062	2,870
	1904	26	960	16	390	554	1,243	3,129	445	298	5,145	7,264	2,119
	1899	27	802	18	285	499		2,517	300	176	4,303	5,266	963
Coffins, burial cases, and undertakers' goods..	1909	11	672	2	130	540	663	1,391	145	206	776	1,565	739
	1904	11	534	3	40	485	904	1,091	49	245	648	1,246	598
	1899	5	414	2	62	350		429	64	150	492	775	283
Confectionery.....	1909	61	2,337	50	405	1,832	1,268	2,931	519	770	3,934	6,659	2,725
	1904	43	2,120	36	314	1,779	1,048	2,348	346	628	2,632	4,630	1,998
	1899	35			413	1,866		2,613	349	584	3,183	4,938	1,755
Coopers and wooden goods, not elsewhere specified.	1909	43	1,209	40	81	1,088	2,319	1,929	102	553	1,902	3,079	1,177
	1904	46	1,931	34	116	1,781	3,314	2,624	144	739	2,264	3,712	1,448
	1899	61			59	1,235		1,291	80	451	1,156	2,087	931

1 Excluding statistics for one establishment, to avoid disclosure of individual operations.
2 Not reported separately.
3 Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—MISSOURI.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
STATE—Continued.													
Copper, tin, and sheet-iron products.....	1909	207	3,228	203	388	2,637	1,556	\$5,716	\$465	\$1,482	\$4,508	\$7,827	\$3,229
	1904	106	2,573	112	243	2,218	878	6,831	293	1,099	3,288	5,720	2,432
	1899	171	.....	.....	148	906	.....	1,376	125	405	995	1,994	999
Cutlery and tools, not elsewhere specified.....	1909	22	346	19	38	289	603	943	42	177	298	600	307
	1904	17	225	14	19	192	343	556	26	117	193	409	216
	1899	6	.....	.....	8	52	.....	75	6	34	34	103	69
Electrical machinery, apparatus, and supplies.....	1909	20	1,419	8	351	1,060	1,180	3,883	405	627	1,104	3,251	2,147
	1904	20	983	5	183	795	824	1,644	193	412	606	1,741	1,135
	1899	17	603	11	59	533	421	982	69	186	355	911	556
Flour-mill and gristmill products.....	1909	680	3,602	810	594	2,198	43,175	17,066	643	1,040	38,826	44,508	5,682
	1904	552	3,555	752	458	2,345	40,202	14,834	453	1,091	32,928	38,026	5,098
	1899	544	.....	.....	332	1,517	35,916	10,205	309	787	20,034	23,832	3,798
Food preparations.....	1909	37	696	30	195	471	1,551	3,061	250	214	4,254	5,384	1,130
	1904	35	775	30	174	571	630	1,379	203	184	2,058	3,002	944
	1899	32	.....	.....	145	484	.....	988	173	198	1,940	2,730	781
Foundry and machine-shop products.....	1909	329	9,051	202	1,406	7,443	13,568	20,870	1,674	4,860	9,156	19,075	10,819
	1904	256	8,331	188	938	7,155	9,905	14,102	1,172	4,274	6,073	14,692	8,619
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furniture and refrigerators.....	1909	69	3,977	54	496	3,427	6,203	6,708	594	1,919	3,327	7,380	4,033
	1904	77	3,137	50	310	2,777	4,909	4,487	347	1,415	1,985	4,836	2,851
	1899	57	2,912	37	273	2,602	.....	3,107	287	1,127	1,636	3,834	2,198
Gas and electric fixtures and lamps and reflectors.....	1909	10	299	5	62	232	214	546	77	144	327	642	315
	1904	10	239	4	49	186	270	307	47	125	186	456	270
	1899	18	235	20	28	237	.....	443	30	98	123	337	214
Gas, illuminating and heating.....	1909	29	1,403	32	490	941	3,635	33,929	357	636	1,223	4,688	3,415
	1904	28	2,411	.....	585	1,820	3,050	45,047	230	898	1,778	5,585	3,807
	1899	25	984	.....	150	584	.....	33,504	112	464	766	2,877	2,121
Glass.....	1909	4	1,830	.....	75	1,755	8,820	6,739	150	758	947	1,993	1,046
	1904	6	1,072	.....	111	1,561	5,755	3,219	199	938	708	1,781	1,073
	1899	8	676	.....	26	650	3,110	2,198	47	341	232	706	534
Hats and caps, other than felt, straw, and wool.....	1909	14	226	16	28	182	39	153	38	106	218	440	222
	1904	9	107	9	17	171	20	184	16	86	186	330	144
	1899	16	213	24	7	182	.....	64	3	65	99	239	140
Ice, manufactured.....	1909	92	975	32	182	761	22,904	6,947	183	472	667	2,084	1,417
	1904	53	559	30	96	433	13,546	3,318	94	272	399	1,130	731
	1899	31	357	13	65	279	7,207	1,835	66	157	226	641	415
Iron and steel, steel works and rolling mills.....	1909	4	2,379	.....	152	2,227	6,255	5,299	211	1,320	2,859	5,013	2,154
	1904	4	1,410	.....	61	1,349	4,692	3,072	89	928	1,588	2,909	1,411
	1899	5	1,656	.....	52	1,604	3,330	1,946	82	882	1,605	3,200	1,695
Jewelry.....	1909	19	472	10	86	376	160	747	66	272	323	873	550
	1904	17	308	20	36	252	87	136	23	201	235	589	354
	1899	11	.....	.....	6	169	.....	145	8	116	107	392	225
Leather goods.....	1909	105	2,303	96	398	1,814	5,986	4,579	454	1,037	3,794	6,508	2,714
	1904	74	2,194	68	351	1,775	1,122	3,610	371	971	2,888	5,361	2,473
	1899	47	.....	.....	213	1,362	.....	1,782	227	640	1,919	3,559	1,640
Leather, tanned, curried, and finished.....	1909	9	246	3	23	220	519	1,478	42	146	1,599	2,035	436
	1904	9	242	4	21	217	546	1,345	37	131	734	1,128	394
	1899	9	209	4	20	185	388	922	35	99	557	817	260
Lime.....	1909	31	763	15	56	692	1,314	2,400	61	317	461	1,031	570
	1904	23	558	8	57	493	615	1,047	04	221	319	792	473
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liquors, distilled.....	1909	23	78	28	16	34	644	346	17	14	101	613	512
	1904	34	105	41	15	49	654	265	12	25	61	206	145
	1899	35	63	39	3	21	.....	148	2	5	25	92	67
Liquors, malt.....	1909	31	6,348	6	696	5,646	30,436	44,662	1,307	3,908	7,568	27,447	19,879
	1904	50	6,202	10	624	5,568	13,769	43,620	1,207	3,408	6,252	24,154	17,602
	1899	49	3,561	13	398	3,150	13,644	25,732	1,890	3,073	3,073	13,777	10,704
Lumber and timber products.....	1909	1,098	15,814	1,289	1,003	13,522	49,506	18,930	1,106	5,897	10,614	23,261	12,647
	1904	495	14,057	565	828	12,664	33,047	13,688	875	5,542	6,417	18,349	11,632
	1899	762	.....	.....	546	11,391	32,570	12,010	513	4,155	7,899	16,426	8,557
Marble and stone work.....	1909	169	1,710	174	194	1,342	4,306	3,079	218	989	1,447	3,441	1,994
	1904	73	1,053	65	106	882	2,216	1,726	130	580	904	2,365	1,401
	1899	63	.....	.....	68	658	.....	1,139	72	364	512	1,236	724
Mattresses and spring beds.....	1909	33	439	28	66	345	310	580	60	137	457	959	502
	1904	28	563	24	59	450	457	564	69	270	564	1,140	576
	1899	17	.....	.....	17	242	.....	243	21	105	362	612	260
Millinery and lace goods.....	1909	35	1,143	28	181	934	94	538	130	277	885	1,647	762
	1904	10	339	9	25	305	42	146	20	99	238	448	210
	1899	13	454	9	27	418	.....	94	15	82	281	455	175
Paint and varnish.....	1909	32	1,034	4	345	685	2,706	5,295	503	366	4,698	6,828	2,130
	1904	30	1,014	15	395	604	2,028	4,116	439	313	4,737	6,400	1,663
	1899	27	686	14	157	515	1,745	3,244	241	243	3,359	4,555	1,190

¹ Excluding statistics for two establishments, to avoid disclosure of individual operations.

² Figures not comparable.

³ Not reported separately.

MANUFACTURES—MISSOURI.

655

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
STATE—Continued.													
Paper goods, not elsewhere specified.....	1900	11	493	5	53	435	309	\$730	\$75	\$178	\$447	\$922	\$475
	1904	9	349	7	39	303	175	394	44	105	296	598	322
	1899	14	82	4	8	70	.....	95	6	22	63	108	45
Patent medicines and compounds and druggists' preparations.....	1900	185	1,957	150	827	980	908	5,120	999	415	2,536	7,639	5,103
	1904	125	1,470	76	476	924	440	3,949	530	353	1,985	5,512	3,527
	1899	114	.....	.....	457	951	.....	3,178	496	329	1,481	4,974	3,493
Photographic apparatus and materials.....	1900	4	304	.....	56	248	750	1,464	103	130	584	1,415	831
	1904	6	378	.....	70	308	614	1,306	124	150	573	1,428	855
	1899	5	354	3	50	301	.....	512	91	152	574	1,022	448
Photo-engraving.....	1900	18	269	13	69	187	80	161	62	165	82	450	368
	1904	10	148	10	19	113	63	73	22	83	34	205	171
	1899	7	62	12	4	40	.....	26	5	28	10	75	65
Pipes, tobacco.....	1900	7	330	5	24	307	243	242	23	107	169	396	227
	1904	6	311	4	22	285	101	195	21	83	145	329	184
	1899	12	317	11	15	291	.....	126	13	82	95	201	166
Pottery, terra-cotta, and fire-clay products....	1900	20	3,437	11	288	3,138	7,848	13,247	405	1,554	1,070	4,069	2,993
	1904	33	2,728	18	178	2,532	6,089	5,378	251	1,246	752	3,083	2,331
	1899	37	1,757	27	123	1,907	2,805	2,952	162	648	370	1,662	1,292
Printing and publishing.....	1900	1,322	15,792	1,243	3,760	10,790	10,472	21,908	4,256	6,610	8,627	29,651	21,024
	1904	1,253	13,912	1,209	2,856	9,757	8,384	16,358	2,934	5,330	6,801	24,412	17,611
	1899	1,142	11,319	1,184	2,085	8,050	.....	11,961	1,874	4,150	5,082	16,544	11,462
Show cases.....	1900	8	237	3	25	209	100	314	31	137	170	433	263
	1904	8	294	3	31	260	234	338	30	151	207	546	339
	1899	5	150	5	12	133	.....	151	9	58	88	223	135
Slaughtering and meat packing.....	1900	45	5,529	34	821	4,074	11,735	18,787	845	2,673	72,198	79,581	7,383
	1904	38	4,862	29	597	4,236	7,685	16,449	623	2,381	54,099	60,110	6,011
	1899	40	3,412	36	251	3,125	.....	7,969	260	1,454	39,182	43,162	3,980
Soap.....	1900	10	838	3	281	554	954	2,669	233	272	3,055	4,719	1,664
	1904	10	706	8	150	548	745	1,844	206	267	1,871	3,113	1,242
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stoves and furnaces, including gas and oil stoves.	1900	20	2,430	4	413	2,013	2,241	8,205	597	1,426	2,846	6,713	3,867
	1904	22	2,402	8	337	2,147	1,633	5,004	536	1,462	2,086	5,932	3,846
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wirework, including wire rope and cable....	1900	14	805	9	140	710	902	2,260	250	379	1,734	3,396	1,662
	1904	23	758	28	146	584	594	2,631	212	201	1,234	2,336	1,102
	1899	25	414	24	45	345	.....	809	72	180	746	1,204	458
All other industries.....	1900	1,347	27,239	1,259	3,673	22,307	43,505	83,054	4,602	11,858	65,353	103,596	38,243
	1904	1,223	26,059	1,178	2,260	22,021	40,588	99,063	2,509	11,275	40,646	91,843	42,202
	1899	1,661	.....	.....	3,379	28,764	.....	52,541	3,748	13,335	40,936	95,091	46,155

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

KANSAS CITY—All industries.....	1900	902	13,051	757	3,251	14,643	36,064	\$42,729	\$3,478	\$8,526	\$30,962	\$54,705	\$23,743
	1904	612	13,559	519	2,001	11,039	.....	32,127	2,120	5,929	19,525	35,573	16,048
	1899	585	.....	.....	1,183	9,699	.....	22,902	1,164	4,569	12,531	23,589	11,053
Bread and other bakery products.....	1900	107	1,739	103	256	1,375	847	5,356	287	726	3,490	5,617	2,127
	1904	75	1,294	69	169	1,056	.....	2,043	200	458	1,959	3,402	1,503
	1899	66	332	72	28	232	.....	141	14	130	873	657	284
Brick and tile.....	1900	5	374	2	19	353	480	639	27	161	121	339	268
	1904	5	183	1	17	165	.....	550	22	84	81	253	172
	1899	7	297	7	13	277	.....	483	14	150	89	364	275
Brooms and brushes.....	1900	6	35	5	4	26	44	28	3	18	35	77	42
	1904	8	31	7	1	23	.....	25	(e)	11	15	36	21
	1899	7	35	8	.....	29	.....	16	.....	12	22	45	23
Carriages and wagons and materials.....	1900	11	158	4	24	130	252	233	20	78	128	270	142
	1904	16	102	10	12	74	.....	116	7	42	63	161	68
	1899	27	.....	.....	5	163	.....	102	5	83	134	308	174
Cars and general shop construction and repairs by steam-railroad companies.	1900	4	703	.....	41	662	415	1,047	49	508	315	883	563
	1904	5	840	.....	44	796	.....	232	33	552	481	1,073	592
	1899	5	529	.....	24	505	.....	897	24	289	245	578	333
Clothing, men's, including shirts.....	1900	15	857	11	27	519	199	459	35	302	631	1,129	498
	1904	9	847	4	113	730	.....	545	67	205	562	959	397
	1899	10	.....	.....	14	1,485	.....	355	18	325	799	1,243	449
Coffee and spice, roasting and grinding.....	1900	10	211	5	99	107	350	565	124	51	1,393	1,870	456
	1904	3	74	3	24	47	.....	122	32	17	139	219	80
	1899	3	64	1	22	41	.....	128	27	14	143	243	100

¹ Excluding statistics for two establishments, to avoid disclosure of individual operations.

² Not reported separately.

³ Less than \$500.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaries employed.	Wage earners (average number).							
Expressed in thousands.													
KANSAS CITY—Continued.													
Confectionery.....	1909	10	254	8	32	214	242	\$456	\$38	\$76	\$512	\$980	\$478
	1904	8	448	9	59	380		706	72	118	504	926	332
	1899	7			85	734		1,221	91	197	1,216	1,817	601
Copper, tin, and sheet-iron products.....	1909	59	681	62	66	553	407	1,025	77	349	828	1,576	747
	1904	117	408	19	23	368		1,587	45	202	525	973	448
	1899	124			34	186		155	30	79	104	301	197
Cutlery and tools, not elsewhere specified.....	1909	4	19	4		15	7	99		9	12	35	23
	1904	4	16	5		11		18		8	6	26	20
	1899												
Flour-mill and gristmill products.....	1909	8	262	3	50	209	3,210	1,087	71	93	4,102	4,507	405
	1904	10	271	6	56	209		1,711	77	124	5,072	5,518	444
	1899	10			49	106		1,034	47	58	1,772	2,069	297
Foundry and machine-shop products.....	1909	58	868	32	191	645	1,223	2,306	177	461	775	1,828	1,051
	1904	37	695	26	81	588		1,450	97	328	485	1,287	772
	1899												
Furniture and refrigerators.....	1909	20	361	18	50	293	602	558	55	189	406	835	429
	1904	17	291	16	36	239		689	25	128	285	540	255
	1899	17	128	9	15	102		138	16	51	129	246	117
Hand stamps and stencils and brands.....	1909	4	32	5	9	18	12	12	7	12	17	51	34
	1904	5	28	5	3	20		14	2	13	7	37	30
	1899	14	21	3		18		8		10	8	27	19
Ice, manufactured.....	1909	7	171		31	140	4,830	1,003	41	118	104	396	292
	1904	4	83		10	73		413	14	48	73	157	84
	1899	5	61	6	13	42		207	12	30	53	138	80
Leather goods.....	1909	21	516	19	91	406	204	1,120	81	264	1,017	1,508	551
	1904	13	357	15	67	275		726	69	171	443	857	414
	1899	12			32	327		284	40	170	608	931	323
Lumber and timber products.....	1909	26	942	22	118	802	1,866	1,811	160	519	2,141	3,398	1,267
	1904	13	531	8	45	478		1,193	54	317	677	1,274	597
	1899	12	467	12	28	427		744	18	254	557	927	370
Marble and stone work.....	1909	12	236	11	24	201	379	285	26	156	255	566	311
	1904	8	146	6	11	129		142	13	106	111	303	192
	1899	11			5	143		139	5	82	94	227	133
Mattresses and spring beds.....	1909	7	94	4	16	74	136	98	11	44	133	237	104
	1904	5	77	1	11	65		69	6	30	79	140	70
	1899	5			1	50		40	1	28	79	137	53
Models and patterns, not including paper patterns.	1909	5	20	6		14	29	9		11	5	26	21
	1904	5	14	6		8		18		7	3	20	17
	1899	7	22	8		14		7		10	6	25	19
Patent medicines and compounds and druggists' preparations.	1909	46	184	28	86	70	68	447	84	26	162	467	305
	1904	16	72	14	20	38		95	16	16	51	178	127
	1899	17			8	48		37	6	17	37	131	94
Printing and publishing.....	1909	179	3,336	142	1,002	2,192	8,961	4,158	976	1,465	2,352	7,548	5,166
	1904	129	2,257	117	582	1,558		2,188	555	999	1,418	4,505	3,037
	1899	111			325	1,526		1,499	283	938	810	2,928	2,118
Surgical appliances and artificial limbs.....	1909	7	33	5	14	14	10	14	14	9	12	79	67
	1904	13	8	3	5	8		4	3	6	3	25	22
	1899	43	16		4	4		1	7	2	3	21	13
All other industries.....	1909	271	6,565	253	1,001	5,311	11,291	19,371	1,115	2,881	12,016	20,357	8,341
	1904	197	4,478	163	612	3,703		17,471	702	1,930	6,393	12,667	6,274
	1899	225			478	3,292		15,355	506	1,590	5,245	10,221	4,976
ST. JOSEPH—All industries.													
	1909	261	6,514	213	911	5,390	7,737	\$12,038	\$873	\$2,710	\$11,054	\$17,626	\$6,572
	1904	219	5,552	211	678	4,663		9,734	579	2,072	6,820	11,574	4,754
	1899	184			457	5,095		8,016	449	1,938	6,942	11,362	4,420
Boots and shoes, including cut stock and findings.	1909	5	433	5	18	410	213	276	16	201	724	1,025	301
	1904	13	182	1	13	168		175	9	65	256	350	94
	1899	4	215	3	12	200		131	11	73	269	362	93
Bread and other bakery products.....	1909	43	681	42	91	548	321	3,698	103	261	1,367	2,174	807
	1904	36	652	38	145	499		1,940	107	182	1,349	2,054	711
	1899	24	483	22	72	389		1,162	53	119	856	1,327	471
Brick and tile.....	1909	4	165	6	10	149	550	273	10	85	49	210	161
	1904	9	210	8	13	189		326	14	89	60	195	136
	1899	10	250	10	4	236		159	4	94	55	211	156
Carriages and wagons and materials.....	1909	9	62	8	5	49	41	67	2	33	40	108	68
	1904	48	80	8	5	67		95	5	34	30	103	73
	1899	19	87	10	3	74		88	2	40	53	143	85
Clothing, men's, including shirts.....	1909	9	1,420		94	1,328	364	1,239	78	499	1,453	2,403	950
	1904	16	1,186	5	30	1,151		600	28	371	1,061	1,557	496
	1899	19	1,754	10	61	1,683		859	99	506	1,059	1,782	724

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

² Figures can not be shown without disclosing individual operations.

³ Figures not comparable.

⁴ Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—MISSOURI.

657

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
ST. JOSEPH—Continued.													
Confectionery.....	1909	0	430	0	111	313	162	\$500	\$92	\$142	\$1,004	\$1,424	\$420
	1904	4	228	8	32	188		257	27	66	234	437	203
	1899	3			35	110		249	30	43	246	302	110
Cooperage and wooden goods, not elsewhere specified.	1909	3	37	0	3	28	24	50	1	17	40	71	25
	1904	3	35	5	4	26		32	2	15	31	53	22
	1899	3			2	65		41	1	19	58	113	55
Copper, tin, and sheet-iron products.....	1909	12	75	11	10	54		86	6	45	76	146	70
	1904	18	61	10	4	47		35	1	39	50	124	74
Floor-mill and gristmill products.....	1909	7	131	2	35	94	1,277	865	33	44	1,838	1,994	156
	1904	5	58	3	16	39		390	15	22	593	683	90
	1899	6	86	2	25	59		576	30	35	757	957	200
Foundry and machine-shop products.....	1909	15	283	10	40	233	395	361	43	128	104	430	266
	1904	17	122	10	8	104		100	8	58	49	150	101
Leather goods.....	1909	10	268	8	22	238	110	251	19	152	585	819	234
	1904	15	205	3	18	184		175	16	103	328	525	199
	1899	3			6	173		54	4	82	290	416	126
Lumber and timber products.....	1909	10	243	10	33	200	454	504	40	136	636	947	311
	1904	4	210	4	18	188		413	21	107	412	647	265
	1899	5			11	105		332	14	74	282	523	241
Marble and stone work.....	1909	4	20	3	5	12	15	25	3	10	18	39	21
	1904	4	37	2	5	30		110	5	23	37	81	44
Mattresses and spring beds.....	1909	4	21	5		18	29	19		8	17	35	18
	1904	3	15	4		11		19		4	10	19	9
Patent medicines and compounds and druggists' preparations.	1909	7	21	4	9	8	6	13	3	3	9	24	15
	1904	3	5	1	5	2		37	3	1	3	17	14
	1899	4	22	2	12	8		19	6	3	11	34	23
Printing and publishing.....	1909	30	549	25	150	368	278	797	167	226	273	1,025	752
	1904	25	310	30	121	359		472	120	182	215	745	530
	1899	29			45	378		420	39	193	145	596	451
All other industries.....	1909	83	1,075	62	269	1,344	3,497	2,954	261	720	2,755	4,752	1,997
	1904	86	1,723	71	241	1,411		4,652	198	711	2,110	3,834	1,724
	1899	76			169	1,606		3,926	156	717	2,857	4,536	1,679
ST. LOUIS—All industries.													
	1909	2,687	104,587	1,889	15,347	87,371	163,615	\$269,392	\$19,871	\$48,535	\$188,189	\$328,495	\$140,306
	1904	2,482	95,902	1,883	11,381	82,698		265,937	13,475	42,842	137,740	267,307	129,567
	1899	2,646		8,867	8,867	64,832		150,526	10,079	29,145	101,838	193,733	91,895
Automobiles, including bodies and parts.....	1909	11	340	2	50	282	139	620	62	197	727	1,302	575
	1904	13	37	3	13	21		24	5	16	31	63	32
Baking powders and yeast.....	1909	6	65	4	16	45	30	88	25	19	205	295	90
	1904	7	105	3	20	82		123	25	34	243	416	173
	1899	11			42	75		144	46	23	346	506	220
Blackening and cleansing and polishing preparations.	1909	23	164	17	50	97	150	208	61	53	291	671	280
	1904	8	61	8	26	27		52	24	12	77	147	70
	1899	16	24	6	10	8		8	6	4	8	29	21
Boots and shoes, including cut stock and findings.	1909	33	13,006	3	805	12,138	7,547	10,563	991	6,169	23,735	33,970	10,285
	1904	22	9,679	1	347	9,331		6,885	418	3,998	12,233	19,662	7,429
	1899	35			170	5,398		2,539	199	1,808	5,932	8,487	2,595
Boxes, fancy and paper.....	1909	19	865	9	66	790	493	681	81	286	464	900	496
	1904	12	711	4	52	655		458	54	187	285	604	319
	1899	9	605	4	36	565		285	42	114	131	413	282
Brass and bronze products.....	1909	11	325	6	50	269	385	963	76	180	1,632	2,165	533
	1904	10	223	10	35	178		693	53	111	1,161	1,457	290
	1899	10	212	8	24	180		353	32	92	915	1,132	217
Bread and other bakery products.....	1909	448	3,317	438	615	2,264	8,018	7,077	559	1,223	4,765	8,624	3,859
	1904	311	2,397	308	215	1,574		3,044	185	1,013	3,385	6,098	2,713
	1899	387	2,121	393	274	1,454		2,266	202	667	2,414	4,818	2,404
Brick and tile.....	1909	7	1,839		66	1,773	2,632	4,630	112	887	618	2,198	1,580
	1904	12	1,141	6	71	1,064		5,202	98	603	316	1,293	942
	1899	11	909	4	48	857		4,315	70	304	137	643	508
Brooms and brushes.....	1909	23	121	24	13	84	33	97	10	47	120	226	106
	1904	25	173	32	15	126		204	12	62	119	257	138
	1899	28	207	20	14	164		100	11	67	162	363	191
Canning and preserving.....	1909	9	293	10	92	191	161	976	97	75	628	962	334
	1904	7	204	6	34	104		512	35	64	397	631	234
	1899	17	234	7	62	155		276	63	50	332	544	212
Carriages and wagons and materials.....	1909	77	2,569	53	253	2,254	3,144	5,146	301	1,242	3,838	6,328	2,490
	1904	98	2,528	91	222	2,215		3,081	265	1,266	3,402	5,759	2,357
	1899	105			182	2,015		2,927	214	1,044	2,402	4,638	2,230

¹ Excluding statistics for one establishment, to avoid disclosure of individual operations.
² Excluding statistics for two establishments, to avoid disclosure of individual operations.
³ Figures not comparable.

⁴ Figures can not be shown without disclosing individual operations.
⁵ Not reported separately.

MANUFACTURES—MISSOURI.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaries employees.	Wage earners (average number).							
Expressed in thousands.													
ST. LOUIS—Continued.													
Cars and general shop construction and repairs by steam-railroad companies.	1909	5	1,775	.....	98	1,677	1,485	\$534	\$89	\$879	\$765	\$1,742	\$977
	1904	4	1,329	.....	69	1,260	.....	258	63	844	817	1,725	908
	1899	6	1,229	.....	66	1,163	.....	945	61	672	605	1,355	750
Clothing, men's, including shirts.....	1909	50	5,246	32	463	4,751	879	5,420	582	1,966	5,382	9,087	4,305
	1904	53	4,198	45	211	3,942	.....	3,472	319	1,449	3,436	8,850	3,414
	1899	136	.....	.....	340	3,504	.....	3,560	432	1,041	3,337	6,316	2,979
Clothing, women's.....	1909	58	2,745	49	257	2,439	438	2,050	301	1,021	2,902	4,886	1,984
	1904	46	1,923	56	163	1,704	.....	1,128	182	623	1,075	3,075	1,400
	1899	42	2,191	52	182	1,957	.....	990	183	529	1,071	2,987	1,316
Coffee and spice, roasting and grinding.....	1909	23	1,091	6	515	570	1,886	4,547	697	268	7,217	9,514	2,297
	1904	19	855	11	360	484	.....	2,926	407	240	4,738	6,725	1,987
	1899	20	692	14	259	419	.....	2,271	270	149	3,948	4,766	818
Coffins, burial cases, and undertakers' goods..	1909	6	596	.....	106	490	608	1,174	132	268	665	1,371	706
	1904	6	510	.....	40	470	.....	1,039	46	238	627	1,204	577
	1899	5	414	2	62	350	.....	429	64	150	492	775	283
Confectionery.....	1909	25	1,453	14	217	1,222	823	1,747	350	512	2,175	3,848	1,673
	1904	18	1,334	6	205	1,123	.....	1,255	232	416	1,601	3,052	1,361
	1899	20	.....	.....	277	984	.....	1,114	219	336	1,668	2,673	1,005
Cooperage and wooden goods, not elsewhere specified.	1909	22	1,034	15	61	958	1,942	1,566	87	493	1,562	2,592	1,030
	1904	120	993	11	68	914	.....	1,443	88	428	1,195	1,946	751
	1899	28	.....	.....	48	874	.....	1,088	72	329	883	1,542	679
Copper, tin, and sheet-iron products.....	1909	100	2,188	85	270	1,833	976	4,096	318	978	2,978	5,060	2,062
	1904	63	1,988	59	208	1,721	.....	4,930	239	813	2,630	4,432	1,802
	1899	139	.....	.....	110	728	.....	1,160	92	306	847	1,598	751
Cutlery and tools, not elsewhere specified.....	1909	13	236	13	23	200	472	750	34	128	234	440	206
	1904	11	184	8	17	159	.....	482	24	97	175	337	162
	1899	5	.....	.....	8	48	.....	62	6	32	30	91	61
Electrical machinery, apparatus, and supplies..	1909	16	912	7	206	699	650	1,524	265	380	636	2,081	1,445
	1904	16	966	3	179	784	.....	1,607	189	407	598	1,713	1,115
	1899	11	584	5	57	522	.....	974	65	182	341	875	534
Electroplating.....	1909	12	88	13	9	66	115	48	6	45	21	103	82
	1904	9	78	11	4	63	.....	37	4	41	19	94	75
	1899	7	.....	.....	6	80	.....	40	6	39	17	88	71
Enameling and japanning.....	1909	3	32	3	1	28	.....	11	1	17	5	31	26
	1904	3	68	1	6	61	.....	70	4	25	43	77	34
	1899	3	44	1	8	35	.....	40	6	10	10	38	28
Flour-mill and gristmill products.....	1909	8	181	2	43	136	2,027	703	74	86	3,210	3,551	341
	1904	9	268	1	71	196	.....	1,127	86	124	3,459	3,974	515
	1899	15	.....	.....	56	194	.....	1,321	76	107	3,177	3,600	423
Food preparations.....	1909	21	559	18	159	382	946	2,377	207	170	3,490	4,455	956
	1904	24	653	21	142	490	.....	1,109	174	153	1,632	2,409	777
	1899	23	.....	.....	133	381	.....	785	161	156	1,054	1,695	641
Foundry and machine-shop products.....	1909	160	6,350	80	972	5,298	8,692	14,409	1,208	3,518	6,682	14,591	7,909
	1904	143	6,591	83	831	5,677	.....	10,695	999	3,412	4,828	11,573	6,745
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Furniture and refrigerators.....	1909	65	3,310	22	406	2,882	5,163	5,690	504	1,620	2,735	6,111	3,376
	1904	51	2,643	25	254	2,364	.....	3,551	307	1,213	1,589	4,057	2,468
	1899	140	2,532	19	230	2,283	.....	2,760	247	996	1,367	3,289	1,902
Gas and electric fixtures and lamps and reflectors.	1909	7	257	4	51	202	185	490	65	126	285	547	282
	1904	9	233	4	48	181	.....	275	47	122	185	448	263
	1899	12	267	12	26	220	.....	424	30	93	100	293	193
Hand stamps and stencils and brands.....	1909	7	58	7	9	42	23	44	10	25	24	91	67
	1904	7	40	5	5	30	.....	49	4	16	47	104	57
	1899	6	29	4	5	20	.....	29	5	9	14	54	40
Hats and caps, other than felt, straw, and wool.	1909	9	146	11	11	124	31	116	19	78	159	307	148
	1904	6	157	6	15	136	.....	175	11	69	161	275	114
	1899	12	.....	.....	5	158	.....	52	2	55	88	205	117
Ice, manufactured.....	1909	9	236	.....	35	201	8,105	2,210	44	151	291	731	440
	1904	9	198	.....	31	167	.....	1,523	38	124	186	516	330
	1899	10	160	3	28	129	.....	1,035	34	78	112	306	194
Jewelry.....	1909	8	263	4	40	224	117	148	32	153	228	533	305
	1904	10	247	12	26	209	.....	97	17	165	196	484	253
	1899	8	155	7	5	143	.....	134	6	99	82	263	186
Leather goods.....	1909	32	1,204	21	223	960	693	2,293	272	515	1,629	3,108	1,479
	1904	30	1,363	31	211	1,121	.....	2,184	219	593	1,776	3,265	1,489
	1899	25	.....	.....	139	824	.....	1,271	158	377	881	1,942	1,081
Leather, tanned, curried, and finished.....	1909	9	246	3	23	220	519	1,478	42	146	1,599	2,035	436
	1904	7	232	2	19	211	.....	1,333	36	129	722	1,107	385
	1899	8	.....	.....	20	182	.....	915	35	98	548	806	259

¹ Excluding statistics for one establishment, to avoid disclosure of individual operations.
² Excluding statistics for two establishments, to avoid disclosure of individual operations.
³ Figures not comparable.

MANUFACTURES—MISSOURI.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

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

INDUSTRY AND CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.			Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.	
			Total.	Proprietors and firm members.	Salaries employed.								Wage earners (average number).
Expressed in thousands.													
ST. LOUIS—Continued.													
Liquors, malt.....	1909	10	5,378	4	550	4,823	24,590	\$34,747	\$1,077	\$3,339	\$6,474	\$23,147	\$16,673
	1904	28	5,434	4	483	4,947	.....	30,687	985	2,998	5,445	20,930	15,485
	1899	28	2,077	5	302	2,670	.....	23,340	709	1,660	2,633	11,674	8,041
Lumber and timber products.....	1909	71	3,187	24	351	2,812	8,608	6,340	443	1,669	3,884	7,367	3,483
	1904	63	3,255	18	288	2,940	.....	4,261	355	1,460	2,473	4,409	1,036
	1899	52	2,445	18	216	2,211	.....	3,297	243	973	1,985	4,177	2,192
Marble and stone work.....	1909	39	665	30	78	557	1,073	1,220	113	468	723	1,580	857
	1904	25	452	19	52	381	.....	784	72	265	575	1,305	730
	1899	22	.....	19	254	.....	.....	362	28	161	177	437	260
Mattresses and spring beds.....	1909	14	222	11	32	179	120	356	36	106	204	462	258
	1904	14	390	10	42	344	.....	413	53	216	398	815	417
	1899	9	.....	.....	13	160	.....	164	17	67	240	400	160
Millinery and lace goods.....	1909	18	655	13	128	514	64	440	97	183	549	1,045	496
	1904	9	326	8	25	293	.....	130	20	96	235	440	205
	1899	7	290	5	14	271	.....	84	9	56	195	296	101
Models and patterns, not including paper patterns.	1909	15	141	12	23	106	72	76	25	78	46	211	165
	1904	16	127	15	19	93	.....	54	20	57	33	156	123
	1899	12	.....	.....	4	65	.....	32	4	42	18	82	64
Paint and varnish.....	1909	23	809	1	270	598	2,139	4,661	368	315	3,738	5,564	1,826
	1904	25	928	14	362	552	.....	3,783	398	283	4,439	5,909	1,470
	1899	18	533	9	126	448	.....	2,071	193	208	2,865	3,860	1,004
Patent medicines and compounds and druggists' preparations.	1909	99	1,626	87	677	862	800	4,507	880	304	2,281	6,346	4,565
	1904	95	1,344	55	428	861	.....	3,741	490	328	1,907	5,182	3,275
	1899	86	.....	.....	424	861	.....	3,001	477	298	1,398	4,064	3,266
Photo-engraving.....	1909	11	165	8	43	114	46	85	45	98	59	298	230
	1904	6	37	9	12	66	.....	42	15	53	19	131	112
	1899	5	34	7	2	25	.....	13	4	17	5	46	41
Pottery, terra-cotta, and fire-clay products....	1909	13	2,246	2	195	2,049	4,230	8,777	295	1,061	634	2,683	2,049
	1904	15	2,089	4	148	1,937	.....	4,077	213	951	615	2,316	1,701
	1899	13	1,359	4	101	1,254	.....	2,394	135	494	289	1,258	960
Printing and publishing.....	1909	347	8,000	226	2,150	5,708	14,333	10,915	2,705	3,824	5,118	17,164	12,046
	1904	362	8,040	279	1,931	5,830	.....	10,750	2,193	3,462	4,543	16,366	11,823
	1899	320	6,008	266	1,573	4,229	.....	7,778	1,456	2,366	3,653	10,823	7,175
Slaughtering and meat packing.....	1909	24	1,807	19	319	1,469	5,515	5,598	341	900	24,055	26,601	2,546
	1904	20	1,453	13	203	1,237	.....	3,944	254	753	16,043	17,485	1,442
	1899	25	907	23	103	841	.....	2,608	143	448	11,120	12,943	1,823
Stereotyping and electrotyping.....	1909	4	120	.....	26	94	146	165	38	72	51	194	143
	1904	3	71	.....	17	54	.....	44	16	36	16	91	75
	1899	3	67	4	13	50	.....	41	12	30	16	80	70
Stoves and furnaces, including gas and oil stoves.	1909	13	2,048	2	373	1,673	1,826	7,254	535	1,199	2,468	5,923	3,465
	1904	14	2,185	6	304	1,875	.....	4,528	503	1,310	1,943	5,523	3,580
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Surgical appliances and artificial limbs.....	1909	8	34	7	4	23	6	69	5	16	10	65	55
	1904	9	67	10	26	31	.....	91	22	19	25	131	106
	1899	12	43	15	5	23	.....	23	5	10	12	53	41
Wirework, including wire rope and cable.....	1909	9	832	6	143	683	853	2,242	247	365	1,697	3,323	1,626
	1904	11	692	10	137	545	.....	2,546	204	270	1,194	2,245	1,051
	1899	12	347	7	42	298	.....	729	70	182	625	1,014	389
All other industries.....	1909	614	23,401	446	3,039	10,316	39,687	97,526	4,617	10,562	54,302	91,006	36,704
	1904	678	24,097	536	2,071	21,490	.....	125,415	2,893	11,026	43,793	88,079	44,316
	1899	932	.....	.....	2,972	25,094	.....	68,818	3,460	12,077	42,526	84,741	42,215

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

Hannibal.....	1909	66	2,688	65	178	2,445	3,412	\$2,498	\$176	\$1,284	\$4,310	\$6,195	\$1,879
	1904	58	1,957	49	97	1,811	.....	1,848	91	825	2,156	3,564	1,408
	1899	66	.....	.....	121	1,238	.....	1,754	100	535	1,735	2,699	964
Jefferson City.....	1909	35	1,572	19	217	1,336	1,166	3,079	257	391	3,652	5,446	1,794
	1904	45	474	31	181	262	.....	1,845	200	117	2,487	3,927	1,440
	1899	41	.....	.....	178	299	.....	1,489	179	92	2,131	3,061	930
Joplin.....	1909	77	1,089	73	186	830	3,102	2,992	184	494	2,358	4,136	1,778
	1904	56	835	55	100	680	.....	2,524	110	356	1,960	3,006	1,046
	1899	45	.....	.....	50	682	.....	1,268	63	380	1,556	2,325	760
Moberly.....	1909	31	1,155	29	127	909	1,276	1,320	120	538	1,002	1,984	892
	1904	28	504	23	45	406	.....	503	42	266	399	501	402
	1899	32	.....	.....	41	656	.....	459	39	319	360	792	432
Sedalia.....	1909	75	1,150	66	149	935	1,662	2,346	145	461	1,216	2,333	1,117
	1904	50	1,097	42	81	974	.....	1,307	80	503	825	1,692	867
	1899	57	.....	.....	66	900	.....	1,152	53	399	675	1,283	608
Springfield.....	1909	108	2,473	91	251	2,131	3,685	5,517	283	1,280	8,048	5,332	2,334
	1904	82	2,431	69	204	2,153	.....	3,926	192	1,128	3,392	5,293	1,901
	1899	79	.....	.....	108	1,710	.....	1,930	89	853	1,901	3,434	1,443
Webb City.....	1909	25	212	24	18	170	511	462	18	108	513	777	264
	1904	19	171	23	10	138	.....	199	10	71	395	638	243
	1899	12	.....	.....	7	126	.....	131	7	62	214	354	140

¹ Excluding statistics for two establishments, to avoid disclosure of individual operations.

² Not reported separately.

³ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.				
					Male.	Female.	Average number.	Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	3,375	185,705	8,228	6,594	14,061	3,831	152,993	Se 163,514	Ja 141,268	(1)	(1)	(1)	(1)	(1)	340,467		
2 Agricultural implements.....	25	532	16	28	40	10	438	Je 522	Se 332	471	409	1	1	1,080			
3 Artificial stone.....	117	380	147	17	6	4	206	Je 287	Ja 62	352	348	4	4	184			
4 Automobiles, including bodies and parts	17	449	6	38	23	14	368	Jy 427	Ja 299	412	394	18	18	184			
5 Awnings, tents, and sails.....	18	554	5	39	45	36	429	Je 529	Ja 353	401	107	234	217	217			
6 Baking powders and yeast.....	6	65	4	7	6	3	45	Se 48	Jy 39	47	21	26	26	30			
7 Baskets, and rattan and willow ware...	3	25	2	2	1	1	20	Au 23	Oc 19	20	19	1	1	20			
8 Belting and hose, leather.....	7	80	2	13	12	6	47	Se 52	My 39	51	51	1	1	140			
9 Blacking and cleansing and polishing preparations.	32	194	24	24	25	11	110	My 128	Jy 83	115	75	38	2	162			
10 Boots and shoes, including cut stock and findings.	59	18,665	14	220	776	259	17,396	De 18,223	My 16,820	18,241	11,048	5,801	853	539	11,113		
11 Boxes, cigar.....	5	124	4	8	4	3	105	No 114	Fe 99	111	36	70	4	1	39		
12 Boxes, fancy and paper.....	27	1,237	10	52	43	19	1,113	De 1,264	Jy 1,036	1,263	336	784	27	110	657		
13 Brass and bronze products.....	15	867	17	21	28	4	297	No 356	Mh 266	338	337	1	1	445			
14 Bread and other bakery products.....	954	6,797	1,003	127	682	242	4,743	No 5,095	Fe 4,326	5,111	3,483	1,484	40	104	3,023		
15 Brick and tile.....	120	3,289	121	95	67	7	2,969	Jy 3,899	Fe 1,635	3,246	3,151	95	95	8,274			
16 Brooms.....	50	265	52	11	15	3	184	Fe 213	Au 156	203	194	7	2	126			
17 Brushes.....	11	63	10	5	6	1	42	My 43	Se 41	42	42	1	1	21			
18 Butter, cheese, and condensed milk.....	56	277	31	29	35	23	159	Jy 210	Fe 121	142	121	21	2	788			
19 Buttons.....	10	385	14	6	3	3	302	Oc 545	Jy 372	347	253	91	2	232			
20 Canning and preserving.....	222	1,705	548	95	98	12	952	Se 4,597	Ja 178	4,701	1,394	2,509	274	524	974		
21 Carpets, rag.....	8	38	10	1	1	1	28	My 41	Ja 16	22	16	6	1	46			
22 Carriages and wagons and materials....	243	3,940	277	166	145	50	3,302	Ap 3,548	Ja 3,035	3,245	3,162	71	11	1	5,868		
23 Cars and general shop construction and repairs by steam-railroad companies.	35	8,620	137	137	349	13	8,121	Oc 9,215	Ap 7,103	9,014	9,005	9	11	1	9,042		
24 Cars and general shop construction and repairs by street-railroad companies.	7	931	14	11	1	1	905	Fe 923	Ap 891	908	904	1	3	3,005			
25 Chemicals.....	9	845	42	48	112	24	619	No 648	Fe 601	642	533	68	24	17	886		
26 Clothing, men's, including shirts.....	84	8,667	52	116	437	68	7,994	De 8,575	Ja 7,550	8,877	1,911	6,778	19	169	1,559		
27 Clothing, women's.....	68	3,122	58	84	171	50	2,750	Se 2,976	Ja 2,576	2,934	548	2,721	2	63	487		
28 Coffee and spice, roasting and grinding.	40	1,376	15	89	466	76	730	No 770	Je 690	738	425	273	31	9	2,379		
29 Coffins, burial cases, and undertakers' goods.	11	672	2	27	88	15	540	Mh 562	Je 506	539	412	98	20	9	663		
30 Confectionery.....	61	2,337	50	70	266	69	1,882	No 2,250	Jy 1,685	2,275	878	1,350	6	41	1,268		
31 Cooperage and wooden goods, not elsewhere specified.	43	1,209	40	48	22	11	1,088	Se 1,223	De 953	1,013	981	8	29	2,319			
32 Copper, tin, and sheet-iron products....	207	3,228	203	126	202	60	2,637	Oc 2,995	Ja 2,185	2,808	2,579	190	30	9	1,556		
33 Cutlery and tools, not elsewhere specified.	22	346	19	17	9	12	289	De 321	Ja 270	345	330	12	3	663			
34 Dairymen's, poulterers', and apiarists' supplies.	3	31	1	4	1	3	22	My 29	No 13	25	22	1	2	38			
35 Dentists' materials.....	4	22	3	3	3	2	11	Oc 12	Ja 11	12	7	3	1	9			
36 Electrical machinery, apparatus, and supplies.	20	1,419	8	65	221	65	1,060	De 1,193	Fe 941	1,196	937	225	2	32	1,180		
37 Electroplating.....	16	112	20	8	1	2	81	Oc 87	Jy 75	86	82	4	4	138			
38 Enameling and japanning.....	3	32	3	1	1	1	28	Fe 34	Se 23	31	30	1	1	21			
39 Flags, banners, regalia, society badges, and emblems.	6	80	6	6	18	10	46	Se 52	Fe 43	48	25	19	3	1			
40 Flour-mill and gristmill products.....	680	3,602	310	281	264	40	2,198	Au 2,371	Je 2,016	2,303	2,286	9	8	43,175			
41 Food preparations.....	37	696	30	38	125	32	471	No 603	Je 395	504	347	149	8	1,551			
42 Foundry and machine-shop products....	329	9,051	202	500	726	174	7,443	No 7,968	Ja 6,795	7,936	7,838	32	66	13,568			
43 Fur goods.....	8	109	8	5	6	12	78	De 126	Mh 41	126	29	96	1	9			
44 Furnishing goods, men's.....	20	399	25	16	43	10	305	No 374	Je 259	377	48	319	1	9	48		
45 Furniture and refrigerators.....	99	3,977	54	197	240	59	3,427	Oc 3,723	Jy 3,113	3,674	3,400	88	96	6,203			
46 Gas and electric fixtures and lamps and reflectors.	10	289	5	24	30	8	232	De 276	Je 193	276	241	11	22	214			
47 Gas, illuminating and heating.....	29	1,403	32	56	239	135	941	Je 1,195	Ja 732	873	872	1	1	3,635			
48 Glass.....	4	1,830	18	45	12	1,755	No 2,175	Ja 1,490	De 1,270	2,170	2,135	20	15	8,820			
49 Hand stamps and stencils and brands....	15	96	17	12	4	2	61	De 64	Se 58	64	56	8	8	35			
50 Hats and caps, other than felt, straw, and wool.	14	226	16	13	13	2	182	Au 203	Fe 163	192	113	71	5	39			
51 Hats, fur-felt.....	4	41	3	2	2	2	32	Je 34	Ja 20	29	15	14	1	4			
52 Ice, manufactured.....	92	975	32	114	56	12	761	Au 1,109	Ja 401	836	834	1	1	22,904			
53 Iron and steel, steel works and rolling mills.	4	2,379	29	107	16	2,227	De 3,126	Ja 1,751	3,126	3,114	12	12	12	6,285			
54 Jewelry.....	19	472	10	24	35	27	376	De 396	Au 345	396	329	53	14	180			
55 Kaolin and ground earths.....	6	155	15	6	3	131	Oc 172	Jy 98	177	177	177	1	1	992			
56 Leather goods.....	106	2,308	96	117	238	43	1,814	Mh 1,866	Ja 1,710	1,838	1,649	174	9	6	6,980		
57 Leather, tanned, curried, and finished..	9	246	3	11	8	4	220	Au 240	Ja 200	221	220	1	1	519			
58 Lime.....	31	763	15	81	20	5	692	Oc 831	Ja 361	688	688	6	6	1,314			
59 Liquors, distilled.....	28	78	28	11	5	1	34	Mh 53	Au 11	70	64	6	6	644			
60 Liquors, malt.....	31	6,348	6	133	537	26	5,646	Au 6,522	De 5,174	5,821	5,266	493	59	30,456			
61 Lumber and timber products.....	1,098	15,814	1,289	508	400	95	13,522	No 14,025	Ja 12,671	16,142	15,763	88	284	49,566			
62 Marble and stone work.....	169	1,710	174	98	76	20	1,342	Se 1,481	Ja 952	1,419	1,416	2	1	4,306			
63 Mattresses and spring beds.....	33	439	28	31	24	11	345	Oc 378	Au 295	373	314	51	6	810			
64 Millinery and lace goods.....	35	1,143	28	51	41	89	934	Mh 1,852	Je 515	867	127	701	3	30	64		
65 Mirrors.....	6	106	3	9	19	6	69	Oc 78	Ja 61	70	69	1	1	86			
66 Models and patterns, not including paper patterns.	20	161	18	11	8	4	120	No 140	Ap 101	138	119	15	4	101			

*No figures given for reasons explained in the Introduction.

MANUFACTURES—MISSOURI.

THE STATE, BY INDUSTRIES: 1909.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.			Miscellaneous.				
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$444,343,135	\$522,275,887	\$13,003,746	\$15,990,176	\$60,842,776	\$9,769,086	\$344,622,065	\$3,180,593	\$11,436,506	\$2,667,451	\$40,743,488	\$574,111,070	\$219,699,919
2 1,724,069	804,187	40,301	30,641	219,112	10,853	487,608	2,405	5,174	75	76,898	981,458	476,907
3 328,958	277,072	16,835	8,682	92,118	2,137	135,009	4,636	927	1,600	15,608	351,585	214,379
4 799,848	1,494,317	59,852	24,093	261,848	8,523	1,016,621	21,850	2,366	4,850	103,403	1,070,840	651,680
5 930,281	1,703,280	53,413	64,200	193,475	7,074	1,199,362	30,288	4,062	.....	150,420	1,784,124	576,783
6 88,399	269,544	11,243	13,486	18,911	1,035	203,302	3,168	383	78	17,438	294,900	90,123
7 26,143	30,272	1,650	900	8,434	322	16,827	1,805	138	.....	193	40,988	22,939
8 472,429	410,899	24,440	16,322	31,831	3,865	285,708	3,150	1,173	.....	44,905	445,358	155,785
9 224,090	531,930	30,311	27,230	55,201	4,656	293,245	11,339	1,508	.....	97,437	600,365	297,404
10 15,837,749	40,532,538	507,220	928,287	8,103,815	155,519	34,384,182	102,235	87,341	183,200	2,020,679	48,751,235	14,211,534
11 98,019	138,355	10,301	5,200	32,476	2,050	73,604	4,192	198	.....	10,208	164,099	89,045
12 932,853	1,280,498	80,082	38,085	371,667	27,256	642,125	37,402	3,886	300	70,095	1,376,340	706,959
13 1,025,133	2,006,732	46,707	32,905	196,300	21,146	1,632,893	4,120	4,053	.....	65,053	2,221,038	537,089
14 17,043,475	16,113,211	243,455	742,794	2,487,491	280,491	10,539,848	271,801	70,702	13,938	1,453,036	15,523,326	7,694,492
15 7,135,407	3,040,887	168,222	58,185	1,408,929	710,154	303,167	8,702	29,799	77,983	216,846	3,076,274	2,033,953
16 399,192	601,413	13,785	11,220	88,504	3,636	407,048	4,704	1,077	22,845	48,965	705,373	297,680
17 69,770	119,684	4,740	4,026	27,822	707	71,353	3,180	307	.....	6,649	140,474	68,414
18 700,817	2,764,960	30,394	38,023	100,267	20,721	2,478,295	10,070	8,225	36	75,020	2,958,818	459,802
19 180,269	211,987	5,484	856	107,713	3,068	82,894	1,874	235	.....	8,963	265,730	178,874
20 1,780,772	1,452,513	43,232	83,973	185,873	14,374	900,635	8,340	4,422	.....	121,664	1,673,835	568,823
21 12,564	20,227	.....	.....	10,101	949	3,302	2,185	113	370	3,117	33,536	29,195
22 7,883,082	7,640,070	284,196	175,184	1,780,049	62,083	4,707,747	103,010	32,782	8,075	401,814	8,408,856	3,609,023
23 7,437,664	9,811,812	173,545	294,692	5,096,627	263,732	3,850,520	4,400	10,966	.....	94,331	9,811,812	5,633,559
24 1,169,641	1,203,000	21,220	10,021	620,462	7,474	493,710	.....	16,804	.....	33,930	1,203,000	702,470
25 3,950,186	3,356,570	110,832	218,444	333,338	61,982	2,161,982	9,300	20,806	.....	430,886	3,640,116	1,416,152
26 8,169,057	13,849,278	244,777	500,162	2,904,001	62,834	9,008,976	123,895	24,137	153,271	737,075	15,407,193	6,335,883
27 2,383,665	5,041,769	157,758	179,625	1,137,458	27,232	3,153,065	104,216	5,931	19,513	256,971	5,430,053	2,258,756
28 5,272,818	11,236,458	220,952	615,941	342,019	73,125	9,118,464	96,478	21,897	38,145	709,467	12,061,868	2,870,277
29 1,200,662	1,427,370	42,610	102,029	296,036	6,407	709,588	14,485	5,349	.....	190,880	1,566,158	789,133
30 2,931,362	5,054,947	181,109	337,780	769,560	46,101	3,888,272	70,758	12,430	.....	639,919	6,058,966	2,724,613
31 1,929,447	2,738,801	73,592	28,312	558,116	21,539	1,880,202	19,439	11,015	2,350	144,230	3,079,308	1,177,627
32 5,716,000	7,038,203	240,767	214,928	1,482,058	40,754	4,548,386	115,512	27,517	3,091	347,190	7,829,669	3,228,529
33 943,381	569,151	29,068	13,084	177,320	12,725	280,241	4,036	3,565	30	49,082	600,395	307,429
34 35,220	54,531	4,949	1,241	9,318	860	31,554	555	227	500	5,327	75,942	43,528
35 71,836	98,328	6,672	4,948	7,036	420	71,114	2,500	301	.....	5,328	115,798	44,255
36 3,883,357	2,483,933	176,806	227,873	626,627	29,273	1,075,017	36,202	12,125	.....	299,950	3,250,535	2,146,245
37 59,793	100,302	5,770	1,004	56,132	8,433	14,931	8,815	373	.....	4,235	126,623	103,259
38 10,625	24,392	1,201	.....	16,614	1,364	3,240	1,873	47	.....	53	30,900	25,096
39 55,661	78,952	7,950	4,528	17,508	783	32,093	3,500	211	700	11,109	93,164	59,778
40 17,065,740	41,525,008	369,155	273,474	1,040,420	395,519	38,480,100	27,232	67,069	8,631	913,009	44,508,108	5,682,478
41 3,060,660	5,040,195	81,535	168,405	213,832	32,324	4,222,120	44,021	18,857	.....	259,011	5,383,636	1,129,194
42 20,870,221	17,556,820	919,464	154,220	4,859,777	347,786	8,807,931	151,614	71,968	166,939	1,477,121	19,075,149	10,819,432
43 217,730	270,291	17,000	18,413	45,183	920	146,798	20,340	914	.....	20,723	318,970	166,252
44 399,352	699,581	17,095	47,197	106,379	2,054	488,123	17,940	565	.....	19,564	330,736	340,559
45 6,708,409	6,540,923	375,044	218,720	1,018,061	63,171	3,263,398	75,885	37,348	.....	583,667	7,380,001	4,053,522
46 546,320	612,894	38,710	38,484	144,103	6,889	319,928	18,808	2,386	.....	43,586	641,562	314,745
47 33,928,814	2,962,194	108,164	248,747	635,548	1,110,129	107,326	3,196	320,606	59	413,419	4,637,544	3,414,089
48 8,733,193	2,038,901	94,945	55,026	758,491	323,063	622,783	.....	13,081	.....	169,712	1,992,853	1,046,137
49 63,435	114,514	12,980	4,306	37,410	1,537	44,523	8,380	431	100	4,847	154,878	109,818
50 152,570	394,744	24,042	13,122	106,210	3,166	214,918	11,892	507	.....	20,287	440,082	221,998
51 29,042	58,353	2,500	1,820	14,740	1,544	20,084	6,900	135	.....	10,630	76,554	54,926
52 6,947,040	1,612,565	132,245	50,901	471,583	471,106	196,106	70,800	33,317	7	186,600	2,083,886	1,416,674
53 5,299,135	5,032,446	80,545	124,247	1,320,285	274,802	2,584,183	2,000	15,813	.....	624,571	5,012,227	2,153,842
54 747,457	725,140	34,680	31,191	272,111	2,780	320,514	23,662	1,042	.....	38,860	872,697	549,403
55 817,708	241,197	19,667	5,388	67,733	19,657	87,852	3,262	1,684	.....	35,954	323,080	216,471
56 4,678,653	5,854,836	193,012	261,204	1,037,186	30,954	3,763,515	104,500	19,044	27,156	418,265	6,508,347	2,713,878
57 1,478,051	1,838,546	36,050	6,437	145,543	11,848	1,587,017	1,170	6,210	.....	44,266	2,034,979	436,114
58 2,399,811	884,914	44,184	17,134	317,485	206,701	254,134	1,400	2,894	53	40,839	1,031,937	570,411
59 345,827	545,704	10,780	6,720	14,049	6,803	93,997	1,570	405,440	205	6,190	612,931	512,131
60 44,651,874	22,403,040	606,552	700,433	3,907,049	547,158	7,020,598	11,260	4,469,708	.....	5,139,684	27,440,504	19,878,748
61 18,929,837	19,563,458	689,064	416,899	5,897,120	109,882	10,503,771	69,072	126,244	558,654	1,192,752	23,280,926	12,647,273
62 3,079,438	2,942,810	144,592	73,845	680,231	88,901	1,357,741	32,269	13,780	41,583	200,877	3,440,706	1,994,004
63 879,518	809,614	36,103	23,549	186,638	8,038	449,186	13,515	3,359	400	88,770	958,079	601,755
64 537,041	1,462,277	81,085	48,521	276,769	8,207	877,094	40,355	2,945	.....	127,321	1,640,618	761,817
65 119,812	214,590	16,940	7,870	41,273	2,664	113,225	4,370	291	.....	27,857	232,033	116,144
66 84,689	189,848	14,668	10,524	89,359	4,178	46,838	8,695	494	75	15,117	236,750	185,784

* Same number reported for one or more other months.

TABLE II.—DETAIL STATEMENT FOR THE

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.				Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number.		Male.		Female.	Male.	Female.		
								Maximum month.	Minimum month.							
67 Musical instruments and materials, not specified.	4	14	3	3			8	My ¹ 8	Ja ¹ 7	8	8					2
68 Optical goods.	5	72		7	7	4	54	Se 59	Ja 50	52	47	3	2			29
69 Paint and varnish.	32	1,034	4	98	202	45	685	Oc 759	Ja 492	647	599	41	5	2		2,706
70 Paper goods, not elsewhere specified.	11	493	5	22	14	17	435	De 402	Je 403	463	170	252	1	39		309
71 Patent medicines and compounds and druggists' preparations.	185	1,057	150	172	398	257	980	Mh 1,081	Ja 917	1,020	411	538	8	13		906
72 Photographic apparatus and materials.	4	304		17	29	10	248	No 256	Fe 241	254	161	74	11	8		750
73 Photo-engraving.	18	269	13	24	34	11	187	Se 202	Jy 170	218	200	9	9			89
74 Pipes, tobacco.	7	336	5	13	9	2	307	Fe 335	No 268	293	236	42	11	4		243
75 Pottery, terra-cotta, and fire-clay products.	29	3,437	11	74	181	33	3,138	De 3,566	Ja 2,553	3,573	3,561	7	5			7,848
76 Printing and publishing.	1,322	15,702	1,243	854	2,076	829	10,790	De 11,218	Jy 10,503	11,265	3,056	2,931	200	78		10,472
77 Pumps, not including steam pumps.	5	53	4	6	6	3	34	Se ¹ 41	Mh ¹ 29	39	37	2				94
78 Scales and balances.	3	102	2	8	10	3	79	No ¹ 104	Je ¹ 69	104	104					110
79 Show cases.	8	237	3	12	11	2	209	Oc 225	Ja 198	222	221	1				100
80 Signs and advertising novelties.	14	220	12	10	32	18	148	Oo 176	Mh 94	155	129	23	3			20
81 Slaughtering and meat packing.	45	5,529	34	95	647	79	4,674	Fe 4,903	My 4,367	4,822	4,658	153	6			11,735
82 Soap.	10	838	3	20	231	30	554	Ap 577	Ja 527	554	426	123	1	14		954
83 Stereotyping and electrotyping.	7	143	5	12	13	3	110	No ¹ 114	Jy ¹ 104	114	108					208
84 Stoves and furnaces, including gas and oil stoves.	20	2,430	4	87	285	41	2,013	No 2,267	Ja 1,337	2,227	2,207	2	18			2,241
85 Surgical appliances and artificial limbs.	15	67	12	6	7	5	37	Ap ¹ 38	Ja ¹ 37	37	30	7				16
86 Tobacco manufactures.	477	5,980	511	141	816	59	4,453	Fe 4,650	Ap 4,000	4,680	2,916	1,095	60	9		2,034
87 Type founding and printing materials.	7	234	3	9	42	16	164	Oc 183	Au 146	181	124	36	12	9		126
88 Wirework, including wire rope and cable.	14	865	9	23	109	14	710	Au 761	Ja 588	747	689	55	3			902
89 All other industries ² .	550	17,987	419	654	1,151	293	15,470									38,871

¹ Same number reported for one or more other months.

² All other industries embrace—

Artificial flowers and feathers and plumes.	3	Clocks and watches, including cases and materials.	2	Fuel, manufactured.	1
Axle grease.	3	Clothing, horse.	1	Furs, dressed.	2
Babbitt metal and solder.	6	Cordage and twine and jute and linen goods.	4	Galvanizing.	1
Bags, other than paper.	2	Cordials and sirups.	5	Glass, cutting, staining and ornamenting.	18
Bags, paper.	2	Cork, cutting.	1	Gloves and mittens, leather.	2
Bicycles, motorcycles, and parts.	2	Corsets.	2	Glucose and starch.	1
Billiard tables and materials.	3	Cotton goods, including cotton small wares.	2	Glue.	1
Bluing.	4	Dyeing and finishing textiles.	2	Grease and tallow.	8
Boots and shoes, rubber.	1	Engravers' materials.	2	Hair work.	5
Butter, reworking.	1	Engraving and diesinking.	4	Hats, straw.	2
Calcium lights.	2	Engraving, wood.	10	Hosiery and knit goods.	2
Candles.	1	Explosives.	3	House-furnishing goods, not elsewhere specified.	5
Carriages and sleds, children's.	1	Fancy articles, not elsewhere specified.	2	Ink, printing.	2
Cars, steam-railroad, not including operations of railroad companies.	7	Fertilizers.	5	Ink, writing.	1
Cars, street-railroad, not including operations of railroad companies.	2	Firearms and ammunition.	1	Instruments, professional and scientific.	4
Cash registers and calculating machines.	4	Fire extinguishers, chemical.	3	Iron and steel, blast furnaces.	2
Cement.	4	Fireworks.	1	Iron and steel, bolts, nuts, washers and rivets, not made in steel works or rolling mills.	1
Charcoal.	1	Flavoring extracts.	12	Iron and steel, doors and shutters.	1
		Foundry supplies.	1	Iron and steel forgings.	1

MANUFACTURES—MISSOURI.

663

STATE, BY INDUSTRIES: 1909—Continued.

Capital.	EXPENSES.									Value of products.	Value added by manufacture.	
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.			Other.
67	\$26,880	\$19,142	\$4,311	\$4,885	\$219	\$7,901	\$980	\$49	\$797	\$24,973	\$16,853	
68	92,103	148,230	8,320	\$7,633	30,193	1,730	73,811	4,020	406	22,126	170,591	95,050
69	5,294,896	6,206,094	238,906	264,150	366,164	47,258	4,651,002	32,505	\$300	579,988	6,827,747	2,129,487
70	798,192	800,723	51,651	22,873	177,932	7,500	439,030	12,483	2,850	84,503	921,760	475,230
71	5,125,636	5,891,917	437,416	561,118	415,439	24,531	2,511,536	90,881	20,984	49,525	7,639,159	5,103,042
72	1,463,608	1,010,270	58,780	43,954	136,103	13,358	570,920	600	26,706	159,849	1,415,472	831,194
73	161,408	388,099	34,557	27,757	164,527	6,779	75,001	14,239	424	7,573	450,409	308,629
74	242,477	320,704	14,943	8,422	106,731	3,321	166,041	398	2,850	57,242	395,606	226,244
75	13,246,816	3,493,528	102,648	212,224	1,554,141	499,731	576,438	0,650	40,016	4,767	4,068,701	2,992,532
76	21,998,017	25,140,164	1,730,506	2,525,240	6,609,759	294,408	8,332,344	543,702	87,774	810,272	29,651,153	21,024,401
77	98,485	115,772	7,200	14,181	16,744	901	65,496	1,842	240	800	146,375	79,973
78	145,601	177,666	13,600	7,877	43,506	2,406	69,028	2,860	460	3,329	201,311	129,277
79	314,201	360,390	22,288	8,711	137,417	4,902	165,374	10,656	1,234	9,748	433,085	262,749
80	349,975	525,470	15,399	33,442	126,103	1,411	160,275	10,534	605	14,114	582,896	421,210
81	18,788,840	78,268,807	225,120	619,647	2,672,620	303,710	71,834,554	18,953	35,161	2,499,042	79,581,294	7,383,030
82	2,658,565	4,063,899	60,533	171,054	271,640	38,111	3,016,588	6,023	8,940	90,000	4,719,352	1,664,653
83	124,248	195,939	27,175	12,558	83,699	6,424	49,750	6,357	444	600	220,155	163,081
84	8,294,920	5,690,347	264,966	331,060	1,420,432	43,546	2,302,799	25,555	41,712	759,677	6,712,698	3,860,353
85	83,020	103,031	12,834	5,928	24,304	703	21,482	7,760	272	666	143,311	121,126
86	17,341,649	20,124,106	438,737	932,924	2,235,083	69,068	16,476,848	65,443	4,782,264	97	4,123,642	14,404,722
87	571,147	303,639	27,320	35,087	83,440	5,105	87,699	11,716	1,737	51,520	337,977	245,173
88	2,299,532	2,745,331	104,318	146,111	378,935	21,517	1,712,634	6,393	11,026	364,397	3,396,27	1,662,128
89	61,522,777	62,424,259	1,390,227	1,299,273	8,423,734	2,207,070	44,371,427	256,543	257,442	350,609	67,056,680	20,478,133

*All other industries embrace—Continued.

Jewelry and instrument cases.....	2	Peanuts, grading, roasting, cleaning, and shell-	2	Steam packing.....	2
Labels and tags.....	7	ing.....	2	Tin foil.....	1
Lard, refined, not made in slaughtering and	1	Petroleum, refining.....	1	Toys and games.....	5
meat-packing establishments.....	1	Roofing materials.....	5	Umbrellas and canes.....	4
Lasts.....	1	Saws and vaults.....	1	Upholstering materials.....	3
Lead, bar, pipe, and sheet.....	2	Saws.....	2	Vault lights and ventilators.....	1
Liquors, vinous.....	0	Screws, machine.....	1	Vinegar and cider.....	24
Looking-glass and picture frames.....	11	Sewing machines, cases, and attachments.....	2	Washing machines and clothes wringers.....	5
Malt.....	4	Shipbuilding, including boat building.....	1	Wheelbarrows.....	1
Mineral and soda waters.....	176	Silverware and plated ware.....	1	Whips.....	1
Mucilage and paste.....	7	Smelting and refining, copper.....	1	Window shades and fixtures.....	5
Musical instruments, pianos and organs and	5	Smelting and refining, lead.....	5	Wood distillation, not including turpentine and	1
materials.....	5	Smelting and refining, zinc.....	2	rosin.....	1
Oil, castor.....	1	Smelting and refining, not from the ore.....	1	Wood preserving.....	3
Oil, cottonseed, and cake.....	4	Soda-water apparatus.....	2	Wood, turned and carved.....	35
Oil, linseed.....	2	Sporting and athletic goods.....	6	Wool pulling.....	3
Oil, not elsewhere specified.....	2	Springs, steel, car and carriage.....	3	Wool scouring.....	1
Oleomargarine.....	1	Stationery goods, not elsewhere specified.....	3	Woolen, worsted, and felt goods, and wool hats.....	2
Paper and wood pulp.....	1	Statuary and art goods.....	7		

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES,
CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES.
KANSAS CITY.

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	Male.	Female.		Under 16.	Male.	Female.	Male.	Female.		
1 All industries.....	902	18,651	757	825	1,765	661	14,643	10,841	3,562	240	15,740	11,659	3,827	143	111	36,064	
2 Bread and other bakery products.....	107	1,739	103	28	198	30	1,375	789	583	3	1,591	913	674	4		847	
3 Brick and tile.....	5	374	2	9	10		353	353			377	377				480	
4 Brooms.....	3	24	3		2	1	18	18			24	24				27	
5 Brushes.....	3	11	2		1		8	8			8	8				17	
6 Carriages and wagons and materials.....	11	158	4	17	5	2	130	124	6		142	135	7			252	
7 Cars and general shop construction and repairs by steam-railroad companies.....	4	703		12	27	2	662	660	2		791	789	2			415	
8 Clothing, men's, including shirts.....	15	857	11	10	10	7	819	67	748	4	906	74	827	1	4	199	
9 Coffee and spice, roasting and grinding.....	10	211	5	25	66	8	107	56	44	7	105	55	43	4	3	350	
10 Confectionery.....	10	254	8	5	19	8	214	78	133	3	232	85	144	3	3	242	
11 Copper, tin, and sheet-iron products.....	59	681	62	28	24	14	553	527	24	2	601	573	26	2	3	407	
12 Cutlery and tools, not elsewhere specified.....	4	19	4				15				16	12	3	1		7	
13 Flour-mill and gristmill products.....	8	202	3	17	30	3	209	209			238	238				3,210	
14 Foundry and machine-shop products.....	58	868	32	78	72	41	645	627	4	14	724	704	4	16		1,223	
15 Furniture and refrigerators.....	20	361	18	22	19	9	293	282	7	4	348	335	8	5		602	
16 Hand stamps and stencils and brands.....	4	32	5	6	2	1	18	17			18	17				12	
17 Ice, manufactured.....	7	171		16	14	1	140	140			180	180				4,830	
18 Leather goods.....	21	516	19	22	54	15	406	349	55	2	423	364	57	2		204	
19 Lumber and timber products.....	26	942	22	37	68	13	802	768	4	30	825	790	4	31		1,856	
20 Marble and stone work.....	12	236	11	12	8	4	201	201			198	198				379	
21 Mattresses and spring beds.....	7	94	4	8	6	2	74	59	12	3	97	77	16	2	2	136	
22 Models and patterns, not including paper patterns.....	5	20	6				14	14			13	13				29	
23 Patent medicines and compounds and druggists' preparations.....	46	184	28	24	38	24	70	32	35	3	85	39	42	3	1	68	
24 Printing and publishing.....	179	3,306	142	164	570	268	2,192	1,696	471	25	2,330	1,807	502	18	9	8,961	
25 Surgical appliances and artificial limbs.....	7	33	5	5	4	5	14	13	1		14	13	1			10	
26 All other industries ¹	271	6,565	253	280	518	203	5,311	3,743	1,430	138	5,448	3,839	1,407	53	89	11,291	

¹ All other industries embrace: Agricultural implements, 3; artificial stone, 4; automobiles, including bodies and parts, 5; awnings, tents, and sails, 3; axle grease, 1; babbitt metal and solder, 2; bags, other than paper, 2; baskets, and rattan and willow ware, 1; belting and hose, leather, 1; billiard tables and materials, 1; blacking and cleansing and polishing preparations, 6; bluing, 1; boots and shoes, including cut stock and findings, 2; boxes, cigar, 2; boxes, fancy and paper, 4; brass and bronze products, 6; butter, cheese, and condensed milk, 2; butter, reworking, 1; buttons, 1; calcium lights, 1; canning and preserving, 5; carpets, rag, 2; cars and general shop construction and repairs by street-railroad companies, 1; cars, steam-railroad, not including operations of railroad companies, 2; chemicals, 2; clocks and watches, including cases and materials, 1; clothing, women's, 8; coffins, burial cases, and undertakers' goods, 2; cooperage and wooden goods, not elsewhere specified, 2; cordials and syrups, 1; cotton goods, including cotton small wares, 1; dentists' materials, 1; electrical machinery, apparatus, and supplies, 1; electroplating, 2; engraving and disinking, 2; engraving, wood, 1; fancy articles, not elsewhere specified, 1; fertilizers, 1; flags, banners, regalia, society badges, and emblems, 1; flavoring extracts, 2; food preparations, 12; fuel, manufactured, 1; fur goods, 3; furnishing goods, men's, 2; gas and electric fixtures and lamps and reflectors, 3; glass, 1; glass, cutting, staining, and ornamenting, 3;

ST. LOUIS.

1 All industries.....	2,667	104,587	1,869	3,637	9,308	2,402	87,371	65,802	19,105	2,464	93,447	69,912	20,894	1,460	1,181	163,615
2 Automobiles, including bodies and parts.....	11	340	2	30	18	8	282	275	7		329	321	8			130
3 Baking powders and yeast.....	6	65	4	7	6	3	45	20	25		47	21	26			150
4 Blacking and cleansing and polishing preparations.....	23	164	17	19	23	8	97	62	34	1	99	63	35	1		
5 Boots and shoes, including cut stock and findings.....	33	13,006	3	145	529	191	12,138	7,370	3,866	902	12,832	7,791	4,087	607	347	7,547
6 Boxes, fancy and paper.....	19	865	9	35	21	10	790	218	467	105	908	250	537	16	105	493
7 Brass and bronze products.....	11	325	6	18	28	4	269	268		1	303	302		1		385
8 Bread and other bakery products.....	448	3,317	483	78	306	141	2,264	1,672	524	68	2,344	1,731	542	5	66	8,018
9 Brick and tile.....	7	1,839		23	38	5	1,773	1,728		45	1,638	1,592		41		2,632
10 Brooms.....	15	69	16	2	1		50	50			57	57				26
11 Brushes.....	8	52	8	5	5		34	34			34	34				7
12 Canning and preserving.....	9	293	10	9	73	10	101	111	80		208	121	87			161
13 Carriages and wagons and materials.....	77	2,500	53	101	114	38	2,254	2,178	65	11	2,175	2,102	63	9	1	3,144
14 Cars and general shop construction and repairs by steam-railroad companies.....	5	1,775		14	82	2	1,677	1,671	6		1,715	1,709	6			1,455
15 Clothing, men's, including shirts.....	50	5,246	32	75	341	47	4,751	3,706	154	5,372	1,007	4,191	17	157		879
16 Clothing, women's.....	58	2,745	49	71	137	49	2,439	1,910	50	2,630	1,507	2,050	1	63		438
17 Coffee and spice, roasting and grinding.....	23	1,091	6	61	357	67	570	331	207	32	581	337	211	27	6	1,886
18 Coffins, burial cases, and undertakers' goods.....	6	590		23	71	12	490	387	93	10	487	385	92	5	5	608
19 Confectionery.....	25	1,453	14	43	133	41	1,222	471	723	28	1,510	582	894	4	30	823
20 Cooperage and wooden goods, not elsewhere specified.....	22	1,034	15	33	20	8	958	917	9	32	857	820	8	29		1,942
21 Copper, tin, and sheet-iron products.....	100	2,188	85	84	150	36	1,833	1,644	154	35	1,949	1,748	104	28	9	976
22 Cutlery and tools, not elsewhere specified.....	13	236	13	11	4	8	200	194	4	2	220	219	5	2		472
23 Electrical machinery, apparatus, and supplies.....	16	912	7	53	116	37	699	491	177	31	770	545	197	2	32	650
24 Electroplating.....	12	88	13	8		1	66	62		4	68	64		4		115
25 Enameling and japanning.....	3	32	3	1			28	27		1	31	30		1		
26 Flour-mill and gristmill products.....	8	181	2	14	25	4	136	136			129	129				2,027
27 Food preparations.....	21	559	18	28	103	28	382	250	124	8	404	265	131	6	2	946
28 Foundry and machine-shop products.....	160	6,350	80	334	533	105	5,298	5,232	21	45	5,517	5,448	22	47		8,652
29 Furniture and refrigerators.....	65	3,310	22	159	204	43	2,882	2,735	74	73	3,078	2,921	79	78		5,163
30 Gas and electric fixtures and lamps and reflectors.....	7	257	4	20	25	6	202	184	1	17	238	217	1	20		185
31 Hand stamps and stencils and brands.....	7	58	7	6	2	1	42	35		7	45	38		7		22

MANUFACTURES—MISSOURI.

665

AND TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909.

CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES.

KANSAS CITY.

	Capital.	EXPENSES.										Value of products.	Value added by manufacture.	
		Total.	Services.			Materials.			Miscellaneous.					
			Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.			
1	\$42,728,579	\$49,462,770	\$1,508,894	\$1,968,992	\$8,525,620	\$756,170	\$30,205,689	\$657,755	\$807,675	\$338,464	\$4,893,511	\$54,704,510	\$23,742,651	
2	5,358,872	5,094,335	67,885	218,827	726,398	58,258	3,431,617	49,706	14,920	12,967	513,948	5,616,784	2,126,900	
3	639,463	349,618	16,310	10,705	160,903	92,137	20,250	1,800	2,029		35,494	389,048	267,661	
4	13,360	34,344		1,089	11,175	644	18,862		254		1,430	44,400	24,904	
5	8,893	25,228		1,080	6,847	267	15,032		804		1,102	32,970	17,671	
6	232,066	240,596	16,345	3,829	78,205	3,631	124,089	4,956	980		8,561	270,305	142,585	
7	1,040,569	883,003	16,569	32,583	508,210	21,604	293,128		1,875		0,025	883,003	508,271	
8	459,063	1,019,285	15,801	10,012	301,797	5,733	624,918	21,776	1,022		28,326	1,129,139	498,488	
9	564,684	1,678,358	59,000	67,986	51,085	9,693	1,383,660	14,820	2,861	38,145	54,069	1,878,789	485,427	
10	455,871	768,611	17,743	20,402	76,427	6,062	506,032	12,720	1,251		127,974	990,139	478,045	
11	1,025,116	1,376,116	51,777	25,232	349,451	10,020	817,710	26,055	3,345	1,570	90,947	1,574,998	747,259	
12	38,977	23,483			9,281	813	10,876	1,500	149	30	774	34,830	23,141	
13	1,086,631	4,377,105	38,620	32,170	92,752	29,537	4,072,868	11,825	3,222		96,201	4,506,655	404,250	
14	2,305,703	1,627,941	119,649	67,627	460,782	21,937	752,894	20,733	8,038	7,239	170,042	1,826,401	1,051,570	
15	557,880	735,103	32,075	22,520	189,367	9,036	397,285	14,000	2,763		68,157	834,550	428,238	
16	12,451	42,538	5,160	1,034	11,635	706	16,694	3,200	157	100	3,212	51,267	33,807	
17	1,603,265	382,873	24,913	15,658	118,272	70,209	33,620	58,657	4,440		57,104	306,282	202,453	
18	1,119,771	1,478,567	32,301	48,281	263,822	4,074	1,012,181	25,103	3,165	75	88,695	1,568,300	551,205	
19	1,811,226	3,047,482	70,570	80,477	518,558	12,242	2,128,882	12,630	9,093	52,428	153,602	3,398,164	1,257,030	
20	285,441	514,706	17,610	8,435	156,212	6,443	248,264	6,325	1,309	17,947	52,161	506,393	311,686	
21	97,591	213,981	6,721	4,190	44,254	1,575	131,671	5,227	674		19,769	237,392	104,146	
22	8,507	17,594			11,235	602	3,895	1,435	44		323	25,558	21,001	
23	447,114	871,323	24,470	59,457	26,202	2,079	159,487	14,727	2,231	150	82,520	466,837	305,271	
24	4,157,923	6,320,691	348,102	627,653	1,465,429	62,996	2,288,615	132,829	14,878	185,105	1,195,084	7,547,852	5,196,241	
25	13,523	85,292	10,534	3,394	8,800	357	11,052	3,772	166	66	26,221	78,731	66,722	
26	19,871,689	18,774,277	619,439	596,931	2,878,522	324,396	11,092,608	204,095	527,004	22,642	2,008,740	20,355,574	8,338,670	

glucose and starch, 1; hair work, 2; hats and caps, other than felt, straw, and wool, 3; hats, fur-felt, 3; hosiery and knit goods, 2; house-furnishing goods, not elsewhere specified, 2; ink, printing, 1; ink, writing, 1; iron and steel, steel works and rolling mills, 1; iron and steel, doors and shutters, 1; jewelry, 10; labels and tags, 1; lard, refined, not made in slaughtering and meat-packing establishments, 1; liquors, malt, 3; looking-glass and picture frames, 4; millinery and lace goods, 14; mineral and soda waters, 9; mullage and paste, 2; musical instruments, pianos and organs and materials, 3; oil, castor, 1; oil, linseed, 1; oil, not elsewhere specified, 1; optical goods, 3; paint and varnish, 7; paper and wood pulp, 1; paper goods, not elsewhere specified, 2; photo-engraving, 5; pottery, terra-cotta, and fire-clay products, 1; roofing materials, 2; saws and saws, 1; scales and balances, 1; show cases, 2; signs and advertising novelties, 7; slaughtering and meat packing, 3; stationery goods, not elsewhere specified, 1; statuary and art goods, 1; steam packing, 1; stereotyping and electrotyping, 2; stoves and furnaces, including gas and oil stoves, 2; tobacco manufactures, 3; toys and games, 1; type founding and printing materials, 2; umbrellas and canes, 2; upholstering materials, 1; vinegar and cider, 3; washing machines and clothes wringers, 1; window shades and fixtures, 3; wirework, including wire rope and cable, 2; wood, turned and carved, 1.

ST. LOUIS.

1	\$289,392,377	\$297,246,790	\$8,522,017	\$11,148,894	\$48,534,989	\$5,033,407	\$183,155,756	\$2,111,737	\$10,112,702	\$1,393,476	\$27,233,812	\$328,495,313	\$140,306,150
2	620,371	1,079,644	45,252	16,043	107,452	5,516	721,282	9,832	2,102	30	81,535	1,302,283	575,485
3	89,309	209,544	11,243	13,480	18,911	1,035	203,802	3,108	383	78	17,438	264,960	90,123
4	207,008	509,465	34,090	20,880	52,577	4,476	286,181	10,549	1,468		93,238	570,914	280,258
5	10,592,837	32,540,576	346,411	644,482	6,169,631	98,433	23,636,735	90,107	67,006		1,487,711	33,070,372	10,235,204
6	680,947	905,063	61,429	10,131	286,224	21,129	442,775	22,800	2,416	300	48,859	950,532	495,628
7	963,035	1,981,732	43,197	32,065	170,661	20,080	1,611,755	2,730	4,477		66,867	2,164,768	532,933
8	7,076,877	7,410,205	139,761	425,237	1,223,055	162,091	4,602,815	160,388	40,433	865	661,552	8,023,641	3,858,735
9	4,630,290	1,829,066	73,160	38,450	889,945	380,025	237,943	5,247	22,919	69,961	114,416	2,109,064	1,580,096
10	36,966	94,704	1,640	200	25,050	904	62,635	1,688	194		1,555	118,006	64,467
11	59,877	94,456	4,740	3,846	20,975	440	56,321	2,376	211		5,547	107,504	50,743
12	975,608	888,381	21,047	75,474	75,206	4,554	623,512	5,061	2,600		79,847	962,193	334,127
13	5,145,688	5,846,907	210,644	150,173	1,241,511	35,806	3,802,235	85,505	22,053	1,258	297,832	6,328,164	2,400,323
14	634,132	1,742,491	18,974	60,867	879,126	38,865	720,623		1,178		7,858	1,742,491	977,003
15	5,419,636	8,630,894	173,718	408,008	1,966,168	41,223	5,340,780	87,259	13,094	153,271	447,364	9,687,421	4,305,409
16	2,050,468	4,550,862	142,838	158,618	1,021,016	23,473	2,878,335	96,847	4,980	19,506	295,240	4,886,052	1,934,244
17	4,647,171	8,923,305	158,872	538,400	268,406	50,143	7,157,922	79,798	17,096		648,578	9,513,595	2,206,530
18	1,178,575	1,249,193	80,790	95,276	268,230	4,793	659,746	10,800	4,704		188,994	1,371,092	706,563
19	1,747,211	3,477,777	136,376	213,348	512,420	29,867	2,145,072	53,953	7,898		378,873	3,848,482	1,673,483
20	1,665,935	2,299,340	60,404	26,766	492,551	10,937	1,542,400	17,983	9,674	2,350	127,265	2,592,262	1,029,755
21	4,096,181	4,571,756	171,434	146,400	978,004	35,085	2,042,633	73,735	2,176	1,400	200,799	5,060,190	2,082,472
22	749,810	423,203	23,698	10,107	127,697	8,666	225,447	2,280	2,982		22,520	439,773	205,660
23	1,523,842	1,548,711	136,448	128,066	380,114	21,142	614,987	35,642	8,753		222,769	2,080,635	1,444,506
24	47,563	83,537	5,770	800	44,948	7,070	13,369	7,489	326		3,527	103,419	82,341
25	10,625	24,392	1,201		16,614	1,364	3,240	1,873	47		53	30,600	25,996
26	702,848	3,439,345	48,095	25,451	86,281	18,667	3,191,269	4,369	5,293		59,220	3,551,470	341,434
27	2,377,416	4,134,769	67,179	139,697	169,722	22,350	3,476,557	37,167	16,076		205,505	4,454,774	955,861
28	14,409,474	12,834,617	633,011	674,329	3,517,908	240,393	6,435,486	111,718	108,550	155,873	1,108,550	14,590,834	7,908,955
29	6,089,684	5,438,609	324,158	180,330	1,020,135	49,466	2,685,563	58,002	32,127		488,828	6,110,965	3,375,936
30	490,237	523,087	32,020	32,936	126,313	6,368	279,044	13,978	2,000		32,388	547,044	282,034
31	43,754	65,556	7,820	2,642	25,025	601	23,040	4,820	180		1,379	61,476	67,730

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES, AND CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES—Continued.
ST. LOUIS—Continued.

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).					Total.	16 and over.		Under 16.		
					Male.	Female.	Total.	16 and over.		Under 16.	Male.		Female.	Male.	Female.		
								Male.	Female.								
32 Hats and caps, other than felt, straw, and wool.	9	146	11	6	3	2	124	71	45	8	132	76	48	5	3	31	
33 Ice, manufactured.	9	236	23	23	11	1	201	201	28	11	197	197	29	12	1	8,105	
34 Jewelry.	8	268	4	13	16	11	224	185	28	11	236	195	29	12	7	117	
35 Leather goods.	32	1,204	21	61	145	17	960	845	102	13	951	837	101	12	6	693	
36 Leather, tanned, curried, and finished.	9	246	3	11	8	4	220	219	1	1	221	220	1	1	1	619	
37 Liquors, malt.	10	5,373	81	450	19	4,823	4,349	415	59	5,120	4,617	441	59	3	24,590		
38 Lumber and timber products.	71	3,187	24	160	158	33	2,812	2,669	57	86	2,978	2,827	60	36	5	8,608	
39 Marble and stone work.	39	665	30	42	27	9	557	556	1	1	532	531	1	1	1	1,072	
40 Mattresses and spring beds.	14	222	11	13	12	7	179	152	27	172	146	26	1	1	1	120	
41 Millinery and lace goods.	18	655	13	29	29	70	514	104	388	22	576	116	435	3	22	64	
42 Models and patterns, not including paper patterns.	15	141	12	11	8	4	106	90	13	3	125	106	15	4	1	72	
43 Paint and varnish.	23	869	1	79	157	34	598	561	29	8	550	516	27	5	2	2,139	
44 Patent medicines and compounds and druggists' preparations.	99	1,625	87	136	324	217	862	322	530	10	870	325	535	1	9	800	
45 Photo-engraving.	11	165	8	14	23	6	114	102	4	8	128	114	5	9	1	46	
46 Pottery, terra-cotta, and fire-clay products.	13	2,246	2	60	120	25	2,040	2,041	6	2	2,234	2,225	7	2	1	4,230	
47 Printing and publishing.	347	8,090	226	458	1,280	418	5,708	4,310	1,228	170	5,950	4,493	1,280	125	62	14,333	
48 Slaughtering and meat packing.	24	1,807	19	76	209	34	1,469	1,428	35	6	1,470	1,435	35	6	1	5,515	
49 Stereotyping and electrotyping.	4	120	11	13	2	94	88	1	6	98	92	6	6	1	1	146	
50 Stoves and furnaces, including gas and oil stoves.	13	2,043	2	64	274	35	1,673	1,663	2	8	1,855	1,844	2	9	1	1,826	
51 Surgical appliances and artificial limbs.	8	34	7	1	3	1	23	17	6	23	17	6	1	1	1	6	
52 Wirework, including wire rope and cable.	9	832	6	23	106	14	683	628	52	3	719	661	55	3	1	833	
53 All other industries ¹ .	614	23,401	446	765	2,347	527	19,316	15,087	3,859	370	21,722	16,966	4,340	160	256	39,637	

¹ All other industries embrace: Agricultural implements, 2; artificial flowers and feathers and plumes, 3; artificial stone, 4; awnings, tents, and sails, 11; axle grease, 2; babbitt metal and solder, 3; bags, other than paper, 3; baskets, and rattan and willow ware, 2; belting and hose, leather, 6; bicycles, motorcycles, and parts, 2; billiard tables and materials, 2; bluing, 3; boots and shoes, rubber, 1; boxes, cigar, 2; butter, cheese, and condensed milk, 3; buttons, 2; calcium lights, 1; candles, 1; carpets, rag, 3; carriages and sleds, children's, 1; cars and general shop construction and repairs by street-railroad companies, 1; cars, steam-railroad, not including operations of railroad companies, 3; cars, street-railroad, not including operations of railroad companies, 2; cash registers and calculating machines, 3; chemicals, 7; clocks and watches, including cases and materials, 1; cordage and twine and jute and linen goods, 4; cordials and syrups, 3; cork, cutting, 1; corsets, 2; cotton goods, including cotton small wares, 1; dairymen's, poulterers', and apiarists' supplies, 1; dentists' materials, 3; engravers' materials, 2; engraving and die-sinking, 2; engraving, wood, 6; fancy articles, not elsewhere specified, 1; fertilizers, 2; fire extinguishers, chemical, 3; fireworks, 1; flags, banners, regalia, society badges, and emblems, 5; flavoring extracts, 8; foundry supplies, 1; fur goods, 3; furnishing goods, men's, 8; furs, dressed, 2; galvanizing, 1; gas, illuminating and heating, 1; glass, 1; glass, cutting, staining, and ornamenting, 14; gloves and mittens, leather, 2; glue, 1; grease and tallow, 5; hair work, 2; hats, fur-felt, 1; hats, straw, 2; house-furnishing goods, not elsewhere specified, 2; ink, printing, 1; instru-

ST. JOSEPH.

1 All industries.	261	6,514	213	232	511	168	5,390	3,268	2,035	87	5,632	3,388	2,154	30	60	7,737
2 Boots and shoes, including cut stock and findings.	5	433	5	4	9	5	410	289	120	1	402	283	118	1	1	213
3 Bread and other bakery products.	43	681	42	2	63	26	548	317	180	51	545	315	179	14	37	521
4 Brick and tile.	4	165	6	9	1	1	149	145	4	1	157	153	4	1	1	360
5 Carriages and wagons and materials.	9	62	8	4	1	1	49	49	1	1	44	44	1	1	1	41
6 Clothing, men's, including shirts.	9	1,420	19	65	10	1,326	134	1,184	8	1,397	141	1,248	8	1	1	364
7 Confectionery.	6	430	6	9	87	15	313	110	196	7	387	136	242	1	8	162
8 Cooperage and wooden goods, not elsewhere specified.	3	37	6	1	1	1	28	28	1	1	33	33	1	1	1	24
9 Copper, tin, and sheet-iron products.	12	75	11	4	1	5	54	54	1	1	55	55	1	1	1	1
10 Flour-mill and gristmill products.	7	131	2	10	17	8	94	87	7	1	105	97	8	1	1	1,277
11 Foundry and machine-shop products.	15	283	10	19	17	4	233	233	1	1	250	250	1	1	1	396
12 Leather goods.	10	268	8	5	13	4	238	224	14	1	248	233	15	1	1	110
13 Lumber and timber products.	10	243	10	9	16	8	200	194	6	1	215	209	6	1	1	454
14 Marble and stone work.	4	20	3	1	4	1	12	12	1	1	11	11	1	1	1	15
15 Mattresses and spring beds.	4	21	5	1	1	1	16	15	1	1	16	15	1	1	1	29
16 Patent medicines and compounds and druggists' preparations.	7	21	4	2	4	3	8	5	2	1	11	7	2	2	1	6
17 Printing and publishing.	30	549	25	40	83	33	368	238	129	1	382	247	134	1	1	278
18 All other industries ¹ .	83	1,675	62	94	130	45	1,344	1,134	202	8	1,374	1,159	207	2	6	3,497

¹ All other industries embrace: Agricultural implements, 1; artificial stone, 1; awnings, tents, and sails, 1; boxes, fancy and paper, 1; brooms, 2; butter, cheese, and condensed milk, 4; canning and preserving, 1; carpets, rag, 1; cars and general shop construction and repairs by steam-railroad companies, 2; cars and general shop construction and repairs by street-railroad companies, 1; clothing, horse, 1; clothing, women's, 1; coffee and spice, roasting and grinding, 4; coffins, burial cases, and undertakers' goods, 1; cutlery and tools, not elsewhere specified, 1; dyeing and finishing textiles, 1; electroplating, 2; engraving, wood, 3; food preparations, 2; fur goods, 2; furnishing goods, men's, 2; furniture and refrigerators, 2; glass, cutting, staining, and ornamenting, 1; grease and tallow, 1; hair work, 1; hand stamps and stencils and

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

1 HANNIBAL.	66	2,638	65	75	73	80	2,445	1,808	542	95	2,540	1,878	563	61	38	3,412
2 JEFFERSON CITY.	35	1,572	19	76	116	25	1,336	1,098	208	30	1,349	1,109	210	19	11	1,668
3 JOPLIN.	77	1,089	73	57	104	25	830	659	168	3	968	768	196	2	2	3,102
4 MOBERLY.	31	1,155	29	50	63	14	999	860	118	21	1,134	976	134	24	1	1,276
5 SEDALIA.	75	1,150	66	46	69	34	935	768	163	4	979	804	171	4	1	1,662
6 SPRINGFIELD.	108	2,473	91	70	141	40	2,131	2,020	98	13	2,238	2,121	103	14	1	3,655
7 WEBB CITY.	25	212	24	4	9	5	170	146	24	1	186	160	26	1	1	511

MANUFACTURES—MISSOURI.

TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909—Continued.

CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES—Continued.

ST. LOUIS—Continued.

	Capital.	EXPENSES.									Value of products.	Value added by manufacture.	
		Total.	Services.			Materials.		Miscellaneous.					
			Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.			Other.
22	115,945	280,282	14,800	4,600	77,736	2,288	158,828	9,292	266	.....	14,473	307,293	148,177
23	2,209,680	525,874	33,702	10,120	151,044	206,590	84,673	2,707	13,913	.....	23,125	731,083	439,820
24	147,673	446,310	19,512	12,330	152,947	774	227,719	12,772	382	.....	19,830	532,637	304,144
25	2,292,601	2,775,702	109,826	101,693	514,931	18,248	1,611,088	63,511	10,986	.....	235,419	3,108,181	1,478,795
26	1,478,051	1,838,546	36,050	6,437	145,548	11,848	1,587,017	1,170	6,210	.....	44,266	2,034,979	436,114
27	34,747,224	18,786,305	474,036	603,193	3,339,175	408,242	6,065,418	2,010	3,790,084	.....	4,096,247	23,147,250	16,673,590
28	6,340,072	6,396,742	280,896	162,069	1,660,386	60,136	3,823,890	41,990	33,071	42,633	276,665	7,466,970	3,482,950
29	1,219,755	1,428,983	72,404	40,328	467,670	18,655	704,511	17,843	7,876	18,298	81,329	1,680,056	856,990
30	396,154	396,156	22,250	13,966	106,156	5,035	199,169	0,138	2,134	.....	41,719	462,148	257,944
31	440,308	981,042	59,778	37,333	182,561	6,350	542,527	29,765	2,512	.....	70,216	1,045,408	496,531
32	76,182	172,254	14,608	10,524	78,124	3,516	42,943	7,160	450	75	14,794	211,192	104,733
33	4,661,187	5,004,380	199,386	198,813	315,048	43,202	3,695,023	21,450	23,517	.....	507,941	5,564,021	1,825,796
34	4,566,796	5,256,207	398,796	480,846	364,250	21,035	2,259,645	70,222	18,212	45,710	1,596,482	6,846,391	4,565,711
35	85,099	253,286	24,666	20,729	92,881	4,447	54,477	8,704	223	5,225	41,934	298,001	239,137
36	5,776,838	2,317,742	147,819	147,000	1,060,843	239,332	345,035	0,650	33,358	.....	284,649	2,682,754	2,043,337
37	10,915,429	14,975,497	1,044,182	1,660,625	3,823,547	159,499	4,663,310	300,425	53,706	553,570	2,421,633	17,164,143	12,046,334
38	5,598,026	26,246,456	103,132	173,132	899,580	110,774	23,943,841	15,586	20,177	.....	915,090	26,600,956	2,546,339
39	105,198	174,124	25,875	12,246	71,708	5,426	45,120	6,100	339	.....	8,250	193,635	142,989
40	7,264,137	4,965,678	217,762	317,482	1,198,582	20,288	2,423,236	24,355	38,755	.....	711,218	5,923,388	3,465,804
41	69,497	37,760	2,000	2,534	15,504	346	9,830	3,988	100	600	2,861	64,580	54,404
42	2,241,838	2,684,409	104,318	142,811	364,932	21,075	1,076,162	2,373	10,936	.....	361,812	3,323,043	1,625,816
43	97,526,632	83,962,362	1,888,364	2,726,321	10,503,942	2,237,783	52,064,652	358,564	5,667,495	322,473	8,132,708	91,004,140	36,701,705

ments, professional and scientific, 4; iron and steel, blast furnaces, 1; iron and steel, steel works and rolling mills, 3; iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills, 1; iron and steel forgings, 1; jewelry and instrument cases, 2; kaolin and ground earths, 1; labels and tags, 6; lasts, 1; lead, bar, pipe, and sheet, 2; liquors, vinous, 1; looking-glass and picture frames, 7; malt, 4; mineral and soda waters, 33; mirrors, 6; mucilage and paste, 6; musical instruments and materials, not specified, 2; musical instruments, pianos and organs and materials, 2; oil, cottonseed, and cake, 1; oil, not elsewhere specified, 1; oleomargarine, 1; optical goods, 2; paper goods, not elsewhere specified, 9; peanuts, grading, roasting, cleaning, and shelling, 2; photographic apparatus and materials, 3; pumps, not including steam pumps, 3; roofing materials, 3; saws, 1; screws, machine, 1; sewing machines, cases, and attachments, 2; shipbuilding, including boat building, 1; show cases, 5; signs and advertising novelties, 4; silverware and plated ware, 1; smelting and refining, zinc, 1; smelting and refining, not from the ore, 1; soap, 9; soda-water apparatus, 2; sporting and athletic goods, 5; springs, steel, car and carriage, 3; stationary goods, not elsewhere specified, 1; stationary and art goods, 6; steam packing, 1; tin foil, 1; tobacco manufactures, 260; toys and games, 3; type founding and printing materials, 5; umbrellas and canes, 2; upholstering materials, 2; vault lights and ventilators, 1; vinegar and cider, 2; washing machines and clothes wringers, 2; whips, 1; window shades and fixtures, 2; wood preserving, 1; wood, turned and carved, 5; wool pulling, 3; wool scouring, 1.

ST. JOSEPH.

1	\$12,037,839	\$16,041,433	\$385,777	\$488,790	\$2,709,769	\$221,940	\$10,831,640	\$118,536	\$164,377	\$48,882	\$1,075,716	\$17,625,682	\$6,572,096
2	276,245	982,458	7,160	8,728	200,743	5,050	718,872	4,018	1,224	.....	36,693	1,025,487	301,565
3	3,687,766	1,952,136	27,940	75,462	261,264	22,450	1,344,564	9,523	9,541	.....	201,392	2,174,362	807,348
4	272,599	169,912	15,160	600	35,088	44,243	4,386	250	730	.....	19,405	209,750	161,121
5	97,038	83,558	1,658	520	33,487	1,626	37,918	3,445	370	1,500	3,034	103,288	65,744
6	1,239,103	2,172,933	35,130	42,812	498,816	12,422	1,440,138	12,749	7,306	.....	123,560	2,402,982	960,422
7	500,465	1,355,736	13,260	79,081	142,067	7,176	907,041	6,900	2,199	.....	108,072	1,424,158	419,941
8	49,589	67,496	598	618	17,487	125	45,703	300	143	.....	2,456	71,157	25,266
9	85,987	135,694	4,032	1,776	45,305	495	75,321	2,437	377	.....	5,351	146,145	70,329
10	865,236	1,943,093	17,220	16,916	43,793	19,624	1,818,405	2,980	3,624	.....	24,231	1,994,407	156,378
11	361,357	366,506	31,000	12,018	127,560	7,030	157,090	2,972	1,445	875	26,510	430,397	266,271
12	250,962	775,257	9,160	10,318	151,542	4,166	539,741	3,933	840	.....	14,567	519,446	234,539
13	683,732	880,903	13,541	26,235	135,620	4,410	631,614	1,121	2,341	.....	66,969	947,154	311,124
14	26,284	30,115	1,500	1,552	9,644	99	17,677	607	53	.....	4,983	39,377	21,601
15	19,200	27,742	.....	.....	7,921	246	16,710	780	177	.....	1,908	35,324	18,368
16	12,567	19,473	900	2,520	2,936	118	8,593	540	92	.....	3,714	23,683	14,972
17	796,553	872,859	75,004	82,058	226,130	3,354	265,051	17,168	2,937	30,751	165,406	1,024,835	751,430
18	2,954,126	4,199,557	131,934	126,518	720,366	84,300	2,671,763	51,513	130,973	13,753	268,444	4,748,730	1,962,677

brands, 2; hats and caps, other than felt, straw, and wool, 2; ice, manufactured, 4; jewelry, 1; liquors, malt, 3; millinery and lace goods, 2; mineral and soda waters, 4; paint and varnish, 1; photo-engraving, 2; pumps, not including steam pumps, 1; signs and advertising novelties, 2; slaughtering and meat packing, 2; stationary goods, not elsewhere specified, 1; stenotyping and electrotyping, 1; tobacco manufactures, 10; vinegar and cider, 1; wirework, including wire rope and cable, 1; wood, turned and carved, 2; woolen, worsted, and felt goods, and wool hats, 1.

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

1	\$2,498,202	\$5,997,301	\$98,357	\$77,851	\$1,284,445	\$84,610	\$4,231,042	\$7,336	\$34,269	.....	\$179,391	\$6,195,129	\$1,879,477
2	3,078,991	4,874,293	123,885	133,523	390,983	1,136,003	2,515,161	8,400	23,965	\$235,494	305,979	5,445,518	1,792,454
3	2,992,218	3,400,007	89,928	94,042	494,324	106,622	2,251,341	16,421	27,070	4,444	315,975	4,135,925	1,776,662
4	1,320,476	1,888,354	54,434	65,196	538,212	45,277	1,047,110	4,947	11,249	87	101,842	1,983,971	891,584
5	2,345,992	2,093,018	69,643	75,507	461,184	51,443	1,165,030	15,275	27,602	9,635	207,699	2,333,072	1,116,599
6	5,517,206	4,935,218	123,705	158,900	1,279,763	178,560	2,399,190	26,515	28,021	8,984	260,994	5,382,098	2,334,343
7	461,884	677,028	6,500	11,204	108,265	18,151	494,522	2,089	4,022	.....	31,875	777,970	264,397

This page was intentionally left blank.

MONTANA.

INDUSTRIES IN GENERAL.

General character of the state.—Montana, with a land area of 146,201 square miles, ranks third in size among the states of the Union. Its population in 1910 was 376,053, as compared with 243,329 in 1900 and 142,924 in 1890. It ranked fortieth among the 49 states and territories of continental United States as regards population in 1910 and forty-third in 1900. Thirty-five and five-tenths per cent of the entire population of the state resides in incorporated cities and towns having populations of 2,500 inhabitants or over, as against 34.7 per cent in 1900.

The state has six cities each having a population of over 10,000: Butte, with a population of 39,165; Great Falls, with 13,948; Missoula, with 12,869; Helena, with 12,515; Anaconda, with 10,134; and Billings, with 10,031. The density of population, which is only 2.6 persons per square mile, shows the state to be but sparsely settled. The corresponding figure for 1900 was 1.7 persons.

Eastern Montana is a high plateau devoted mainly to stock raising, is very sparsely settled, with no large cities and with very limited railway facilities. The

western part of the state is mountainous, more largely a mining and manufacturing community, with several cities of commercial importance, and has better transportation facilities than the eastern section of the state. There are no navigable rivers of great importance in the state, but several mountain streams are important because of the development of their water power and their use in irrigation.

Importance and growth of manufactures.—Although Montana is not relatively important as a manufacturing community, at the last two censuses the manufactures of the state have shown, on the whole, considerable increase. The industries of the state are those to which its natural resources give rise, the principal ones being mining, agriculture, and stock raising. Its principal manufacturing industries are those supplementary to its mining interests.

The following table gives the most important figures relative to all classes of manufactures combined for the state as returned at the censuses of 1909, 1904, and 1899, together with the percentages of increase from census to census:

	NUMBER OR AMOUNT.			PER CENT OF INCREASE. ¹	
	1900	1904	1899	1904-1900	1899-1904
Number of establishments.....	677	382	395	77.2	-3.3
Persons engaged in manufactures.....	13,694	10,196	(²)	34.3	.....
Proprietors and firm members.....	659	334	(²)	97.3	.....
Salaried employees.....	1,380	905	508	52.5	78.1
Wage earners (average number).....	11,655	8,957	9,854	30.1	-9.1
Primary horsepower.....	90,402	46,736	43,679	93.4	7.0
Capital.....	\$44,588,000	\$52,590,000	\$38,225,000	-15.2	37.6
Expenses.....	66,830,000	55,140,000	39,817,000	21.2	33.5
Services.....	12,955,000	10,158,000	8,163,000	27.5	24.4
Salaries.....	2,054,000	1,506,000	786,000	36.4	91.6
Wages.....	10,901,000	8,652,000	7,377,000	26.0	17.3
Materials.....	49,180,000	40,930,000	30,068,000	20.2	36.1
Miscellaneous.....	4,695,000	4,052,000	1,586,000	15.8	155.5
Value of products.....	73,272,000	66,415,000	52,745,000	10.3	25.9
Value added by manufacture (value of products less cost of materials).....	24,092,000	25,485,000	22,677,000	-5.5	12.4

¹ A minus sign (-) denotes decrease.

² Figures not available.

In 1909 the state of Montana had 677 manufacturing establishments, which gave employment to an average of 13,694 persons during the year and paid out \$12,955,000 in salaries and wages. Of the persons employed, 11,655 were wage earners. These establishments turned out products to the value of \$73,272,000, to produce which materials costing \$49,180,000 were consumed. The value added by manufacture was thus \$24,092,000, which figure, as

explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of Montana as a whole showed considerable growth during both the five year periods 1899-1904 and 1904-1909. During the later period the number of establishments increased 77.2 per cent and the average number of wage earners

30.1 per cent, but while the value of products increased 10.3 per cent the value added by manufacture decreased 5.5 per cent. The decrease in value added by manufacture is accounted for largely by conditions in the copper smelting and refining industry. In this industry the establishments are generally operated as departments of the mining companies which produce

the ore, and hence the cost of materials charged against them by the mining companies is often a matter of bookkeeping and has varied greatly in its relation to the value of products at the last three censuses.

The relative importance and growth of the leading manufacturing industries of the state are shown in the following table:

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. ¹			
		Average number.	Percent distribution.	Amount.	Percent distribution.	Amount.	Percent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All industries.....	677	11,655	100.0	\$78,272,000	100.0	\$24,092,000	100.0	10.3	25.9	-5.5	12.4
Lumber and timber products.....	155	3,106	26.6	6,334,000	8.6	4,469,000	18.5	102.9	2.5	67.6	31.4
Cars and general shop construction and repairs by steam-railroad companies.....	12	1,913	16.4	2,811,000	3.8	1,725,000	7.2	78.8	108.5	91.2	99.1
Liquors, malt.....	21	246	2.1	2,440,000	3.3	1,838,000	7.6	40.9	35.7	47.0	38.3
Flour-mill and gristmill products.....	12	195	0.9	2,175,000	3.0	482,000	2.0	8.6	113.8	17.3	152.1
Printing and publishing.....	135	691	5.9	2,111,000	2.9	1,708,000	7.1	42.0	51.6	44.7	49.9
Slaughtering and meat packing.....	9	105	0.9	2,054,000	2.8	273,000	1.1	.....	.....	.....	.....
Bread and other bakery products.....	71	214	1.8	1,096,000	1.5	478,000	2.0	48.1	77.9	23.5	89.8
Foundry and machine-shop products.....	14	316	2.7	986,000	1.3	605,000	2.5	18.1	-27.2	18.9	-33.8
Brick and tile.....	21	189	1.6	371,000	0.5	288,000	1.2	107.3	33.0	104.3	35.6
Tobacco manufactures.....	53	91	0.8	320,000	0.4	188,000	0.8	18.1	55.7	13.8	50.6
Marble and stone work.....	21	78	0.7	230,000	0.3	173,000	0.7	.....	.....	.....	.....
Leather goods.....	16	36	0.3	192,000	0.3	108,000	0.4	.....	.....	.....	.....
Copper, tin, and sheet-iron products.....	9	31	0.3	137,000	0.2	72,000	0.3	191.5	.....	166.7	.....
All other industries.....	128	4,534	38.9	52,015,000	71.0	11,685,000	48.5	.....	.....	.....	.....

¹ Percentages are based on figures in Table I; a minus sign (-) denotes decrease. Where the percentages are omitted, comparable figures can not be given.

The most important industries listed in this table, in which they are arranged in the order of the value of products, call for brief consideration. It should be stated in this connection that statistics for copper smelting and refining, by far the most important manufacturing industry in the state, can not be shown, because to do so would tend to disclose the operations of individual establishments. The industries for which figures are shown in this table, with possibly one exception, have apparently been established to meet the local demand for their products.

Lumber and timber products.—This is the most important manufacturing industry for which figures are shown. In 1909 it gave employment to an average of 3,106 wage earners, or 26.6 per cent of the total number for all industries, and its products amounted to \$6,334,000, forming 8.6 per cent of the total. The statistics showing number of wage earners, amount paid in wages, and value of products all indicate a considerable growth of the industry. The classification includes the operation of timber plants, sawmills, and planing mills, most of which are in the wooded rural regions of the state.

Cars and general shop construction and repairs by steam-railroad companies.—This industry embraces the work done in the car shops operated by steam-railroad

companies and does not include minor repairs made at the roundhouses. The operations consist almost exclusively of repairs to rolling stock and equipment. In 1909 the industry gave employment to an average of 1,913 wage earners, or 16.4 per cent of the total for the state, and the value of its products, \$2,811,000, formed 3.8 per cent of the total for the state.

Liquors, malt.—This industry shows a steady growth in value of products and value added by manufacture for the last two census periods. The percentage of increase in value of products for the five-year period 1904-1909 was 40.9; that for the five-year period 1899-1904 was 35.7. The corresponding increases in value added by manufacture were 47.6 per cent and 38.3 per cent, respectively.

Flour-mill and gristmill products.—Between 1899 and 1904 this industry grew rapidly both in value of products and value added by manufacture; but the growth was largely arrested in the period 1904-1909, and the percentages of increase in value of products and value added by manufacture were small. Because of the comparatively simple processes involved and the extent to which these processes are carried on by machinery, the value added by manufacture is small compared with the gross value of products.

Measured by value added by manufacture these specified industries show certain changes in their relative rank when measured by value of products. Malt liquors becomes second in order of importance instead of steam-railroad repair shops, which in turn becomes third, and printing and publishing takes the place of the flour-mill and gristmill industry, which falls to sixth place.

A comparison of the rates of increase for the seven leading specified industries shows that steam-railroad repair shops increased at a greater rate from 1904 to 1909 in value added by manufacture than any other, namely, 91.2 per cent, while lumber and timber products showed the greatest increase for the same period in value of products, namely, 102.9 per cent. Brick and tile, and copper, tin, and sheet-iron products, industries of minor importance, also showed marked increases both in gross value of products and in value added by manufacture.

Each of the 13 industries for which the figures are given showed increases in value of products and in value added by manufacture from 1899 to 1904 and from 1904 to 1909, with the exception of foundry and machine-shop products, which industry showed decreases in both items for the former period.

In addition to the 13 industries presented separately there were 13 industries which had a value of product in 1909 in excess of \$100,000. They are included with all other industries, because in some instances if they were shown separately the operations of individual establishments would be disclosed; in others, the returns do not properly present the true condition of the industry, for the reason that it is more or less interwoven with one or more industries of similar character; while for others, comparable statistics for the different census years can not be presented without disclosing the operations of individual establishments or on account of changes in classification. These industries are: Artificial stone; beet sugar; butter, cheese, and condensed milk; coffee and spice, roasting and grinding; coke; confectionery; gas, illuminating and heating; malt; mineral and soda waters; pottery, terra-cotta, and fire-clay products; smelting and refining, copper; smelting and refining, lead; and soap. Statistics for 1909 for 3 of these industries—artificial stone; butter, cheese, and condensed milk; and gas—are presented in Table II.

Persons engaged in manufacturing industries.—The following table shows, for 1909, the distribution of the number of persons engaged in manufactures, the average number of wage earners being distributed by sex and age.

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 Introduction.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes.....	13,694	13,387	307
Proprietors and officials.....	1,143	1,126	17
Proprietors and firm members.....	659	645	14
Salariated officers of corporations.....	80	82	1
Superintendents and managers.....	395	393	2
Clerks.....	896	796	100
Wage earners (average number).....	11,655	11,465	190
16 years of age and over.....	11,625	11,436	189
Under 16 years of age.....	30	29	1

The average number of persons engaged in manufactures during 1909 was 13,694, of whom 11,655 were wage earners. Of the remainder, 1,143 were proprietors and officials and 896 were clerks. Corresponding figures for individual industries will be found in Table II.

The following table shows, for 1909, the percentages of proprietors and officials, clerks, and wage earners, respectively, among the total number of persons employed in manufactures. It covers all industries combined and seven important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries.....	13,694	8.3	6.5	85.1
Bread and other bakery products.....	324	25.6	8.3	66.0
Cars and general shop construction and repairs by steam-railroad companies.....	2,084	3.0	5.2	91.8
Flour-mill and gristmill products.....	152	12.5	18.4	69.1
Foundry and machine-shop products.....	372	8.1	7.0	84.9
Liquors, malt.....	349	17.2	12.3	70.5
Lumber and timber products.....	3,452	7.4	2.7	90.0
Printing and publishing.....	1,046	16.1	17.9	66.1
All other industries.....	5,916	7.9	6.5	85.6

Of the total number of persons engaged in all manufacturing industries, 8.3 per cent were proprietors and officials, 6.5 per cent clerks, and 85.1 per cent wage earners. In the bakery industry the majority of the establishments are small and the work is done to a large extent by the proprietors or their immediate representatives, so that the proportion of persons engaged in the industry falling in the class of proprietors and officials is very much higher than for most other industries or for all industries combined. Similar conditions prevailed to some extent in the manu-

facture of malt liquors, in printing and publishing, and in the manufacture of flour-mill and gristmill products, in which industries the percentages of proprietors and officials were 17.2, 16.1, and 12.5, respectively. The railroad repair-shop industry shows the smallest percentage of proprietors and officials, this being due partly to the fact that the establishments in this industry were under corporate ownership, and so reported no proprietors; and partly to the fact that the officials of the railroad companies are not as a rule assigned to this particular branch of the work.

The next table shows, for 1909, in percentages, for all industries combined, the distribution of the average number of wage earners, by age periods and for those 16 years of age and over by sex, calculated in the manner described in the Introduction. It also shows, for some of the important industries separately, a similar distribution of the wage earners as reported for December 15, or the nearest representative day. As a means of judging the importance of the several industries the average total number employed for the year is also given in each case.

INDUSTRY.	WAGE EARNERS.			
	Average number. ¹	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
All industries.....	11,655	98.1	1.6	0.3
Bread and other bakery products.....	214	72.0	28.0	.....
Cars and general shop construction and repairs by steam-railroad companies.....	1,913	99.8	.....	0.2
Flour-mill and gristmill products.....	105	99.0	1.0	.....
Foundry and machine-shop products.....	316	100.0	.....	.....
Liquors, malt.....	246	100.0	.....	.....
Lumber and timber products.....	3,106	99.8	0.2	0.2
Printing and publishing.....	691	88.9	9.6	1.5
All other industries.....	5,064	98.7	1.1	0.2

¹ For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

For all industries combined, 98.1 per cent of the average number of wage earners were males 16 years of age and over; 1.6 per cent females 16 years of age and over; and but three-tenths of 1 per cent persons under the age of 16. The largest proportion of women, 28 per cent, was employed in bakeries; while the largest percentage of children, 1.5 per cent, was employed in the printing and publishing industry.

In order to compare the distribution of persons engaged in manufactures in 1909 with that shown at the census of 1904, it is necessary to use the classification employed at the earlier census. (See Introduction.) The next table makes this comparison according to occupational status.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				Per cent of increase, 1904-1909.
	1909		1904		
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total.....	13,694	100.0	10,196	100.0	84.8
Proprietors and firm members.....	659	4.8	334	3.3	97.3
Salaried employees.....	1,380	10.1	905	8.9	62.6
Wage earners (average number).....	11,655	85.1	8,957	87.8	30.1

Comparable figures are not obtainable for 1899. The table shows increases in the percentages of distribution of proprietors and firm members and salaried employees, and a decrease in the proportion of wage earners. The increased percentage of proprietors is due to the increase in the number of small establishments under individual and firm ownership.

The following table shows the average number of wage earners, distributed according to age periods, and in the case of those 16 years of age and over according to sex, for 1909, 1904, and 1899. The averages for 1909 are estimated on the basis of the actual number reported for a single representative day. (See Introduction.)

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	11,655	100.0	8,957	100.0	9,854	100.0
16 years of age and over:						
Male.....	11,436	98.1	8,755	97.7	9,062	98.1
Female.....	189	1.6	143	1.6	86	0.9
Under 16 years of age.....	30	0.3	59	0.7	100	1.1

This table indicates that for all industries combined there has been a decrease during the 10 years in the employment of children under 16 years of age. There has not been much change in the proportion of male and female wage earners; the proportion of women increased slightly from 1899 to 1904, but remained unchanged during the latter five-year period. In 1909, as in 1899, males 16 years of age and over formed 98.1 per cent of all wage earners, as compared with 97.7 in 1904.

Wage earners employed, by months.—The following table gives the number of wage earners employed on the 15th of each month during the year 1909, for all industries combined, for the lumber and timber industry, and for all other industries combined; it gives also the percentage which the number reported for each month is of the greatest number reported for any one month. In Table II, page 680, is shown, for practically

This page was inadvertently omitted during scanning.

employed where less than 9 hours a day prevail and only 3.8 per cent where more than 10 hours a day prevail.

Location of establishments.—A tabular statement separating manufactures in the larger cities from those of outside districts can not be shown because comparable statistics are available for Butte and Helena only, and to show the statistics for Great Falls for 1909 would disclose the operations of individual establishments. (See Introduction.) General statistics of cities, except those for Great Falls, are shown in Table I.

In 1909 only 9.2 per cent of the total value of products for the state and only 15.7 per cent of the average number of wage earners were reported from the five cities having over 10,000 inhabitants, for which totals are shown. During the 10-year period, however, the manufactures of these cities gained on those of the rural districts in every respect.

Great Falls, with its large copper smelters, is the only one of the six cities in which is located a distinctive industry of importance. The industries of most prominence in the other cities are bread and other bakery products, malt liquors, printing and publishing, and slaughtering and meat packing. The statistics of prior censuses show that the rate of growth of manufactures in Butte, as measured by the percentage of increase in value of products, was greater in the five-year period 1904-1909, than in the earlier period, 1899-1904, while in Helena the greater growth was in the earlier years.

Character of ownership.—The table that follows has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined, comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually. In order to avoid disclosing the operations of individual concerns it is necessary to omit several important industries from this table and the one following.

The most important distinction shown is that between corporate and all other forms of ownership. In 1909, 30 per cent of the total number of manufacturing establishments were under corporate ownership. In 1904 the corresponding figure was 30.9 per cent. As measured by value of products and value added by manufacture, corporations show decreases of 2 per cent and 5.6 per cent, respectively, for the five-year period 1904-1909.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909.....	677	11,655	\$73,271,793	\$24,091,654
1904.....	382	8,957	66,415,452	26,485,892
Individual:				
1909.....	352	1,108	3,265,067	2,106,309
1904.....	204	710	1,892,491	1,137,764
Firm:				
1909.....	112	494	1,424,052	904,781
1904.....	57	370	1,150,688	639,133
Corporation:				
1909.....	203	10,041	68,458,197	21,050,121
1904.....	118	7,877	63,309,703	23,705,925
Other:				
1909.....	10	12	124,477	21,343
1904.....	3		2,570	2,570
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Individual:				
1909.....	52.0	9.5	4.5	8.7
1904.....	53.4	7.9	2.8	4.5
Firm:				
1909.....	16.5	4.2	1.9	3.8
1904.....	14.9	4.1	1.7	2.5
Corporation:				
1909.....	30.0	86.2	93.4	87.4
1904.....	30.9	87.9	95.4	93.0
Other:				
1909.....	1.5	0.1	0.2	0.1
1904.....	0.8		(¹)	(¹)
Bread and other bakery products, 1909.....				
Individual.....	71	214	\$1,095,838	\$278,328
Firm.....	54	99	535,085	293,796
Corporation.....	13	17	128,181	58,608
1904.....	4	98	428,672	155,824
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	76.1	46.3	49.2	55.1
Firm.....	18.3	7.9	11.7	12.3
Corporation.....	5.6	45.8	39.1	32.6
Liquors, malt, 1909.....				
Individual ²	21	246	\$2,439,832	\$1,837,473
1904.....	5	19	116,076	84,890
Corporation.....	16	227	2,323,756	1,752,622
Per cent of total.....	100.0	100.0	100.0	100.0
Individual ²	23.8	7.7	4.8	4.6
Corporation.....	76.2	92.3	95.2	95.4
Lumber and timber products, 1909.....				
Individual.....	155	3,106	\$6,333,778	\$4,468,693
Firm.....	85	449	793,138	589,597
1904.....	35	324	626,625	497,950
Corporation.....	35	2,333	4,914,015	3,381,346
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	54.8	14.5	12.5	13.2
Firm.....	22.6	10.4	9.9	11.1
Corporation.....	22.6	75.1	77.6	75.7
Printing and publishing, 1909.....				
Individual.....	135	691	\$2,111,229	\$1,708,569
Firm.....	78	191	637,693	435,750
1904.....	16	32	104,087	85,907
Corporation ³	41	468	1,469,449	1,186,912
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	57.3	27.6	25.5	25.5
Firm.....	11.8	4.6	4.9	5.0
Corporation ³	30.4	67.7	69.6	69.4

¹ Less than one-tenth of 1 per cent.

² Includes the group "Firm," to avoid disclosure of individual operations.

³ Includes the group "Other," to avoid disclosure of individual operations.

Size of establishment.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization. In order to throw some light upon it, the following table groups the establishments according to the value of their products. The table also shows the average size of establishments for all industries combined and for im-

portant industries separately as measured by number of wage earners, value of products, and value added by manufacture. The totals for all industries are shown for the last two censuses, while for certain important industries figures are given for 1909 only.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909.....	677	11,655	\$73,271,798	\$24,091,554
1904.....	382	8,957	66,415,452	25,485,392
Less than \$5,000:				
1909.....	261	227	649,143	457,008
1904.....	124	106	325,145	228,101
\$5,000 and less than \$20,000:				
1909.....	236	754	2,437,212	1,535,283
1904.....	152	556	1,571,629	1,030,951
\$20,000 and less than \$100,000:				
1909.....	118	1,708	5,092,318	3,108,691
1904.....	68	1,354	3,246,226	2,066,633
\$100,000 and less than \$1,000,000:				
1909.....	56	4,836	15,221,004	8,024,045
1904.....	34	3,096	8,726,054	5,089,845
\$1,000,000 and over:				
1909.....	6	4,130	49,871,216	10,965,927
1904.....	6	3,845	52,545,498	17,063,862
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Less than \$5,000:				
1909.....	38.0	1.9	0.9	1.9
1904.....	32.5	1.2	0.5	0.9
\$5,000 and less than \$20,000:				
1909.....	34.9	6.5	3.3	6.4
1904.....	39.8	0.2	2.4	4.1
\$20,000 and less than \$100,000:				
1909.....	17.4	14.7	6.9	12.9
1904.....	17.3	15.1	4.9	8.1
\$100,000 and less than \$1,000,000:				
1909.....	8.3	41.5	20.8	33.3
1904.....	8.9	34.0	13.1	20.0
\$1,000,000 and over:				
1909.....	0.9	35.4	68.1	45.5
1904.....	1.6	42.9	79.1	67.0
Average per establishment:				
1909.....		17	\$108,230	\$35,586
1904.....		23	173,862	66,716
Bread and other bakery products, 1909	71	214	\$1,095,838	\$478,328
Less than \$5,000.....	21	4	48,689	24,017
\$5,000 and less than \$20,000.....	40	80	430,862	107,940
\$20,000 and less than \$100,000.....	10	130	616,287	256,360
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	29.6	1.9	4.4	5.0
\$5,000 and less than \$20,000.....	56.3	37.4	39.3	41.4
\$20,000 and less than \$100,000.....	14.1	60.7	56.2	53.6
Average per establishment.....		3	\$15,434	\$6,737
Liquors, malt, 1909	21	246	\$2,439,832	\$1,837,472
\$5,000 and less than \$20,000 ²	6	13	61,986	45,668
\$20,000 and less than \$100,000.....	6	52	410,314	305,925
\$100,000 and less than \$1,000,000.....	9	181	1,967,532	1,485,879
Per cent of total.....	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000 ²	28.6	5.3	2.5	2.5
\$20,000 and less than \$100,000.....	28.6	21.1	16.8	16.6
\$100,000 and less than \$1,000,000.....	42.9	73.6	80.6	80.9
Average per establishment.....		12	\$116,182	\$87,499
Lumber and timber products, 1909	165	3,108	\$6,833,773	\$4,468,893
Less than \$5,000.....	65	89	144,414	111,005
\$5,000 and less than \$20,000.....	40	231	470,598	320,737
\$20,000 and less than \$100,000.....	32	682	1,248,400	908,078
\$100,000 and less than \$1,000,000 ³	12	2,104	4,470,366	3,129,073
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	41.9	2.9	2.3	2.5
\$5,000 and less than \$20,000.....	29.7	7.4	7.4	7.2
\$20,000 and less than \$100,000.....	20.6	22.0	19.7	20.3
\$100,000 and less than \$1,000,000 ³	7.7	67.7	70.6	70.0
Average per establishment.....		20	\$40,863	\$28,832
Printing and publishing, 1909	195	691	\$2,111,229	\$1,708,569
Less than \$5,000.....	71	68	203,431	104,437
\$5,000 and less than \$20,000.....	45	149	442,484	348,045
\$20,000 and less than \$100,000.....	15	242	740,338	613,436
\$100,000 and less than \$1,000,000.....	4	232	724,976	582,651
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	52.6	9.8	9.6	9.6
\$5,000 and less than \$20,000.....	33.3	21.6	21.0	20.4
\$20,000 and less than \$100,000.....	11.1	35.0	35.1	35.9
\$100,000 and less than \$1,000,000.....	3.0	33.6	34.3	34.1
Average per establishment.....		5	\$15,639	\$12,655

¹ Includes the group "\$100,000 and less than \$1,000,000."
² Includes the group "Less than \$5,000."
³ Includes the group "\$1,000,000 and over."

Of the 677 establishments reported in 1909, only 6, or nine-tenths of 1 per cent, each had a value of products exceeding \$1,000,000. These establishments, however, employed an average of 4,130 wage earners, or 35.4 per cent of the total number in all establishments, and reported 68.1 per cent of the total value of products and 45.5 per cent of the total value added by manufacture.

The very small establishments—that is, those having a value of products of less than \$5,000—although constituting 38.6 per cent of the total number of establishments, produced only nine-tenths of 1 per cent of the total value of products. Most of the manufacturing was carried on in establishments which reported a product valued at not less than \$100,000.

During the five years the average value of products per establishment decreased from \$173,862 to \$108,230, the value added by manufacture from \$66,716 to \$35,586, and the average number of wage earners from 23 to 17. These decreases are undoubtedly caused to a great extent by the large increase in the number of establishments employing but few wage earners and having small value of products. The table shows further that the baking and printing and publishing industries in Montana are conducted chiefly in the smaller establishments, while the lumber and timber industry is conducted mainly in larger establishments.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of establishments to bring out the feature of size is a classification according to the number of wage earners employed. The next table shows, for 1909, such a classification for all industries combined and for seven important industries individually, and gives not only the number of establishments falling in each group but also the average number of wage earners employed.

The per cent distribution of the number of establishments is not shown in this table. Of the 677 establishments reported for all industries, 13.6 per cent employed no wage earners; 61.2 per cent, 1 to 5; 14.6 per cent, 6 to 20; and 5.5 per cent, 21 to 50. The most numerous single group consists of the 414 establishments employing from 1 to 5 wage earners; the next being the group of 99 establishments employing from 6 to 20 wage earners. There were 10 establishments that employed over 250 wage earners, 3 of which employed over 500 each.

Of the total number of wage earners, 50.5 per cent were in establishments employing over 250 wage earners. The single group having the largest number of employees was the group comprising the establishments employing from 251 to 500 wage earners. This group employed 2,363 wage earners, or 20.3 per cent of the total. Most of the railroad repair shops are comparatively large establishments.

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—								
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
NUMBER OF ESTABLISHMENTS.										
All industries.....	677	92	414	99	37	15	10	7	2	1
Bread and other bakery products.....	71	18	48	4		1				
Cars and general shop construction and repairs by steam-railroad companies.....	12				1	4	4	3		
Flour-mill and gristmill products.....	12		7	3	2					
Foundry and machine-shop products.....	14		7	3	3		1			
Liquors, malt.....	21		8	10	3					
Lumber and timber products.....	155	5	91	35	12	5	4	2	1	
Printing and publishing.....	135	24	92	11	5	3				
All other industries.....	267	46	161	33	11	2	1	2	1	1
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	11,655		900	1,100	1,104	1,182	1,491	2,368	1,514	2,001
Bread and other bakery products.....	214		102	36		76				
Cars and general shop construction and repairs by steam-railroad companies.....	1,913				21	301	528	1,063		
Flour-mill and gristmill products.....	105		16	41	48					
Foundry and machine-shop products.....	316		22	37	99		158			
Liquors, malt.....	246		21	151	74					
Lumber and timber products.....	3,108		190	376	376	479	608	527	550	
Printing and publishing.....	691		207	101	178	205				
All other industries.....	5,064		342	358	308	121	197	773	984	2,001
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0		7.7	9.4	9.5	10.1	12.8	20.3	13.0	17.8
Bread and other bakery products.....	100.0		47.7	16.8		35.5				
Cars and general shop construction and repairs by steam-railroad companies.....	100.0				1.1	15.7	27.6	55.6		
Flour-mill and gristmill products.....	100.0		15.2	39.0	45.7					
Foundry and machine-shop products.....	100.0		7.0	11.7	31.3		50.0			
Liquors, malt.....	100.0		8.5	61.4	30.1					
Lumber and timber products.....	100.0		6.1	12.1	12.1	15.4	19.6	17.0	17.7	
Printing and publishing.....	100.0		30.0	14.6	25.8	28.7				
All other industries.....	100.0		6.8	7.1	6.1	2.4	3.9	15.3	19.0	39.5

Expenses.—As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total.

The following table shows, in percentages, for 1909, the distribution of expenses among the classes indicated for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	3.1	18.3	73.6	7.0
Bread and other bakery products.....	3.0	18.3	68.5	10.3
Cars and general shop construction and repairs by steam-railroad companies.....	5.9	54.7	38.6	0.8
Flour-mill and gristmill products.....	2.7	5.3	84.9	7.1
Foundry and machine-shop products.....	7.6	41.9	45.1	5.4
Liquors, malt.....	12.6	19.2	52.3	36.4
Lumber and timber products.....	5.6	40.9	34.9	19.2
Printing and publishing.....	16.8	39.1	23.0	21.1
All other industries.....	1.9	10.7	82.9	4.6

This table shows that, for all industries combined, 73.6 per cent of the total expense was incurred for materials, 19.4 per cent for services—that is, salaries and wages—and but 7 per cent for other purposes. As

would be expected, these proportions vary greatly in the different industries. The large percentage shown for miscellaneous expenses for malt liquors is explained by the fact that this item includes internal-revenue taxes.

Engines and power.—The next table shows, for all industries combined, the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current), and their total horsepower.

As shown in the table, the amount of primary power used increased from 43,679 horsepower in 1899 to 90,402 in 1909. The greatest increase, both absolute and relative, was in electric power rented, of which 26,879 horsepower was reported in 1909, an increase of 1,259 horsepower over 1899. Steam was still the dominant power in 1909, although the proportion which this formed of the total decreased from 73.3 per cent in 1899 to 54.9 per cent in 1909. The use of electric motors for the purpose of applying the power generated within the establishments showed a considerable increase from 1899 to 1904, but a large decrease from 1904 to 1909, the horsepower of such motors increasing from 1,988 in 1899 to 4,081 in 1904 and decreasing to 797 in 1909. The cause of the decrease lies in the fact that some of the large manufacturing establishments, particularly those engaged in the smelting and refining of copper, which formerly operated electric motors by power generated within their own establishments, used rented power in 1909, as is indi-

This page was inadvertently omitted during scanning.

From 1899 to 1904 there was a decrease in total value of products, so that the percentage of increase during the last five years was greater than 140.9 per cent, as shown for the decade.

Practically all of the products were sold as fresh meat, with but a very small proportion of the meat or by-products undergoing further preparation. The quantities of pork, mutton, and veal more than doubled, while beef increased 80.1 per cent during the 10 years.

Printing and publishing.—As shown by the following table, this industry has increased steadily in the number of publications and aggregate circulation per issue from 1904 to 1909 and from 1899 to 1904:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total.....	189	101	95	246,798	197,643	127,148
Daily.....	17	12	11	70,203	58,009	42,104
Sunday.....	7	5	6	48,088	34,111	(1)
Semiweekly.....	8	7	4	13,180	11,200	9,380
Weekly.....	101	69	70	92,027	75,463	62,109
Monthly.....	5	5	3	13,800	7,700	6,495
All other classes.....	1	3	1	9,500	10,500	7,000

¹ Included in circulation of dailies.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. In 1909 there were 26 such establishments in the state of Montana.

The following statement summarizes the statistics:

Number of establishments.....	26
Persons engaged in the industry.....	723
Proprietors and firm members.....	24
Salaried employees.....	47
Wage earners (average number).....	652
Primary horsepower.....	851
Capital.....	\$877,089
Expenses.....	764,904
Services.....	522,008
Materials.....	154,428
Miscellaneous.....	88,468
Amount received for work done.....	935,260

Eleven of the 26 establishments were under corporate ownership, 8 under individual ownership, and 7 under firm ownership. One establishment had receipts for the year's business amounting to between \$100,000 and \$1,000,000, 18 had receipts of between \$20,000 and \$100,000, and 7 receipts of less than \$20,000 each.

The number of wage earners employed each month and the per cent which this number represented of the greatest number employed in any month were as follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	606	85.4	July.....	697	68.2
February.....	597	84.1	August.....	710	100.0
March.....	610	85.9	September.....	698	68.3
April.....	631	88.9	October.....	667	63.9
May.....	629	88.6	November.....	654	62.1
June.....	663	93.4	December.....	660	63.0

The different kinds of primary power, the number of engines, and the amount of horsepower used in 1909 are shown in the following tabular statement:

KIND.	Number of engines or motors.	Horsepower.
Primary power, total.....		851
Owned—Steam.....	19	639
Rented—Electric.....	51	212

The kind and amount of fuel used are shown in the following statement:

KIND.	Unit.	Quantity.
Anthracite coal.....	Tons.....	326
Bituminous coal.....	Tons.....	9,979
Wood.....	Cords.....	1,300
Oil.....	Barrels.....	46
Gas.....	1,000 feet.....	2,905

Custom sawmills and gristmills.—Statistics for custom sawmills and gristmills are not included in the general tables or in the totals for manufacturing industries, but are presented in the following summary:

	Custom sawmills.	Custom gristmills.
Number of establishments.....	14	2
Persons engaged in the industry.....	43	4
Proprietors and firm members.....	19	3
Wage earners (average number).....	24	1
Primary horsepower.....	53 ¹	42
Capital.....	\$32,000	\$11,000
Expenses.....	13,356	13,840
Services.....	8,741	595
Materials.....	670	113,190
Miscellaneous.....	3,945	65
Value of products.....	24,249	114,175

¹ Includes estimate of all grain ground. A similar estimate for value of lumber sawed by custom sawmills is impracticable.

MANUFACTURES—MONTANA.

679

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY AND CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
STATE—All Industries.....	1909	677	13,694	659	1,380	11,655	90,402	\$44,588	\$2,054	\$10,901	\$49,180	\$73,273	\$24,092
	1904	382	10,196	334	905	8,957	46,736	52,690	1,508	8,652	40,930	66,415	25,485
	1899	395			508	9,854	43,679	38,225	786	7,377	30,068	52,745	23,677
Bread and other bakery products.....	1909	71	324	80	30	214	109	1,145	27	165	618	1,090	478
	1904	45	234	51	22	161	84	466	24	102	353	740	387
	1899	27	150	31	23	96		201	15	56	202	416	214
Brick and tile.....	1909	21	280	24	17	189	1,135	519	24	166	83	371	288
	1904	14	118	13	8	97	240	240	13	77	38	179	141
	1899	23	160	27	9	124	243	107	4	69	30	134	104
Cars and general shop construction and repairs by steam-railroad companies.....	1909	12	2,084		171	1,013	2,670	2,912	165	1,538	1,086	2,811	1,725
	1904	10	1,115		76	1,039	1,661	1,055	98	799	301	1,572	902
	1899	7	670		40	621	396	625	50	398	301	754	453
Copper, tin, and sheet-iron products.....	1909	9	48	11	6	31	5	64	6	35	65	137	72
	1904	3	14	2	1	11		11	(1)	13	20	47	27
	1899												
Flour-mill and gristmill products.....	1909	12	152	2	45	105	2,313	2,559	53	105	1,693	2,175	482
	1904	12	109	6	36	67	1,455	991	47	57	1,592	2,003	411
	1899	13			25	61		686	26	50	774	937	163
Foundry and machine-shop products.....	1909	14	372	12	44	316	741	994	65	354	381	980	605
	1904	10	402	11	39	352	841	690	57	325	363	872	509
	1899	10	532	7	25	550		906	42	510	429	1,198	769
Leather goods.....	1909	16	63	16	11	36	10	220	9	39	84	192	108
	1904	8	34	6		28	2	73		27	56	113	57
	1899												
Liquors, malt.....	1909	21	349	9	94	246	2,472	3,040	223	359	602	2,440	1,838
	1904	23	322	13	59	250	1,714	2,175	133	285	487	1,732	1,245
	1899	21	249	22	34	193	1,038	1,204	68	169	376	1,276	900
Lumber and timber products.....	1909	155	3,452	170	176	3,106	14,337	8,544	285	2,185	1,865	6,334	4,469
	1904	47	2,408	45	145	2,218	7,612	4,840	198	1,512	454	3,121	2,687
	1899	91		62	2,357	4,131		2,377	72	1,214	1,014	3,044	2,030
Marble and stone work.....	1909	21	110	20	12	78	123	246	18	102	57	230	173
	1904	6	24	8		16	18	24		14	16	51	35
	1899												
Printing and publishing.....	1909	135	1,046	110	245	691	679	1,651	294	685	408	2,111	1,708
	1904	102	691	81	129	481	492	1,024	102	542	307	1,487	1,180
	1899	89	659	80	94	485		771	139	334	194	981	787
Slaughtering and meat packing.....	1909	9	102	3	54	105	316	483	65	92	1,781	2,054	273
	1904												
	1899	3		6		34	55	168	12	31	746	852	106
Tobacco manufactures.....	1909	53	202	110	1	91		121		85	132	320	188
	1904	44	142	40	1	95		71	1	66	105	271	166
	1899	30	105	33		72		69		48	70	174	104
All other industries.....	1909	128	5,100	92	474	4,534	65,402	22,090	840	4,991	40,330	52,015	11,685
	1904	68	4,583	52	389	4,142	32,298	40,024	743	4,832	36,409	54,227	17,768
	1899	81		181		5,201		31,001	358	4,468	25,932	42,079	17,047

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

Anaconda.....	1909	13	151	10	44	97	253	\$489	\$77	\$134	\$157	\$591	\$434
	1904												
	1899												
Billings.....	1909	37	294	32	36	226	661	951	52	229	765	1,243	478
	1904												
	1899												
Butte.....	1909	66	867	68	147	662	1,217	1,899	200	649	920	2,464	1,544
	1904	54	614	47	89	478		1,287	160	509	568	1,760	1,192
	1899	50		58		411		1,130	66	396	777	1,516	739
Helena.....	1909	44	550	33	97	420	788	1,981	121	362	493	1,303	810
	1904	34	440	29	62	349		1,112	86	260	428	1,163	735
	1899	27		50		264		817	62	172	336	776	440
Missoula.....	1909	26	529	20	81	423	594	913	81	403	402	1,171	769
	1904												
	1899												

¹ Less than \$500.
² Figures can not be shown without disclosing individual operations.
³ Excluding statistics for one establishment, to avoid disclosure of individual operations.
⁴ Excluding statistics for two establishments, to avoid disclosure of individual operations.
⁵ Figures not available.
⁶ Figures do not agree with those published in 1904, because it was necessary to revise the totals to include data only for those establishments located within the corporate limits of the city.

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.				
					Male.	Female.	Average number.	Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	677	13,694	659	484	796	100	11,655	Oct 13,127	Fe 10,772	(1)	(1)	(1)	(1)	(1)	90,402		
2 Artificial stone.....	16	113	23	2	3	1	84	Oct 126	Ja ² 28	70	69	1			86		
3 Bread and other bakery products.....	71	324	80	3	14	13	214	De 228	Fe 201	233	168	65			109		
4 Brick and tile.....	21	230	24	12	5		189	Jy 386	Fe 19	266	265	1			1,136		
5 Butter, cheese, and condensed milk.....	20	43	4	6	3	1	29	Je ² 30	Ja ² 27	32	27	5			235		
6 Carriages and wagons and materials.....	4	34	2	2	2		28	Je 34	Fe 23	24	24				19		
7 Cars and general shop construction and repairs by steam-railroad companies.....	12	2,084		63	104	4	1,913	Nov 2,303	Ap 1,597	2,264	2,259		5		2,670		
8 Cars and general shop construction and repairs by street-railroad companies.....	4	24		3			21	De 24	Ja 19	24	24				79		
9 Copper, tin, and sheet-iron products.....	9	48	11	5		1	31	Oct 40	Ja 20	36	36				5		
10 Flour-mill and gristmill products.....	12	152	2	17	20	8	105	De 120	Jy 95	122	121	1			2,313		
11 Foundry and machine-shop products.....	14	372	12	19	24	2	316	Oct 336	Jy 278	329	329				741		
12 Gas, illuminating and heating.....	5	63		8	5	2	48	Jy 62	Fe 36	60	60				129		
13 Leather goods.....	16	63	16	6	5		36	Je ² 40	Ja ² 32	34	34				10		
14 Liquors, malt.....	21	340	9	51	42	1	246	Jy 263	Fe 230	236	236				2,472		
15 Lumber and timber products.....	155	3,452	170	84	88	4	3,108	Nov 3,773	Ap 2,673	4,473	4,457	7			14,337		
16 Marble and stone work.....	21	110	20	5	6	1	78	Je 103	Ja 26	109	109				123		
17 Patent medicines and compounds, and druggists' preparations.....	5	14	1	3	3	1	6	De 8	Je ² 6	8	6	1	1		5		
18 Printing and publishing.....	135	1,046	110	53	160	27	691	De 718	Ja 667	717	637	68	11	1	679		
19 Slaughtering and meat packing.....	9	162	3	13	37	4	105	Nov 113	Mh 97	104	100	4			316		
20 Tobacco manufactures.....	53	202	110	1			91	Ja ² 95	Ap ² 88	100	90	3					
21 All other industries ³	74	4,800	62	124	275	30	4,318								64,939		

¹ No figures given for reasons explained in the Introduction.
² Same number reported for one or more other months.
³ All other industries embrace—

Awning, tents, and sails.....	2	Coffee and spice, roasting and grinding.....	2	Food preparations.....	4
Beet sugar.....	1	Coffins, burial cases, and undertakers' goods.....	1	Fur goods.....	1
Brooms.....	2	Coke.....	1	Hand stamps and stencils and brands.....	1
Carpets, rag.....	1	Confectionery.....	10	Hats and caps, other than felt, straw, and wool... 1	
Chemicals.....	1	Dairy-men's, poultryers', and apiarists' supplies... 1	1	Jewelry.....	1

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES, CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

CITY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	16 and over.			Under 16.	Male.	Female.				
								Male.	Female.								
1 ANACONDA.....	13	151	10	12	30	2	97	88	8	1	101	91	9	1	258		
2 BILLINGS.....	37	294	32	19	15	2	226	212	10	4	224	210	10	4	661		
3 BUTTE.....	66	867	58	42	76	29	662	599	53	5	633	572	56	4	1,217		
4 HELENA.....	44	550	33	33	54	10	420	360	60		413	354	59		788		
5 MISSOULA.....	26	529	20	11	66	4	428	428			431	431			594		

MANUFACTURES—MONTANA.

681

THE STATE, BY INDUSTRIES: 1909.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.	
	Total.	Services.			Materials.		Miscellaneous.						
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.			
\$44,688,368	\$66,829,595	\$1,092,444	\$961,578	\$10,901,452	\$3,712,840	\$45,467,399	\$1,672,057	\$635,087	\$322,110	\$2,064,628	\$73,271,793	\$24,091,564	
1	131,855	193,784	2,550	2,475	71,265	740	111,581	120	480	4,573	223,500	111,179	
2	1,144,650	901,768	6,785	20,051	164,924	21,082	595,828	20,372	3,908	68,218	1,095,838	478,328	
3	518,544	298,313	18,508	5,000	165,728	62,491	20,905	600	2,054	23,027	370,574	287,178	
4	178,656	401,957	6,060	2,712	23,798	3,565	350,608	3,990	804	0,820	418,920	64,747	
5	67,653	68,932	2,400	2,200	31,514	1,483	27,504	960	1,053	1,818	78,669	49,632	
6													
7	2,912,134	2,810,494	88,462	76,548	1,538,121	120,392	965,229		11,127		10,615	2,810,521	1,724,900
8	95,585	48,807	3,020		20,905	1,724	11,774		380		2,004	48,807	35,309
9	63,534	114,932	5,635	200	35,375	591	64,811	2,423	2,312		3,630	136,995	71,593
10	2,558,734	1,993,682	26,660	26,008	105,410	25,850	1,607,490		14,272		127,402	2,175,236	481,896
11	993,787	846,147	29,083	34,852	354,364	30,853	344,543	1,684	5,335		38,933	985,036	604,640
12	1,041,030	153,036	7,825	5,495	41,183	60,317	16,425		5,474	1,107	15,260	189,912	113,170
13	219,784	146,220	6,800	2,600	39,070	965	83,117	8,999	1,368		3,305	192,016	107,934
14	3,040,409	1,893,008	174,918	48,265	358,508	84,080	518,280		200,602		338,415	2,439,832	1,837,472
15	8,543,743	5,342,549	100,942	104,320	2,185,300	14,776	1,850,109	3,104	73,584	289,666	660,742	6,333,778	4,468,893
16	245,555	192,795	9,000	8,775	101,763	4,656	52,467	890	1,088		14,156	229,809	172,686
17	33,308	37,576	2,940	5,723	4,503	251	14,928	1,020	208		7,403	48,598	31,419
18	1,650,672	1,751,293	123,010	170,690	684,914	29,598	373,092	44,889	12,120	29,730	233,190	2,111,229	1,708,569
19	482,955	2,012,975	25,640	39,591	91,658	13,785	1,707,250	19,010	3,965		52,076	2,053,699	272,574
20	121,196	252,081	360		61,328	900	130,691	7,085	16,638		11,079	320,301	188,710
21	20,544,614	47,399,176	390,656	405,467	4,788,815	3,228,171	36,500,707	1,557,905	188,325	1,007	338,962	51,009,013	11,280,675

1 All other industries embrace—Continued.

Lime.....	5	Pottery, terra-cotta, and fire-clay products.....	1	Soap.....	1
Liquors, distilled.....	1	Signs and advertising novelties.....	1	Umbrellas and canes.....	1
Malt.....	1	Smelting and refining, copper.....	4	Wall plaster.....	2
Mattresses and spring beds.....	2	Smelting and refining, lead.....	1	Wirework, including wire rope and cable.....	2
Mineral and soda waters.....	22				

AND TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909.

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

Capital.	EXPENSES.										Value of products.	Value added by manufacture.	
	Total.	Services.			Materials.		Miscellaneous.						
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.			
1	\$489,381	\$512,039	\$37,600	\$30,458	\$133,595	\$7,799	\$149,474	\$1,380	\$25,453		\$117,880	\$591,032	\$433,759
2	950,501	1,177,725	34,830	17,530	229,378	23,218	741,431	31,110	27,245	\$5,400	67,583	1,243,185	478,536
3	1,899,366	2,082,558	89,550	110,757	648,712	89,624	830,347	48,320	63,514	3,609	198,125	2,463,780	1,543,899
4	1,980,526	1,175,574	65,203	55,341	362,483	52,105	440,722	11,952	18,043	18,701	161,024	1,802,725	809,898
5	912,570	1,024,394	34,525	40,798	402,553	37,082	365,254	5,823	32,703		99,676	1,171,436	769,120

This page was intentionally left blank.

NEBRASKA.

INDUSTRIES IN GENERAL.

General character of the state.—Nebraska, with a gross area of 77,520 square miles, of which 712 represent water surface, had a population in 1910 of 1,192,214, as compared with 1,066,300 in 1900 and 1,062,656 in 1890. It ranked twenty-ninth among the 49 states and territories of continental United States as regards population in 1910 and twenty-seventh in 1900. Twenty-six and one-tenth per cent of the entire population of the state resides in incorporated places having a population of 2,500 inhabitants or over, as against 23.7 per cent in 1900. The state has four cities having a population of over 10,000: Omaha, Lincoln, South Omaha, and Grand Island. The density of population for the entire state was 15.5 persons per square mile, the corresponding figure for 1900 being 13.9. The several trunk lines of railways with their numerous feeders form a network covering the entire state, and furnish good facilities for transportation and direct connection with outside markets.

Importance and growth of manufactures.—Nebraska is not preeminently a manufacturing state, but its manufacturing interests have been rapidly developing

during the last 50 years. In fact, the increase has been greater in proportion than the corresponding growth of population in the state for the same period. During 1859 an average of only 336 wage earners, representing 1.2 per cent of the total population, were employed in manufactures, while in 1909 an average of 24,336 wage earners, or 2 per cent of the total population, were so engaged. During this period of 50 years the gross value of products per capita of the total population of the state increased from \$21 in 1859 to \$167 in 1909. In 1859 Nebraska produced less than one-tenth of 1 per cent of the total value of products of manufacturing industries in the United States and in 1909 nearly 1 per cent. In the former year it ranked thirty-ninth among the states of the Union in respect to value of manufactures and in 1909 twenty-fifth.

The following table gives the most important figures relative to all classes of manufactures combined for the state as returned at the censuses of 1909, 1904, and 1899, together with the percentages of increase from census to census:

	NUMBER OR AMOUNT.			PER CENT OF INCREASE. ¹	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments.....	2,500	1,819	1,695	37.4	7.3
Persons engaged in manufactures.....	31,966	25,358	(²)	26.1	.....
Proprietors and firm members.....	2,522	1,904	(²)	32.5	.....
Salaried employees.....	5,108	3,192	2,296	60.0	39.0
Wage earners (average number).....	24,336	20,260	18,669	20.1	8.5
Primary horsepower.....	64,466	46,372	41,825	39.0	10.9
Capital.....	\$99,901,000	\$80,235,000	\$65,906,000	24.5	21.7
Expenses.....	183,587,000	146,689,000	113,043,000	25.2	29.7
Services.....	19,439,000	14,097,000	10,949,000	37.9	28.8
Salaries.....	5,491,000	3,075,000	2,107,000	78.6	45.9
Wages.....	13,948,000	11,022,000	8,842,000	26.5	24.7
Materials.....	151,081,000	124,052,000	95,925,000	21.8	29.3
Miscellaneous.....	13,067,000	8,490,000	6,169,000	53.9	37.6
Value of products.....	199,019,000	154,918,000	130,302,000	28.5	18.9
Value added by manufacture (value of products less cost of materials).....	47,938,000	30,866,000	34,377,000	55.3	-10.2

¹ A minus sign (—) denotes decrease.

² Figures not available.

In 1909 the state of Nebraska had 2,500 manufacturing establishments, which gave employment to an average of 31,966 persons during the year and paid out \$19,439,000 in salaries and wages. Of the persons employed, 24,336 were reported as wage earners. These establishments turned out products to the value of \$199,019,000, to produce which materials costing \$151,081,000 were consumed. The value added by manufacture was thus \$47,938,000, which figure, as explained in the Introduction, best represents the net wealth

created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of Nebraska as a whole showed a considerable increase during the five-year period 1904-1909. From 1899 to 1904 the number of establishments increased 7.3 per cent, the average number of wage earners 8.5 per cent, and the value of products 18.9 per cent, while the value added by manufacture decreased 10.2 per cent. During the more recent period the number of establishments

increased 37.4 per cent, the average number of wage earners 20.1 per cent, and the value of products 28.5 per cent, while the value added by manufacture increased 55.3 per cent. The decrease of 10.2 per cent in the value added by manufacture from 1899 to 1904 is due largely to the figures reported for the lead smelting and refining industry. This industry is included with "All other industries" because its statistics can not be given without disclosing individual operations. The manufacturing operations in this industry frequently are so closely related to those of mining that it is not always practicable to separate mining and manufacturing expenses. As a result, the cost of materials used by smelters which

are operated by mining companies may represent the actual cost of mining, or its market value at the smelters as though purchased from other producers, or an arbitrary cost placed upon it by the book-keeping methods of the companies. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the full extent indicated by these figures regarding values, since the increase shown is certainly due, in part, to the increase that has taken place in the price of commodities.

The relative importance and growth of the leading manufacturing industries of the state are shown in the following table:

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. ¹			
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All industries.....	2,500	24,358	100.0	\$199,019,000	100.0	\$47,938,000	100.0	28.5	18.9	55.3	-10.2
Slaughtering and meat packing.....	18	6,015	24.7	92,305,000	46.4	13,047,000	29.1	33.1	-2.7	73.2	-2.2
Flour-mill and gristmill products.....	249	839	3.4	17,836,000	9.0	2,619,000	5.5	46.3	59.4	28.6	24.1
Butter, cheese, and condensed milk.....	37	383	1.6	7,081,000	3.9	1,246,000	2.6	130.9	47.6	90.5	63.5
Printing and publishing.....	674	2,329	9.6	6,007,000	3.3	4,956,000	10.3	33.6	44.5	34.1	48.2
Cars and general shop construction and repairs by steam-railroad companies.....	13	3,685	15.1	4,042,000	2.3	2,018,000	6.1	5.6	67.5	17.8	53.5
Liquors, malt.....	14	424	1.7	3,335,000	1.7	2,710,000	5.7	100.4	10.0	124.9	7.4
Bread and other bakery products.....	279	646	2.7	3,014,000	1.5	1,342,000	2.8	123.1	37.2	112.7	13.3
Foundry and machine-shop products.....	73	1,020	4.2	2,930,000	1.5	1,414,000	2.9				
Lumber and timber products.....	48	543	2.2	2,021,000	1.0	795,000	1.7				
Leather goods.....	30	266	1.1	1,583,000	0.8	605,000	1.3	61.0	7.5	35.3	10.9
Clothing, men's, including shirts.....	12	887	3.6	1,545,000	0.8	578,000	1.2	45.1		70.5	
Gas, illuminating and heating.....	48	400	1.6	1,415,000	0.7	970,000	2.0	55.2	73.7	44.3	71.9
Paint and varnish.....	4	112	0.5	1,254,000	0.6	405,000	0.8	231.4	-58.6	203.2	-63.8
Artificial stone.....	286	553	2.3	1,226,000	0.6	712,000	1.5	717.3		747.6	
Confectionery.....	18	383	1.6	1,176,000	0.6	471,000	1.0	117.0	118.5	38.1	207.2
Brick and tile.....	78	831	3.4	1,161,000	0.6	883,000	1.8	2.6	34.8	3.3	34.2
Tobacco manufactures.....	151	537	2.2	1,072,000	0.5	603,000	1.3	19.1	28.2	7.3	35.1
Dairymen's, poultryers', and apiarists' supplies.....	16	230	0.9	941,000	0.5	482,000	1.0	281.0		217.1	
Marble and stone work.....	38	187	0.8	721,000	0.4	390,000	0.8	97.0	422.0	73.3	368.8
Patent medicines and compounds and druggists' preparations.....	39	86	0.4	669,000	0.3	424,000	0.9	51.7		70.3	
Carriages and wagons and materials.....	22	200	0.8	577,000	0.3	326,000	0.7	81.4	28.7	71.6	21.0
Copper, tin, and sheet-iron products.....	37	180	0.7	562,000	0.3	273,000	0.6				
Cooperage and wooden goods, not elsewhere specified.....	4	95	0.4	498,000	0.2	154,000	0.3	84.4	-36.9	90.1	-36.7
Canning and preserving.....	12	215	0.9	481,000	0.2	212,000	0.4				
Mattresses and spring beds.....	6	113	0.5	355,000	0.2	138,000	0.3	255.0	-35.9	176.0	-13.8
All other industries.....	294	3,177	13.1	43,354,000	21.8	8,365,000	17.4				

¹ Percentages are based on figures in Table I; a minus sign (-) denotes decrease. Where the percentages are omitted, comparable figures can not be given.

It should be borne in mind, in considering this table, that the value of products in some of the industries involves a certain amount of duplication due to the use of the product of one establishment in the industry as material for another establishment.

The most important industries listed in this table, where they are arranged in the order of the value of products, call for brief consideration.

Slaughtering and meat packing.—The development of this industry in Nebraska is due partly to the natural advantages afforded by the state for feeding cattle and partly to its central location in the corn and cattle raising sections of the country. Not only is a large amount of live stock bred in Nebraska, but large numbers of animals are also brought from other states to the feeding grounds in Nebraska to be fattened for market. The center of the slaughtering and meat-packing indus-

try is South Omaha, where it was firmly established in the early eighties, when the plant of the Union Stock Yards Company was erected. The importance of this industry is best indicated by the fact that in 1909 it gave employment to 24.7 per cent of the total number of wage earners engaged in all manufacturing industries in the state and contributed 46.4 per cent of the aggregate value of products. In 1909 but three states—Illinois, Kansas, and New York—produced a greater value in slaughtering and meat-packing products.

Flour-mill and gristmill products.—In a state which is so largely agricultural and whose principal crops are cereals it is natural that this industry should take high rank. The 249 establishments engaged in this industry are distributed widely through the state and, while the majority of them are small and located in

rural districts, there are a number of considerable size. This industry, the second in importance in the state, increased in value of products \$10,042,000, or 128.8 per cent, during the past decade. Its growth has been rapid and steady, the percentage of increase for the period 1904-1909 being a very little less than for the earlier period, 1899-1904. The remarkable development of this industry may be fully realized from the statistics for 1859, which showed but 17 establishments, with a total value of products of \$110,000. Statistics for mills which do only custom work are not included in the general tables or in the totals for manufacturing industries. Separate statistics for such mills are given on page 695.

Butter, cheese, and condensed milk.—The establishments reported for this industry are engaged primarily in the manufacture of butter, the amount of cheese manufactured being small and no condensed-milk products were made in 1909. This industry, while showing a decrease in number of establishments, has made rapid growth in the volume of its operations. In 1909 its products aggregated \$7,681,000 in value, an increase of 130.9 per cent over that of 1904.

Printing and publishing.—The statistics showing number of wage earners, value of products, and value added by manufacture all indicate a considerable growth of this industry. The establishments classified under this head include those publishing newspapers, books, and periodicals, job-printing offices, establishments engaged in bookbinding and blank-book making, and lithographing and engraving establishments.

Cars and general shop construction and repairs by steam-railroad companies.—This industry represents the work done in the car shops by steam-railroad companies and is exclusive of minor repairs in roundhouses. The operations consist almost exclusively of repairs to rolling stock and equipment. Although the number of establishments reported decreased from 30 in 1904 to 13 in 1909, due to the elimination of a number of roundhouses that were included in the prior census, the value of the work performed increased slightly. Employment was given to an average of 3,685 wage earners, and products were reported amounting to \$4,642,000.

Measured by value added by manufacture the relative rank of these leading industries is somewhat changed from their order when measured by value of products, printing and publishing, railroad repair shops, and malt liquors becoming second, third, and fourth in order, respectively, while flour-mill and gristmill products and butter and cheese products become fifth and eighth, respectively. In the flour-mill and gristmill and the butter and cheese industries, owing to the comparatively simple processes involved and the extent to which these processes are carried on by machinery, the value added by manufacture is not commensurate with the gross value of products.

This table shows also the percentages of increase for these leading industries in respect to value of products and value added by manufacture where the statistics are comparable. The manufacture of artificial stone, which was first commenced in Nebraska on a commercial basis less than a decade ago, has shown a rapid development. Its value of products increased from \$150,000 in 1904 to \$1,226,000 in 1909, or more than sevenfold. The dairymen's, poulterers', and apiarists' supplies, mattress and spring-bed, and paint and varnish industries also showed remarkable increases both in gross value of products and in value added by manufacture. In fact, all of the industries showed a decided increase from 1904 to 1909 in these respects. The increases from 1899 to 1904 were usually smaller, and in several instances decreases were shown.

In addition to the 25 industries presented separately, there are 9 other industries, some of which are among the most important in the state, and each of which had a value of products in 1909 in excess of \$500,000. They are included in the group of "All other industries," because in some instances if they were shown separately the operations of individual establishments would be disclosed; in others, because the returns do not properly present the true condition of the industry owing to its being interwoven with one or more other industries of similar character; and for others, the comparable statistics for the different census years can not be presented either because the data for prior censuses are not available or on account of changes in classification. These industries are: Bags, other than paper; brooms; cars, steam-railroad, not including operations of railroad companies; coffee and spice, roasting and grinding; food preparations; liquors, distilled; smelting and refining, copper; smelting and refining, lead; and soap. Figures for the broom industry for 1909 will be found in Table II.

Persons engaged in manufacturing industries.—The following table shows, for 1909, the distribution of the number of persons engaged in manufactures, the average number of wage earners being distributed by sex and age. It should be borne in mind, however, that 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 Introduction.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes.....	31,966	27,557	4,409
Proprietors and officials.....	3,086	3,572	114
Proprietors and firm members.....	2,522	2,425	97
Salaried officers of corporations.....	342	334	8
Superintendents and managers.....	822	813	9
Clerks.....	3,944	3,044	900
Wage earners (average number).....	24,336	20,941	3,395
16 years of age and over.....	24,119	20,763	3,356
Under 16 years of age.....	217	178	39

The average number of persons engaged in manufactures during 1909 was 31,966, of whom 24,336 were wage earners. Of the remainder, 3,686 were proprietors and officials and 3,944 were clerks. Corresponding figures for individual industries will be found in Table II.

The following table shows, for 1909, the percentage of proprietors and officials, clerks, and wage earners, respectively, among the total number of persons employed in manufactures. It covers all industries combined and 11 important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries.....	31,966	11.5	12.3	76.1
Bread and other bakery products.....	1,155	29.5	14.5	55.9
Butter, cheese, and condensed milk.....	602	14.8	21.6	63.6
Cars and general shop construction and repairs by steam-railroad companies.....	4,021	3.5	4.9	91.6
Clothing, men's, including shirts.....	963	2.6	5.3	92.1
Flour-mill and gristmill products.....	1,455	25.4	14.0	57.7
Foundry and machine-shop products.....	1,346	9.0	15.2	75.8
Leather goods.....	365	13.2	14.0	72.9
Liquors, malt.....	547	8.8	13.7	77.5
Lumber and timber products.....	707	9.9	13.3	76.8
Printing and publishing.....	3,884	21.8	18.2	60.0
Slaughtering and meat packing.....	7,221	0.7	16.0	83.3
All other industries.....	9,700	15.4	9.4	75.2

Of the total number of persons engaged in all manufacturing industries, 11.5 per cent were proprietors and officials, 12.3 per cent clerks, and 76.1 per cent wage earners. The highest percentage of proprietors and officials shown for any individual industry, 29.5, is for the bakeries. In this industry, and also in the flour-mill and gristmill and the printing and publishing industries, the majority of the establishments are small, and the work is to a large extent done by the proprietors or their immediate representatives, so that the proportion of persons engaged in these industries falling in the class of proprietors and officials is very much higher than for most other industries or for all industries combined. The smallest proportion for this class is shown for the slaughtering and meat-packing industry, due to the large average number of wage earners to an individual establishment in this industry.

The table following shows, in percentages, for all industries combined, the distribution of the average number of wage earners, by age periods and for those 16 years of age and over by sex, calculated in the manner described in the Introduction. It also shows, for some of the important industries separately, a similar distribution of wage earners as reported for December 15, or the nearest representative day. As a means of judging the importance of the several industries, the average total number employed for the year is also given in each case.

For all industries combined, 85.3 per cent of the average number of wage earners were males 16 years of age and over; 13.8 per cent, females 16 years of age and over; and only nine-tenths of 1 per cent, persons

under the age of 16.¹ The larger part of the total number of female wage earners is made up of those employed in the manufacture of men's clothing, and in the bakery and the printing and publishing industries. In the men's clothing industry over nine-tenths of the employees are women 16 years of age and over, and in the bakery and the printing and publishing industries the proportion is about one-fourth.

INDUSTRY.	Average number. ¹	WAGE EARNERS.		
		Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
All industries.....	24,336	85.3	13.8	0.9
Bread and other bakery products.....	646	72.6	26.0	1.4
Butter, cheese, and condensed milk.....	383	88.8	10.7	0.5
Cars and general shop construction and repairs by steam-railroad companies.....	3,685	100.0	.....	.....
Clothing, men's, including shirts.....	887	8.0	91.7	0.3
Flour-mill and gristmill products.....	839	92.7	7.0	0.2
Foundry and machine-shop products.....	1,020	98.0	1.3	0.7
Leather goods.....	266	100.0	.....	.....
Liquors, malt.....	424	100.0	.....	.....
Lumber and timber products.....	543	98.5	.....	1.5
Printing and publishing.....	2,329	73.9	23.8	2.3
Slaughtering and meat packing.....	6,015	92.6	6.3	1.1
All other industries.....	7,299	80.9	18.2	0.9

¹ For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

In order to compare the distribution of persons engaged in manufactures in 1909 with that shown at the census of 1904 it is necessary to use the classification employed at the earlier census. (See Introduction.) The following table makes this comparison according to occupational status:

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				Per cent of increase, 1904-1909.
	1909		1904		
	Number.	Percent distribution.	Number.	Percent distribution.	
Total.....	31,966	100.0	25,356	100.0	28.1
Proprietors and firm members.....	2,522	7.9	1,904	7.5	32.5
Salaried employees.....	5,108	16.0	3,132	12.6	60.0
Wage earners (average number).....	24,336	76.1	20,280	79.9	20.1

Comparable figures are not obtainable for 1899. The table shows a greater percentage of increase in the salaried employees than in the other two classes.

The table following shows the average number of wage earners, distributed according to age periods, and in the case of those 16 years of age and over according to sex, for 1909, 1904, and 1899. The averages for 1909 are estimated on the basis of the actual number reported for a single representative day. (See Introduction.)

This table indicates that for all industries combined there has been no great change in the proportion of male and female wage earners. In 1909 males 16 years of age and over formed 85.3 per cent of all wage earners, as compared with 85.5 per cent in 1904 and 86.9 per cent in 1899. The proportion of children

employed decreased from 3.9 per cent in 1899 to nine-tenths of 1 per cent in 1909.

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Percent distribution.	Number.	Percent distribution.	Number.	Percent distribution.
Total.....	24,386	100.0	20,260	100.0	18,669	100.0
16 years of age and over..	24,119	99.1	19,863	98.0	17,936	96.1
Male.....	20,763	85.3	17,321	85.5	16,227	86.9
Female.....	3,356	13.8	2,542	12.5	1,709	9.2
Under 16 years of age....	217	0.9	397	2.0	733	3.9

Wage earners employed, by months.—The following table gives the number of wage earners employed on the 15th of each month during the year 1909 for all industries combined, for four selected industries, and for all other industries combined; it also gives the percentage which the number reported for each month is of the greatest number reported for any month. In Table II, page 698, is shown, for practically all of the important industries of the state, the largest number and the smallest number of wage earners reported for any month. The figures are for the 15th day, or the nearest representative day of the month.

MONTH.	WAGE EARNERS.											
	All industries.		Artificial stone.		Brick and tile.		Canning and preserving.		Slaughtering and meat packing.		All other industries.	
	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.
January.....	22,138	85.3	111	13.1	220	17.4	44	4.8	5,936	87.4	15,827	90.0
February.....	23,283	89.7	136	16.0	245	19.4	48	5.3	6,794	100.0	16,040	91.2
March.....	22,994	88.6	362	42.6	507	40.1	56	6.2	5,785	85.2	16,288	92.6
April.....	23,744	91.5	679	70.9	924	73.2	56	6.2	5,643	83.1	16,442	93.5
May.....	24,277	93.6	825	97.1	1,197	94.0	57	6.3	5,740	84.5	16,468	93.7
June.....	24,748	95.4	850	100.0	1,232	97.5	68	7.5	6,051	89.1	16,547	94.1
July.....	24,742	95.4	842	99.1	1,188	94.1	119	13.1	5,855	89.2	16,738	95.2
August.....	25,628	98.8	841	98.9	1,263	100.0	909	100.0	5,709	84.9	16,846	95.8
September.....	25,945	100.0	801	94.2	1,186	93.9	788	86.7	5,978	88.0	17,192	97.8
October.....	25,373	97.8	635	74.7	902	78.5	218	24.0	6,146	90.5	17,382	95.9
November.....	24,929	96.1	397	46.7	648	51.3	147	16.2	6,157	90.6	17,580	100.0
December.....	24,251	93.5	162	19.1	384	30.4	74	8.1	6,314	82.9	17,317	88.5

The variation from month to month in the number of wage earners employed in all industries combined was slight. The highest number, 25,945, was reported for September and the lowest, 22,138, for January. Of the four industries presented separately, three show considerable variation from month to month in the number of wage earners; however, the total number employed in these three industries is not large. The principal industry of the state is slaughtering and meat packing; the maximum number of employees in this industry, 6,794, was in February and the minimum, 5,643, in April. The artificial-stone industry shows a decided concentration of employment in the summer months; the same is true, in a somewhat less degree, of the brick and tile industry. The great bulk of the work in the canning and preserving industry is done in August and September, when the fruits and vegetables ripen. Exclusive of the four industries mentioned separately the industries of the state, as a whole, report a steady increase in the number of wage earners from 15,827 in January to 17,580 in November.

Prevailing hours of labor.—In the table following wage earners have been classified according to hours of labor prevailing in the establishments in which they are employed. In making this classification the

average number of wage earners employed during the year is used and the number employed in each establishment is classified as a total according to the hours prevailing in that establishment, even though some few employees work a greater or less number of hours.

It is evident from these figures that for the great majority of wage earners employed in the manufacturing industries of Nebraska the prevailing hours of labor range from 54 to 60 a week, or from 9 to 10 a day, only 11.8 per cent of the total being employed in establishments working less than 9 hours a day, and only 10.3 per cent being employed in establishments working more than 10 hours a day.

It will be noted that the artificial-stone, brick and tile, foundry and machine-shop, and slaughtering and meat-packing industries are principally on a 10-hour-per-day basis (60 hours per week), while the railroad repair shops and the men's clothing industries are mainly on a 9-hour basis. The prevailing hours in the flour-mill and gristmill industry are somewhat longer than in the other important specified industries, ranging from 60 to 72 hours, inclusive, per week for nearly all establishments, while in the manufacture of gas most of the wage earners work more than 72 hours per week.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS GROUPED ACCORDING TO PREVAILING HOURS OF WORK PER WEEK.								
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries.....	24,336	1,991	892	6,076	3,876	8,991	1,916	184	410
Artificial stone.....	553	8	4	35	83	423			
Bread and other bakery products.....	646	41	8	240	1	290			
Brick and tile.....	831	70	28	17	16	672	37	21	8
Butter, cheese, and condensed milk.....	383	5		13		274	28		
Canning and preserving.....	215	4	2		19	190	87	4	
Carriages and wagons and materials.....	200	1		15	110	74			
Cars and general shop construction and repairs by steam-railroad companies.....	3,685			1,985	637	115	948		
Clothing, men's, including shirts.....	887	8	302	511	66				
Confectionery.....	383	2		159		222			
Cooperage and wooden goods, not elsewhere specified.....	95					95			
Copper, tin, and sheet-iron products.....	180	67	7	30	36	40			
Dairymen's, poulterers', and apiarists' supplies.....	230		32	17		181			
Flour-mill and gristmill products.....	839	11	14	6	6	447	236	116	3
Foundry and machine-shop products.....	1,020	9	74	116	130	690		1	
Gas, illuminating and heating.....	400	11	1			8	33		
Leather goods.....	266	1	8	9	191	37	20		347
Liquors, malt.....	424	305		60		21	17	21	
Lumber and timber products.....	543	3		148	261	131			
Marble and stone work.....	187	22	66	57	1	41			
Mattresses and spring beds.....	113			86	10	17			
Paint and varnish.....	112	3		61	46	2			
Patent medicines and compounds and druggists' preparations.....	86	10	23	22	16	15			
Printing and publishing.....	2,329	971	178	792	118	258	1	11	
Slaughtering and meat packing.....	6,015			734	1,484	3,786	2	9	
Tobacco manufactures.....	537	323		108	30	76			
All other industries.....	3,177	116	145	855	615	886	507	1	52

Location of establishments.—The next table shows the extent to which manufactures of Nebraska are centralized in cities of 10,000 population or over. (See Introduction.) The statistics for 1904 are omitted from this table because there was no census of population for that year, and it was impossible to determine the cities that came within the group having over 10,000 inhabitants.

ITEM.	Year.	Total.	LOCATION OF ESTABLISHMENTS.		PER CENT OF TOTAL.	
			In cities with population of 10,000 and over.	Outside districts.	In cities with population of 10,000 and over.	Outside districts.
Population....	1910	1,192,214	204,654	987,560	17.2	82.8
	1900	1,066,300	168,725	897,575	15.8	84.2
Number of establishments.	1909	2,500	714	1,786	28.6	71.4
	1899	1,695	429	1,266	25.3	74.7
Average number of wage earners.	1909	24,336	17,085	7,251	70.2	29.8
	1899	18,669	12,707	5,962	68.1	31.9
Value of products.	1909	\$199,018,579	\$162,137,395	\$36,881,184	81.5	18.5
	1899	130,302,453	110,346,627	19,955,826	84.7	15.3
Value added by manufacture.	1909	47,937,608	36,174,579	11,763,029	75.5	24.5
	1899	34,377,275	27,804,848	6,572,427	80.9	19.1

The four cities grouped in this table contain 17.2 per cent of the population of the state and 28.6 per cent of the total number of manufacturing establishments. These establishments, however, gave employment in 1909 to 70.2 per cent of the total number of wage earners, and reported 81.5 per cent of the total value of products and 75.5 per cent of the total value added by manufactures reported for all establishments in the state. The figures indicate that while little relative change took place during the 10 years between

the totals for the cities and for those of the districts outside, the latter reported a slightly greater relative increase in value of products and value added by manufacture than did the cities.

The increase in the population of Grand Island has affected slightly the grouping in the table. Prior to 1910 this city had less than 10,000 inhabitants, and so was included in the outside districts.

The population for 1910 and 1900 of the four cities which had 10,000 inhabitants or over in 1910 is given in the following statement:

CITY.	POPULATION.	
	1910	1900
Omaha.....	124,098	102,555
Lincoln.....	43,973	40,169
South Omaha.....	26,259	26,001
Grand Island.....	10,323	17,554

¹ Population less than 10,000 in 1900; therefore, in the preceding table the statistics for Grand Island for 1899 are included with those for the districts outside of cities.

The relative importance in manufactures of each of the four cities having a population of 10,000 or over in 1910 is shown in the following table, in which the value of products and the average number of wage earners are shown separately for 1909, 1904, and 1899:

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
South Omaha....	6,306	5,662	6,327	\$92,435,712	\$67,415,177	\$69,508,899
Omaha.....	8,023	5,822	5,276	60,854,550	54,003,704	38,074,244
Lincoln.....	2,140	1,617	1,104	7,010,135	5,222,620	2,763,484
Grand Island....	616	(¹)	(¹)	1,336,908	(¹)	(¹)

¹ Figures not available.

Although ranking third in population in 1910, South Omaha was the leading manufacturing city of the state when measured by value of products. The value of its products, which were almost entirely those of the slaughtering and meat-packing industry, formed 46.4 per cent of the total for the state in 1909. During this year the city produced 96.9 per cent of the total value of products of the above-mentioned industry for the state. While a slight decrease appears in the total value of products for the city from 1899 to 1904, due to the temporary idleness of a large slaughtering and meat-packing establishment, a decided growth is shown for the more recent census period.

Omaha is the only city having a population of 50,000 and over and for which separate comparative statistics are given for individual industries. (See Table I.) Although the smelting and refining of lead is by far the most important industry in Omaha, the figures for the industry can not be given because to do so would disclose individual operations. In addition to the 11 industries presented separately in Table I, there are 11 other industries, some of which were among the most important in the city and none of which had a value of product of less than \$300,000 in 1909. They are included in the group of "All other industries" for reasons similar to those given for not showing comparative figures for all industries for the state. The 11 industries not shown in this table are: Bags, other than paper; boots and shoes, including cut stock and findings; cars and general shop construction and repairs by steam-railroad companies; the construction of steam-railroad cars, other than by railroad companies; coffee and spice, roasting and grinding; flour-mill and gristmill products; food preparations; gas, illuminating and heating; liquors, distilled; smelting and refining, copper; and smelting and refining, lead.

Omaha and South Omaha, by location practically one city, constitute the real center of the manufacturing activity of the state. While the two cities have but 12.6 per cent of the population of the state, they employ 58.9 per cent of the average number of wage-earners and produce 77 per cent of the total value of products.

Lincoln and Grand Island ranked third and fourth, respectively, among the cities in the value of products. The principal industries of Lincoln are butter and cheese and printing and publishing, although a considerable variety of other industries of lesser importance were reported. Comparative figures for Grand Island are not available. In 1909 the principal industries reported for this city were the steam-railroad car shops and the flour mills and gristmills.

Character of ownership.—The table that follows has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined, comparative figures are given covering the cen-

suses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually.

In order to avoid disclosing the operations of individual concerns, it is necessary to omit the statistics for several important industries from this table and the one following.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909.....	2,500	24,336	\$199,018,579	\$47,937,608
1904.....	1,819	20,260	154,813,220	30,866,592
Individual:				
1909.....	1,511	3,298	13,767,422	5,938,527
1904.....	1,074	2,727	9,050,696	3,929,820
Firm:				
1909.....	451	1,436	8,974,303	2,820,270
1904.....	367	1,670	7,113,897	2,448,620
Corporation:				
1909.....	487	19,495	175,021,402	38,977,121
1904.....	359	15,844	138,623,975	24,456,721
Other:				
1909.....	51	107	655,452	201,690
1904.....	19	19	129,682	31,422
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Individual:				
1909.....	60.4	13.6	6.9	12.4
1904.....	59.0	13.5	5.8	12.7
Firm:				
1909.....	18.0	5.9	4.5	5.9
1904.....	20.2	8.2	4.6	7.9
Corporation:				
1909.....	19.5	80.1	88.2	81.3
1904.....	19.7	78.2	89.5	79.2
Other:				
1909.....	2.0	0.4	0.3	0.4
1904.....	1.0	0.1	0.1	0.1
Bread and other bakery products, 1909.				
Individual.....	279	646	\$3,014,061	\$1,349,240
Firm.....	221	325	1,549,262	689,845
Corporation.....	49	117	514,120	219,414
Other.....	9	204	950,709	433,951
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	79.2	50.3	51.4	51.3
Firm.....	17.6	18.1	17.1	16.3
Corporation.....	3.2	31.6	31.5	32.3
Butter, cheese, and condensed milk, 1909.				
Individual.....	37	383	\$7,681,372	\$1,246,536
Firm.....	12	51	652,278	95,826
Corporation.....	11	293	6,559,189	1,085,323
Other.....	14	89	469,898	65,377
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	32.4	13.3	8.5	7.7
Corporation.....	29.7	76.5	85.4	87.1
Other.....	37.8	10.2	6.1	5.2
Flour-mill and gristmill products, 1909.				
Individual.....	249	839	\$17,835,596	\$2,618,338
Firm.....	115	199	3,844,517	628,531
Corporation.....	75	176	4,978,782	724,531
Other.....	59	464	9,012,297	1,265,260
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	46.2	23.7	21.6	24.0
Firm.....	30.1	21.0	27.9	27.7
Corporation.....	23.7	55.3	50.5	48.3
Foundry and machine-shop products, 1909.				
Individual.....	73	1,020	\$3,929,583	\$1,418,577
Firm.....	30	130	543,870	271,175
Corporation.....	13	60	130,623	75,659
Other.....	30	840	2,255,090	1,066,743
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	41.1	12.7	18.6	19.2
Firm.....	17.8	4.9	4.5	5.4
Corporation.....	41.1	82.4	77.0	75.5
Leather goods, 1909.				
Individual.....	30	266	\$1,582,866	\$605,024
Firm.....	17	23	98,107	44,898
Corporation.....	6	100	714,802	310,723
Other.....	7	143	769,957	240,403
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	55.7	8.6	6.2	7.4
Firm.....	20.0	37.6	45.2	62.8
Corporation.....	23.3	53.8	48.6	39.7

1 Includes the group "Other," to avoid disclosure of individual operations.
 2 Includes the group "Firm," to avoid disclosure of individual operations.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
Lumber and timber products, 1909.				
Individual.....	48	543	\$2,021,366	\$795,425
Firm.....	24	96	221,323	132,918
Corporation.....	9	31	75,737	44,687
Other.....	15	418	1,724,306	617,820
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	50.0	17.7	10.9	18.7
Firm.....	18.7	5.7	3.7	5.6
Corporation.....	31.2	76.6	85.3	77.7
Printing and publishing, 1909.				
Individual.....	674	2,329	\$6,667,290	\$4,955,946
Firm.....	491	783	1,900,499	1,472,044
Corporation.....	86	220	515,816	375,873
Other.....	74	1,276	4,112,919	2,992,549
Other.....	23	60	138,056	115,480
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	72.8	33.6	28.5	29.7
Firm.....	12.8	9.4	7.7	7.6
Corporation.....	11.0	54.8	61.7	60.4
Other.....	3.4	2.1	2.1	2.3
Slaughtering and meat packing, 1909.				
Individual.....	18	6,015	\$92,305,484	\$13,947,606
Firm.....	7	19	353,003	66,618
Corporation.....	6	19	297,364	55,020
Other.....	5	5,977	91,655,117	13,827,968
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	38.9	0.3	0.4	0.5
Firm.....	33.3	0.3	0.3	0.4
Corporation.....	27.8	99.4	99.3	99.1

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 19.5 per cent of the total number of establishments were in 1909 under corporate ownership as against 80.5 per cent under all of the remaining forms. The corresponding figures for 1904 were 19.7 per cent and 80.3 per cent, respectively. In general, the larger establishments in all the industries reported were operated by corporations. At both census years, corporations controlled about four-fifths of the manufacturing activities of the state, as measured by average number of wage earners, value of products, or value added by manufacture.

The form of ownership prevailing in the different industries varied considerably. In all but two of the industries shown separately the most common form of ownership was the individual. The largest percentage of corporations is found in the foundry and machine-shop and in the lumber industries. In the butter and cheese industry the most common form of ownership was the cooperative, classed under "Other" forms of ownership in the table. These are establishments operated largely by farmers, who organize for the purpose of securing a steady and better market for their milk and cream.

Size of establishment.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization. In order to throw some light upon it, the next table groups the establishments according to the value of their products. The table also shows the average size of establish-

ments for all industries combined and for important industries separately as measured by the number of wage earners, the value of products, and the value added by manufacture. The totals for all industries are shown for the last two censuses, while for certain important industries figures are given for 1909 only.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909.....	2,500	24,336	\$199,018,579	\$47,937,808
1904.....	1,819	20,360	154,918,220	30,856,599
Less than \$5,000:				
1909.....	1,266	1,089	2,951,130	1,907,985
1904.....	938	1,034	2,059,096	1,439,480
\$5,000 and less than \$20,000:				
1909.....	685	2,477	6,778,610	3,844,646
1904.....	451	1,980	4,628,580	2,529,238
\$20,000 and less than \$100,000:				
1909.....	399	4,220	17,100,526	6,781,959
1904.....	320	3,727	13,315,999	5,393,601
\$100,000 and less than \$1,000,000:				
1909.....	133	7,862	35,055,151	13,363,538
1904.....	101	6,359	24,900,507	9,169,414
\$1,000,000 and over:				
1909.....	17	8,688	137,133,162	22,039,481
1904.....	9	7,160	110,013,438	12,334,859
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Less than \$5,000:				
1909.....	50.6	4.5	1.5	4.0
1904.....	51.6	5.1	1.3	4.7
\$5,000 and less than \$20,000:				
1909.....	27.4	10.2	3.4	8.0
1904.....	24.8	9.8	3.0	8.2
\$20,000 and less than \$100,000:				
1909.....	16.0	17.3	8.6	14.1
1904.....	17.6	18.4	8.6	17.5
\$100,000 and less than \$1,000,000:				
1909.....	5.3	32.3	17.6	27.9
1904.....	5.6	31.4	16.1	29.7
\$1,000,000 and over:				
1909.....	0.7	35.7	68.9	46.0
1904.....	0.5	35.3	71.0	40.0
Average per establishment:				
1909.....	10	79,607	\$19,175	\$10,175
1904.....	11	85,167	16,969	16,969
Bread and other bakery products, 1909.				
Individual.....	279	646	\$3,014,091	\$1,342,240
Firm.....	132	74	384,092	174,949
Corporation.....	120	247	1,060,564	482,963
Other.....	27	325	1,569,435	684,328
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	47.3	11.5	12.7	13.0
\$5,000 and less than \$20,000.....	43.0	35.2	35.2	36.0
\$20,000 and less than \$100,000.....	9.7	50.3	62.1	51.0
Average per establishment.....	2	\$10,803	\$4,811	
Butter, cheese, and condensed milk, 1909.				
Individual.....	37	383	\$7,681,272	\$1,246,586
Firm.....	3	1	10,028	1,808
Corporation.....	8	12	102,371	16,549
Other.....	15	42	658,787	96,414
Other.....	8	143	2,628,082	394,471
Other.....	3	185	4,282,004	787,284
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	8.1	0.3	0.1	0.1
\$5,000 and less than \$20,000.....	21.6	3.1	1.3	1.3
\$20,000 and less than \$100,000.....	40.5	11.0	8.6	7.7
\$100,000 and less than \$1,000,000.....	21.6	37.3	34.2	31.6
\$1,000,000 and over.....	8.1	48.3	58.7	58.2
Average per establishment.....	10	\$207,602	\$33,690	
Flour-mill and gristmill products, 1909.				
Individual.....	249	839	\$17,835,596	\$2,618,328
Firm.....	31	2	72,789	15,189
Corporation.....	47	35	560,447	117,799
Other.....	129	302	5,676,850	970,125
Other.....	42	500	11,625,510	1,515,215
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	12.4	0.2	0.4	0.6
\$5,000 and less than \$20,000.....	18.9	4.2	8.1	4.5
\$20,000 and less than \$100,000.....	51.8	36.0	31.3	37.1
\$100,000 and less than \$1,000,000.....	16.9	59.6	65.2	57.9
Average per establishment.....	3	\$71,629	\$10,516	

¹ Includes the group "\$100,000 and less than \$1,000,000."

² Includes the group "\$1,000,000 and over."

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
Foundry and machine-shop products, 1909.....	73	1,020	\$2,929,583	\$1,413,577
Less than \$5,000.....	24	24	64,372	37,050
\$5,000 and less than \$20,000.....	28	134	297,960	190,055
\$20,000 and less than \$100,000.....	16	271	762,829	365,504
\$100,000 and less than \$1,000,000.....	5	591	1,804,422	820,905
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	32.9	2.4	2.2	2.6
\$5,000 and less than \$20,000.....	38.4	13.1	10.2	13.4
\$20,000 and less than \$100,000.....	21.9	26.6	26.0	25.0
\$100,000 and less than \$1,000,000.....	6.8	57.9	61.6	58.1
Average per establishment.....		14	\$40,131	\$19,304
Leather goods, 1909.....	80	266	\$1,582,866	\$605,024
Less than \$5,000.....	11	11	33,320	17,526
\$5,000 and less than \$20,000.....	9	25	97,418	48,315
\$20,000 and less than \$100,000.....	4	32	160,316	61,910
\$100,000 and less than \$1,000,000.....	6	198	1,201,812	477,273
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	36.7	4.1	2.1	2.9
\$5,000 and less than \$20,000.....	30.0	9.4	6.2	8.0
\$20,000 and less than \$100,000.....	13.3	12.0	10.1	10.2
\$100,000 and less than \$1,000,000.....	20.0	74.4	81.6	78.9
Average per establishment.....		9	\$52,762	\$20,167
Lumber and timber products, 1909.....	48	543	\$2,021,366	\$795,425
Less than \$5,000.....	18	15	40,833	29,515
\$5,000 and less than \$20,000.....	14	62	140,278	87,130
\$20,000 and less than \$100,000.....	11	184	435,959	212,517
\$100,000 and less than \$1,000,000.....	5	282	1,398,298	466,263
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	37.5	2.8	2.3	3.7
\$5,000 and less than \$20,000.....	29.2	11.4	6.9	11.0
\$20,000 and less than \$100,000.....	22.9	33.9	21.6	26.7
\$100,000 and less than \$1,000,000.....	10.4	51.9	69.2	58.6
Average per establishment.....		11	\$42,112	\$16,571
Printing and publishing, 1909.....	674	2,329	\$6,667,290	\$4,955,948
Less than \$5,000.....	489	488	1,135,248	901,897
\$5,000 and less than \$20,000.....	140	549	1,210,342	956,450
\$20,000 and less than \$100,000.....	33	562	1,373,699	949,219
\$100,000 and less than \$1,000,000.....	12	730	2,948,001	2,148,380
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	72.0	21.0	17.0	18.2
\$5,000 and less than \$20,000.....	20.8	23.6	18.2	19.3
\$20,000 and less than \$100,000.....	4.9	24.1	20.0	18.2
\$100,000 and less than \$1,000,000.....	1.8	31.3	44.2	43.3
Average per establishment.....		3	\$9,892	\$7,353
Slaughtering and meat packing, 1909.....	18	6,015	\$92,805,484	\$13,947,606
\$5,000 and less than \$20,000.....	4	8	39,725	13,123
\$20,000 and less than \$100,000.....	8	23	460,051	91,354
\$100,000 and over.....	6	5,984	91,815,108	13,843,129
Per cent of total.....	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000.....	22.2	0.1	(¹)	0.1
\$20,000 and less than \$100,000.....	44.4	0.4	0.5	0.7
\$100,000 and over.....	33.3	99.5	99.5	99.2
Average per establishment.....		334	\$5,128,082	\$774,807

¹ Includes the group "Less than \$5,000."
² Includes the group "\$100,000 but less than \$1,000,000."
³ Less than one-tenth of 1 per cent.

This table shows that in 1909 of the 2,500 establishments only 17, or seven-tenths of 1 per cent, had a value of product exceeding \$1,000,000. These establishments, however, employed an average of 8,688 wage earners, or 35.7 per cent of the total number in all establishments, and reported 68.9 per cent of the total value of products and 46 per cent of the total value added by manufacture.

On the other hand, small establishments—that is, those having a value of product of less than \$5,000—constituted a considerable proportion (50.6 per cent) of the total number of establishments, but the value

of their product amounted to only 1.5 per cent of the total. The great bulk of the manufacturing was carried on in establishments having a product valued at not less than \$100,000 each.

During the five years from 1904 to 1909 no clear tendencies can be seen as to changes in the relative importance of the classes. During this period the average number of wage earners per establishment decreased from 11 in 1904 to 10 in 1909, and the average value of products per establishment from \$85,167 to \$79,607. On the other hand, the average value added by manufacture per establishment increased from \$16,969 in 1904 to \$19,175 in 1909. The table shows further that in all the industries shown separately, with the exception of the bakeries and the printing and publishing establishments, the bulk of the value of product is contributed by the establishments having a value of products in excess of \$100,000.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of establishments to bring out the feature of size is a classification according to the number of wage earners employed. The next table shows, for 1909, such a classification for all industries combined and for 11 important industries individually, and gives not only the number of establishments falling in each group but also the average number of wage earners employed.

The per cent distribution of the number of establishments is not shown in this table; of the 2,500 establishments reported for all industries, 19.2 per cent employed no wage earners; 62.6 per cent, 1 to 5; 12.2 per cent, 6 to 20; and 3.3 per cent, 21 to 50. The most numerous single group consists of the 1,564 establishments employing from 1 to 5 wage earners, and the next of the 481 establishments employing no wage earners. There were 15 establishments that employed over 250 wage earners and 4 that employed over 1,000.

Of the total number of wage earners, 43.4 per cent were in establishments employing over 250 wage earners. The single group having the largest number of employees was the group employing over 1,000 wage earners. This group, composed in most part of slaughtering and meat-packing establishments, employed 6,451 wage earners, or 26.5 per cent of the total. The individual industries listed in this table, but not in the preceding one, namely, railroad repair shops, men's clothing, and malt liquor, are industries in which comparatively large establishments do most of the business, as appears from the classification according to the number of wage earners.

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—								
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
		NUMBER OF ESTABLISHMENTS.								
All industries.....	2,500	481	1,564	305	82	39	14	9	2	4
Bread and other bakery products.....	279	71	191	15	1		1			
Butter, cheese, and condensed milk.....	37	3	22	7	2	3				
Cars and general shop construction and repairs by steam-railroad companies.....	13				2	3	2	4	1	1
Clothing, men's, including shirts.....	12		2	4	1		2			
Flour-mill and gristmill products.....	249	52	160	35		1	2	1		
Foundry and machine-shop products.....	73	8	35	22	6		1			
Leather goods.....	30	3	16	6	6		1	1		
Liquors, malt.....	14	1	2	5	1	5				
Lumber and timber products.....	48	7	22	13	3	3				
Printing and publishing.....	674	189	415	51	13	5	1			
Slaughtering and meat packing.....	18	1	10	2			1		1	2
All other industries.....	1,053	146	689	145	48	17	5	3		
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	24,336		3,043	3,252	2,708	2,650	2,113	2,876	1,243	6,451
Bread and other bakery products.....	646		351	133	22		140			
Butter, cheese, and condensed milk.....	383		44	81	69	189				
Cars and general shop construction and repairs by steam-railroad companies.....	3,685				65	245	242	1,230	509	1,388
Clothing, men's, including shirts.....	887		6	46	31	138	321	345		
Flour-mill and gristmill products.....	839		342	307		60	130			
Foundry and machine-shop products.....	1,020		77	241	202		166	334		
Leather goods.....	200		28	60	178					
Liquors, malt.....	424		9	61	24	330				
Lumber and timber products.....	543		52	171	108	214				
Printing and publishing.....	2,329		807	546	428	355	193			
Slaughtering and meat packing.....	8,016		25	13			180		734	5,063
All other industries.....	7,299		1,302	1,593	1,583	1,119	741	961		
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0		12.5	13.4	11.1	10.9	8.7	11.8	5.1	26.5
Bread and other bakery products.....	100.0		54.3	20.6	3.4		21.7			
Butter, cheese, and condensed milk.....	100.0		11.5	21.1	18.0	49.3				
Cars and general shop construction and repairs by steam-railroad companies.....	100.0				1.8	6.6	6.6	33.5	13.8	37.7
Clothing, men's, including shirts.....	100.0		0.7	5.2	3.5	15.6	36.2	38.9		
Flour-mill and gristmill products.....	100.0		40.8	36.6		7.2	15.5			
Foundry and machine-shop products.....	100.0		7.6	23.6	19.8		16.3	32.7		
Leather goods.....	100.0		10.5	22.6	66.0					
Liquors, malt.....	100.0		2.1	14.4	5.7	77.8				
Lumber and timber products.....	100.0		9.6	31.5	19.5	39.4				
Printing and publishing.....	100.0		34.7	23.4	18.4	15.2	8.3			
Slaughtering and meat packing.....	100.0		0.4	0.2			3.0		12.2	84.2
All other industries.....	100.0		17.8	21.8	21.7	15.3	10.2	13.2		

Expenses.—As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total.

The table following shows in percentages the distribution of expenses among the classes indicated for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	3.0	7.6	82.3	7.1
Bread and other bakery products.....	4.8	15.7	70.4	9.1
Butter, cheese, and condensed milk.....	2.7	3.5	88.5	5.3
Cars and general shop construction and repairs by steam-railroad companies.....	7.0	48.9	37.2	6.9
Clothing, men's, including shirts.....	4.9	20.2	67.9	6.9
Flour-mill and gristmill products.....	1.9	3.1	91.7	3.2
Foundry and machine-shop products.....	9.7	22.2	56.7	11.4
Leather goods.....	5.3	14.3	71.2	9.1
Liquors, malt.....	9.9	11.2	24.0	54.9
Lumber and timber products.....	5.8	19.6	67.4	7.3
Printing and publishing.....	15.5	27.1	33.2	24.2
Slaughtering and meat packing.....	1.6	3.9	90.0	4.5
All other industries.....	3.1	8.0	80.4	8.6

This table shows that, for all industries combined, 82.3 per cent of the total expenses was incurred for materials, 10.6 per cent for services—that is, salaries and wages—and but 7.1 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries. The large percentage shown for miscellaneous expenses for the malt-liquor industry is due to the inclusion of internal-revenue taxes.

Engines and power.—The table following shows, for all industries combined, the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current), and their total horsepower at the censuses of 1909, 1904, and 1899. It also shows separately the number and horsepower of electric motors, including those operated by current generated in the manufacturing establishments.

The table indicates that the absolute increase in primary power was chiefly in power generated by steam, although power generated by gas engines and rented electric power showed much greater percentages of increase. Water power remained about the same at the three censuses. A more general use of gas engines is shown, the number of such engines reported being 686 in 1909, as against 334 in 1904. The figures also

show that the practice of renting power is on the increase, 12 per cent of the total power being rented in 1909, as against but 5.4 per cent in 1904 and 2.9 per cent in 1899. The use of electric motors for the purpose of applying the power generated within the establishments is also shown to be rapidly becoming more common, increasing from 1,532 horsepower in 1899 to 5,762 in 1904 and 8,412 in 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 ¹	1909	1904	1899 ¹	1909	1904	1899
Primary power, total.....	2,694	1,010	1,337	64,466	46,372	41,825	100.0	100.0	100.0
Owned.....	1,306	1,010	1,337	56,726	43,881	40,608	88.0	94.6	97.1
Steam.....	537	516	813	44,806	34,012	31,048	99.5	73.3	74.2
Gas.....	689	334	358	4,408	2,035	1,019	6.8	4.4	4.6
Water wheels.....	135	156	106	7,361	7,130	7,513	11.4	15.4	18.0
Water motors.....	8	4	(?)	75	91	(?)	0.1	0.2	(?)
Other.....				76	613	128	0.1	1.3	0.3
Rented.....	1,328	(?)	(?)	7,740	2,491	1,217	12.0	5.4	2.9
Electric.....	1,328	(?)	(?)	7,530	2,364	866	11.7	5.1	2.1
Other.....				210	127	351	0.3	0.3	0.8
Electric motors.....	1,940	300	90	15,042	8,126	2,398	100.0	100.0	100.0
Run by current generated by establishment.....	612	300	90	8,412	5,762	1,532	52.8	70.9	63.9
Run by rented power.....	1,328	(?)	(?)	7,530	2,364	866	47.2	29.1	36.1

¹ Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.
² Not reported.

Fuel.—Closely related to the question of kind of power employed is that of the fuel used in generating this power, or otherwise as material in the manufacturing processes.

The following table shows the quantity of each kind of fuel used in 1909 for all industries combined and for certain selected industries:

INDUSTRY.	Anthracite coal (tons).	Bituminous coal (tons).	Coke (tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
All industries.....	2,829	871,666	33,574	9,513	134,771	18,439
Bread and other bakery products.....	573	3,844	1,193	4,057	164	3,150
Brick and tile.....		50,009	2,027	1,825	2,155	
Butter, cheese, and condensed milk.....		8,685	39		10,712	
Cars and general shop construction and repairs by steam-railroad companies.....	27	363,945	161	3,123	4,066	191
Clothing, men's, including shirts.....	8	508			8	
Flour-mill and gristmill products.....	741	61,036		94	2,010	
Foundry and machine-shop products.....	7	4,700	2,216	186	857	1,005
Gas, illuminating and heating.....	369	12,159	18,053	7	78,904	1,774
Leather goods.....	33	623			44	100
Liquors, malt.....	112	21,934	20	93	12,184	
Lumber and timber products.....		2,124			384	
Printing and publishing.....	324	6,351	114	10	1,198	5,535
Slaughtering and meat packing.....		242,154		7	1,386	126
All other industries.....	630	87,294	9,791	111	11,149	6,642

NOTE.—In addition, there were 169 tons of other varieties of fuel reported.

SUPPLEMENTARY DATA REGARDING IMPORTANT INDUSTRIES.

(With statistics for laundries and custom gristmills.)

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantity and cost of materials and the quantity and value of products which do not appear on the general schedule. Certain data of this character for four important industries in the state of Nebraska are here presented.

Slaughtering and meat packing.—This classification includes wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage only. The following tabular statement gives the kind, quantity, and cost of materials used and the quantity and value of the various products at the censuses of 1909, 1904, and 1899:

MATERIAL OR PRODUCT.	1909	1904	1899 ¹	MATERIAL OR PRODUCT.	1909	1904	1899 ¹
Materials used, total cost.....	\$78,867,878	\$61,277,610	\$63,043,186	Pork, fresh:			
Beef slaughtered:				Pounds.....	98,834,601	83,484,004	84,632,189
Number.....	651,258	627,129	681,032	Value.....	\$8,624,522	\$5,886,362	\$5,618,922
Cost.....	\$32,069,207	\$25,103,912	\$24,533,897	Pork, salted or cured:			
Calves slaughtered:				Pounds.....	184,213,423	250,832,315	346,490,410
Number.....	58,168	9,707	8,454	Value.....	\$20,252,674	\$20,645,428	\$24,174,049
Cost.....	\$637,168	\$75,635	\$121,878	Sausage, fresh or cured.....	\$2,108,874	\$1,223,537	\$1,483,558
Sheep slaughtered:				All other fresh meat:			
Number.....	1,127,962	949,310	723,520	Pounds.....	5,319,504	8,198,486	(?)
Cost.....	\$5,429,148	\$3,482,582	\$3,076,671	Value.....	\$343,573	\$61,107	(?)
Hogs slaughtered:				Lard:			
Number.....	2,103,603	2,358,325	2,733,304	Pounds.....	89,851,980	84,703,231	94,801,004
Cost.....	\$32,635,715	\$27,659,297	\$27,846,114	Value.....	\$9,163,052	\$5,351,401	\$5,375,550
Fuel and rent of power.....	602,777	466,464	355,209	Tallow, oleo stock, and stearin:			
All other materials.....	7,123,873	4,489,720	7,114,427	Pounds.....	20,525,345	(?)	(?)
Value.....	\$1,757,624	(?)	(?)	Value.....	\$1,757,624	(?)	(?)
Products, total value.....	\$92,305,484	\$69,328,920	\$71,280,866	Fertilizers and fertilizer materials:			
Beef, fresh:				Tons.....	24,469	23,310	15,414
Pounds.....	354,358,419	337,481,262	307,786,549	Value.....	\$579,591	\$617,019	\$251,258
Value.....	\$26,914,613	\$20,022,154	\$22,637,020	Hides:			
Beef, salted or cured:				Number.....	687,631	686,665	528,256
Pounds.....	6,750,949	15,006,931	11,945,633	Pounds.....	39,975,521	39,860,510	31,446,074
Value.....	\$629,441	\$583,349	\$773,966	Value.....	\$5,439,014	\$3,726,906	\$2,927,334
Veal, fresh:				Pelts:			
Pounds.....	7,609,474	1,162,620	1,832,589	Number.....	1,127,937	956,686	(?)
Value.....	\$664,563	\$71,843	\$145,809	Value.....	\$1,410,685	\$1,003,744	(?)
Mutton, fresh:				All other products, including custom or contract work.....	\$10,340,297	\$6,339,097	\$4,704,716
Pounds.....	45,101,857	42,550,050	32,991,157				
Value.....	\$4,076,961	\$2,746,883	\$2,098,184				

¹ Excluding statistics for two establishments, to avoid disclosure of individual operations.
² Figures not available.

There were 24,129, or 3.8 per cent, more beeves slaughtered in 1909 than in 1904; 178,652, or 18.8 per cent, more sheep; and 48,451, or 499.1 per cent, more calves; but a decrease of 254,723, or 10.8 per cent, took place in the number of hogs. In the product the number of pounds of beef, fresh and cured, increased 8,621,175 from 1904 to 1909, that of mutton 2,545,807, and of veal 6,446,854, while the amount of pork decreased 51,268,295 pounds. The total value of products increased \$22,976,564 during the same period. The percentage of increase in value is somewhat greater than that in the quantity of meat produced, due to the higher prices of meats that prevailed in 1909.

Flour-mill and gristmill products.—This is one of the important industries of Nebraska, and shows a rapid development for the last 10 years.

The following tabular statement gives the quantity and value of products for 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$17,835,598	\$12,190,303	\$7,794,130
Wheat flour:			
White—			
Barrels.....	2,252,828	1,730,468	1,666,390
Value.....	\$11,379,662	\$7,897,128	\$5,150,851
Graham—			
Barrels.....	14,722	9,530	(¹)
Value.....	\$71,657	\$42,607	(¹)
Corn meal and corn flour:			
Barrels.....	425,413	542,099	310,202
Value.....	\$1,222,670	\$1,133,437	\$440,192
Rye flour:			
Barrels.....	26,475	51,059	49,792
Value.....	\$120,425	\$193,749	\$127,634
Buckwheat flour:			
Pounds.....	281,389	224,660	258,240
Value.....	\$10,842	\$7,276	\$7,413
Hominy:			
Pounds.....	8,279,732	8,528,940	5,249,000
Value.....	\$94,709	\$93,824	\$40,561
Grits:			
Pounds.....	26,390,992	(²)	(²)
Value.....	\$406,648		
Feed:			
Tons.....	97,159	82,388	85,458
Value.....	\$2,353,508	\$1,299,977	\$1,067,271
Offal:			
Tons.....	91,903	86,723	68,877
Value.....	\$1,798,390	\$1,200,205	\$708,621
All other products.....	\$377,085	\$317,100	\$251,637

¹ Figures not available.

² Combined with hominy.

There was an increase of 522,360, or 30.2 per cent, in the number of barrels of white wheat flour from 1904 to 1909, and an increase of \$3,482,534, or 44.1 per cent, in its value. The value of corn meal and corn flour increased 7.9 per cent, but the quantity decreased 21.5 per cent. Rye flour was the only product showing decreases in both quantity and value.

Of the total value of products reported in 1909, the value of the white wheat flour, amounting to \$11,379,662, formed 63.8 per cent, and the value of offal, the principal part of which is the by-product of the manufacture of wheat flour, was 10.1 per cent. The value of feed amounted to \$2,353,508, or 13.2 per cent, and of corn meal and corn flour \$1,222,670, or 6.9 per cent, of the total value of products for the industry in the state.

Butter, cheese, and condensed milk.—This industry, although showing a decrease in the number of establishments for the last 10 years, shows a large increase in the value of products. The decrease in number of establishments is due to a change in the manner of conducting the industry. In 1899 there were a great

number of small local creameries, which to a great extent have been abandoned and in their stead large central plants established in the larger cities. For instance, in 1899 Omaha had but two small establishments, while in 1909 the city had four large establishments with products valued at \$3,785,873, or 49.3 per cent of the total value of products for the industry in the entire state.

A slight decrease since 1899 is reported in the number of pounds of milk used, but a large increase in the amount of cream, which is due to the fact that a larger part of the cream is now being separated on the farms prior to sending it to the factories. In 1909 only 14 factories were reported as operating cream separators, against 65 in 1904 and 325 in 1899.

The following table gives the quantity and value of products of the butter and cheese industry for 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$7,681,273	\$3,326,110	\$2,253,993
Butter:			
Packed solid—			
Pounds.....	13,652,328	10,573,016	10,077,362
Value.....	\$3,654,578	\$2,074,694	\$1,864,746
Prints or rolls—			
Pounds.....	10,320,834	5,462,452	1,648,818
Value.....	\$2,915,506	\$1,089,606	\$310,822
Cream sold:			
Pounds.....	281,811	1,077,068	407,264
Value.....	\$27,149	\$80,497	\$30,133
Cheese:			
Full cream—			
Pounds.....	77,122	158,470	294,300
Value.....	\$10,407	\$17,166	\$29,430
All other products.....	\$1,073,632	\$64,147	\$18,730

In 1899 only 14.1 per cent of the butter produced was put up in prints and rolls, while in 1909, 43.1 per cent was put up in this way. During the past few years the production of cheese has decreased until in 1909 reports were received from but three cheese factories in the state, which reported only \$10,407 as the value of cheese manufactured.

The large increase in the value of "All other products" from 1904 to 1909 is due to the fact that in the latter year a number of the establishments carried on a combined manufacturing and mercantile business, the two being so closely connected that it was not practical to separate the manufacturing from the mercantile expenses. There is also a large amount of reworked butter included in this item.

Printing and publishing.—While the printing and publishing industry of Nebraska showed a marked growth when measured by value of products, there was a slight decrease in the total number of publications as shown in the following tabular statement:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total.....	623	636	547	2,303,151	1,874,362	1,095,538
Daily.....	34	31	32	202,109	185,835	122,414
Sunday.....	8	8	9	129,050	99,779	(¹)
Weekly.....	521	535	454	1,074,654	861,540	650,349
Semiweekly and triweekly.....	16	18	17	31,082	24,730	54,208
Monthly.....	35	39	28	684,513	399,444	255,935
All other classes.....	9	5	7	121,840	302,784	12,632

¹ Included in circulation of dailies.

With the exception of the daily, Sunday, and all other publications, the several kinds of publications show decreases in number since 1904. On the other hand, a marked increase is shown in the circulation per issue for each class, with the exception of those included in "All other classes."

The 34 daily and 8 Sunday papers were all printed in English, but a great variety of languages is found in the other publications. Of the weeklies, 487 were published in English, 16 in German, 10 Bohemian, 2 Swedish, 3 Danish, 1 Polish, 1 English and German, and 1 Danish and Norwegian. Of the semiweeklies and triweeklies, 15 were in English and 1 Danish; of the monthlies, 31 were in English, 2 Swedish, 1 Danish, and 1 Indian. Of the other publications, there were 5 in English, 3 German, and 1 Bohemian, making a total of 580 in English, 19 German, 11 Bohemian, 5 Danish, 4 Swedish, 1 Indian, 1 Polish, 1 English and German, and 1 Danish and Norwegian.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. There were 76 such establishments in the state of Nebraska, 17 of which were in Omaha and 7 in Lincoln.

The following statement summarizes the statistics:

Number of establishments.....	76
Persons engaged in the industry.....	1,314
Proprietors and firm members.....	84
Salaried employees.....	120
Wage earners (average number).....	1,110
Primary horsepower.....	1,510
Capital.....	\$871,600
Expenses.....	946,140
Services.....	554,245
Materials.....	255,620
Miscellaneous.....	136,275
Amount received for work done.....	1,197,374

The most common form of organization was the individual, with 43 establishments. The firm and the corporate forms of ownership were represented by 19 and 14 establishments, respectively. Thirty-one establishments had receipts for the year's business of less than \$5,000; 24, \$5,000 but less than \$20,000; 21, \$20,000 but less than \$100,000.

The number of wage earners employed each month and the per cent which this number represented of

the greatest number employed in any month were as follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	1,041	89.1	July.....	1,143	97.9
February.....	1,050	89.9	August.....	1,168	100.0
March.....	1,061	90.8	September.....	1,162	99.5
April.....	1,074	92.0	October.....	1,148	98.3
May.....	1,080	92.5	November.....	1,135	97.2
June.....	1,114	95.4	December.....	1,140	97.6

The different kinds of primary power, the number of engines, and the amount of horsepower used in 1909 are shown in the following tabular statement:

KIND.	Number of engines or motors.	Horsepower.
Primary power, total.....		1,510
Owned.....	70	1,354
Steam.....	57	1,282
Gas.....	13	72
Rented—Electric.....	42	156

The kind and amount of fuel used are shown in the following statement:

KIND.	Unit.	Quantity.
Bituminous coal.....	Tons.....	17,554
Coke.....	Tons.....	28
Oil.....	Barrels.....	649
Gas.....	1,000 feet.....	6,046

Custom gristmills.—Statistics for custom gristmills are not included in the general tables or in the totals for manufacturing industries, but are presented in the following summary:

Number of establishments.....	32
Persons engaged in the industry.....	107
Proprietors and firm members.....	97
Wage earners (average number).....	10
Primary horsepower.....	714
Capital.....	\$134,223
Expenses.....	151,327
Services.....	5,130
Materials.....	¹ 142,731
Miscellaneous.....	3,466
Value of products.....	¹ 174,291

¹ Includes estimate of all grain ground.

MANUFACTURES—NEBRASKA.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of Products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
			Expressed in thousands.										
STATE—All industries	1909	2,500	31,966	2,522	5,108	24,336	64,466	\$99,901	\$5,491	\$13,948	\$151,081	\$199,019	\$47,938
	1904	1,819	25,356	1,904	3,192	20,260	46,372	80,235	3,075	11,022	124,052	154,818	30,866
	1899	1,695	.....	.....	2,296	18,669	41,825	65,906	2,107	8,842	95,925	130,802	34,377
Artificial stone.....	1909	286	934	340	35	553	503	825	29	337	514	1,226	712
	1904	26	126	34	9	83	25	77	6	45	66	150	84
Bread and other bakery products.....	1909	279	1,155	327	182	646	342	1,092	115	378	1,672	3,014	1,342
	1904	138	667	160	24	333	183	654	22	188	720	1,351	631
	1899	91	478	102	44	332	.....	551	31	139	505	1,002	557
Brick and tile.....	1909	78	978	80	67	831	4,033	2,649	67	465	278	1,161	883
	1904	99	1,084	129	50	905	3,510	1,566	41	471	277	1,132	885
	1899	106	1,029	134	40	855	2,254	1,276	26	328	203	840	637
Butter, cheese, and condensed milk.....	1909	37	602	14	205	383	1,032	2,975	196	256	6,435	7,081	1,249
	1904	40	390	24	113	253	861	1,861	102	137	2,672	3,326	654
	1899	93	446	47	66	333	2,263	952	41	147	1,854	2,254	400
Canning and preserving.....	1909	12	250	7	28	215	569	511	29	63	269	481	212
	1904	8	317	5	20	292	378	357	11	62	309	550	250
	1899	5	176	6	9	161	127	124	6	22	131	211	80
Carriages and wagons and materials.....	1909	22	247	23	24	200	224	459	20	131	251	577	326
	1904	20	188	27	11	150	101	212	9	87	128	318	190
	1899	29	197	62	11	124	.....	134	9	67	90	247	157
Cars and general shop construction and repairs by steam-railroad companies.....	1909	13	4,021	.....	336	3,685	6,016	6,311	326	2,271	1,724	4,642	2,918
	1904	30	3,626	.....	381	3,245	4,210	5,975	189	2,109	1,917	4,395	2,478
	1899	23	2,572	.....	114	2,458	2,037	3,635	100	1,421	1,010	2,024	1,614
Clothing, men's, including shirts.....	1909	12	963	6	70	887	323	858	70	288	967	1,546	578
	1904	9	719	5	22	692	178	413	22	216	726	1,065	339
Confectionery.....	1909	18	523	13	127	383	241	545	121	127	705	1,176	471
	1904	10	314	6	54	254	68	263	49	87	201	542	341
	1899	5	.....	.....	44	126	.....	112	17	32	137	248	111
Cooperage and wooden goods, not elsewhere specified.....	1909	4	108	1	12	95	204	179	18	66	342	490	154
	1904	7	119	7	10	102	233	138	11	49	188	269	81
	1899	7	.....	.....	7	145	.....	127	8	72	298	426	128
Copper, tin, and sheet-iron products.....	1909	37	245	44	21	180	100	323	16	121	289	562	273
	1904	110	65	14	1	50	8	48	.....	33	56	128	72
	1899	5	.....	.....	6	32	.....	27	.....	17	35	69	34
Dairymen's, poulterers', and apiarists' supplies.....	1909	16	316	18	68	230	345	350	54	135	459	941	462
	1904	8	136	6	23	107	94	168	13	57	95	247	152
Flour-mill and gristmill products.....	1909	249	1,455	293	323	839	19,907	9,472	323	519	15,217	17,836	2,619
	1904	234	1,324	294	167	893	17,951	6,497	153	408	10,153	12,190	2,037
	1899	236	.....	.....	137	682	14,454	4,049	102	355	6,163	7,794	1,641
Foundry and machine-shop products.....	1909	73	1,346	60	266	1,020	1,399	2,808	259	595	1,516	2,930	1,414
	1904	146	626	43	65	518	715	920	61	39	428	1,022	684
	1899	48	500	53	87	410	.....	611	31	190	432	831	399
Gas, illuminating and heating.....	1909	48	542	25	117	400	1,015	10,047	124	209	445	1,415	970
	1904	25	386	14	70	392	1,461	6,979	59	142	240	512	672
	1899	9	329	.....	39	290	1,063	6,956	37	80	134	825	391
Leather goods.....	1909	30	365	31	68	266	148	988	73	197	978	1,583	605
	1904	22	364	28	89	247	142	906	78	146	536	983	447
	1899	112	.....	.....	64	325	.....	570	55	167	511	914	403
Liquors, malt.....	1909	14	547	5	118	424	2,038	3,999	257	290	625	3,335	2,710
	1904	16	338	7	66	265	1,826	2,558	135	186	459	1,684	1,205
	1899	19	259	14	45	200	964	2,679	94	131	312	1,434	1,122
Lumber and timber products.....	1909	48	707	43	121	543	1,343	1,155	106	356	1,226	2,021	795
	1904	127	416	27	33	356	1,119	379	37	234	645	645	381
	1899	35	.....	.....	34	377	.....	420	30	161	629	1,002	378
Marble and stone work.....	1909	38	262	47	28	187	315	473	28	150	331	721	390
	1904	15	150	20	9	121	43	195	9	92	141	366	225
	1899	6	.....	.....	2	39	.....	50	1	24	22	70	48
Mattresses and spring beds.....	1909	6	181	3	15	113	96	185	17	58	217	355	138
	1904	5	49	5	8	36	31	123	8	16	50	100	50
	1899	3	.....	.....	6	73	.....	84	6	21	98	156	58
Paint and varnish.....	1909	4	150	.....	38	112	425	734	65	68	849	1,254	405
	1904	3	61	1	20	40	170	227	34	19	237	347	110
	1899	3	134	.....	41	93	310	882	58	53	584	838	304
Patent medicines and compounds and druggists' preparations.....	1909	39	239	30	123	86	244	528	109	41	245	699	424
	1904	19	140	17	59	64	134	220	42	29	192	441	240
	1899	16	.....	.....	30	83	.....	72	24	16	61	177	116

¹ Excluding statistics for two establishments, to avoid disclosure of individual operations.

² Figures can not be shown without disclosing individual operations.

³ Less than \$500.

⁴ Excluding statistics for one establishment, to avoid disclosure of individual operations.

MANUFACTURES—NEBRASKA.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.

INDUSTRY AND CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Printing and publishing.....	1909 1904 1899	674 631 557	3,884 3,326	674 673	881 580 351	2,329 2,073 1,890	2,552 1,687	\$4,979 3,618 2,898	\$796 582 308	\$1,397 1,093 886	\$1,711 1,294 960	\$6,667 4,991 3,454	\$4,956 3,697 2,494
Slaughtering and meat packing.....	1909 1904 1899	18 9 12	7,221 6,482 6,818	20 8 7	1,186 869 721	6,015 5,500 6,090	11,873 6,328 7,192	19,414 20,606 16,525	1,420 936 684	3,372 3,159 2,991	78,358 61,278 63,048	92,305 69,329 71,280	13,947 8,051 8,232
Tobacco manufactures.....	1909 1904 1899	151 157 141	740 708 566	172 176 168	31 16 9	537 516 399	1	520 370 265	80 15 7	270 238 171	469 338 286	1,072 900 702	603 562 416
All other industries.....	1909 1904 1899	294 205 233	4,035 3,355	240 179	618 423 439	3,177 2,753 3,202	7,618 4,916	27,522 24,907 22,907	823 443 429	1,793 1,372 1,351	34,989 41,087 18,482	43,354 47,476 33,144	8,365 6,389 14,662

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

OMAHA—All industries.....	1909 1904 1899	432 318 307	10,185 7,064	329 276	1,833 968 791	8,023 5,822 5,276	16,037	\$45,461 34,558 32,956	\$2,071 1,080 766	\$4,837 3,204 2,603	\$43,415 42,893 19,928	\$60,855 54,004 33,074	\$17,440 11,111 13,146
Bread and other bakery products.....	1909 1904 1899	65 29 43	490 245 276	68 32 45	118 21 34	304 192 197	181	538 380 348	86 22 22	168 91 88	823 325 330	1,515 657 680	687 332 350
Brick and tile.....	1909 1904 1899	6 5 9	238 162 197	1 3 8	17 6 12	215 153 177	729	587 124 110	23 8 7	124 87 64	86 62 35	323 188 150	240 126 115
Butter, cheese, and condensed milk.....	1909 1904 1899	4 4 4	241 106	39 35	152 71	320	1,221 182	111 43	128 46	3,104 1,005	3,785 1,229	632 224	
Carrriages and wagons and materials.....	1909 1904 1899	7 18 13	191 120	7 11	22 9	102 100 87	172	281 132 60	18 6 8	103 62 50	195 82 60	458 206 178	203 124 118
Clothing, men's, including shirts.....	1909 1904 1899	7 13	656 539	4 2	44 9	608 528	248	565 207	39 12	200 166	693 603	1,076 843	378 240
Confectionery.....	1909 1904 1899	5 4	356 233	1 1	88 50	267 182	181	308 211	83 44	85 60	413 135	719 381	306 246
Foundry and machine-shop products.....	1909 1904 1899	23 18 210	457 384 275	12 14 9	81 42 21	364 328 245	610	982 510 303	90 48 20	218 184 113	635 253 240	1,133 673 444	498 420 204
Leather goods.....	1909 1904 1899	8 18 13	136 128	12 14	30 20 37	94 94 139	31	320 226 217	33 19 30	73 56 78	427 145 292	719 282 524	292 137 232
Liquors, malt.....	1909 1904 1899	5 5 6	313 214 150	1 1 2	66 42 30	246 171 118	1,780	2,788 1,879 1,737	101 108 80	196 126 82	396 320 217	2,272 1,141 1,030	1,876 821 813
Lumber and timber products.....	1909 1904 1899	15 15 26	353 223 194	11 1 4	84 21 18	258 201 172	555	507 206 269	63 23 16	183 137 77	908 149 362	1,346 354 599	438 205 207
Printing and publishing.....	1909 1904 1899	89 80 175	1,292 1,089 940	61 65 62	441 320 239	790 704 630	954	1,633 1,386 1,141	427 342 220	557 482 410	791 556 404	3,001 2,183 1,585	2,210 1,027 1,181
All other industries.....	1909 1904 1899	198 149 142	5,467 3,621	151 132	753 391 301	4,563 3,098 3,502	10,276	35,661 29,025 28,781	907 405 363	2,802 1,707 1,641	34,934 39,253 17,068	44,504 45,362 32,884	9,570 6,009 14,026

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

Grand Island.....	1909 1904 1899	44	749	41	92	616	950	\$1,697	\$97	\$380	\$1,011	\$1,837	\$326
Lincoln.....	1909 1904 1899	167 128 81	2,386 2,119	134 121	562 381 176	2,140 1,617 1,104	2,208	7,107 4,421 2,249	534 373 165	1,056 853 481	3,894 2,691 1,596	7,010 5,223 2,763	3,146 2,532 1,167
South Omaha.....	1909 1904 1899	71 41 41	7,659 6,571	63 34	1,290 875 769	6,306 5,662 6,327	11,859	19,877 20,564 16,382	1,559 950 736	3,544 3,210 3,115	77,673 59,193 61,018	92,486 67,415 69,609	14,763 8,222 8,491

¹ Excluding statistics for two establishments, to avoid disclosure of individual operations.
² Excluding statistics for one establishment, to avoid disclosure of individual operations.
³ Figures can not be shown without disclosing individual operations.
⁴ Figures not available.

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.					Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number.		Male.	Female.		Male.	Female.			
								Maximum month.	Minimum month.								
All industries.....	2,500	31,968	2,522	1,164	3,044	900	24,336	Se 25,945	Ja 22,138	(1)	(1)	(1)	(1)	(1)	64,466		
1 Agricultural implements.....	11	91	6	12	0	1	83	Jy 89	Ja 40	92	92				180		
2 Artificial stone.....	286	934	346	27	7	1	583	Ja 850	Ja 111	805	803		2		563		
3 Automobiles, including bodies and parts.....	6	25	3	3	1		18	My 25	De 13	17	16		1		41		
4 Bread and other bakery products.....	279	1,155	327	14	92	76	646	De 700	Ja 584	709	515		184	8	2		
5 Brick and tile.....	78	978	80	43	23	1	831	Au 1,203	Ja 220	1,060	1,047			13	4,033		
6 Brooms.....	15	119	12	13	14	3	77	De 88	Ja 66	89	72		6	11	79		
7 Butter, cheese, and condensed milk.....	37	602	14	75	63	67	333	Jy 545	Ja 253	506	449		54	3	1,032		
8 Canning and preserving.....	12	250	7	18	10		215	Au 909	Ja 44	940	551		297	49	569		
9 Carpets, rag.....	8	24	9				15	Ja 23	Ja 8	11	10		1		13		
10 Carriages and wagons and materials.....	22	247	23	6	11	7	200	Ap 221	Ja 178	187	180		1		224		
11 Cars and general shop construction and repairs by steam-railroad companies.....	13	4,021		140	190	6	3,685	De 3,942	Jy 3,471	3,942	3,942				6,616		
12 Clothing, men's, including shirts.....	12	963	6	19	39	12	887	Fe 982	Se 799	925	74		848		323		
13 Clothing, women's.....	6	91	6	5	2	1	77	Oc 94	Fe 61	71	21		50		14		
14 Confectionery.....	18	523	13	16	88	23	383	No 462	Ja 291	453	157		293	1	241		
15 Cooperage and wooden goods, not elsewhere specified.....	4	108	1	9	3		95	Au 110	Ap 86	93	93				204		
16 Copper, tin, and sheet-iron products.....	37	245	44	3	12	6	180	Je 201	Ja 143	179	179				100		
17 Cutlery and tools, not elsewhere specified.....	3	12	2	2		1	7	Au 10	Ja 5	8	6				30		
18 Dairymen's, poultryers', and apiarists' supplies.....	16	316	18	9	24	35	230	Mh 343	Jy 110	309	255		54		345		
19 Flour-mill and gristmill products.....	249	1,455	293	120	166	37	839	De 956	Jy 701	985	913		69	3	19,907		
20 Foundry and machine-shop products.....	73	1,346	60	61	156	49	1,020	Se 1,100	Ja 864	1,033	1,013		13	6	1,399		
21 Fur goods.....	6	55	6	1	2	5	41	No 68	Mh 27	64	24		40		17		
22 Furnishing goods, men's.....	6	76	7	7	2	1	59	Je 69	De 44	60	9		51		30		
23 Furniture and refrigerators.....	10	111	6	5	4	7	89	Mh 97	Je 81	104	101		2	1	124		
24 Gas and electric fixtures and lamps and reflectors.....	4	11	7				3	No 5	Ja 2	5	5				19		
25 Gas, illuminating and heating.....	48	542	25	35	73	9	400	Oc 451	Ja 340	439	439				1,015		
26 Hand stamps and stencils and brands.....	3	21	3	2	1	2	13	Jy 15	Ja 12	12	12				10		
27 Ice, manufactured.....	7	62	2	11	18	1	30	Jy 42	Ja 12	34	34				1,193		
28 Jewelry.....	5	32	6			3	23	Oc 25	Je 21	24	23				10		
29 Leather goods.....	30	365	31	17	44	7	266	My 271	Ja 262	267	267		1		148		
30 Liquors, malt.....	14	547	5	43	68	7	424	Au 522	Ja 385	394	394				2,938		
31 Lumber and timber products.....	48	707	43	27	82	12	543	Au 600	Fe 460	576	568			8	1,343		
32 Marble and stone work.....	38	262	47	5	21	2	187	Au 202	De 156	179	178		1		315		
33 Mattresses and spring beds.....	6	131	3	4	7	4	113	No 121	Je 108	112	98		14		96		
34 Optical goods.....	5	63	2	7	14	6	34	Oc 39	Fe 32	38	27		5	6	9		
35 Paint and varnish.....	4	150		6	27	5	112	Ap 122	Oc 103	118	108		10		425		
36 Patent medicines and compounds and druggists' preparations.....	39	239	30	27	68	28	86	Oc 93	Ja 83	94	69		25		244		
37 Photo-engraving.....	3	49	1	5	1	3	39	Au 41	De 38	38	35		1	2	21		
38 Printing and publishing.....	674	3,884	674	173	453	255	2,329	No 2,440	Ja 2,279	2,448	1,809		583	53	2,552		
39 Signs and advertising novelties.....	7	75	5	3	3	4	60	Oc 78	Ja 25	66	44		22		21		
40 Slaughtering and meat packing.....	18	7,221	20	32	1,014	140	6,015	Fe 6,794	Ap 5,643	6,316	5,851		398	50	11,873		
41 Tobacco manufactures.....	161	740	172	10	19	2	537	No 577	Jy 515	595	401		187	7	1		
42 All other industries.....	189	3,118	157	149	213	70	2,529								5,807		

1 No figures given for reasons explained in the Introduction.
 2 Same number reported for one or more other months.
 3 All other industries embrace—

Awings, tents, and sails.....	5	Cars and general shop construction and repairs by street-railroad companies.....	2	Engraving and diesinking.....	1
Bags, other than paper.....	1	Cars, steam-railroad, not including operations of railroad companies.....	2	Fire extinguishers, chemical.....	1
Baking powders and yeast.....	2	Chemicals.....	2	Flavoring extracts.....	3
Baskets, and rattan and willow ware.....	1	Coffee and spice, roasting and grinding.....	2	Flax and hemp, dressed.....	1
Beet sugar.....	1	Coffins, burial cases, and undertakers' goods.....	5	Food preparations.....	18
Boots and shoes, including cut stock and findings.....	3	Dentists' materials.....	1	Furs, dressed.....	2
Boxes, cigar.....	1	Electrical machinery, apparatus, and supplies.....	2	Glass, cutting, staining, and ornamenting.....	2
Boxes, fancy and paper.....	2	Electroplating.....	2	Gloves and mittens, leather.....	1
Brass and bronze products.....	1			Glucose and starch.....	1
Butter, reworking.....	1			Grease and tallow.....	3

MANUFACTURES—NEBRASKA.

699

THE STATE, BY INDUSTRIES: 1909.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$99,901,089	\$183,586,432	\$2,018,296	\$3,472,578	\$13,947,845	\$2,292,670	\$148,788,301	\$573,713	\$2,879,976	\$411,727	\$9,201,326	\$199,018,579	\$47,937,608
2 294,708	155,704	12,300	9,621	32,845	3,153	80,320	738	811	.....	15,918	152,343	68,870
3 825,058	928,740	23,665	5,268	337,376	7,669	506,247	5,482	3,974	3,602	35,457	1,220,078	712,102
4 114,575	49,934	3,600	480	14,545	610	27,637	1,188	376	.....	1,498	57,423	29,176
5 1,062,493	2,374,311	18,736	95,844	372,839	81,544	1,590,307	64,715	6,806	65	143,465	3,014,091	1,342,240
6 2,649,362	923,468	49,100	17,423	465,477	210,429	67,585	1,030	7,963	408	109,048	1,161,106	833,092
7 354,352	482,715	21,036	22,000	29,892	1,841	268,644	1,538	1,095	51,178	85,431	523,410	252,025
8 2,975,211	7,273,942	96,466	99,304	255,689	60,537	6,374,209	6,845	9,131	130,591	235,170	7,681,272	1,246,526
9 511,446	427,490	15,302	14,070	62,669	6,411	262,870	358	2,568	.....	63,242	480,800	211,219
10 9,608	10,438	.....	.....	5,806	437	2,453	546	58	.....	1,136	15,853	12,083
11 459,187	427,495	6,819	13,660	130,589	6,345	244,325	4,322	2,283	300	18,382	579,918	325,748
12 6,310,671	4,641,740	178,484	147,076	2,271,293	135,213	1,589,263	.....	39,985	.....	280,426	4,641,740	2,917,204
13 857,799	1,423,735	22,830	47,181	288,020	3,094	958,175	18,686	3,657	60	76,432	1,545,315	578,446
14 83,703	146,325	6,000	3,726	34,297	1,283	91,357	2,556	148	.....	6,958	159,632	66,932
15 544,529	1,077,110	27,390	93,490	127,021	13,168	691,840	18,147	3,654	.....	102,394	1,176,039	471,025
16 179,460	438,261	15,714	2,760	66,488	4,465	337,208	905	689	2,800	7,232	496,162	154,489
17 322,660	469,840	4,248	11,730	121,178	4,787	234,596	8,121	1,344	400	33,429	562,045	272,662
18 16,417	22,025	2,600	579	4,164	1,011	8,482	2,160	114	.....	2,915	26,989	17,496
19 349,786	335,880	14,168	39,477	135,414	7,052	452,072	696	2,077	.....	184,924	940,758	481,635
20 9,472,217	16,588,119	158,375	164,608	518,937	221,892	14,995,376	13,100	41,791	13,897	465,033	17,535,596	2,618,328
21 2,808,256	2,675,537	75,997	182,882	594,574	46,949	1,469,057	8,770	12,411	3,020	275,877	2,928,583	1,413,577
22 60,449	132,774	2,300	5,992	19,185	1,059	91,120	7,814	357	600	4,347	172,660	80,481
23 106,867	117,967	5,460	2,920	18,643	1,440	73,049	1,230	394	2,578	6,253	155,705	75,316
24 146,683	165,392	4,890	6,961	49,411	2,735	79,799	3,687	259	1,625	16,125	182,730	100,196
25 9,972	6,316	.....	192	1,716	318	2,419	960	37	.....	674	8,072	5,335
26 10,047,410	968,462	66,964	57,058	209,003	317,484	127,389	525	109,102	1,005	79,982	1,415,002	970,179
27 31,314	28,186	2,400	1,665	7,468	518	10,361	1,360	233	.....	4,181	35,196	24,317
28 413,648	102,250	3,595	20,653	21,066	20,455	13,552	40	1,145	.....	10,739	124,387	84,880
29 29,555	48,824	.....	1,236	18,485	661	25,736	1,548	53	.....	1,105	61,661	35,264
30 938,043	1,372,792	24,460	48,510	195,796	7,464	970,378	14,235	5,448	200	105,300	1,582,866	605,024
31 3,998,996	2,601,204	165,960	90,588	290,078	75,950	549,400	180	458,193	15,273	955,572	3,334,617	2,709,257
32 1,154,858	1,819,981	45,490	60,159	355,339	15,513	1,210,423	3,782	7,665	200	120,405	2,021,366	795,425
33 473,361	536,686	6,400	21,300	149,565	6,732	323,852	4,180	2,848	550	71,259	721,074	390,490
34 134,759	315,932	7,200	9,847	57,637	3,058	213,446	4,428	1,009	1,601	17,706	355,119	138,615
35 65,952	126,576	14,200	7,837	19,708	1,054	60,280	6,690	339	.....	10,468	146,478	79,144
36 734,041	1,131,769	14,900	50,206	68,331	9,431	839,726	600	3,269	.....	145,306	1,254,475	405,318
37 528,164	500,364	39,901	63,711	40,913	3,755	240,996	12,792	1,906	2,260	149,130	669,380	424,629
38 29,962	69,920	7,540	3,179	35,478	728	7,464	2,400	139	9,550	3,442	77,486	69,294
39 4,978,918	5,151,107	300,366	495,092	1,397,460	84,150	1,627,194	129,910	27,609	143,280	945,546	6,687,290	4,955,946
40 62,242	138,541	4,620	3,763	37,628	667	45,659	3,473	351	1,000	41,380	151,918	105,592
41 19,413,614	87,672,883	174,533	1,245,471	3,372,439	562,777	77,795,101	128,877	74,859	1,300	3,717,526	92,305,454	13,947,606
42 520,187	914,535	11,040	18,900	269,603	4,763	404,319	17,866	90,897	184	36,958	1,072,026	602,944
43 25,685,693	38,776,264	357,747	281,033	1,441,775	342,453	33,702,259	60,272	-1,962,953	18,200	613,517	41,300,233	7,255,521

* All other industries embrace—Continued.

Hair work.....	3	Models and patterns, not including paper patterns.....	2	Stereotyping and electrotyping.....	2
Hats and caps, other than felt, straw, and wool.....	1	Mucilage and paste.....	1	Stoves and furnaces, including gas and oil stoves... 1	1
Hats, fur-felt.....	1	Paper goods, not elsewhere specified.....	1	Surgical appliances and artificial limbs.....	1
Hosiery and knit goods.....	1	Pottery, terra-cotta, and fire-clay products.....	1	Type founding and printing materials.....	2
House-furnishing goods, not elsewhere specified....	2	Roofing materials.....	1	Umbrellas and canes.....	1
Labels and tags.....	2	Show cases.....	1	Upholstering materials.....	1
Lead, bar, pipe, and sheet.....	1	Silverware and plated ware.....	1	Vinegar and cider.....	9
Liquors, distilled.....	2	Smelting and refining, copper.....	1	Washing machines and clothes wringers.....	1
Looking-glass and picture frames.....	2	Smelting and refining, lead.....	1	Whips.....	1
Malt.....	1	Smelting and refining, not from the ore.....	1	Windmills.....	1
Mineral and soda waters.....	59	Soap.....	2	Window shades and fixtures.....	1
Mirrors.....	1	Steam packing.....	1	Wirework, including wire rope and cable.....	9

MANUFACTURES—NEBRASKA.

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES,
CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES.
OMAHA.

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).					Total.	16 and over.		Under 16.		
					Male.	Female.	Total.	16 and over.		Under 16.	Male.		Female.	Male.	Female.		
								Male.	Female.								
1 All industries.....	432	10,185	329	436	1,056	341	8,023	6,324	1,669	30	8,571	6,709	1,831	22	9	16,037	
2 Bread and other bakery products.....	65	490	68	9	68	41	304	186	117	1	355	217	137	.....	1	181
3 Brick and tile.....	6	233	1	10	7	.....	215	215	.....	.....	226	226	.....	.....	.....	729
4 Butter, cheese, and condensed milk.....	4	241	.....	25	26	38	152	137	15	.....	204	265	29	.....	.....	320
5 Carriages and wagons and materials.....	7	191	7	4	11	7	162	161	1	.....	149	148	1	.....	.....	172
6 Clothing, men's, including shirts.....	7	656	4	14	24	6	608	51	554	3	665	56	606	.....	.....	248
7 Confectionery.....	5	356	1	11	69	8	267	70	188	3	322	92	227	1	3	181	
8 Foundry and machine-shop products.....	23	457	12	24	46	11	364	364	.....	.....	341	341	.....	.....	.....	610
9 Leather goods.....	8	136	12	6	20	4	94	94	.....	.....	95	95	.....	.....	.....	31
10 Liquors, malt.....	5	313	1	25	37	4	246	246	.....	.....	234	234	.....	.....	.....	1,780
11 Lumber and timber products.....	15	353	11	13	63	8	253	257	.....	1	283	282	.....	1	.....	555
12 Printing and publishing.....	89	1,292	61	76	272	93	790	638	148	4	821	663	154	4	.....	954
13 All other industries ¹	198	5,467	151	219	413	121	4,563	3,899	646	18	4,786	4,090	677	16	3	10,276	

¹ All other industries embrace: Artificial stone, 5; awnings, tents, and sails, 2; bags, other than paper, 1; baking powders and yeast, 1; baskets, and rattan and willow-ware, 1; boots and shoes, including cut stock and findings, 2; boxes, fancy and paper, 1; brass and bronze products, 1; brooms, 2; canning and preserving, 2; carpets, rag, 1; cars and general shop construction and repairs by steam-railroad companies, 2; cars and general shop construction and repairs by street-railroad companies, 1; cars, steam-railroad, not including operations of railroad companies, 1; chemicals, 1; clothing, women's, 4; coffee and spice, roasting and grinding, 2; coffins, burial cases, and undertakers' goods, 1; cooperage and wooden goods, not elsewhere specified, 2; copper, tin, and sheet-iron products, 1; cutlery and tools, not elsewhere specified, 3; dairymen's, poultrymen's and apiarists' supplies, 4; electroplating, 2; engraving and die-sinking, 1; flavoring extracts, 3; flour-mill and gristmill products, 4; food preparations, 6; fur goods, 4; furnishing goods, men's, 2; furniture and refrigerators, 8; gas and electric fixtures and lamps and reflectors, 1; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 1; glucose and starch, 1; hair work, 2; hand stamps and stencils and brands, 2; hats and caps, other than felt, straw, and wool, 1; hats,

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

1 GRAND ISLAND.....	44	749	41	47	37	8	616	471	115	30	757	579	141	12	25	950
2 LINCOLN.....	167	2,836	134	103	281	172	2,140	1,605	512	23	2,194	1,645	525	24	.....	2,206
3 SOUTH OMAHA.....	71	7,659	63	58	1,071	161	6,306	5,806	431	69	6,550	6,031	448	53	18	11,859

MANUFACTURES—NEBRASKA

AND TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909.

CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES.

OMAHA.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$45,480,541	\$55,681,020	\$932,307	\$1,139,064	\$4,836,782	\$773,246	\$42,641,381	\$231,833	\$2,226,635	\$208,591	\$2,691,181	\$60,854,550	\$17,439,923
2 538,426	1,203,109	14,572	71,708	167,025	30,302	791,428	22,097	2,350	-----	97,021	1,514,627	686,897
3 567,050	257,279	17,850	5,094	124,129	57,599	28,644	300	2,738	-----	20,925	325,501	239,258
4 1,221,154	3,527,721	51,949	58,946	128,127	21,822	3,081,833	5,675	2,006	84,804	92,460	3,785,873	682,218
5 280,946	335,296	4,080	13,660	103,087	5,292	189,240	3,513	1,689	-----	14,735	458,038	263,506
6 565,185	982,705	13,860	24,940	200,336	4,450	693,935	16,066	1,619	60	27,439	1,075,913	377,528
7 307,609	668,405	20,670	62,660	85,440	8,612	404,757	11,235	2,387	-----	72,644	718,987	305,618
8 982,193	1,006,741	34,517	55,328	218,106	14,304	620,637	11,055	3,213	900	48,681	1,133,243	498,302
9 320,169	612,484	8,700	24,250	72,625	2,741	424,376	7,500	1,854	200	70,148	719,206	292,089
10 2,788,180	1,845,307	185,600	55,466	105,940	35,649	360,644	180	842,252	6,273	713,303	2,271,777	1,875,484
11 597,221	1,242,363	20,800	41,750	183,425	5,566	902,540	2,849	4,470	200	80,757	1,345,573	437,467
12 1,633,159	2,474,546	147,889	278,680	557,120	26,548	764,787	54,755	9,220	79,449	558,092	3,001,352	2,210,017
13 35,699,249	41,625,064	401,820	446,570	2,800,822	554,361	34,378,560	93,518	1,852,741	30,705	896,967	44,504,460	9,571,539

fur-felt, 1; hosiery and knit goods, 1; house-furnishing goods, not elsewhere specified, 1; ice, manufactured, 2; jewelry, 4; labels and tags, 1; liquors, distilled, 1; looking-glass and picture frames, 2; malt, 1; marble and stone work, 6; mattresses and spring beds, 2; mineral and soda waters, 6; mirrors, 1; models and patterns, not including paper patterns, 2; mucilage and paste, 1; optical goods, 4; paint and varnish, 1; paper goods, not elsewhere specified, 1; patent medicines and compounds and druggists' preparations, 16; photo-engraving, 2; roofing materials, 1; show cases, 1; silverware and plated ware, 1; signs and advertising novelties, 6; slaughtering and meat packing, 2; smelting and refining, copper, 1; smelting and refining lead, 1; smelting and refining, not from the ore, 1; soap, 1; steam packing, 1; stereotyping and electrotyping, 2; surgical appliances and artificial limbs, 1; tobacco manufactures, 21; type founding and printing materials, 2; umbrellas and canes, 1; whips, 1; wirework, including wire rope and cable, 5.

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

1 \$1,697,103	\$1,680,822	\$61,602	\$35,753	\$380,392	\$47,288	\$963,667	\$11,737	\$14,721	\$9,108	\$156,554	\$1,836,998	\$826,043
2 7,106,566	6,325,527	193,583	340,119	1,056,263	127,202	3,737,002	56,048	43,619	36,910	734,781	7,010,135	3,145,931
3 19,876,911	86,964,353	228,601	1,329,902	3,543,500	589,863	77,083,167	142,592	115,168	7,972	3,923,528	92,435,712	14,762,582

This page was intentionally left blank.

NEVADA.

INDUSTRIES IN GENERAL.

General character of the state.—Nevada has an area of 109,740 square miles. The population in 1910 was 81,875, as against 42,335 in 1900 and 47,355 in 1890. It ranked forty-ninth among the states and territories as regards population in 1910 and fiftieth in 1900. In its early days as a territory thousands of people were attracted to Nevada by the fabulous richness of the Comstock lode. This lode, perhaps the most remarkable deposit of the precious metals discovered in historical times, has produced hundreds of millions of dollars in gold and silver, and is still producing. The subsequent discovery of rich gold and silver mines at Tonopah and Goldfield has served to

place Nevada among the great mining states of the country.

The state has but one city having a population of over 10,000, Reno, with a population of 10,867.

Importance and growth of manufactures.—Though Nevada is not important as a manufacturing community, the manufactures of the state have shown at the last two censuses a marked increase in value.

The following table gives the more important figures relative to all classes of manufactures combined for the state as returned at the censuses of 1909, 1904, and 1899, together with percentages of increase from census to census.

	NUMBER OR AMOUNT.			PER CENT OF INCREASE.	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments.....	177	115	99	53.9	16.2
Persons engaged in manufactures.....	2,650	1,016	(¹)	160.8	-----
Proprietors and firm members.....	137	108	(¹)	26.9	-----
Salaried employees.....	256	106	37	141.5	186.5
Wage earners (average number).....	2,257	802	504	181.4	59.1
Primary horsepower.....	7,765	2,834	1,561	174.0	81.6
Capital.....	\$9,807,000	\$2,892,000	\$1,251,000	239.1	131.2
Expenses.....	11,082,000	2,632,000	1,099,000	321.0	139.5
Services.....	2,360,000	819,000	388,000	188.2	111.1
Salaries.....	378,000	126,000	35,000	200.0	260.0
Wages.....	1,982,000	693,000	353,000	186.0	96.3
Materials.....	8,366,000	1,623,000	662,000	413.9	145.9
Miscellaneous.....	356,000	185,000	49,000	92.4	277.6
Value of products.....	11,887,000	3,096,000	1,261,000	283.9	145.5
Value added by manufacture (value of products less cost of materials).....	3,521,000	1,468,000	599,000	139.8	145.1

¹ Figures not available.

In 1909 the state of Nevada had 177 manufacturing establishments, which gave employment to an average of 2,650 persons during the year and paid \$2,360,000 in salaries and wages. Of the persons employed, 2,257 were wage earners. These establishments turned out products to the value of \$11,887,000, to produce which materials costing \$8,366,000 were consumed. The value added by manufacture was thus \$3,521,000, which figure best represents the net wealth created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of Nevada as a whole showed considerable development during the five-year period 1899-1904, and a very much greater development during the more recent period, 1904-1909. During the latter period the number of establishments increased 53.9 per cent and the average number of wage earners 181.4 per cent, while the value of products increased 283.9 per cent and the value added by

manufacture 139.8 per cent. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume during the period 1904-1909 to the extent indicated by these figures regarding values, since the increase shown is certainly due, in part, to the increase that has taken place in the price of commodities.

It is a matter of interest to note that the percentages of increase shown for wages, value of products, average number of wage earners, and other items are much larger than for the number of establishments reported. The large percentage of increase in the cost of materials was due to the amount reported by an establishment engaged in the smelting and refining of copper, which has commenced operations since 1904. The large percentages of increase shown for other items are also to a considerable extent due to the amounts reported by this establishment.

The relative importance and growth of the leading manufacturing industries of the state for which figures can be given are shown in the table following.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE.			
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All industries.....	177	2,257	100.0	\$11,887,000	100.0	\$3,521,000	100.0	283.9	145.5	139.8	145.1
Cars and general shop construction and repairs by steam-railroad companies.....	9	818	36.2	1,033,000	8.7	696,000	19.8	94.2	79.7	124.5	67.6
Flour-mill and gristmill products.....	8	24	1.1	598,000	5.0	102,000	2.9	14.8	264.3	14.6	206.9
Printing and publishing.....	54	180	8.0	519,000	4.4	407,000	11.6	105.1	127.9	84.5	136.6
Lumber and timber products.....	9	186	8.2	503,000	4.2	215,000	6.1	-4.7	214.3	-20.7	310.6
Bread and other bakery products.....	29	47	2.1	356,000	3.0	142,000	4.0	180.3	693.8	125.4	300.0
Butter, cheese, and condensed milk.....	9	16	0.7	326,000	2.7	37,000	1.0	65.5	33.1	2.8	71.4
All other industries.....	59	986	43.7	8,552,000	71.9	1,922,000	54.6	311.7	147.5	301.5	141.9

¹Percentages are based on figures in Table I; a minus sign (-) denotes decrease.

The most important industries listed in this table, where they are arranged in the order of the value of products, call for brief consideration.

Cars and general shop construction and repairs by steam-railroad companies.—This industry, which ranks first in importance among the manufacturing industries for which statistics are shown separately, gave employment to 818 wage earners and reported products amounting to \$1,033,000.

Flour-mill and gristmill products.—The statistics showing number of wage earners, amount paid in wages, and value of products indicate a considerable growth in this industry.

Printing and publishing.—This industry shows marked growth both in number of wage earners, amount paid in wages, and value of products.

Lumber and timber products.—For this industry, which ranks fourth in value of products and third in value added by manufacture among the industries for which statistics are given separately, increases are shown in the number of establishments, number of wage earners, and wages paid. There was a decrease from 1904 to 1909 in capital and value of products, though there had been an increase in both items from 1899 to 1904.

Measured by value added by manufacture, these industries held generally the same relative rank as when measured by value of products, though flour-mill and gristmill products becomes fifth instead of second in order.

This table shows also the percentages of increase for these leading industries in respect to value of products and value added by manufacture. The bread and other bakery products industry showed a greater rate of increase in value added by manufacture both from 1899 to 1904 and from 1904 to 1909 than any other of the specified industries, namely, 800 per cent and 125.4 per cent, respectively. The industry "Cars and general shop construction and repairs by steam-railroad

companies" showed a remarkable increase from 1904 to 1909 both in gross value of products and in value added by manufacture. There are some striking differences among the several industries specified as regards the relative increase from 1899 to 1904 and from 1904 to 1909, respectively. All but one of the specified industries showed an increase from 1904 to 1909 both in value of products and in value added by manufacture, while all but one showed a much larger increase in the value added by manufacture from 1899 to 1904 than from 1904 to 1909.

The phenomenal increase in value of products and in value added by manufacture from 1904 to 1909 for "All other industries" is due to the fact that details for two industries, namely, slaughtering and meat packing and smelting and refining, copper, can not be shown without disclosing the operations of individual establishments. The latter, the largest industry in the state, was established between 1904 and 1909.

Persons engaged in manufacturing industries.—The following table shows the distribution of the average number of persons engaged in manufactures, the average number of wage earners being distributed by sex and age in the manner already explained. (See Introduction.)

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes.....	2,650	2,568	64
Proprietors and officials.....	233	225	8
Proprietors and firm members.....	137	131	6
Salaried officers of corporations.....	32	30	2
Superintendents and managers.....	64	64	.....
Clerks.....	160	130	30
Wage earners (average number).....	2,257	2,231	26
16 years of age and over.....	2,248	2,222	26
Under 16 years of age.....	9	9	.....

This table shows that there were 2,650 persons returned as the average number engaged in manufactures during 1909, of whom 2,257 were wage earners. Of the remaining number, the proprietors and officials formed about three-fifths and the clerks about two-fifths. Corresponding figures for individual industries will be found in Table II.

The following table shows the percentage of proprietors and officials, clerks, and wage earners, respectively, in the total number of persons employed in manufactures. It covers all industries combined and six important industries.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries.....	2,650	8.8	6.0	85.2
Bread and other bakery products.....	86	39.5	5.8	54.7
Butter, cheese, and condensed milk.....	25	23.0	8.0	64.0
Cars and general shop construction and repairs by steam-railroad companies.....	857	1.5	3.0	95.4
Flour-mill and gristmill products.....	39	28.2	10.3	61.5
Lumber and timber products.....	224	7.1	9.8	83.0
Printing and publishing.....	276	24.6	10.1	65.2
All other industries.....	1,143	7.3	6.4	85.3

Of the total number of persons engaged in all manufacturing industries, 8.8 per cent were proprietors and officials, 6 per cent clerks, and 85.2 per cent wage earners. In the bread and other bakery products industry the majority of the establishments are small and the work is done to a large extent by the proprietors or their representatives. Therefore the proportion of persons engaged in the industry falling in the class of proprietors and officials is very much higher than for other industries. Similar conditions prevail to some extent in the manufacture of flour-mill and gristmill products and in the printing and publishing industry, where the proprietors and officials form 28.2 and 24.6 per cent, respectively, of the total persons engaged. The smallest proportion for this class is shown for cars and general shop construction and repairs by steam-railroad companies, and is due to the fact that these establishments are operated by corporations, for which no proprietors are reported and whose general officials are not, as a rule, assigned to the supervision of this particular branch of work.

The table following shows, for all industries combined and for some of the important industries separately, the average number of wage earners, their distribution by age periods, and for those 16 years of age and over by sex.

Clerks are not shown in this table; of the 160 clerks, 130, or 81.2 per cent were male and 30, or 18.8 per cent, female. Of the wage earners, 98.8 per cent were male and 1.2 per cent female; 99.6 per cent were 16 years or over and but 0.4 per cent under 16 years.

It may be noted that the largest number of women were employed in the bread and other bakery products, and the butter, cheese, and condensed-milk industries. Of the total number of wage earners in these two industries, 10.6 and 12.5 per cent, respectively, were women.

INDUSTRY.	WAGE EARNERS.			
	Average number. ¹	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
All industries.....	2,257	98.4	1.2	0.4
Bread and other bakery products.....	47	89.4	10.6	.....
Butter, cheese, and condensed milk.....	16	87.5	12.5	.....
Cars and general shop construction and repairs by steam-railroad companies.....	818	99.8	.....	0.2
Flour-mill and gristmill products.....	24	100.0	.....	.....
Lumber and timber products.....	186	100.0	.....	.....
Printing and publishing.....	180	88.3	8.3	3.3
All other industries.....	986	99.5	0.4	0.1

¹ For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

In order to compare the distribution of persons engaged in manufactures in 1909 with that shown at the census of 1904, it is necessary to use the classification employed at the earlier census. (See Introduction.) The following table makes this comparison according to occupational status:

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				
	1909		1904		Per cent of increase, 1904-1909.
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total.....	2,650	100.0	1,016	100.0	180.8
Proprietors and firm members.....	137	5.2	103	10.6	26.9
Salaried employees.....	256	9.7	106	10.4	141.5
Wage earners (average number).....	2,257	85.2	802	78.9	181.4

Comparable figures are not obtainable for 1899. The table shows a greater percentage of increase in the wage earners than in the other two classes.

The following table shows the average number of wage earners, distributed according to age periods, and in the case of those 16 years of age and over according to sex, for 1909, 1904, and 1899:

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	2,257	100.0	802	100.0	504	100.0
16 years of age and over.....	2,248	99.6	798	99.5	487	96.6
Male.....	2,222	98.4	790	98.5	481	95.4
Female.....	26	1.2	8	1.0	6	1.2
Under 16 years of age.....	9	0.4	4	0.5	17	3.4

This table indicates that for all industries combined there has been a decrease during the 10 years in the employment of children under 16 years of age. There has not been much change in the proportion of male and female wage earners. In 1909 males 16 years of age and over formed 98.4 per cent of all wage earners, as compared with 98.5 per cent in 1904 and 95.4 per cent in 1899.

Wage earners employed, by months.—The next table gives the number of wage earners employed on the 15th of each month during the year 1909 for all industries combined; it also gives the percentage which the number employed each month forms of the greatest number employed in any one month.

As there is no seasonal industry in the state, there was but little variation by months in the number of wage earners. The largest number of wage earners was employed in August and the smallest number in January. Between the percentages for these two months there was a difference of only 12.1.

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	2,107	87.9	July.....	2,349	98.0
February.....	2,116	88.2	August.....	2,398	100.0
March.....	2,140	89.2	September.....	2,341	97.6
April.....	2,190	91.3	October.....	2,390	99.7
May.....	2,244	93.6	November.....	2,302	96.0
June.....	2,266	94.5	December.....	2,247	93.7

Prevailing hours of labor.—Establishments have been classified also according to the prevailing number of hours of labor of the bulk of their employees; that is to say, the wage earners of each establishment are all classified according to the prevailing hours of labor in the establishment, even though some may have to work a different number of hours. The table that follows shows the result of this classification. It is based on the average number of wage earners employed during the year.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS GROUPED ACCORDING TO PREVAILING HOURS OF WORK PER WEEK.								
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries.....	2,257	365	38	690	694	196	260	6	8
Bread and other bakery products.....	47	7	5	9	14	4	7	1	.....
Butter, cheese, and condensed milk.....	16	2	.....	.....	4	2	8	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	818	44	.....	614	.....	42	118	.....	.....
Flour-mill and gristmill products.....	24	.....	.....	.....	.....	.....	13	5	6
Lumber and timber products.....	186	1	.....	40	.....	139	.....	.....	.....
Printing and publishing.....	180	143	.....	.....	35	2	.....	.....	.....
All other industries.....	986	188	33	21	641	7	114	.....	2

It is evident from these figures that for the majority of the wage earners employed in the manufacturing industries of Nevada the prevailing number of hours of labor ranges from 54 to 60 a week, inclusive, or from 9 to 10 a day. Establishments working less than 9 hours per day employed 17.9 per cent, and those working more than 10 hours per day 12.1 per cent, of the total number. It will be noted that the industry designated "Cars and general shop construction and repairs by steam-railroad companies" is mainly on a 9-hour-per-day basis (54 hours per week). The printing and publishing industry is chiefly on a basis of 8 hours, or less.

Location of establishments.—A separate presentation is made in the next table for the manufactures of Reno. (See Introduction.)

As statistics are shown only for cities having at least 10,000 inhabitants, there are no comparable figures for former censuses because the city did not reach the 10,000 mark until the census of 1910. The figures show that 22.6 per cent of the total number of establishments were located in Reno, that 15.7 per cent of the total value of products was reported from that city, and that 13.7 per cent of the total average number of wage earners were employed there. The value added

by manufacture was \$691,471, which represents 19.6 per cent, or about one-fifth of the net wealth of the state created by manufacturing operations during the year.

ITEM.	Year.	Total.	LOCATION OF ESTABLISHMENTS.		PER CENT OF TOTAL.	
			Reno.	Outside districts.	Reno.	Outside districts.
Population.....	1910	81,875	10,867	71,008	13.3	86.7
Number of establishments.....	1909	177	40	137	22.6	77.4
Average number of wage earners.....	1909	2,257	310	1,947	13.7	86.3
Value of products.....	1909	\$11,836,828	\$1,862,285	\$10,024,543	15.7	84.3
Value added by manufacture.....	1909	3,520,889	691,471	2,829,418	19.6	80.4

Character of ownership.—The table that follows has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined, comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries. In order to avoid disclosing the operations of individual concerns it is necessary to omit several important industries from this table and the one following.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909.....	177	2,257	\$11,886,828	\$3,520,889
1904.....	115	802	3,096,274	1,468,498
Individual:				
1909.....	83	174	892,482	390,367
1904.....	52	123	563,796	311,470
Firm:				
1909.....	24	40	232,562	108,441
1904.....	26	62	241,614	172,550
Corporation:				
1909 ¹	70	2,043	10,761,784	3,022,081
1904.....	34	604	2,220,209	956,426
Other:				
1909 ²	3	13	70,655	28,652
1904.....	3	13	70,655	28,652
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Individual:				
1909.....	46.9	7.7	7.5	11.1
1904.....	45.2	15.3	18.2	21.2
Firm:				
1909.....	13.6	1.8	2.0	3.1
1904.....	22.6	7.7	7.8	11.8
Corporation:				
1909 ¹	39.5	90.5	90.5	85.8
1904.....	29.6	75.3	71.7	65.1
Other:				
1909 ²	2.6	1.0	2.3	1.9
1904.....	2.6	1.0	2.3	1.9
Flour-mill and gristmill products, 1909.....	8	24	\$597,929	\$102,206
Individual.....	5	9	213,374	31,431
Corporation ³	3	15	384,555	70,775
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	62.5	37.5	35.7	30.8
Corporation ³	37.5	62.5	64.3	69.2
Lumber and timber products, 1909.....	9	186	\$503,268	\$214,946
Firm ⁴	3	6	20,500	10,240
Corporation.....	6	180	482,768	204,706
Per cent of total.....	100.0	100.0	100.0	100.0
Firm ⁴	33.3	3.2	4.1	4.8
Corporation.....	66.7	96.8	95.9	95.2
Printing and publishing, 1909.....	54	180	\$519,243	\$406,728
Individual.....	28	81	216,263	154,045
Firm.....	8	11	33,807	26,979
Corporation.....	18	88	269,173	225,704
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	51.9	45.0	41.6	37.9
Firm.....	14.8	6.1	6.5	6.6
Corporation.....	33.3	48.9	51.8	55.5

¹ Includes the group "Other," to avoid disclosure of individual operations.
² This group included with "Corporation."
³ Includes the group "Firm."
⁴ Includes the group "Individual."

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 39.5 per cent of the total number of establishments had in 1909 a corporate form of organization, as against 60.5 per cent for all other forms. The corresponding figures for 1904 were 29.6 per cent and 70.4 per cent, respectively. The increase in the corporate form of organization was due to the establishment of new industries, having that form of ownership, between 1904 and 1909. For all industries combined, as measured by value of products and value added by manufacture, the relative importance of corporations has increased to a large extent.

Size of establishment.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization. In order to throw some light upon it the following table groups the establishments according to the value of their prod-

ucts. The table also shows the average size of establishments for all industries combined and for important industries separately as measured by number of wage earners, value of products, and value added by manufacture. The totals for all industries are shown for the last two censuses, while for certain important industries figures are given for 1909 only.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909.....	177	2,257	\$11,886,828	\$3,520,889
1904.....	115	802	3,096,274	1,468,498
Less than \$5,000:				
1909.....	60	49	172,825	122,639
1904.....	47	66	144,684	113,556
\$5,000 and less than \$20,000:				
1909.....	66	168	608,654	359,561
1904.....	39	105	388,264	242,333
\$20,000 and less than \$100,000:				
1909.....	40	605	1,968,738	961,529
1904.....	21	235	895,226	460,699
\$100,000 and less than \$1,000,000:				
1909 ¹	11	1,435	9,136,611	2,077,160
1904.....	8	396	1,668,100	651,910
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Less than \$5,000:				
1909.....	33.9	2.2	1.5	3.5
1904.....	40.9	8.2	4.7	7.7
\$5,000 and less than \$20,000:				
1909.....	37.3	7.4	5.1	10.2
1904.....	33.9	13.1	12.5	16.5
\$20,000 and less than \$100,000:				
1909.....	22.6	26.8	16.6	27.3
1904.....	18.3	29.3	28.9	31.4
\$100,000 and less than \$1,000,000:				
1909 ¹	6.2	63.6	76.9	59.0
1904.....	7.0	49.4	53.9	44.4
Average per establishment:				
1909.....	13	13	\$7,157	\$10,892
1904.....	7	7	26,924	12,770
Flour-mill and gristmill products, 1909.....	8	24	\$597,929	\$102,206
\$5,000 and less than \$20,000.....	3	4	32,320	5,985
\$20,000 and less than \$100,000 ²	5	20	565,609	96,221
Per cent of total.....	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000.....	37.5	16.7	5.4	5.9
\$20,000 and less than \$100,000 ²	62.5	83.3	94.6	74.1
Average per establishment.....	13	3	\$74,741	\$12,776
Lumber and timber products, 1909.....	9	186	\$503,268	\$214,946
Less than \$5,000 ³	3	6	20,500	10,240
\$20,000 and less than \$100,000 ³	6	180	482,768	204,706
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000 ³	33.3	3.2	4.1	4.8
\$20,000 and less than \$100,000 ³	66.7	96.8	95.9	95.2
Average per establishment.....	21	21	\$58,919	\$23,883
Printing and publishing, 1909.....	54	180	\$519,243	\$406,728
Less than \$5,000.....	29	29	84,784	70,647
\$5,000 and less than \$20,000.....	18	59	145,581	115,830
\$20,000 and less than \$100,000.....	7	92	288,878	220,251
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	53.7	16.1	16.3	17.4
\$5,000 and less than \$20,000.....	33.3	32.8	28.0	28.5
\$20,000 and less than \$100,000.....	13.0	51.1	55.6	54.2
Average per establishment.....	13	3	\$9,616	\$7,532

¹ Includes the group "\$1,000,000 and over."
² Includes the group "\$100,000 and less than \$1,000,000."
³ Includes the group "\$5,000 and less than \$20,000."

This table shows that, in 1909, of the 177 establishments only 11, or 6.2 per cent, had a value of products exceeding \$100,000. These establishments, however, notwithstanding their small number, had a total average number of wage earners of 1,435, or 63.6 per cent of the total number in all establishments, and reported 76.9 per cent of the total value of products, and 59 per cent of the total value added by manufacture.

On the other hand, small establishments—that is, those having a value of product of less than \$5,000—constituted a considerable proportion (33.9 per cent) of the total number of establishments, but the value of their products amounted to only 1.5 per cent of the total. The great bulk of the manufacturing was carried on in establishments having a product valued at not less than \$100,000.

It will be seen that during the short period of five years from 1904 to 1909 extensive changes took place in the relative importance of the largest establishments as measured by value of products, value added by manufacture, and average number of wage earners, due to the fact that the largest industry in the state had been established between 1904 and 1909.

The fact that from 1904 to 1909 the average value of products per establishment increased from \$26,924 to \$67,157, and the value added by manufacture from \$12,770 to \$19,892, can scarcely be taken as an indication of a tendency toward concentration. The increased values shown as above stated are due to the establishment of a large copper smelter and also, perhaps, in some degree to the increase that has taken place in the prices of commodities.

The average number of wage earners per establishment increased from 7 to 13.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufactures work, the best classification of establishments to bring out the feature of size is a classification according to the number of wage earners employed. The next table shows such a classification for all industries combined and for six important industries, and gives not only the number of establishments falling in each group but also the average number of wage earners employed.

Consolidating these classes to a certain extent it will be seen that 91.5 per cent of the establishments employed either no wage earners at all or less than 21 persons each. The most numerous single group consists of the 116 establishments employing less than 6 wage earners. The two groups consisting of the establishments employing from 6 to 20 wage earners each and no wage earners at all, respectively, are next in importance, with 23 establishments each.

Of the total number of wage earners, 47.8 per cent were in establishments employing over 250 wage earners. The single group having the largest number of employees was the group comprising the establishments employing from 501 to 1,000 wage earners. This group employed 637 wage earners, or 28.2 per cent of the total.

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—							
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
NUMBER OF ESTABLISHMENTS.									
All industries.....	177	23	116	23	8	5	1	1	.....
Bread and other bakery products.....	29	8	19	2	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk.....	9	.....	9	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	9	.....	.....	2	3	3	1	.....	.....
Flour-mill and gristmill products.....	8	.....	7	1	.....	.....	.....	.....	.....
Lumber and timber products.....	9	.....	3	4	1	1	.....	.....	.....
Printing and publishing.....	54	9	37	7	1	.....	.....	.....	.....
All other industries.....	59	6	41	7	3	1	.....	1	.....
AVERAGE NUMBER OF WAGE EARNERS.									
All industries.....	2,257	.....	225	285	293	394	443	637	.....
Bread and other bakery products.....	47	.....	31	16	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk.....	16	.....	16	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	818	.....	.....	22	105	243	443	.....	.....
Flour-mill and gristmill products.....	24	.....	14	10	.....	.....	.....	.....	.....
Lumber and timber products.....	136	.....	6	56	35	89	.....	.....	.....
Printing and publishing.....	180	.....	78	70	32	.....	.....	.....	.....
All other industries.....	980	.....	80	91	121	57	.....	637	.....
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.									
All industries.....	100	.....	10.0	11.7	13.0	17.5	.....	19.6	28.2
Bread and other bakery products.....	100	.....	66.0	34.0	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk.....	100	.....	100.0	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	100	.....	.....	2.7	12.8	30.3	.....	54.2	.....
Flour-mill and gristmill products.....	100	.....	58.3	41.7	.....	.....	.....	.....	.....
Lumber and timber products.....	100	.....	3.2	30.1	18.8	47.8	.....	.....	.....
Printing and publishing.....	100	.....	43.3	38.9	17.8	.....	.....	.....	.....
All other industries.....	100	.....	8.1	9.2	12.3	5.8	.....	64.6	.....

Expenses.—As stated in the Introduction the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses going to make up the total.

The following table shows, in percentages, the distribution of expenses among the classes indicated for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	3.4	17.9	75.5	3.2
Bread and other bakery products.....	1.0	18.9	74.6	5.5
Butter, cheese, and condensed milk.....	1.0	4.6	91.7	2.1
Cars and general shop construction and repairs by steam-railroad companies.....	5.9	59.3	32.7	2.2
Flour-mill and gristmill products.....	1.5	4.3	90.2	4.0
Lumber and timber products.....	9.2	28.0	56.5	6.2
Printing and publishing.....	16.8	45.2	26.3	11.7
All other industries.....	2.3	11.8	83.3	2.6

This table shows that, for all industries combined, 75.5 per cent of the total expenses were incurred for materials, 21.3 per cent for services—that is, salaries and wages—and but 3.2 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

Engines and power.—The following table shows for all industries combined the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current), and their total horsepower at the censuses of 1909, 1904, and 1899. It also shows separately the number and horsepower of electric motors, including those operated by current generated in the manufacturing establishments.

The table indicates that the increase in primary power was mainly in power generated by steam engines, while on the other hand water power showed a decided decrease. There appears to have been a more general use of gas engines, the number of such engines having increased steadily since 1899, although the horsepower per engine has increased but slightly. The figures also show that the practice of renting primary power is on the increase, 33.9 per cent of the total power being rented in 1909, as compared with 29.5 per cent in 1904 and only one-tenth of 1 per cent in 1899.

The practice of renting electric power in Nevada was first shown in a United States census of 1904 and the development of the use of this kind of power in manufactures is evidenced from the fact that, in 1909, of the total of all rented power, 87.7 per cent was electric, compared with 65.9 per cent in 1904. That the use of electric motors for the purpose of applying the power generated within the establishments is also being rapidly developed is evident from the fact that the horsepower of such motors was 4,134 in 1909, none being reported for 1904 and 1899.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 ¹	1909	1904	1899 ¹	1909	1904	1899
Primary power, total.	268	56	65	7,765	2,834	1,561	100.0	100.0	100.0
Owned.....	84	50	65	5,133	1,999	1,560	66.1	70.5	99.9
Steam.....	40	27	35	4,533	1,092	623	58.4	38.5	40.2
Gas and oil.....	35	23	9	201	125	39	2.6	4.4	2.5
Water wheels..	8	5	21	397	742	893	5.1	26.2	57.2
Water motors..	1	1	(²)	2	40	(²)	(²)	1.4	(²)
Rented.....	184	.....	.....	2,632	835	1	33.9	29.5	0.1
Electric.....	178	.....	.....	2,307	550	1	29.7	19.4	0.1
Other.....	6	.....	.....	325	285	.....	4.2	10.1	.....
Electricmotors	344	.....	.....	6,441	550	1	100.0	100.0	100.0
Run by current generated by establishment.....	166	.....	.....	4,134	.....	.....	64.2	.....	.....
Run by rented power.....	178	.....	.....	2,307	550	1	35.8	100.0	100.0

¹ Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.
² Not reported. ³ Less than one-tenth of 1 per cent.

Fuel.—Closely related to the question of kind of power employed is that of the fuel used in generating this power, or otherwise as material in the manufacturing processes. The following table shows the quantity of each kind of fuel used in 1909:

INDUSTRY.	Anthracite coal (tons).	Bituminous coal (tons).	Coke (tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
All industries.....	115	70,541	326	2,992	53,449	174
Bread and other bakery products.....	.....	58	6	928	.....	174
Butter, cheese, and condensed milk.....	.....	118	.....	382	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	115	3,116	41	134	25,283	.....
Printing and publishing.....	.....	211	.....	66	129	.....
All other industries.....	.....	67,038	279	1,432	28,032	.....

NOTE.—In addition, there were 130 tons of other varieties of fuel reported.

SUPPLEMENTARY DATA REGARDING IMPORTANT INDUSTRIES.

(With statistics for laundries.)

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantity and value of materials and products which do not appear on the general schedule. Data for the quantity and value of products for two important industries in Nevada are here presented.

Flour-mill and gristmill products.—The following tabular statement gives the data for the quantity and value of products for the last two census years for flour-mill and gristmill products:

PRODUCT.	QUANTITY.		VALUE.	
	1909	1904	1909	1904
Total value.....			\$587,929	\$520,969
Wheat flour:				
White.....barrels..	61,380	47,186	357,200	255,598
Graham.....barrels..	558	270	3,340	1,380
Feed.....tons..	5,575	7,775	173,668	215,157
Offal.....tons..	2,631	2,393	63,721	48,659
All other products.....				175

This table shows that there was an increase of 14,194 barrels, or 30.1 per cent, in the quantity of wheat flour produced in 1909, as compared with the quantity reported in 1904, and a decrease of 2,200 tons in the quantity of feed produced.

Printing and publishing.—This industry, which in value of products ranks third, embraces the printing and publishing of newspapers and periodicals and book and job printing. There were 54 establishments in 1909, an increase of 25, or 86.2 per cent, over the number reported in 1904. There was also an increase of 113, or 168.7 per cent, in the average number of wage earners, and \$129,195, or 202.3 per cent, in the amount of wages paid during the same period. The value of products for 1909 shows an increase of \$266,346, or 105.3 per cent, over the amount reported for 1904.

The following table shows the number and circulation of newspapers and periodicals for 1909, 1904, and 1899:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total.....	59	31	35	45,544	19,540	18,153
Daily.....	15	9	9	15,830	6,930	5,226
Sunday.....	2			5,551		
Weekly.....	40	20	21	22,613	11,435	10,517
Triweekly.....	2		1	1,550		160
Semiweekly.....		2	3		1,175	1,750
Monthly.....			1			500

The number of newspapers and periodicals in the state increased from 35 in 1899 and 31 in 1904 to 59

in 1909. The 59 newspapers and periodicals reported in 1909 included 15 daily papers, 2 Sunday papers, 40 weeklies, and 2 triweeklies.

The aggregate circulation per issue of all newspapers and periodicals in 1909 was 45,544, distributed as follows: Dailies, 15,830; Sunday papers, 5,551; weeklies, 22,613; and triweeklies, 1,550.

Laundries.—Statistics for steam laundries are not included in the general tables. In 1909 there were five such establishments in the state of Nevada, one of which was in Reno.

The following statement summarizes the statistics:

Number of establishments.....	5
Persons engaged in the industry.....	119
Proprietors and firm members.....	2
Salaried employees.....	12
Wage earners (average number).....	105
Total primary horsepower.....	149
Capital.....	\$166,131
Expenses.....	150,181
Services.....	98,029
Materials.....	26,913
Miscellaneous.....	25,239
Amount received for work done.....	165,037

The most common form of organization was the corporate, with four establishments, one establishment being under firm ownership. Three establishments reported receipts for the year's business of over \$20,000 but less than \$100,000.

The number of persons employed each month and the per cent which this number represented of the greatest number employed in any month were as follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	112	100.0	July.....	111	99.1
February.....	104	92.9	August.....	105	93.8
March.....	107	95.5	September.....	103	92.0
April.....	101	90.2	October.....	101	90.2
May.....	105	93.8	November.....	100	89.3
June.....	111	99.1	December.....	104	92.9

The primary power used was wholly steam, seven engines being reported with a total of 149 horsepower.

The kind and amount of fuel used are shown in the following statement:

KIND.	Unit.	Quantity.
Bituminous coal.....	Tons.....	520
Wood.....	Cords.....	820
Oil.....	Barrels.....	1,244

MANUFACTURES—NEVADA.

711

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899.

THE STATE—SELECTED INDUSTRIES.

INDUSTRY AND CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Pri- mary horse- power.	Capital.	Salaries	Wages.	Cost of materials.	Value of products.	Value added by manu- facture.
			Total.	Pro- pri- tors and firm mem- bers.	Sal- aried em- ploy- ees.	Wage earn- ers (aver- age num- ber).							
			Expressed in thousands.										
STATE—All industries.....	1909	177	2,650	137	256	2,257	7,765	\$9,807	\$378	\$1,982	\$8,366	\$11,887	\$3,521
	1904	115	1,016	108	108	802	2,834	2,822	126	693	1,628	3,086	1,468
	1899	99	.....	.....	87	504	1,561	1,251	35	358	662	1,261	599
Bread and other bakery products.....	1909	29	86	34	5	47	0	147	3	54	214	356	142
	1904	11	43	14	3	31	1	39	2	28	64	127	63
	1899	4	8	5	.....	3	.....	4	.....	2	9	16	7
Butter, cheese, and condensed milk.....	1909	0	25	3	0	16	94	102	5	15	289	326	37
	1904	4	11	.....	1	10	67	57	(1)	9	161	197	36
	1899	4	20	.....	9	11	45	50	3	6	127	148	21
Cars and general shop construction and repairs by steam-railroad companies.....	1909	9	857	.....	39	818	1,611	607	61	610	337	1,033	696
	1904	6	340	.....	25	315	212	251	26	280	222	532	310
	1899	6	222	.....	8	214	175	405	10	168	111	296	185
Flour-mill and gristmill products.....	1909	8	39	7	8	24	395	592	8	24	496	598	102
	1904	9	31	8	0	17	361	411	8	16	432	521	89
	1899	9	.....	.....	4	13	.....	227	3	9	114	143	29
Lumber and timber products.....	1909	9	224	5	33	186	563	774	47	143	288	503	215
	1904	5	162	.....	15	147	1,110	1,072	21	110	257	528	271
	1899	3	.....	.....	3	57	.....	91	3	27	102	168	66
Printing and publishing.....	1909	54	276	48	48	180	214	654	72	193	113	519	406
	1904	2 29	121	33	21	67	62	168	22	64	33	253	220
	1899	2 29	107	36	3	68	62	92	2	35	18	111	93
All other industries.....	1909	59	1,143	40	117	956	4,882	6,931	182	943	6,620	8,552	1,923
	1904	51	303	53	35	215	1,021	394	47	186	459	938	479
	1899	44	.....	.....	10	138	.....	382	14	106	181	379	198

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

Reno.....	1909	40	419	25	84	310	1,746	\$1,872	\$121	\$308	\$1,171	\$1,862	\$691
-----------	------	----	-----	----	----	-----	-------	---------	-------	-------	---------	---------	-------

¹ Less than \$500.

² Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—NEVADA.

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.				
					Male.	Female.	Average number.	Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	177	2,650	137	96	130	30	2,257	Au 2,398	Ja 2,107	(1)	(1)	(1)	(1)	7,765			
2 Bread and other bakery products.....	29	86	34	.....	1	4	47	Ja 50	Oc 45	52	47	5	.....	6	
3 Brick and tile.....	4	18	4	1	1	.....	12	Se 35	Ja ² 0	22	20	.....	2	115	
4 Butter, cheese, and condensed milk.....	9	25	3	4	1	1	16	My ³ 19	Ja ³ 14	16	14	2	.....	84		
5 Cars and general shop construction and repairs by steam-railroad companies.....	9	857	.....	13	25	1	818	Ja 870	Au 770	820	818	.....	2	1,011	
6 Copper, tin, and sheet-iron products.....	4	11	2	.....	1	.....	8	Au 10	Ja 6	8	8	.....	.....	.....
7 Flour-mill and gristmill products.....	8	39	7	4	3	1	24	Oc 34	Jy ³ 19	27	27	.....	.....	305	
8 Foundry and machine-shop products.....	3	51	2	1	4	.....	44	Je 54	Ja ³ 34	50	50	.....	.....	138
9 Gas, illuminating and heating.....	3	13	.....	3	3	1	6	Ja ⁴ 6	Jy ⁴ 6	6	6	.....	.....	83
10 Ice, manufactured.....	3	22	6	2	.....	.....	14	Jy 41	Ja ³ 1	13	13	.....	.....	237
11 Liquors, malt.....	3	29	.....	6	3	.....	20	Je ³ 24	Ja ³ 15	24	24	.....	.....	851
12 Lumber and timber products.....	9	224	5	11	19	3	189	Au 287	Fe 88	241	241	.....	.....	563	
13 Printing and publishing.....	54	276	48	20	16	12	180	Mh 195	Au ³ 172	175	154	15	6	214			
14 Salt.....	4	17	2	2	.....	.....	13	Se 16	Fe 10	11	10	1	.....	82
15 Tobacco manufactures.....	8	23	10	.....	.....	.....	13	De 23	Ap 7	23	19	4	.....	.....	
16 Wall plaster.....	4	139	.....	11	8	1	119	My 136	Oc 104	126	126	.....	.....	776
17 All other industries ⁵	23	820	14	18	45	6	737	.....	.....	.....	.....	.....	.....	3,100

1 No figures given for reasons explained in the Introduction.
 2 Note reported for one or more other months.
 3 Same number reported for one or more other months.
 4 Same number reported throughout the year.
 5 All other industries embrace—

Cars and general shop construction and repairs by street-railroad companies.....	1	Lime.....	1	Mattresses and spring beds.....	1
Leather goods.....	2	Marble and stone work.....	2	Mineral and soda waters.....	9

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES, CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

CITY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	16 and over.			Under 16.	Male.	Female.	Male.	Female.		
								Male.	Female.								
1 RENO.....	40	419	25	32	38	14	310	297	13	.....	306	293	13	.....	1,746

MANUFACTURES—NEVADA.

713

THE STATE, BY INDUSTRIES: 1909.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$9,806,597	\$11,081,802	\$185,117	\$192,924	\$1,981,762	\$568,628	\$7,797,811	\$41,152	\$70,211	\$7,490	\$237,207	\$11,886,828	\$3,520,889
2 140,071	286,253	.....	2,722	54,208	10,071	203,564	5,536	1,765	.....	8,387	355,747	142,112
3 165,142	25,555	1,800	163	11,784	7,521	331	.....	208	.....	3,748	31,980	24,125
4 101,911	315,085	4,740	360	14,000	4,537	284,336	550	494	.....	5,468	325,755	36,882
5 607,432	1,029,942	23,507	37,257	610,258	37,789	298,027	.....	6,782	.....	15,442	1,032,707	695,991
6 16,500	19,878	.....	402	10,050	368	8,158	.....	205	75	500	25,045	16,519
7 592,438	549,333	4,960	3,210	23,614	2,714	493,009	300	2,477	.....	19,049	597,929	102,206
8 182,631	112,781	2,400	3,949	48,801	7,201	39,730	720	966	.....	9,014	114,770	67,839
9 235,659	53,976	3,300	1,740	8,000	35,067	1,277	.....	1,711	.....	2,821	67,263	30,919
10 299,199	33,719	2,400	.....	12,436	10,019	2,122	.....	1,509	.....	5,233	39,117	29,976
11 270,544	118,521	14,825	3,295	23,319	9,099	38,964	.....	21,681	.....	7,338	141,939	93,876
12 774,015	510,002	24,850	22,329	142,917	5,608	282,024	900	3,761	.....	26,923	503,268	214,946
13 653,877	427,391	37,284	34,705	193,073	15,076	97,439	14,277	4,259	2,461	28,817	519,243	406,728
14 38,174	16,289	2,220	.....	7,044	542	5,351	.....	282	.....	250	23,879	17,986
15 12,442	28,777	.....	.....	9,927	17	14,504	1,519	2,230	.....	580	37,048	22,527
16 521,859	266,803	22,800	8,750	79,723	41,255	81,037	.....	2,421	.....	30,817	298,847	171,555
17 5,246,273	7,287,497	40,031	73,982	731,348	381,054	5,045,038	17,350	19,480	4,954	72,760	7,777,291	1,449,699

4 All other industries embrace—Continued.
 Paint and varnish 1 | Slaughtering and meat packing 2 | Soap 1
 Photo-engraving 1 | Smelting and refining, copper 1 | Wirework, including wire rope and cable 1

AND TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909.

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

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$1,872,309	\$1,750,082	\$61,730	\$59,373	\$307,641	\$62,667	\$1,108,147	\$25,387	\$31,447	\$1,395	\$92,295	\$1,862,285	\$691,471

This page was intentionally left blank.

NEW HAMPSHIRE.

INDUSTRIES IN GENERAL.

General character of the state.—New Hampshire has a land area of 9,031 square miles. The state had a population in 1910 of 430,572; in 1900 its population was 411,588, and in 1890, 376,530. The density of population for the entire state was, in 1910, 47.7 per square mile, the corresponding figure for 1900 being 45.6. It ranked thirty-ninth among the 49 states and territories of continental United States as regards population in 1910 and thirty-seventh in 1900. In 1899 it ranked twenty-third in respect to value of manufactures, and in 1909, twenty-eighth.

Manchester, with a population of 70,063, is the only city in the state having a population of over 50,000. There are, however, seven other cities having a population of over 10,000. These eight cities, Berlin, Concord, Dover, Keene, Laconia, Manchester, Nashua, and Portsmouth, contain 40.4 per cent of the total population of the state and are credited with 56.5 per cent of the total value of its manufactures.

The greater number of the manufacturing establishments are located in the southern part of the

state. This section possesses marked advantages for manufacturing, among which are an abundance of water power afforded by the Merrimac River, close proximity to the markets and business centers of New England, and excellent transportation facilities.

Importance and growth of manufactures.—In 1849 the total value of the manufactures of the state, including the products of the neighborhood and hand industries, amounted to only \$23,165,000, while in 1909, exclusive of the value of the products of the neighborhood and hand industries, it reached \$164,581,000, representing an increase of over sixfold in 60 years. This increase is the more remarkable considering that during the same period the population of the state increased only 35.4 per cent.

The following table gives the most important figures relative to all classes of manufactures combined as returned at the censuses of 1909, 1904, and 1899, together with the percentages of increase from census to census:

	NUMBER OR AMOUNT.			PER CENT OF INCREASE. ¹	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments.....	1,961	1,618	1,771	21.2	-8.6
Persons engaged in manufactures.....	84,191	69,758	(²)	20.7	.....
Proprietors and firm members.....	2,014	1,726	(²)	16.7	.....
Salaried employees.....	3,519	2,666	2,068	32.0	28.9
Wage earners (average number).....	78,658	65,366	67,646	20.3	-3.4
Primary horsepower.....	293,991	218,344	200,975	34.6	8.6
Capital.....	\$139,990,000	\$109,495,000	\$92,146,000	27.8	18.8
Expenses.....	149,215,000	112,888,000	94,365,000	32.2	19.6
Services.....	40,391,000	30,665,000	28,050,000	31.7	9.3
Salaries.....	4,191,000	2,972,000	2,200,000	41.0	35.1
Wages.....	36,200,000	27,693,000	25,850,000	30.7	7.1
Materials.....	98,157,000	73,216,000	60,163,000	34.1	21.7
Miscellaneous.....	10,667,000	9,007,000	6,152,000	18.4	46.4
Value of products.....	164,581,000	123,611,000	107,591,000	33.1	14.9
Value added by manufacture (value of products less cost of materials).....	66,424,000	50,395,000	47,428,000	31.8	6.3

¹ A minus sign (-) denotes decrease.

² Figures not available.

In 1909 the state of New Hampshire had 1,961 manufacturing establishments which gave employment to an average of 84,191 persons during the year and paid out \$40,391,000 in salaries and wages. Of the persons employed, 78,658 were wage earners. These establishments turned out products to the value of \$164,581,000, to produce which materials costing \$98,157,000 were consumed. The value added by manufacture was thus \$66,424,000, which figure, as explained in the

Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of New Hampshire showed a decrease during the five-year period 1899-1904 in the number of establishments and average number of wage earners, but an increase in the amount paid in wages, the value of products, and every other item. On the other hand, for the more recent period, 1904-

1909, a very considerable increase is shown in every item. During the 10-year period 1899-1909 there was a net increase of 10.7 per cent in the number of establishments and 16.3 per cent in the average number of wage earners, while the value of products increased 53 per cent and the value added by manufacture 40.1 per cent. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the full extent indicated by these figures regarding values, since the increase shown is certainly

due, in part, to the increase that has taken place in the price of commodities.

It is a matter of interest to note that the percentages of increase shown for wages, value of products, and value added by manufacture are much larger than those for the number of establishments and average number of wage earners.

The relative importance and growth of the leading manufacturing industries of the state are shown in the following table:

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. ¹			
		Average number.	Percent distribution.	Amount.	Percent distribution.	Amount.	Percent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All industries.....	1,961	78,658	100.0	\$164,581,000	100.0	\$66,424,000	100.0	53.1	14.9	31.3	6.3
Boots and shoes, including cut stock and findings.....	68	14,211	18.1	39,440,000	24.0	11,225,000	16.9	72.7	-3.9	58.4	0.6
Cotton goods, including cotton small wares.....	21	22,290	28.3	33,602,000	20.4	14,478,000	21.8	13.7	28.4	31.1	0.1
Woolen, worsted, and felt goods, and wool hats.....	39	9,458	12.1	16,731,000	10.2	5,636,000	8.5	17.1	.....	17.3	.....
Lumber and timber products.....	589	8,464	10.8	15,284,000	9.3	8,021,000	12.1	32.1	-0.2	27.9	-6.9
Paper and wood pulp.....	34	3,413	4.3	13,994,000	8.5	4,741,000	7.1	56.7	23.3	31.6	9.4
Foundry and machine-shop products.....	81	2,396	3.0	4,947,000	3.0	3,248,000	4.9	52.5	-6.5	56.8	0.7
Hosiery and knit goods.....	21	3,129	4.0	4,764,000	2.9	2,128,000	3.2	19.9	.....	21.9	.....
Flour-mill and gristmill products.....	105	116	0.2	3,187,000	1.9	378,000	0.6	25.4	15.3	94.8	-28.9
Marble and stone work.....	99	1,527	1.9	1,818,000	1.1	1,520,000	2.3	50.9	11.6	64.5	16.7
Bread and other bakery products.....	157	454	0.6	1,683,000	1.0	628,000	0.9	56.6	28.9	48.5	10.2
Liquors, malt.....	4	272	0.3	1,644,000	1.0	1,099,000	1.7	-27.1	15.3	-30.5	16.6
Furniture and refrigerators.....	26	823	1.0	1,544,000	0.9	848,000	1.3	.....	.....	21.9	.....
Tobacco manufactures.....	51	571	0.7	1,250,000	0.8	574,000	0.9	119.3	3.0	85.3	12.8
Printing and publishing.....	143	677	0.9	1,131,000	0.7	872,000	1.3	16.7	6.2	16.0	8.0
Cooperage and wooden goods, not elsewhere specified.....	30	713	0.9	948,000	0.6	499,000	0.8	-4.0	19.8	-16.0	17.4
Butter, cheese, and condensed milk.....	29	50	0.1	807,000	0.5	98,000	0.1	.....	.....	.....	.....
Clothing, men's, including shirts.....	12	471	0.6	785,000	0.5	323,000	0.5	79.2	4.8	85.6	5.5
Carrriages and wagons and materials.....	44	420	0.5	734,000	0.4	388,000	0.6	-6.4	-13.5	-21.3	-11.5
Leather goods.....	9	300	0.4	641,000	0.4	351,000	0.5	-1.8	.....	7.7	.....
Gas, illuminating and heating.....	14	247	0.3	681,000	0.4	401,000	0.6	19.5	36.5	26.1	17.8
Brick and tile.....	29	395	0.5	533,000	0.3	377,000	0.6	0.8	-1.7	-0.3	-3.3
Clothing, women's.....	8	241	0.3	396,000	0.2	141,000	0.2	-34.2	15.3	-29.5	2.6
Electrical machinery, apparatus, and supplies.....	6	193	0.2	388,000	0.2	233,000	0.3	158.7	-17.6	275.8	-38.0
Cutlery and tools, not elsewhere specified.....	12	268	0.3	328,000	0.2	229,000	0.3	-31.5	10.9	-25.4	2.7
Needles, pins, and hooks and eyes.....	7	438	0.6	275,000	0.2	237,000	0.4	32.2	-20.6	29.5	-21.8
Boxes, fancy and paper.....	12	168	0.2	273,000	0.2	135,000	0.2	11.9	-0.9	7.1	1.6
Patent medicines and compounds and druggists' preparations.....	22	29	(²)	224,000	0.1	145,000	0.2	.....	.....	.....	.....
Slaughtering and meat packing.....	3	24	(²)	199,000	0.1	34,000	0.1	423.7	.....	183.3	.....
Brass and bronze products.....	5	56	0.1	102,000	0.1	57,000	0.1	-36.6	103.8	-37.4	85.7
All other industries.....	276	6,816	8.7	16,348,000	9.9	7,380,000	11.1	.....	.....	.....	.....

¹ Percentages are based on figures in Table I; a minus sign (-) denotes decrease.
² Less than one-tenth of 1 per cent.

Where the percentages are omitted, comparable figures can not be given.

It should be borne in mind, in considering this table, that the value of products in some of the industries involves a certain amount of duplication due to the use of the product of one establishment in the industry as material for another establishment.

The most important industries listed in this table, in which they are arranged in the order of the value of products, call for brief consideration.

Boots and shoes, including cut stock and findings.—The statistics for this industry indicate not only that it has recovered from its temporary depression in 1904 and again assumed first rank in value of products among the industries of the state, but that it has experienced an exceptionally large growth.

Textiles.—The combined value of the textile manufactures of the state, including cotton goods, woolen and worsted goods, and hosiery and knit goods, amounted to \$55,097,000, or 33.5 per cent of the total

value of the manufactures of the state. There was one establishment reported for the silk industry, engaged in throwing raw silk into organzine and tram, but the statistics are omitted since they can not be shown without disclosing the operations of individual establishments. The manufacture of cotton goods was by far the most important branch of the textile industries, and was second in importance among the individual industries of the state.

Comparative figures for the period 1899-1904 are not available for the woolen and worsted goods industry, as the figures for two large mills that were classified as worsted mills in 1899 can not be included without disclosing individual operations. This industry shows an increase in the value of products for the period 1904-1909, notwithstanding the fact that fewer establishments were reported in 1909 than in 1904. This increase is due not only to the greater

production, but also to the general rise of prices and the better grade of goods turned out.

The manufacture of hosiery and knit goods also forms an important branch of the textile industry of New Hampshire. As was the case with cotton manufactures, this industry shows a lower rate of increase in value of products during the period 1904-1909 than during the period 1899-1904.

Lumber and timber products.—This industry, which is among the oldest manufacturing industries of the state, continues to be an important one and shows a marked growth from 1904 to 1909. It not only embraces establishments engaged in logging, but also saw-mills and planing mills and establishments engaged in the manufacture of wooden packing boxes. The principal species of native wood used are spruce and white pine. In the production of spruce the state ranks second only to Maine among the states of the Union. While the original forests of white pine in New Hampshire are practically exhausted and the mills are now using the second growth, the state ranked fifth among the 28 states producing this wood in 1909.

Paper and wood pulp.—The establishments which produce pulp as a final product, as well as those which manufacture paper or pulp and paper, are included under this classification. This industry has grown steadily in the state with the more extensive use of wood pulp and wood fiber as materials in the manufacture of paper, the total value of products in 1909 being \$13,994,000, as compared with \$1,282,000 in 1889. The abundance of spruce, a variety of wood especially suitable for wood pulp, and the large amount of water power available in the state have contributed to this rapid development.

Measured by value added by manufacture, the rank of the leading industries is somewhat changed. Cotton goods becomes first in rank instead of boots and shoes, and lumber and timber products displaces woolen and worsted goods from the third place.

This table also shows the percentages of increase in value added by manufacture as well as in value of products for these leading industries where these statistics are comparable. The electrical machinery, apparatus, and supplies industry showed a greater rate of increase from 1904 to 1909 in value added by manufacture than any other of the specified industries, namely, 275.8 per cent. The slaughtering and meat-packing, tobacco manufactures, men's clothing, and the boot and shoe industries also showed remarkable increases both in gross value of products and in value added by manufacture.

There are some striking differences among the several specified industries in the rates of increase in value of products shown for the two periods 1899-1904 and 1904-1909, respectively. Only one of the industries showing decreases from 1899 to 1904 showed a decrease also from 1904 to 1909, while of the eight industries showing decreases from 1899 to 1904 five showed

marked increases during the later period. Six industries showing increases during the earlier intercensal period show decreases from 1904 to 1909.

In addition to the industries presented separately in the preceding table there are 20 important industries each of which had a value of products in 1909 in excess of \$160,000. They are included under the head of "All other industries" in some cases, because, if they were shown separately, the operations of individual establishments would be disclosed; in others, the returns do not properly present the true condition of the industry, as it is more or less interwoven with one or more other industries of similar character; and for others, comparable statistics for the different census years can not be presented either because the data for prior censuses are not available or on account of changes in classification. These industries represent the manufacture of leather belting and hose; of buttons; the repair shops of steam railroads; the construction of steam-railroad cars, other than by railroad companies; the dyeing and finishing of textiles; the manufacture of fancy articles, not elsewhere specified, and of leather gloves and mittens; the rendering of grease and tallow; the manufacture of hones and whetstones; the tanning, currying, and finishing of leather; the construction of locomotives, other than by railroad companies; the manufacture of mineral and soda waters; of musical instruments; paper goods, not elsewhere specified; the silverware and plated-ware industry; the manufacture of sporting and athletic goods; the steam-packing industry; the manufacture of stoves and furnaces; of upholstering materials; and the turning and carving of wood.

Persons engaged in manufacturing industries.—The following table shows for 1909 the distribution of the number of persons engaged in manufactures, the average number of wage earners being distributed by sex and age. It should be borne in mind, however, that 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 Introduction.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes.....	84,191	58,924	25,267
Proprietors and officials.....	3,279	3,181	98
Proprietors and firm members.....	2,014	1,931	83
Salaried officers of corporations.....	371	368	3
Superintendents and managers.....	394	832	12
Clerks.....	2,254	1,441	813
Wage earners (average number).....	78,658	54,302	24,356
16 years of age and over.....	77,462	53,574	23,888
Under 16 years of age.....	1,196	728	468

The average number of persons engaged in manufactures during 1909 was 84,191, of whom 78,658

were wage earners, about three-fifths of the remainder being proprietors and officials, and the rest clerks. Corresponding figures for individual industries will be found in Table II.

The following table shows for 1909 the percentage of proprietors and officials, clerks, and wage earners, respectively, among the total number of persons employed in manufactures. It covers all industries combined and 15 important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries	84,191	3.9	2.7	93.4
Boots and shoes, including out stock and findings.....	15,113	2.1	3.9	94.0
Bread and other bakery products.....	662	27.8	3.6	68.6
Cooperage and wooden goods, not elsewhere specified.....	773	6.5	1.3	92.2
Cotton goods, including cotton small wares.....	22,504	0.3	0.7	99.0
Flour-mill and gristmill products.....	288	54.2	5.6	40.3
Foundry and machine-shop products.....	2,792	6.1	8.1	85.8
Furniture and refrigerators.....	935	5.7	6.3	88.0
Hosiery and knit goods.....	3,223	2.0	1.0	97.1
Liquors, malt.....	321	4.0	11.2	84.7
Lumber and timber products.....	9,449	8.8	1.6	89.6
Marble and stone work.....	1,718	9.9	1.2	88.9
Paper and wood pulp.....	3,668	2.8	4.2	93.0
Printing and publishing.....	984	18.3	12.9	68.8
Tobacco manufactures.....	640	10.8	.....	89.2
Woolen, worsted, and felt goods, and wool hats.....	9,701	1.3	0.9	97.8
All other industries.....	11,420	6.5	4.9	88.6

Of the total number of persons engaged in all manufacturing industries, 3.9 per cent were proprietors and officials, 2.7 per cent clerks, and 93.4 per cent wage earners. In the flour-mill and gristmill industry the proportion of persons falling in the class of proprietors and officials is high owing to the fact that a majority of the establishments are small and the work is done largely by the proprietors or their immediate representatives. Similar conditions prevail to a lesser extent in the bakery and in the printing and publishing industries.

The following table shows, for 1909, in percentages, for all industries combined, the distribution of the average number of wage earners, by age periods and sex, calculated in the manner described in the Introduction. It also shows, for some of the important industries separately, the percentage distribution by age periods and sex, of the wage earners as reported for December 15, or the nearest representative day. As a means of judging the importance of the several industries the average total number employed for the year is also given in each case.

For all industries combined, 68.1 per cent of the average number of wage earners were males 16 years of age and over; 30.4 per cent females 16 years of age and over; and 1.5 per cent persons under the age of 16. The larger part of the total number of female wage earners is made up of those employed in the textile and boot and shoe industries. In the cotton-goods industry nearly half of the employees are

women over 16 years of age; in the hosiery and knit-goods industry, two-thirds; and in the woolen and worsted industry, over two-fifths. In the boot and shoe industry nearly one-third of the employees are women over 16 years of age.

The textile and boot and shoe industries combined also include the larger part of the total number of wage earners under 16 years of age. There are, however, three other industries listed in the table in which the proportion of persons under 16 years to the total number employed is larger than in any branch of textile or of the boot and shoe industries, namely, bakeries with 4 per cent, and the cooperage and furniture industries with 2.8 per cent each.

INDUSTRY.	WAGE EARNERS.			
	Average number.	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
Male.	Female.			
All industries	78,658	68.1	30.4	1.5
Boots and shoes, including out stock and findings.....	14,211	60.3	31.3	2.4
Bread and other bakery products.....	464	78.4	17.6	4.0
Cooperage and wooden goods, not elsewhere specified.....	713	93.3	3.9	2.8
Cotton goods, including cotton small wares.....	22,290	49.7	48.3	2.0
Flour-mill and gristmill products.....	116	100.0	.....	.....
Foundry and machine-shop products.....	2,396	95.3	4.3	0.5
Furniture and refrigerators.....	823	94.7	2.6	2.8
Hosiery and knit goods.....	3,129	31.3	66.7	1.9
Liquors, malt.....	272	100.0	.....	.....
Lumber and timber products.....	8,464	98.3	1.2	0.5
Marble and stone work.....	1,527	99.9	.....	0.1
Paper and wood pulp.....	3,413	96.2	3.8	.....
Printing and publishing.....	877	68.4	29.5	2.1
Tobacco manufactures.....	571	72.9	26.3	0.9
Woolen, worsted, and felt goods, and wool hats.....	9,480	56.3	42.2	1.6
All other industries.....	10,116	81.9	17.4	0.7

¹ For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.

In order to compare the distribution of the persons engaged in manufactures in 1909 with that shown at the census of 1904 it is necessary to use the classification employed at the earlier census. (See Introduction.) The following table makes this comparison according to occupational status:

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				Per cent of increase, 1904-1909.
	1909		1904		
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	84,191	100.0	69,758	100.0	20.7
Proprietors and firm members.....	2,014	2.4	1,726	2.5	16.7
Salaried employees.....	3,519	4.2	2,666	3.8	22.0
Wage earners (average number).....	78,658	93.4	65,366	93.7	20.3

Comparable figures are not obtainable for 1899. The table shows a greater percentage of increase in the salaried employees than in the other two classes.

The table following shows the average number of wage earners distributed according to age periods, and in the case of those 16 years of age and over according to sex, for 1909, 1904, and 1899. The averages

for 1909 are estimated on the basis of the actual number reported for a single representative day. (See Introduction.)

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	78,658	100.0	65,366	100.0	67,846	100.0
16 years of age and over..	77,462	98.5	64,399	98.5	66,007	97.6
Male.....	53,574	68.1	44,483	68.1	45,413	67.1
Female.....	23,888	30.4	19,916	30.5	20,594	30.4
Under 16 years of age....	1,196	1.5	967	1.5	1,039	2.4

This table indicates that for all industries combined there was a decrease during the five-year period 1899-1904 in the employment of children under 16 years of age. During the more recent period, 1904-1909,

there was an increase in the number of children employed, although the proportion which they represent of the total has remained the same. There has not been much change in the proportions of male and female wage earners. In 1909 and 1904 males 16 years of age and over formed 68.1 per cent of all wage earners, as compared with 67.1 per cent in 1899.

Wage earners employed, by months.—The following table gives the number of wage earners employed on the 15th of each month during the year 1909, for all industries combined, for the lumber industry, and for all other industries combined; it gives also the percentage which the number reported for each month is of the greatest number reported for any month. In Table II, page 734, is shown for practically all of the important industries in the state the largest number and also the smallest number of wage earners reported for any month. The figures are for the 15th day, or the nearest representative day, of the month.

MONTH.	WAGE EARNERS.									
	All industries.		Lumber and timber products.						All other industries.	
			Total.		In mills.		In logging operations.			
	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.
January.....	78,438	96.9	10,428	97.9	5,608	91.2	4,825	98.8	68,010	94.7
February.....	79,097	97.7	10,651	100.0	5,765	93.8	4,886	100.0	68,446	95.3
March.....	79,519	98.2	10,570	99.2	0,119	99.6	4,451	91.1	68,949	96.0
April.....	77,697	96.0	7,972	74.8	0,145	100.0	1,827	37.4	69,725	97.1
May.....	78,132	96.5	7,094	72.2	6,081	99.0	1,613	33.0	70,438	98.1
June.....	78,021	96.4	7,113	66.8	5,587	90.9	1,526	31.2	70,908	98.7
July.....	76,324	94.3	6,213	58.3	5,053	82.2	1,160	23.7	70,111	97.6
August.....	76,975	95.1	6,164	57.9	4,860	79.1	1,304	26.7	70,811	98.6
September.....	77,850	96.2	7,161	67.2	5,350	87.1	1,811	37.1	70,689	98.4
October.....	80,108	99.0	8,280	77.7	5,609	91.3	2,671	54.7	71,828	100.0
November.....	80,797	99.8	8,974	84.2	5,690	92.6	3,284	67.2	71,823	99.9
December.....	80,936	100.0	10,346	97.1	6,076	98.9	4,270	87.4	70,590	98.3

The lumber industry, which is a seasonal industry giving employment to a much larger number of persons from December to March than during the other months of the year, influences considerably the total for all industries combined. The number of wage earners employed in the industry varied during the different months from 10,651 in February to 6,164 in August. Employment for those engaged in the mills is, however, much steadier than for those engaged in logging operations, or the total would be affected to a much greater extent. In the logging operations only 23.7 per cent of the greatest number of wage earners employed during any one month were employed in July, while the number employed in the mills in the same month represented 82.2 per cent of the maximum for this branch of the industry. The totals for all other industries are a fair index of the conditions of employment in the manufactures of the state, January being the month of least activity, and October and November those of greatest activity. In the two most important industries of the state, the textile and the boot and shoe industries, employment is fairly steady throughout the year.

Prevailing hours of labor.—In the next table wage earners have been classified according to the hours of labor prevailing in the establishments in which they are employed. In making this classification the average number of wage earners employed during the year is used, and the number employed in each establishment is classified as a total, according to the hours prevailing in that establishment, even though some few employees work a greater or less number of hours. In the case of the lumber industry, in particular, this average is considerably less than the number employed in the busy season.

It is evident from the figures that for the great majority of the wage earners employed in the manufacturing industries of New Hampshire the prevailing hours of labor range from 54 to 60 per week, or from 9 to 10 a day, only 7 per cent of the total being employed in establishments operating less than 9 hours a day, and only 1.5 per cent being employed in establishments operating more than 10 hours a day. Of those employed in establishments where from 54 to 60 hours per week prevail, 48.5 per cent were in establishments engaged in the manufacture of textiles. Prac-

tically all of the establishments in these industries operated between 54 and 60 hours a week. There is a provision in the labor laws of the state limiting the hours of labor for women and children to 58 per week.

It will be noted that the prevailing hours are shortest in the establishments engaged in marble and stone work, the majority of the wage earners in such estab-

lishments working 48 hours or less a week. In the paper and wood-pulp industry there is a wide variation in the number of hours of labor. While 37.6 per cent of the wage earners worked 48 hours or less a week, 15.4 per cent worked more than 60 hours per week. Of the total number of wage earners employed in establishments where the prevailing hours were more than 60 a week, over two-fifths are found in this industry.

INDUSTRY.	AVERAGE NUMBER OF WAGE EARNERS IN ESTABLISHMENTS GROUPED ACCORDING TO PREVAILING HOURS OF WORK PER WEEK.								
	Total.	48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72.	Over 72.
All industries.....	78,658	3,516	1,991	3,936	57,935	10,087	847	276	70
Boots and shoes, including out stock and findings.....	14,211		12	136	12,459	1,604			
Boxes, fancy and paper.....	168	4		19	145				
Brass and bronze products.....	56		3		19	34			
Bread and other bakery products.....	454	25	5	99	31	259	22	8	
Brick and tile.....	395				108	194	93		
Butter, cheese, and condensed milk.....	50	3	4	8	8	1	26		
Carriages and wagons and materials.....	420		127	70	120	103			
Clothing, men's, including shirts.....	471	251	34	69	106	11			
Clothing, women's.....	241			12	229				
Cooperage and wooden goods, not elsewhere specified.....	713			1	342	370			
Cotton goods, including cotton small wares.....	22,290				22,290				
Cutlery and tools, not elsewhere specified.....	268	2		182	82	2			
Electrical machinery, apparatus, and supplies.....	193				133	60			
Flour-mill and gristmill products.....	116	11	1		5	98	1		
Foundry and machine-shop products.....	2,396	27	21	965	984	399			
Furniture and refrigerators.....	823				428	395			
Gas, illuminating and heating.....	247	6			16	20	160		45
Hosiery and knit goods.....	3,129			6	3,123				
Leather goods.....	300			67	55	178			
Liquors, malt.....	272			272					
Lumber and timber products.....	8,464	45	44	926	3,058	4,114	271	6	
Marble and stone work.....	1,527	1,474		46	4	3			
Needles, pins, and hooks and eyes.....	438				438				
Paper and wood pulp.....	3,413	1,282	508		446	651	244	292	20
Printing and publishing.....	677	180	76	132	205	84			
Tobacco manufactures.....	571	115		453		3			
Woolen, worsted, and felt goods, and wool hats.....	9,496				8,889	597			
All other industries.....	6,869	91	1,156	473	4,212	907	30		

Location of establishments.—The next table shows to what extent manufacturing in the state is centralized in cities having a population of 10,000 and over. (See Introduction.) The statistics for 1904 are omitted from this table, because there was no census of population for that year, and it was impossible to determine the cities that come within the group having over 10,000 inhabitants.

ITEM.	Year.	Total.	LOCATION OF ESTABLISHMENTS.		PER CENT OF TOTAL.	
			In cities with population of 10,000 and over.	Outside districts.	In cities with population of 10,000 and over.	Outside districts.
Population.....	1910	430,572	174,112	255,460	40.4	59.6
	1900	411,588	124,361	287,227	30.2	69.8
Number of establishments.	1909	1,961	604	1,357	30.8	69.2
	1899	1,771	402	1,369	22.7	77.3
Average number of wage earners.	1909	78,658	44,467	34,191	56.5	43.5
	1899	67,646	30,191	37,455	44.6	55.4
Value of products..	1909	\$164,581,019	\$93,054,154	\$71,526,865	56.5	43.5
	1899	107,590,803	48,336,336	59,254,467	44.9	55.1
Value added by manufacture.	1909	66,424,003	36,531,230	29,892,773	55.0	45.0
	1899	47,427,423	21,171,313	26,256,110	44.6	55.4

While it may be noted that by far the greater number of the manufacturing establishments of the state are outside of the cities of over 10,000 inhabitants, the average size of the establishments located in cities having a population of 10,000 and over was larger. Furthermore, 56.5 per cent of the total value of products was reported from these cities in 1909 and the same proportion of the average number of wage earners were employed there.

The figures indicate that considerable change took place in the relative importance of the two groups during the period from 1899 to 1909, as there was a marked increase in 1909 in the proportion for cities having a population of 10,000 inhabitants and over and a corresponding decrease in the proportion for the districts outside. This is due in part to the fact that three cities—Berlin, Keene, and Laconia—which had less than 10,000 inhabitants in 1900 passed into the class of cities of 10,000 and over in 1910.

The relative importance of each of the eight cities having a population of 10,000 or over in 1910 is shown in the table following, in which the value of products and average number of wage earners are shown separately for 1909, 1904, and 1899.

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
Manchester.....	24,735	17,579	17,862	\$46,811,919	\$30,696,926	\$24,628,345
Nashua.....	7,912	6,159	6,777	17,326,134	12,858,882	10,696,064
Concord ¹	2,693	2,654	2,432	6,476,477	5,373,624	4,210,522
Dover.....	3,030	2,859	2,797	6,370,110	6,042,901	5,440,353
Berlin.....	1,790	2,282	2,810	5,596,595	5,989,119	5,986,306
Laconia.....	2,146	1,957	1,535	3,818,440	3,096,878	2,152,379
Keene.....	1,769	1,685	1,576	3,488,291	2,600,967	2,583,887
Portsmouth.....	992	638	1,323	2,871,188	2,602,056	3,961,052

¹ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

Every city except Berlin shows an increase in value of products from 1904 to 1909, and all but Portsmouth an increase from 1899 to 1904. The large decrease in Portsmouth during the earlier five-year period was due primarily to a reduction in the output of the boot and shoe industry.

Manchester is the only city having a population of 50,000 and over and the only one, therefore, for which separate statistics are given for individual industries. (See Table I.) In 1909, 28.4 per cent of the total value of products of the state was reported from this one city and 31.4 per cent of the average number of wage earners were employed there. It ranked first among the cities of the state in the production of boots and shoes, the value of the boots and shoes manufactured in Manchester representing 44.7 per cent of the total value of products for this industry in the state as a whole. Cotton manufacturing was the next most important industry in the city, but statistics for its two large cotton mills can not be shown without disclosing individual operations. A large increase in the value of products is shown for the industries of the city as a whole for each of the two intercensal periods. The average number of wage earners employed remained practically stationary from 1899 to 1904 but increased decidedly from 1904 to 1909.

Nashua ranked second as a manufacturing city in 1909. The number of wage earners and the value of products increased 18.7 per cent and 34.7 per cent, respectively, from 1904 to 1909, as compared with increases of 6.6 per cent and 27.4 per cent, respectively, from 1899 to 1904. Its products of chief importance also were boots and shoes and cotton goods, although the total value reported for these products was in no way comparable with the corresponding figures for Manchester. The foundries and machine shops of Nashua were also important.

Concord held third place among the municipalities of the state in 1909, having displaced Dover from this position since 1904. The most important manufacturing industries of Concord are the making of leather belting and hose, car repair shops, and marble and stone work; those of Dover are the manufacture of cotton goods, the tanning and currying of leather, and the dyeing and finishing of textiles. Just outside of

Concord, but not included in the data for the city, is one of the largest flour mills and gristmills in the state.

The cities of Berlin, Laconia, Keene, and Portsmouth rank in value of products in the order named. No comparison of value of products or average number of wage earners can be made for Berlin, Laconia, or Keene, as these cities had a population of less than 10,000 in 1900, and separate statistics are not available. Portsmouth showed an increase in value of products and average number of wage earners from 1904 to 1909 but a decrease for the earlier period, 1899-1904. Outside of the manufacture of paper and wood pulp and the lumber industry there are no manufactures of importance in Berlin. For Keene a large variety of small industries are reported with products whose value varies from less than \$5,000 to over \$300,000, but the city has no really important industries. On the other hand, Laconia and Portsmouth, like Berlin, each owes its industrial importance to one or two industries, Laconia to the manufacture of hosiery and knit goods and to its railroad repair shop, and Portsmouth to its large breweries and one boot and shoe factory. Mention may be made also of the Kittery Navy Yard, opposite Portsmouth, which is not included in the census of manufactures, but which gave employment to 895 wage earners and reported work done to the amount of \$1,153,181. (See Introduction.)

Character of ownership.—The table that follows has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually. In order to avoid disclosing the operations of individual concerns it is necessary to omit several important industries from this table and the one following.

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 21.6 per cent of the total number of establishments were in 1909 under corporate ownership, as against 78.4 per cent under all other forms. The corresponding figures for 1904 were 20.9 per cent and 79.2 per cent, respectively. Thus the change in character of ownership during the period was slight. In the more important industries, with the exception of the lumber industry, establishments under corporate ownership are predominant as measured by value of products and value added by manufacture. This is especially true of the paper and wood-pulp industry, in which 97.1 per cent of the value of products and 96.3 per cent of the value added by manufacture were reported by establishments of this class. In the lumber industry, on the other hand, only 47.3 per cent of the value of products and 43.7 per cent of the value added by manufacture were reported by establishments under corporate ownership.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:									
1909.....	1,961	78,658	\$164,581,019	\$66,424,003	Foundry and machine-shop products, 1909.....	81	2,396	\$4,946,894	\$3,248,087
1904.....	1,618	65,366	123,610,904	50,894,517	Individual.....	33	293	515,184	312,181
Individual:					Firm.....	15	184	581,676	242,438
1909.....	1,122	8,225	16,987,245	7,963,658	Corporation.....	33	1,929	3,850,034	2,693,373
1904.....	894	7,593	13,882,206	6,780,898	Per cent of total.....	100.0	100.0	100.0	100.0
Firm:					Individual.....	40.7	11.8	10.4	8.6
1909.....	396	8,763	20,666,702	8,257,561	Firm.....	18.5	7.7	11.2	7.5
1904.....	370	10,036	21,226,160	8,195,109	Corporation.....	40.7	80.5	78.4	82.9
Corporation:					Hosiery and knit goods, 1909.....	21	3,129	\$4,764,119	\$3,128,446
1909.....	424	61,653	126,642,602	50,148,332	Individual.....	3	12	26,400	15,373
1904.....	338	47,712	88,159,093	35,305,499	Firm.....	4	681	1,143,838	581,030
Other:					Corporation ²	14	2,426	3,593,821	1,533,442
1909.....	19	17	284,470	54,452	Per cent of total.....	100.0	100.0	100.0	100.0
1904.....	16	25	343,445	53,011	Individual.....	14.3	0.4	0.6	0.6
Per cent of total:					Firm.....	19.0	22.1	24.0	27.3
1909.....	100.0	100.0	100.0	100.0	Corporation ²	66.7	77.5	75.4	72.0
1904.....	100.0	100.0	100.0	100.0	Lumber and timber products, 1909.....	589	8,464	\$15,284,357	\$8,021,070
Individual:					Individual.....	381	2,832	4,740,960	2,709,358
1909.....	57.2	10.5	10.3	12.0	Firm.....	142	1,852	3,806,956	1,804,868
1904.....	55.3	11.6	11.2	13.5	Corporation.....	66	3,780	7,236,451	3,506,844
Firm:					Per cent of total.....	100.0	100.0	100.0	100.0
1909.....	20.2	11.1	12.6	12.4	Individual.....	64.7	33.5	31.0	33.8
1904.....	22.9	15.4	17.2	16.3	Firm.....	24.1	21.9	21.6	22.5
Corporation:					Corporation.....	11.2	44.7	47.3	43.7
1909.....	21.6	78.4	76.9	75.5	Marble and stone work, 1909.....	99	1,527	\$1,818,282	\$1,520,275
1904.....	20.9	73.0	71.3	70.2	Individual.....	54	517	702,624	575,699
Other:		(¹)	0.2	0.1	Firm.....	34	284	422,937	329,926
1909.....	1.0	(¹)	0.3	0.1	Corporation.....	11	726	692,701	614,650
1904.....	1.0	(¹)	0.3	0.1	Per cent of total.....	100.0	100.0	100.0	100.0
Boots and shoes, including out stock and findings, 1909.....	68	14,211	\$39,439,544	\$11,224,404	Individual.....	54.5	33.9	38.6	37.9
Individual.....	21	1,247	2,110,765	789,491	Firm.....	34.3	18.6	23.3	21.7
Firm.....	17	3,500	8,821,701	3,048,829	Corporation.....	11.1	47.5	38.1	40.4
Corporation.....	30	9,464	28,507,078	7,386,084	Paper and wood pulp, 1909.....	34	3,418	\$13,994,251	\$4,740,882
Per cent of total.....	100.0	100.0	100.0	100.0	Firm ³	6	92	408,620	173,086
Individual.....	30.9	8.8	5.4	7.0	Corporation.....	28	3,321	13,585,631	4,567,796
Firm.....	25.0	24.6	22.4	27.2	Per cent of total.....	100.0	100.0	100.0	100.0
Corporation.....	44.1	66.6	72.3	65.8	Firm ³	17.6	2.7	2.9	3.7
Bread and other bakery products, 1909.....	157	454	\$1,683,232	\$628,409	Corporation.....	82.4	97.3	97.1	96.3
Individual.....	129	295	1,085,244	415,330	Woolen, worsted, and felt goods, and wool hats, 1909.....	39	9,486	\$16,730,652	\$5,635,582
Firm.....	25	146	551,648	198,030	Individual.....	8	470	919,166	304,469
Corporation.....	3	13	46,340	14,999	Firm.....	6	381	786,874	340,152
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	25	8,635	15,024,612	4,990,961
Individual.....	82.2	65.0	64.5	66.1	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	15.9	32.2	32.8	31.5	Individual.....	20.5	5.0	5.5	5.4
Corporation.....	1.9	2.9	2.8	2.4	Firm.....	15.4	4.0	4.7	6.0
Flour-mill and gristmill products, 1909.....	105	116	\$3,187,344	\$378,667	Corporation.....	64.1	91.0	89.8	88.6
Individual.....	67	65	1,167,549	153,239					
Firm.....	34	47	1,922,640	213,369					
Corporation.....	4	4	97,155	11,059					
Per cent of total.....	100.0	100.0	100.0	100.0					
Individual.....	63.8	55.0	36.5	40.5					
Firm.....	32.4	40.5	60.3	56.3					
Corporation.....	3.8	3.4	3.0	3.1					

¹ Less than one-tenth of 1 per cent.² Includes the group "Other," to avoid disclosure of individual operations.³ Includes the group "Individual," to avoid disclosure of individual operations.

Size of establishment.—The tendency for manufacturing to become concentrated in large establishments, or the reverse, is a matter of interest from the standpoint of industrial organization. In order to throw some light upon it the table that follows groups the establishments according to the value of their products. The table also shows the average size of establishments for all industries combined and for important industries separately as measured by number of wage earners, value of products, and value added by manufacture. The totals for all industries are shown for the last two censuses, while for certain important industries figures are given for 1909 only.

This table shows that, in 1909, of the 1,961 manufacturing establishments in the state, only 34, or 1.7 per cent, had a value of products exceeding \$1,000,000. These establishments, however, employed an average

of 37,525 wage earners, or 47.7 per cent of the total number in all establishments, and reported 49.1 per cent of the total value of products and 41.8 per cent of the total value added by manufacture.

On the other hand, the very small establishments—that is, those having a value of products of less than \$5,000—constituted a considerable proportion (33.8 per cent) of the total number of establishments, but the value of their products amounted to only 1 per cent of the total. The great bulk of the manufacturing was reported by establishments having products valued at not less than \$100,000 in value.

During the five years from 1904 to 1909 there was a marked increase in the relative importance of the largest establishments as measured by average number of wage earners, value of products, and value added by manufacture.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:									
1909.....	1,961	78,658	\$164,581,019	\$66,424,003	Foundry and machine-shop products, 1909	81	2,396	\$4,946,694	\$3,248,037
1904.....	1,618	65,366	123,610,904	50,394,617	Less than \$5,000.....	18	21	51,724	36,230
Less than \$5,000:	663	963	1,603,993	1,034,742	\$5,000 and less than \$20,000.....	18	63	177,313	117,349
1909.....	500	801	1,269,094	794,078	\$20,000 and less than \$100,000.....	36	819	1,615,422	974,893
1904.....	500	801	1,269,094	794,078	\$100,000 and less than \$1,000,000 ⁴	9	1,468	3,101,935	2,174,605
\$5,000 and less than \$20,000:	048	3,695	6,733,411	3,810,066	Per cent of total.....	100.0	100.0	100.0	100.0
1909.....	536	3,517	5,681,962	3,197,408	Less than \$5,000.....	22.2	0.9	1.0	1.1
1904.....	536	3,517	5,681,962	3,197,408	\$5,000 and less than \$20,000.....	22.2	3.9	3.6	3.6
\$20,000 and less than \$100,000:	432	9,066	18,059,662	9,504,082	\$20,000 and less than \$100,000.....	44.4	34.2	32.7	30.0
1909.....	388	9,141	16,188,793	8,808,274	\$100,000 and less than \$1,000,000 ⁴	11.1	61.1	62.7	65.3
1904.....	388	9,141	16,188,793	8,808,274	Average per establishment.....	.....	30	\$61,073	\$40,099
\$100,000 and less than \$1,000,000:	184	26,800	57,399,937	24,282,557	Hosiery and knit goods, 1909	21	3,129	\$4,764,119	\$2,128,446
1909.....	174	29,222	55,101,461	21,863,613	Less than \$5,000.....	5	17	33,095	18,010
1904.....	174	29,222	55,101,461	21,863,613	\$20,000 and less than \$100,000.....	5	451	289,882	204,496
\$1,000,000 and over:	34	37,525	80,784,016	27,791,656	\$100,000 and less than \$1,000,000 ⁴	11	2,661	4,441,142	1,905,940
1909.....	20	22,685	45,369,594	16,731,449	Per cent of total.....	100.0	100.0	100.0	100.0
1904.....	20	22,685	45,369,594	16,731,449	Less than \$5,000.....	23.8	0.5	0.7	0.8
Per cent of total:	100.0	100.0	100.0	100.0	\$20,000 and less than \$100,000.....	23.8	14.4	6.1	9.6
1909.....	100.0	100.0	100.0	100.0	\$100,000 and less than \$1,000,000 ⁴	52.4	85.0	93.2	89.5
1904.....	100.0	100.0	100.0	100.0	Average per establishment.....	.....	149	\$226,863	\$101,355
Less than \$5,000:	33.8	1.2	1.0	1.6	Lumber and timber products, 1909	589	8,464	\$15,284,357	\$8,021,070
1909.....	30.9	1.2	1.0	1.6	Less than \$5,000.....	210	448	551,316	306,014
1904.....	30.9	1.2	1.0	1.6	\$5,000 and less than \$20,000.....	218	1,655	2,209,556	1,516,347
\$5,000 and less than \$20,000:	33.0	4.7	4.1	5.7	\$20,000 and less than \$100,000.....	127	2,742	5,000,163	2,702,955
1909.....	33.1	5.4	4.6	6.3	\$100,000 and less than \$1,000,000 ⁴	28	3,719	7,523,322	3,404,854
1904.....	33.1	5.4	4.6	6.3	Per cent of total.....	100.0	100.0	100.0	100.0
\$20,000 and less than \$100,000:	22.0	12.3	11.0	14.3	Less than \$5,000.....	30.7	5.3	3.6	4.9
1909.....	24.0	14.0	13.1	17.5	\$5,000 and less than \$20,000.....	37.0	18.4	14.5	18.9
1904.....	24.0	14.0	13.1	17.5	\$20,000 and less than \$100,000.....	21.6	32.4	32.7	33.7
\$100,000 and less than \$1,000,000:	9.4	34.1	34.9	36.6	\$100,000 and less than \$1,000,000 ⁴	4.8	43.9	49.2	42.4
1909.....	10.8	44.7	44.6	43.4	Average per establishment.....	.....	14	\$25,950	\$13,618
1904.....	10.8	44.7	44.6	43.4	Marble and stone work, 1909	99	1,527	\$1,818,262	\$1,520,275
\$1,000,000 and over:	1.7	47.7	49.1	41.8	Less than \$5,000.....	35	53	97,263	73,430
1909.....	1.2	34.7	36.7	31.2	\$5,000 and less than \$20,000.....	44	297	461,100	347,490
1904.....	1.2	34.7	36.7	31.2	\$20,000 and less than \$100,000.....	17	615	742,393	625,393
Average per establishment:	.....	40	\$83,927	\$33,873	\$100,000 and less than \$1,000,000 ⁴	3	562	517,506	474,013
1909.....	.....	40	\$83,927	\$33,873	Per cent of total.....	100.0	100.0	100.0	100.0
1904.....	.....	40	\$83,927	\$33,873	Less than \$5,000.....	35.4	3.5	5.3	4.8
Boots and shoes, including outstock and findings, 1909	68	14,211	\$39,439,544	\$11,224,404	\$5,000 and less than \$20,000.....	44.4	19.4	25.4	22.9
Less than \$5,000.....	6	56	59,185	28,600	\$20,000 and less than \$100,000.....	17.2	40.3	40.8	41.1
\$5,000 and less than \$20,000.....	16	477	649,770	282,614	\$100,000 and less than \$1,000,000 ⁴	3.0	36.8	28.5	31.2
\$20,000 and less than \$100,000.....	35	6,233	14,038,951	4,541,703	Average per establishment.....	.....	15	\$18,366	\$15,356
\$100,000 and less than \$1,000,000.....	35	6,233	14,038,951	4,541,703	Paper and wood pulp, 1909	84	3,413	\$13,994,251	\$4,740,882
\$1,000,000 and over.....	11	7,445	24,691,638	6,371,332	\$20,000 and less than \$100,000.....	16	265	920,501	437,909
Per cent of total.....	100.0	100.0	100.0	100.0	\$100,000 and less than \$1,000,000.....	13	1,139	4,037,946	1,473,355
Less than \$5,000.....	8.8	0.4	0.2	0.3	\$1,000,000 and over.....	5	2,009	9,035,804	2,830,558
\$5,000 and less than \$20,000.....	23.5	3.4	1.6	2.5	Per cent of total.....	100.0	100.0	100.0	100.0
\$20,000 and less than \$100,000.....	51.5	43.9	35.6	40.5	\$20,000 and less than \$100,000.....	47.1	7.8	6.6	9.2
\$100,000 and less than \$1,000,000.....	16.2	62.4	62.6	56.8	\$100,000 and less than \$1,000,000.....	38.2	33.4	28.9	31.1
Average per establishment.....	.....	209	\$79,993	\$165,005	\$1,000,000 and over.....	14.7	58.9	64.6	59.7
Bread and other bakery products, 1909	157	454	\$1,688,232	\$628,409	Average per establishment.....	.....	100	\$411,596	\$139,438
Less than \$5,000.....	55	40	167,431	66,637	Woolen, worsted, and felt goods, and wool hats, 1909	39	9,486	\$16,730,652	\$5,685,582
\$5,000 and less than \$20,000.....	83	238	813,054	322,825	\$20,000 and less than \$100,000.....	10	287	402,440	179,242
\$20,000 and less than \$100,000.....	19	181	702,747	238,947	\$100,000 and less than \$1,000,000 ⁴	29	9,199	10,328,212	5,466,340
Per cent of total.....	100.0	100.0	100.0	100.0	Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	35.0	8.8	9.9	10.6	Less than \$5,000.....	25.6	3.0	2.4	3.2
\$5,000 and less than \$20,000.....	52.9	51.3	48.3	51.4	\$5,000 and less than \$20,000.....	74.4	97.0	97.6	96.8
\$20,000 and less than \$100,000.....	12.1	39.9	41.7	38.0	Average per establishment.....	.....	243	\$428,991	\$144,502
\$100,000 and less than \$1,000,000.....	.....	3	\$10,721	\$4,003	Flour-mill and gristmill products, 1909	105	116	\$3,187,844	\$978,667
Average per establishment.....	.....	3	\$10,721	\$4,003	Less than \$5,000.....	18	7	53,500	8,358
Foundry and machine-shop products, 1909	81	2,396	\$4,946,694	\$3,248,037	\$5,000 and less than \$20,000.....	47	36	553,678	80,516
Less than \$5,000.....	18	21	51,724	36,230	\$20,000 and less than \$100,000.....	40	73	2,580,166	289,793
\$5,000 and less than \$20,000.....	18	63	177,313	117,349	Per cent of total.....	100.0	100.0	100.0	100.0
\$20,000 and less than \$100,000.....	36	819	1,615,422	974,893	Less than \$5,000.....	17.1	6.0	1.7	2.2
\$100,000 and less than \$1,000,000 ⁴	9	1,468	3,101,935	2,174,605	\$5,000 and less than \$20,000.....	44.8	31.0	17.4	21.3
Per cent of total.....	100.0	100.0	100.0	100.0	\$20,000 and less than \$100,000.....	38.1	62.9	81.0	76.5
Less than \$5,000.....	22.2	0.9	1.0	1.1	Average per establishment.....	.....	1	\$30,356	\$3,606
\$5,000 and less than \$20,000.....	22.2	3.9	3.6	3.6	Marble and stone work, 1909	99	1,527	\$1,818,262	\$1,520,275
\$20,000 and less than \$100,000.....	44.4	34.2	32.7	30.0	Less than \$5,000.....	35	53	97,263	73,430
\$100,000 and less than \$1,000,000 ⁴	11.1	61.1	62.7	65.3	\$5,000 and less than \$20,000.....	44	297	461,100	347,490
Average per establishment.....	.....	30	\$61,073	\$40,099	\$20,000 and less than \$100,000.....	17	615	742,393	625,393
Hosiery and knit goods, 1909	21	3,129	\$4,764,119	\$2,128,446	\$100,000 and less than \$1,000,000 ⁴	3	562	517,506	474,013
Less than \$5,000.....	5	17	33,095	18,010	Per cent of total.....	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000.....	5	451	289,882	204,496	Less than \$5,000.....	35.4	3.5	5.3	4.8
\$100,000 and less than \$1,000,000 ⁴	11	2,661	4,441,142	1,905,940	\$5,000 and less than \$20,000.....	44.4	19.4	25.4	22.9
Per cent of total.....	100.0	100.0	100.0	100.0	\$20,000 and less than \$100,000.....	17.2	40.3	40.8	41.1
Less than \$5,000.....	23.8	0.5	0.7	0.8	\$100,000 and less than \$1,000,000 ⁴	3.0	36.8	28.5	31.2
\$5,000 and less than \$20,000.....	23.8	14.4	6.1	9.6	Average per establishment.....	.....	15	\$18,366	\$15,356
\$20,000 and less than \$100,000.....	52.4	85.0	93.2	89.5	Paper and wood pulp, 1909	84	3,413	\$13,994,251	\$4,740,882
Average per establishment.....	.....	149	\$226,863	\$101,355	\$20,000 and less than \$100,000.....	16	265	920,501	437,909
Lumber and timber products, 1909	589	8,464	\$15,284,357	\$8,021,070	\$100,000 and less than \$1,000,000.....	13	1,139	4,037,946	1,473,355
Less than \$5,000.....	210	448	551,316	306,014	\$1,000,000 and over.....	5	2,009	9,035,804	2,830,558
\$5,000 and less than \$20,000.....	218	1,655	2,209,556	1,516,347	Per cent of total.....	100.0	100.0	100.0	100.0
\$20,000 and less than \$100,000.....	127	2,742	5,000,163	2,702,955	\$20,000 and less than \$100,000.....	47.1	7.8	6.6	9.2
\$100,000 and less than \$1,000,000 ⁴	28	3,719	7,523,322	3,404,854	\$100,000 and less than \$1,000,000.....	38.2	33.4	28.9	31.1
Per cent of total.....	100.0	100.0	100.0	100.0	\$1,000,000 and over.....	14.7	58.9	64.6	59.7
Less than \$5,000.....	30.7	5.3	3.6	4.9	Average per establishment.....	.....	100	\$411,596	\$139,438
\$5,000 and less than \$20,000.....	37.0	18.4	14.5	18.9	Woolen, worsted, and felt goods, and wool hats, 1909	39	9,486	\$16,730,652	\$5,685,582
\$20,000 and less than \$100,000.....	21.6	32.4	32.7	33.7	\$20,000 and less than \$100,000.....	10	287	402,440	179,242
\$100,000 and less than \$1,000,000 ⁴	4.8	43.9	49.2	42.4	\$100,000 and less than \$1,000,000 ⁴	29	9,199	10,328,212	5,466,340
Average per establishment.....	.....	14	\$25,950	\$13,618	Per cent of total.....	100.0	100.0	100.0	100.0
Marble and stone work, 1909	99	1,527	\$1,818,262	\$1,520,275	Less than \$5,000.....	25.6	3.0	2.4	3.2
Less than \$5,0									

tion for all industries combined and for 15 important industries individually, and gives not only the number of establishments falling in each group but also the average number of wage earners employed.

The per cent distribution of the number of establishments is not shown in this table; of the 1,961 establishments reported for all industries, 8.1 per cent employed no wage earners; 49.7 per cent, 1 to 5; 22.2 per cent, 6 to 20; 8.6 per cent, 21 to 50; and 11.5 per cent 51 and over. The most numerous single group consists of the 974 establishments employing from 1 to 5 wage earners, and the next of the 435 establishments employing from 6 to 20 wage earners. There were 61 establishments that employed over 250 wage earners, and 8 that employed over 1,000.

Of the total number of wage earners, 76.4 per cent were in establishments employing over 100 wage earners each. The single group having the largest number of employees was the group comprising the establishments employing over 1,000 wage earners. This group employed 23,914 wage earners, or 30.4 per cent of the total. In the manufacture of boots and shoes, cotton goods, hosiery and knit goods, and woolen and worsted goods, as appears from the classification according to the number of wage earners, comparatively large establishments do the major part of the business. The most of the wage earners, however, in the bakery, flour-mill and gristmill, lumber, and printing and publishing industries are employed by smaller establishments.

INDUSTRY.	Total.	ESTABLISHMENTS EMPLOYING—								
		No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
NUMBER OF ESTABLISHMENTS.										
All industries.....	1,961	158	974	435	169	87	77	37	16	8
Boots and shoes, including cut stock and findings.....	68		2	8	12	13	13		6	2
Bread and other bakery products.....	157	15	127	14	1					
Cooperage and wooden goods, not elsewhere specified.....	30	2	10	10	3	3	2			
Cotton goods, including cotton small wares.....	21		1	1	2		5	3	4	5
Flour-mill and gristmill products.....	105	21	83	1						
Foundry and machine-shop products.....	81	7	23	23	19	4	4		1	
Furniture and refrigerators.....	26	2	3	8	9	3	1			
Hosiery and knit goods.....	21	1	2	3		3	7	4	1	
Liquors, malt.....	4				3		1			
Lumber and timber products.....	589	4	311	191	55	17	8	2	1	
Marble and stone work.....	99	8	49	23	7	4	2	1		
Paper and wood pulp.....	34			13	9	2	6	4	1	
Printing and publishing.....	143	29	84	24	4	2				
Tobacco manufactures.....	51	8	35	7				1		
Woolen, worsted, and felt goods, and wool hats.....	39	2		2	5	10	14	5		1
All other industries.....	493	59	244	102	40	26	16	5	2	
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	76,658		2,137	5,074	5,351	5,975	12,088	12,533	11,596	23,914
Boots and shoes, including cut stock and findings.....	14,211		9	112	398	936	2,367	3,892	4,294	2,203
Bread and other bakery products.....	454		280	134	34					
Cooperage and wooden goods, not elsewhere specified.....	713		24	134	103	229	223			
Cotton goods, including cotton small wares.....	22,200		1	9	55		792	1,172	3,550	16,711
Flour-mill and gristmill products.....	116		104	12						
Foundry and machine-shop products.....	2,396		49	271	599	248	719		540	
Furniture and refrigerators.....	823		9	118	299	207	190			
Hosiery and knit goods.....	3,129		6	32		207	1,119	1,224	541	
Liquors, malt.....	272				94		173			
Lumber and timber products.....	8,464		748	2,104	1,670	1,187	1,238	667	760	
Marble and stone work.....	1,527		113	319	270	203	286	276		
Paper and wood pulp.....	3,413			177	260	117	674	1,493	687	
Printing and publishing.....	677		189	266	94	129				
Tobacco manufactures.....	571		53	73				440		
Woolen, worsted, and felt goods, and felt hats.....	9,486			22	207	720	1,927	1,610		5,000
All other industries.....	10,116		531	1,202	1,298	1,732	2,375	1,754	1,224	
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0		2.7	6.4	6.8	7.6	15.4	15.9	14.7	30.4
Boots and shoes, including cut stock and findings.....	100.0		0.1	0.8	2.8	6.6	16.7	27.4	30.2	15.5
Bread and other bakery products.....	100.0		63.0	29.5	7.5					
Cooperage and wooden goods, not elsewhere specified.....	100.0		3.4	18.8	14.4	32.1	31.3			
Cotton goods, including cotton small wares.....	100.0		(1)	(1)	0.2		3.6	5.3	15.9	75.0
Flour-mill and gristmill products.....	100.0		89.7	10.3						
Foundry and machine-shop products.....	100.0		2.0	11.3	23.7	10.4	30.0		22.5	
Furniture and refrigerators.....	100.0		1.1	14.3	36.3	25.2	23.1			
Hosiery and knit goods.....	100.0		0.2	1.0		6.6	35.8	39.1	17.3	
Liquors, malt.....	100.0				34.6		65.4			
Lumber and timber products.....	100.0		8.8	25.9	19.7	14.0	14.6	7.9	9.0	
Marble and stone work.....	100.0		7.4	20.9	17.7	17.2	18.7	18.1		
Paper and wood pulp.....	100.0			5.2	7.6	3.4	19.7	43.9	20.1	
Printing and publishing.....	100.0		27.9	39.1	18.9	19.1				
Tobacco manufactures.....	100.0		10.2	12.8				77.1		
Woolen, worsted, and felt goods, and wool hats.....	100.0			0.2	2.2	7.6	20.3	17.0		62.7
All other industries.....	100.0		5.2	11.9	12.8	17.1	23.5	17.3	12.1	

¹ Less than one-tenth of 1 per cent.

Expenses.—As stated in the Introduction, the census does not purport to furnish figures that can be used for determining the cost of manufacture and profits. Facts of interest can, however, be brought out concerning the relative importance of the different classes of expenses which make up the total.

The following table shows, in percentages, the distribution of expenses among the classes indicated for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	2.3	24.3	65.8	7.1
Boots and shoes, including out stock and findings.....	2.3	18.4	75.4	3.9
Bread and other bakery products.....	1.2	17.6	74.6	6.6
Cooperage and wooden goods, not elsewhere specified.....	2.4	37.0	51.4	9.3
Cotton goods, including cotton small wares.....	1.4	29.6	63.4	5.6
Flour-mill and gristmill products.....	0.6	2.1	95.4	2.0
Foundry and machine-shop products.....	8.8	34.1	41.6	15.5
Furniture and refrigerators.....	5.4	28.3	50.7	15.6
Hosiery and knit goods.....	2.3	27.5	63.4	6.8
Liquors, malt.....	5.7	14.0	39.2	41.1
Lumber and timber products.....	2.5	29.4	64.4	13.7
Marble and stone work.....	4.0	69.3	19.5	7.2
Paper and wood pulp.....	3.8	16.4	72.0	7.9
Printing and publishing.....	13.4	41.0	29.8	15.7
Tobacco manufactures.....	0.9	32.3	58.0	8.8
Woolen, worsted, and felt goods, and wool hats.....	1.8	22.9	69.6	5.8
All other industries.....	4.9	26.1	61.4	7.6

The above table shows that for all industries combined, 65.8 per cent of the total expense was incurred for materials, 27.1 per cent for services—that is, salaries and wages—and but 7.1 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

Engines and power.—The table following shows, for all industries combined, the number of engines or other motors, according to their character, employed in generating power (including electric motors operated by purchased current), and their total horsepower at the censuses of 1909, 1904, and 1899. It also shows separately the number and horsepower of electric motors, including those operated by current generated in the manufacturing establishments.

The increase from 1904 to 1909 in owned primary power was mainly in power generated by steam engines and water wheels, the power generated by gas engines showing a decrease. The figures also show that the practice of renting power is on the increase, 8.7 per cent of the total power being rented in 1909, as against 6.3 per cent in 1904 and but 2.2 per cent in 1899. The use of electric motors for the

purpose of applying the power generated within the establishments is shown to be rapidly becoming more common, the horsepower of such motors increasing from 1,467 in 1899 to 7,288 in 1904 and 24,142 in 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 ¹	1909	1904	1899 ¹	1909	1904	1899
Primary power, total.....	3,415	2,137	2,251	293,991	218,344	200,975	100.0	100.0	100.0
Owned.....	2,399	2,137	2,251	268,407	204,599	196,540	91.3	93.7	97.8
Steam.....	1,191	1,032	1,037	139,123	102,439	89,905	47.3	40.9	44.7
Gas.....	108	72	52	1,233	1,305	571	0.4	0.6	0.3
Water wheels.....	1,076	1,006	1,162	127,490	100,188	105,711	43.4	45.9	52.6
Water motors.....	24	27	(²)	521	86	(²)	0.2	(²)	(²)
Other.....				30	491	362	(²)	0.2	0.2
Rented.....	1,016	(²)	(²)	25,584	13,745	4,426	8.7	6.3	2.2
Electric.....	1,016	(²)	(²)	21,209	5,013	2,004	7.2	2.3	1.0
Other.....				4,375	8,732	2,422	1.5	4.0	1.2
Electric motors.....	1,886	161	65	45,351	12,301	3,471	100.0	100.0	100.0
Run by current generated by establishment.....	670	161	65	24,142	7,288	1,467	53.2	59.2	42.3
Run by rented power.....	1,016	(²)	(²)	21,209	5,013	2,004	46.8	40.8	57.7

¹ Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.
² Not reported. ³ Less than one-tenth of 1 per cent.

Fuel.—Closely related to the question of kind of power employed is that of the fuel used in generating this power, or otherwise as material in the manufacturing processes. The following table shows the quantity of each kind of fuel used in 1909 for all industries combined and for certain selected industries:

INDUSTRY.	Anthracite coal (tons).	Bituminous coal (tons).	CoKe (tons).	Wood (cords).	Oil, including gaso-line (barrels).	Gas (1,000 feet).
All industries.....	23,768	605,450	16,532	124,867	40,199	32,392
Boots and shoes, including out stock and findings.....	14	23,592	.....	1,919	54	212
Bread and other bakery products.....	2,165	82	847	2,098	18	1,224
Brick and tile.....	38	1,501	22	34,410	2	.....
Cooperage and wooden goods, not elsewhere specified.....	13	72	.....	356	7	.....
Cotton goods, including cotton small wares.....	50	186,279	7,395	120	1,700	18,394
Flour-mill and gristmill products.....	63	284	.....	552	561	.....
Foundry and machine-shop products.....	1,880	5,189	4,263	712	199	350
Furniture and refrigerators.....	8	2,082	.....	425	25	5
Gas, illuminating and heating.....	2,275	20,090	41	63	25,851	.....
Hosiery and knit goods.....	623	5,840	.....	401	87	24
Liquors, malt.....	409	13,440	.....	.....	.....	.....
Lumber and timber products.....	13	368	.....	660	189	290
Marble and stone work.....	82	11,684	1	66	249	320
Paper and wood pulp.....	3,133	186,189	.....	78,847	42	.....
Printing and publishing.....	623	214	7	201	60	1,237
Tobacco manufactures.....	61	1	.....	17	.....	293
Woolen, worsted, and felt goods, and wool hats.....	805	91,829	208	1,888	500	6,366
All other industries.....	6,513	56,715	3,748	6,534	10,655	3,207

Note.—In addition, there were 1,533 tons of other varieties of fuel reported.

SUPPLEMENTARY DATA REGARDING IMPORTANT INDUSTRIES.

(With statistics for laundries and custom sawmills and gristmills.)

For certain industries the Census Bureau collects, by means of special schedules, details regarding the quantity and value of materials and products and the number and classes of machines used in manufactures which do not appear on the general schedule. Certain data of this character for five important industries in New Hampshire are here presented.

Boots and shoes, including cut stock and findings.—This industry started in the southern part of New Hampshire early in the century. At first it was carried on largely in the homes of farmers or in small shops and consisted of piecework performed on stock cut in the factories located at Lynn and Haverhill, Mass., and put out in the adjoining towns of that state and of New Hampshire. With the application of machinery soon after the Civil War, the manufacture of boots and shoes as a factory industry developed rapidly in the state, and in 1899 New Hampshire held third place in this industry in the United States, in 1904 fifth place, and in 1909 fourth place.

From 1904 to 1909 the production of men's boots and shoes increased 3,863,851 pairs, or 49.3 per cent; that of boys' and youths' boots and shoes, 562,344 pairs, or 15.6 per cent; and that of misses' and chil-

dren's boots and shoes, 24,828 pairs, or five-tenths of 1 per cent. On the other hand, decreases are shown for women's boots and shoes of 171,570 pairs, or 3.6 per cent, and for women's, misses', and children's slippers of 744,164 pairs, or 72.5 per cent. The manufacture of men's, boys', and youths' slippers was discontinued during the five-year period 1904-1909.

The following table shows the number of pairs of the various kinds of footwear produced in this industry in 1909, 1904, and 1899:

PRODUCT.	NUMBER OF PAIRS.		
	1909	1904	1899
Total.....	25,534,114	22,110,427	21,172,691
Boots and shoes, total.....	25,059,572	20,790,119	20,044,781
Men's.....	11,698,985	7,835,134	2,716,456
Boys' and youths'.....	4,176,479	3,614,135	3,758,750
Women's.....	4,587,874	4,759,444	9,064,178
Misses' and children's.....	4,606,234	4,581,406	4,505,367
Slippers, total.....	282,124	1,270,308	1,127,910
Men's, boys', and youths'.....		244,020	466,466
Women's, misses', and children's.....	282,124	1,026,288	661,444
All other, total.....	182,418	50,000	

The following table shows in greater detail the products of the boot and shoe industry for 1909:

PRODUCT.	NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.					
	Total.	Machine or hand welt.	Turned.	McKay.	Wooden-pegged.	Wire-screw or metal-fastened.
Boots and shoes.....	25,059,572	6,296,732	1,010,933	15,560,408	166,641	2,034,853
Men's.....	11,698,985	5,149,983	47,285	5,052,983	156,450	1,292,284
Boys' and youths'.....	4,176,479	674,291	9,000	3,202,613	7,994	282,581
Women's.....	4,587,874	138,854	731,336	3,528,505	687	188,592
Misses' and children's.....	4,606,234	333,604	223,312	3,776,302	1,610	271,406
Slippers and infants' shoes.....	404,542	177,920		386,622		

¹ Includes "turned" slippers to avoid disclosing operations of individual establishments.

Cotton goods.—Since the establishment of the first cotton mill of importance in New Hampshire in 1804, there has been a steady development of this industry, due largely to the abundant water power of the state.

The quantity and cost of the principal materials used in the manufacture of cotton goods, the quantity and value of the principal products, and the number of producing spindles and looms reported in 1909, 1904, and 1899 are given in the next table.

The quantity of domestic cotton used as material increased from 134,425,428 pounds in 1904 to 136,801,463 pounds in 1909, an increase of 2,376,035 pounds, or 1.8 per cent. The quantity of foreign cotton used is relatively insignificant, although it increased nearly fourfold in the five-year period, that is, from 384,150 pounds in 1904 to 1,731,164 pounds in 1909, an increase of 1,347,014 pounds. Although there was an increase in the total amount of cotton used, there was a decrease in the average price

paid per pound, the total cost of cotton consumed in 1909 being \$704,861 less than in 1904.

The manufacture of plain cloths for printing and converting, and of ticks, denims, and stripes has fallen off considerably since 1904, as was also the case between 1899 and 1904. Brown or bleached sheetings and shirtings and cotton towels and toweling increased slightly both in quantity and value, while twills and sateens show a considerable increase in both respects. Of the classes of goods shown separately in the table, napped fabrics were the most important at each of the three censuses as measured by value of product, their value representing 19.5 per cent of the total value of cotton goods manufactured in 1909. While the output of these fabrics was much greater than in 1899, there has been a slight decrease both in their quantity and value since 1904. By far the most important class of goods manufactured in the state, however, as regards both quantity and value, is ginghams, statistics for which can not be shown

separately without disclosing individual operations. The partly manufactured articles represent a certain amount of duplication, because, although they are the products of one set of mills, they become the materials of other establishments.

somewhat influenced by the increasing consumption of timber in the paper and wood-pulp industry.

Paper and wood pulp.—This industry is of considerable importance in the state, and New Hampshire ranks eighth among the states in the manufacture of paper and wood pulp. Spruce is used in the manufacture of wood pulp almost to the exclusion of every other kind of wood, except balsam fir. In 1909 a total of 349,997 cords of wood were used, of which domestic spruce formed 53.8 per cent, imported spruce 30.5 per cent, and balsam fir 14.6 per cent. The quantity and cost of the principal materials used in the manufacture of paper and wood pulp, the quantity and value of the principal products, and the kinds of machinery reported in 1909, 1904, and 1899 are shown in the following table:

MATERIAL, PRODUCT, OR MACHINE.	1909	1904 ¹	1899
Materials used, total cost.....	\$19,123,850	\$18,496,971	\$11,980,102
Cotton:			
Domestic—			
Pounds.....	136,801,463	134,425,428	136,805,127
Cost.....	\$14,751,538	\$15,038,023	\$9,394,529
Foreign—			
Pounds.....	1,731,164	384,150	183,520
Cost.....	\$248,897	\$67,573	\$18,997
Yarn, purchased:			
Pounds.....	1,884,910	1,158,983	821,587
Cost.....	\$389,000	\$221,958	\$124,337
Cotton waste, purchased:			
Pounds.....	1,067,102	1,070,322	434,053
Cost.....	\$77,884	\$166,560	\$24,518
Starch:			
Pounds.....	7,293,256	3,374,958	4,710,505
Cost.....	\$205,708	\$162,204	\$144,940
Chemicals and dyestuffs.....	416,498	617,402	765,948
Fuel and rent of power.....	712,003	655,299	426,702
All other materials.....	2,321,293	987,952	1,000,071
Products, total value.....	\$33,801,880	\$29,540,770	\$22,998,249
Plain cloths for printing or converting:			
Square yards.....	32,981,275	76,052,718	83,208,801
Value.....	\$1,576,583	\$3,547,092	\$3,081,458
Brown or bleached sheetings and shirtings:			
Square yards.....	29,818,914	29,075,111	64,953,520
Value.....	\$2,012,789	\$1,668,657	\$3,076,366
Twills and sateens:			
Square yards.....	47,921,784	39,220,377	23,926,221
Value.....	\$4,321,001	\$2,784,869	\$1,381,439
Fancy woven fabrics:			
Square yards.....	3,008,344	9,519,533	2,019,785
Value.....	\$544,608	\$1,109,471	\$203,296
Ticks, denims, and stripes:			
Square yards.....	21,324,650	22,790,522	32,201,176
Value.....	\$2,455,704	\$2,816,510	\$3,226,598
Napped fabrics:			
Square yards.....	71,473,313	87,668,996	62,253,909
Value.....	\$9,507,134	\$7,907,370	\$4,394,800
Cotton towels and toweling:			
Square yards.....	7,432,672	0,013,848	.....
Value.....	\$678,230	\$489,938	.....
Yarns, for sale:			
Pounds.....	1,930,524	3,859,034	6,018,260
Value.....	\$527,521	\$831,328	\$347,278
Cotton waste, not used for further manufacture:			
Pounds.....	12,366,641	9,651,117	18,745,350
Value.....	\$203,256	\$337,495	\$395,035
All other products.....	\$14,605,044	\$8,048,000	\$6,331,919
Machinery:			
Spindles (producing, not including doubling and twisting spindles), number.....	1,318,932	1,301,281	1,243,555
Looms, number.....	40,777	36,115	35,123

MATERIAL, PRODUCT, OR MACHINE.	1909	1904	1899
Materials used, total cost.....	\$9,253,369	\$5,327,734	\$3,953,334
Pulp wood.....	\$3,222,871	\$2,011,363	\$1,157,960
Wood pulp, purchased:			
Tons.....	75,127	30,355	35,806
Cost.....	\$2,248,190	\$747,200	\$853,314
Ground—			
Tons.....	31,407	19,587	21,266
Cost.....	\$611,261	\$343,482	\$333,316
Sulphite fiber—			
Tons.....	39,599	7,437	12,123
Cost.....	\$1,452,283	\$260,444	\$418,680
Other chemical fiber—			
Tons.....	4,121	3,332	2,417
Cost.....	\$184,686	\$143,274	\$96,318
All other materials.....	\$3,782,308	\$2,509,171	\$1,942,060
Products, total value.....	\$13,994,251	\$8,930,291	\$7,244,738
News paper:			
Tons.....	119,638	80,522	57,878
Value.....	\$4,040,753	\$3,176,191	\$2,078,604
Book paper:			
Tons.....	14,259	12,039	11,070
Value.....	\$1,118,834	\$814,079	\$724,658
Wrapping paper:			
Tons.....	50,409	27,141	16,933
Value.....	\$2,788,798	\$1,184,128	\$784,422
Boards:			
Tons.....	12,187	8,268	5,618
Value.....	\$659,499	\$350,277	\$241,184
Tissues:			
Tons.....	8,737	2,508	3,973
Value.....	\$755,015	\$292,605	\$339,120
Wood pulp made for sale or for consumption in mills other than where produced:			
Tons.....	98,621	92,459	88,295
Value.....	\$3,817,630	\$3,031,345	\$2,916,353
All other products.....	\$207,716	\$81,066	\$160,497
Wood pulp produced (including that used in mills where manufactured):			
Ground, tons.....	83,565	58,693	31,738
Sulphite fiber, tons.....	133,687	115,195	87,852
Machinery:			
Paper machines—			
Fourdrinier, number.....	29	35	31
Cylinder, number.....	29	26	16
Digesters, number.....	33	23	18
Grinders, number.....	100	101	77

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

Lumber and timber products.—The lumber industry showed a considerable growth in value of products from 1899 to 1909, but this was evidently due, in part, to the increase in the price of lumber. The following is a statement of the quantities of the three main classes of products of the sawmills as reported at the censuses of 1909 and 1899:

PRODUCT.		QUANTITY.	
		1909	1899
Rough lumber.....	M feet b. m.....	649,806	532,258
Lath.....	" "	26,873	74,221
Shingles.....	" "	30,132	40,499

The production of rough lumber increased 15.5 per cent during the decade covered by the table, but that of lath and of shingles show marked decreases. In recent years the annual output of lumber has been

The total cost of pulp wood, wood pulp, and other paper stock and materials used in 1909 amounted to \$9,253,369, which is a gain of 73.7 per cent, as compared with \$5,327,734 in 1904. The total cost of pulp wood consumed increased from \$2,011,363 in 1904 to \$3,222,871 in 1909, or 60.2 per cent. The increase in purchased wood pulp was relatively much greater, its total value being only \$747,200 in 1904, as compared with \$2,248,190 in 1909, an increase of 200.9 per cent. Of a total of 75,127 tons of purchased wood pulp, 52.7 per cent was reduced by the sulphite process, 41.8 per cent by the mechanical process, and the remainder by other chemical processes.

News paper exceeded all other products in quantity and value, representing 33.2 per cent of the total value of products of this industry. Next to news paper, wrapping paper was the most important product of the state's paper mills, substantial increases both in quantity and value being shown for both intercensal periods. In addition to the wood pulp which is made and consumed in the mills of the state an increasing amount is also manufactured for sale.

In this connection it is explained that for census purposes separate reports were secured for paper and pulp mills operated under the same ownership, but located at different points. In such instances pulp,

though not actually sold, was considered by the census as sold by the pulp mill and as purchased by the paper mill.

The total amount of wood pulp produced, including that used in the mills where it was manufactured, increased from 173,888 tons in 1904 to 217,252 tons in 1909, or 24.9 per cent. Of the total wood pulp produced, 61.5 per cent was sulphite fiber.

Woolen and worsted goods.—The quantity and cost of the different materials used, and the quantity and value of the various classes of products, reported for this industry at the census of 1909 are given in the following table:

MATERIAL.	Value or amount.	PRODUCT.	Value or amount.
Materials used, total cost.....	\$11,095,070	Products, total value.....	\$10,730,658
Purchased:		All-wool woven goods—	
Foreign wool, in condition purchased—		Woolen cassimeres, suitings, overcoatings, etc.—	
Pounds.....	10,706,575	Square yards.....	4,747,081
Cost.....	\$3,627,868	Value.....	\$2,725,568
Domestic wool, in condition purchased—		Woolen dress goods, opera flannels, etc.—	
Pounds.....	12,027,487	Square yards.....	3,708,287
Cost.....	\$3,383,625	Value.....	\$1,755,379
Equivalent of above foreign and domestic wool in secured condition, pounds.....	13,793,500	All other all-wool goods.....	\$7,510,308
Raw cotton, domestic and foreign—		Union or cotton-mixed woven goods:	
Pounds.....	489,543	Suitings and overcoatings—	
Cost.....	\$78,358	Square yards.....	2,655,083
Tailors' clippings, rags, etc.—		Value.....	\$1,054,981
Pounds.....	4,037,235	Dress goods, and opera and similar flannels—	
Cost.....	\$403,774	Square yards.....	1,418,125
Shoddy—		Value.....	\$382,002
Pounds.....	2,423,570	All other union goods.....	\$214,559
Cost.....	\$272,794	Cotton-warp woven goods:	
Waste and noils—		Wool-filling dress goods—	
Pounds.....	1,977,694	Square yards.....	5,054,038
Cost.....	\$537,262	Value.....	\$1,051,717
Woolen and worsted yarns—		All other cotton-warp goods.....	\$382,184
Pounds.....	526,832	Partially manufactured products for sale:	
Cost.....	\$430,295	Worsted yarn, all wool—	
Cotton yarns—		Pounds.....	981,254
Pounds.....	1,183,680	Value.....	\$783,591
Cost.....	\$277,696	Waste—	
Chemicals and dyestuffs.....	\$430,271	Pounds.....	207,745
All other materials.....	\$1,663,127	Value.....	\$11,814
Made for own use:		All other partially manufactured products.....	\$288,232
Woolen and worsted yarns, pounds.....	14,885,515	All other products.....	\$251,476
Merino yarns, pounds.....	2,752,311	Contract work, amount received.....	\$49,831
Shoddy, pounds.....	3,375,000		

It will be noted that of the total value of the products of this industry, \$11,791,315, or 70.5 per cent, represented the value of all-wool woven goods. The products included under the head of "All other all-wool goods" comprised principally worsted dress goods, cashmeres, serges, etc. The partly manufactured articles represent a certain amount of duplication, because although they are products of one set of mills they become the materials of other establishments.

The only data for which comparisons with prior censuses can be made are those in regard to some of the principal materials and machinery.

There has been a steady increase in the total amount of wool consumed in the industry. It is interesting to note, however, that the increase is entirely in foreign wool, while the amount of domestic wool shows a small decrease at each census. The steady decrease in the use of raw cotton and cotton yarn and the large decrease from 1904 to 1909 in the use of shoddy are significant.

The tabular statement shows the quantity of the principal materials reported for 1909, 1904, and 1899.

MATERIAL.	QUANTITY CONSUMED (POUNDS).		
	1909	1904	1899
Wool, in condition purchased, total.....	22,734,062	18,608,958	18,218,609
Foreign.....	10,706,575	4,610,445	1,581,498
Domestic.....	12,027,487	13,998,513	14,637,111
Raw cotton and cotton yarn, purchased.....	1,673,223	3,035,302	6,780,376
Shoddy, purchased and made in mill.....	5,768,570	11,088,125	6,433,001

The following table shows the number of spindles, looms, woolen cards, and combing machines reported at the censuses of 1909, 1904, and 1899:

MACHINE.	1909	1904	1899
Spindles ¹	193,704	234,974	146,292
Looms.....	4,230	4,397	5,312
Woolen cards (sets).....	352	378	335
Combing machines.....	62	24	34

¹ Includes both producing and doubling and twisting spindles.

Hosiery and knit goods.—The following table shows the quantity and cost of the materials used and the quantity and value of products of the industry as reported for 1909, 1904, and 1899:

MATERIAL OR PRODUCT.	1909	1904 ¹	1899
Materials, total cost.....	\$2,635,673	\$2,229,132	\$1,319,170
Cotton:			
Pounds.....	1,314,260	1,936,848	1,942,884
Cost.....	\$173,411	\$220,414	\$177,079
Wool (in condition purchased):			
Pounds.....	211,544	803,633	820,271
Cost.....	\$99,855	\$205,838	\$204,550
Wool waste and nolls:			
Pounds.....	74,323	12,691	128,436
Cost.....	\$16,352	\$2,142	\$47,541
Yarns, purchased:			
Pounds.....	4,532,099	3,517,363	1,649,427
Cost.....	\$1,508,171	\$505,252	\$505,252
Cotton—			
Pounds.....	3,712,733	2,874,555	1,230,881
Cost.....	\$728,469	\$521,493	\$229,778
Woolen—			
Pounds.....	14,634	75,022	107,426
Cost.....	\$5,739	\$17,742	\$32,936
Worsted—			
Pounds.....	733,465	529,943	270,820
Cost.....	\$700,228	\$469,202	\$234,095
Merino (cotton mixed)—			
Pounds.....	69,405	36,443	38,000
Cost.....	\$67,316	\$26,455	\$5,220
All other—			
Pounds.....	1,862	1,400	2,300
Cost.....	\$6,369	\$4,508	\$3,222
Chemicals and dyestuffs.....	\$91,871	\$86,115	\$66,040
Fuel and rent of power.....	\$35,995	\$35,595	\$29,160
All other materials.....	\$710,018	\$636,623	\$288,939
Products, total value.....	\$4,764,119	\$3,974,290	\$2,592,829
Hose:			
Dozen pairs.....	2,681,273	2,300,948	1,592,267
Value.....	\$3,164,589	\$2,753,942	\$1,904,878
Cotton—			
Dozen pairs.....	1,186,912	1,043,153	559,439
Value.....	\$984,243	\$1,026,731	\$468,301
Woolen or worsted—			
Dozen pairs.....	991,101	600,706	784,891
Value.....	\$1,589,567	\$843,234	\$1,162,402
Merino or mixed—			
Dozen pairs.....	503,256	657,089	247,937
Value.....	\$690,779	\$893,977	\$334,175
Shirts and drawers:			
Dozens.....	260,703	287,864	200,708
Value.....	\$1,200,038	\$1,063,528	\$628,111
All other products.....	\$399,492	\$156,820	\$59,840

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

The raw materials, wool and cotton, decreased both in quantity and value during the decade 1899-1909, while the cotton and the worsted yarns combined, which in 1909 formed 98.1 per cent of the total quantity of all yarns used and 94.7 per cent of their value, increased 2,944,497 pounds, or 196.1 per cent, in quantity during the decade and \$964,823, or 208 per cent, in value.

There was an increase of 1,089,006 dozen pairs, or 68.4 per cent, in the quantity of hose during the decade and \$1,259,711, or 66.1 per cent, in their value. During the same period there was an increase of 59,995 dozens, or 29.9 per cent, in the quantity of shirts and drawers, while the value increased \$571,927, or 91.1 per cent.

Flour-mill and gristmill products.—The next table shows the quantities and values of the principal products of the flour mills and gristmills for 1909, 1904, and 1899.

PRODUCT.	1909	1904 ¹	1899
Total value.....	\$3,187,344	\$2,541,775	\$2,205,475
Wheat flour:			
White—			
Barrels.....	80,026	75,380	
Value.....	\$500,189	\$451,790	62,379
Graham—			
Barrels.....	115	1,261	\$244,456
Value.....	\$690	\$7,368	
Corn meal and corn flour:			
Barrels.....	511,020	674,192	728,217
Value.....	\$1,485,779	\$1,590,939	\$1,408,759
Rye flour:			
Barrels.....	3,138	1,806	1,690
Value.....	\$12,576	\$6,363	\$5,082
Buckwheat flour:			
Pounds.....	69,356		485,101
Value.....	\$1,491		\$6,277
Barley meal:			
Pounds.....	122,970	275,200	200,680
Value.....	\$1,727	\$4,594	\$3,687
Feed:			
Tons.....	37,467	10,150	20,480
Value.....	\$1,080,959	\$384,184	\$484,451
Offal:			
Tons.....	4,012	3,815	714
Value.....	\$100,276	\$81,228	\$13,535
All other products.....	\$3,003	\$15,269	\$39,228

There was an increase in the output of white flour of 4,646 barrels, or 6.2 per cent, from 1904 to 1909, while the value increased \$48,399, or 10.7 per cent. Corn meal and corn flour was the product of chief value at each of the three censuses. From 1904 to 1909 the quantity decreased 162,572 barrels, or 24.1 per cent, and the value \$105,210, or 6.6 per cent; but for the decade 1899-1909, although the output decreased 216,597 barrels, or 29.7 per cent, the value increased \$77,020, or 5.5 per cent. The most notable increase shown in the table is that for feed, which from 1899 to 1909 increased in quantity 10,987 tons, or 41.5 per cent, while the value increased \$596,508, or 123.1 per cent. The excess of increase in value of feed as compared with the quantity reflects the increase in the cost of corn, which constituted the chief material for this product.

Butter, cheese, and condensed milk.—The quantity and value of products for 1909, 1904, and 1899 are given in the following table:

PRODUCT.	1909	1904 ¹	1899
Total value.....	\$807,164	\$864,109	\$1,467,503
Butter:			
Packed solid—			
Pounds.....	1,123,533	1,089,873	2,255,816
Value.....	\$344,981	\$479,209	\$484,884
Prints and rolls—			
Pounds.....	616,702	1,109,016	2,778,454
Value.....	\$197,481	\$272,478	\$615,212
Cream sold:			
Pounds.....	1,038,205	563,651	821,560
Value.....	\$167,673	\$58,830	\$83,663
All other products.....	\$97,020	\$53,472	\$283,744

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

The industry as a whole decreased 45 per cent in value of products during the decade 1899-1909. Most of the butter in 1909 was packed solid, while in 1899 it was chiefly put up in prints and rolls. There was a decrease during the decade in each of the two

classes of butter, while for the total the quantity decreased 3,294,035 pounds, or 65.4 per cent, and the value \$557,634, or 50.7 per cent. There was an increase of 100.4 per cent in the value of cream sold during the decade.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. In 1909 there were 61 such establishments in the state of New Hampshire.

The following statement summarizes the statistics:

Number of establishments.....	61
Persons engaged in the industry.....	706
Proprietors and firm members.....	82
Salaried employees.....	16
Wage earners (average number).....	608
Primary horsepower.....	988
Capital.....	\$303,013
Expenses.....	379,299
Services.....	233,086
Materials.....	80,027
Miscellaneous.....	66,186
Amount received for work done.....	518,660

Forty-three establishments were operated by individuals and 18 by firms. Twenty establishments reported receipts for the year's business of less than \$5,000; 38, receipts of \$5,000 but less than \$20,000; and 3, receipts of \$20,000 but less than \$100,000.

The number of wage earners employed each month and the per cent which this number represented of the greatest number employed in any month were as follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	533	77.6	July.....	672	97.2
February.....	542	78.4	August.....	691	100.0
March.....	545	78.9	September.....	671	97.1
April.....	560	81.0	October.....	620	89.7
May.....	615	89.0	November.....	601	87.0
June.....	652	94.4	December.....	598	86.5

The different kinds of primary power reported, the number of engines or motors, and the horsepower used in 1909 are shown in the following tabular statement:

KIND.	Number of engines or motors.	Horse-power.
Primary power, total.....		
Owned.....		988
Steam.....	50	861
Gas.....	47	825
Water wheels.....	1	7
Water motors.....	1	25
Rented.....		4
Electric.....	19	127
Other.....	19	82
		45

The kind and amount of fuel used are shown in the following statement:

KIND.	Unit.	Quantity.
Anthracite coal.....	Tons.....	470
Bituminous coal.....	Tons.....	4,932
Coke.....	Tons.....	223
Wood.....	Cords.....	79
Oil.....	Barrels.....	21
Gas.....	1,000 feet.....	2,586

Custom sawmills and gristmills.—Statistics for custom sawmills and gristmills are not included in the general tables or in the totals for manufacturing industries, but are presented in the following summary:

	Custom sawmills.	Custom gristmills.
Number of establishments.....	42	25
Persons engaged in the industry.....	94	38
Proprietors and firm members.....	46	33
Salaried employees.....	1	1
Wage earners (average number).....	47	5
Primary horsepower.....	1,970	743
Capital.....	\$91,378	\$37,176
Expenses.....	27,585	67,219
Services.....	21,978	1,819
Materials.....	956	163,972
Miscellaneous.....	4,653	1,428
Value of products.....	49,201	177,443

¹ Includes estimate of all grain ground. A similar estimate for value of lumber sawed by custom sawmills is impracticable.

MANUFACTURES—NEW HAMPSHIRE.

731

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
STATE—All industries.....	1909	1,961	84,191	2,014	3,519	78,658	293,991	\$139,990	\$4,191	\$36,200	\$98,157	\$164,581	\$66,424
	1904	1,818	69,758	1,726	2,866	65,366	218,344	109,495	2,972	27,693	78,216	123,611	50,895
	1899	1,771	69,758	1,726	2,068	67,646	200,976	92,146	2,200	25,850	60,163	107,591	47,428
Boots and shoes, including cut stock and findings...	1909	68	15,113	61	841	14,211	8,582	12,700	850	6,897	28,215	39,440	11,225
	1904	61	11,320	74	511	10,744	5,284	8,274	464	4,494	15,747	22,834	7,087
	1899	84	12,894	106	372	12,416		8,390	366	5,108	16,713	23,766	7,063
Boxes, fancy and paper.....	1909	12	192	15	9	168	142	123	9	65	138	273	135
	1904	12	230	18	10	202	163	125	7	69	118	244	126
	1899	16	245	20	11	214		151	6	71	138	262	124
Brass and bronze products.....	1909	5	63	4	3	56	123	98	6	29	45	102	57
	1904	7	98	6	7	85	129	113	9	48	70	161	91
	1899	3			5	44		62	9	19	30	79	49
Bread and other bakery products.....	1909	157	602	182	26	454	185	501	17	249	1,055	1,683	628
	1904	113	514	129	28	357	70	347	14	188	662	1,075	423
	1899	114		32	32	331		274	15	165	450	834	384
Brick and tile.....	1909	20	443	24	24	395	727	586	27	199	156	533	377
	1904	36	578	32	19	527	1,235	933	19	229	151	529	378
	1899	55	606	71	34	591	1,068	656	18	228	147	538	391
Butter, cheese, and condensed milk.....	1909	20	85	13	22	50	402	214	8	31	709	807	98
	1904	34	103	20	20	68	514	103	6	36	730	864	134
	1899	53	180	27	34	119	711	311	11	58	1,226	1,468	242
Carriages and wagons and materials.....	1909	44	493	44	20	420	1,231	1,067	31	240	346	734	388
	1904	48	603	63	20	521	1,253	1,141	31	297	261	784	498
	1899	59		33	33	616		1,261	31	320	340	906	537
Clothing, men's, including shirts.....	1909	12	540	12	57	471	234	458	47	161	462	785	323
	1904	9	307	12	37	258	97	208	28	83	264	438	174
	1899	9	283	13	25	245	105	259	21	69	253	418	165
Clothing, women's.....	1909	8	273	0	23	241	134	365	26	75	255	396	141
	1904	7	395	3	13	379	145	511	14	130	402	602	200
	1899	5	457		23	434	168	147	26	184	325	520	195
Cooperage and wooden goods, not elsewhere specified.	1909	30	773	37	23	713	3,180	868	21	323	449	948	499
	1904	27	779	24	22	733	2,514	864	17	338	393	987	594
	1899	24		20	773			720	14	297	318	824	506
Cotton goods, including cotton small wares.....	1909	21	22,504	3	211	22,290	83,966	29,176	411	8,938	19,124	33,602	14,479
	1904	25	20,044	4	309	19,731	75,540	31,176	516	7,373	18,497	29,541	11,044
	1899	23	20,629		175	20,454	68,473	20,262	371	6,769	11,960	22,998	11,038
Cutlery and tools, not elsewhere specified.....	1909	12	316	11	37	268	470	483	37	146	99	323	220
	1904	13	402	19	27	416	782	447	31	193	172	479	307
	1899	9	402	14	23	425		404	28	195	133	432	299
Electrical machinery, apparatus, and supplies.....	1909	6	218	2	23	193	422	378	24	87	155	368	233
	1904	5	100	3	14	83	172	162	12	32	88	150	62
	1899	5	108	3	11	94	293	183	7	33	82	182	100
Flour-mill and gristmill products.....	1909	105	288	149	23	116	5,502	1,329	17	62	2,809	3,187	378
	1904	72	248	109	11	128	4,523	1,099	9	63	2,348	2,642	194
	1899	89		14	157			868	10	73	1,932	2,205	273
Foundry and machine-shop products.....	1909	81	2,792	66	330	2,396	3,782	6,179	361	1,394	1,699	4,647	3,248
	1904	77	2,302	61	221	2,020	3,212	4,267	235	1,085	1,172	3,244	2,072
	1899	93	2,396	86	148	2,162		3,110	150	1,027	1,412	3,470	2,058
Furniture and refrigerators.....	1909	26	935	25	87	823	2,695	1,597	75	388	696	1,544	848
	1904	27	633	29	56	548	1,842	924	53	246	333	846	513
	1899	24	637	22	45	570	1,483	784	34	224	321	734	413
Gas, illuminating and heating.....	1909	14	301	2	52	247	220	2,215	46	106	180	581	401
	1904	13	177		35	142	265	1,790	28	73	168	486	318
	1899	13	156		35	121		1,519	25	60	86	356	270
Hosiery and knit goods.....	1909	21	3,223	25	69	3,129	2,315	3,530	97	1,143	2,636	4,764	2,128
	1904	21	2,899	20	89	2,790	2,215	2,750	92	943	2,229	3,974	1,745
	1899	22	2,559	16	51	2,492	2,313	2,525	58	791	1,319	2,593	1,274
Leather goods.....	1909	9	333	3	30	300	781	579	24	137	290	641	351
	1904	8	345	4	21	320	345	552	23	108	327	653	326
	1899	7			2	116		197	1	53	104	198	94
Liquors, malt.....	1909	4	321		49	272	1,183	2,042	79	195	545	1,644	1,099
	1904	5	344		49	295	1,261	2,247	83	209	673	2,255	1,582
	1899	5	314		34	280	1,336	2,048	65	185	599	1,956	1,357
Lumber and timber products.....	1909	589	9,440	689	296	8,404	44,593	13,866	333	3,924	7,263	15,284	8,021
	1904	474	7,586	604	193	6,789	30,231	8,748	188	2,968	5,301	11,573	6,272
	1899	485		212	212	9,085	33,316	8,819	153	3,309	4,858	11,594	6,736
Marble and stone work.....	1909	99	1,718	135	56	1,527	3,620	1,721	62	1,082	298	1,818	1,520
	1904	55	1,156	73	35	1,048	1,822	969	29	610	281	1,205	924
	1899	48			35	870		728	31	508	288	1,080	792

¹ Excluding statistics for one establishment, to avoid disclosure of individual operations.
² Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—NEW HAMPSHIRE.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Needles, pins, and hooks and eyes.....	1909	7	451	1	12	438	217	\$246	\$11	\$171	\$38	\$275	\$237
	1904	6	365	1	11	353	249	228	12	127	25	208	183
	1899	5	419	2	9	408	182	209	9	145	28	262	234
Paper and wood pulp.....	1909	34	3,068	13	242	3,419	70,912	27,534	485	2,106	9,253	13,904	4,741
	1904	25	2,074	5	147	2,522	49,784	14,041	209	1,315	5,328	8,930	3,602
	1899	29	2,524	20	113	2,391	48,590	8,163	173	1,037	3,953	7,245	3,292
Patent medicines and compounds and druggists' preparations.	1909	22	61	17	15	29	118	167	16	17	79	224	145
	1904	13	47	9	10	22	8	152	24	8	36	206	170
	1899	12	.....	.....	.....	53	.....	113	15	20	63	245	182
Printing and publishing.....	1909	143	984	138	169	677	1,865	1,066	116	356	259	1,131	872
	1904	126	853	122	86	645	637	1,076	86	333	217	969	752
	1899	134	884	140	68	676	.....	1,215	65	304	216	912	696
Slaughtering and meat packing.....	1909	8	37	10	3	24	87	62	2	14	165	199	84
	1904	7	15	7	.....	8	28	15	.....	4	28	38	12
	1899	10	20	8	.....	12	.....	9	.....	6	28	43	15
Tobacco manufactures.....	1909	51	640	93	6	571	5	274	11	376	676	1,250	574
	1904	45	398	53	3	342	.....	203	2	198	261	570	309
	1899	42	336	48	4	284	.....	147	2	146	276	550	274
Woolen, worsted, and felt goods, and wool hats.....	1909	39	9,701	21	194	9,486	30,485	15,103	289	3,649	11,095	16,731	5,630
	1904	44	6,820	32	207	6,581	18,437	14,411	257	2,755	9,479	14,284	4,895
	1899	43	4,208	37	129	4,042	10,100	8,161	153	1,572	4,741	7,624	2,883
All other industries.....	1909	276	7,614	240	558	6,816	16,723	14,863	653	3,660	8,968	16,348	7,360
	1904	203	7,354	200	440	6,714	15,680	11,649	474	3,078	7,437	12,940	5,503
	1899	255	.....	.....	359	7,171	.....	11,501	333	2,936	7,815	13,297	5,482

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

MANCHESTER—All industries.....	1909	175	25,718	156	827	24,735	61,796	\$26,221	\$880	\$10,444	\$30,497	\$46,812	\$16,316
	1904	155	18,327	142	606	17,579	.....	25,248	681	7,323	18,707	30,697	11,990
	1899	166	.....	.....	308	17,862	.....	21,540	441	6,468	13,803	24,628	10,825
Boots and shoes, including cut stock and findings.....	1909	14	5,327	9	422	4,896	2,294	3,818	363	2,323	13,327	17,647	4,320
	1904	19	2,958	7	215	2,736	.....	1,698	160	1,221	4,692	6,568	1,876
	1899	16	.....	.....	92	2,002	.....	1,169	96	837	2,904	4,052	1,148
Bread and other bakery products.....	1909	36	171	44	2	125	31	80	1	65	256	410	154
	1904	27	136	30	14	86	.....	43	5	44	107	270	109
	1899	29	.....	.....	2	74	.....	28	1	35	119	193	74
Carriages and wagons and materials.....	1909	5	52	6	7	39	83	150	7	24	115	160	45
	1904	7	100	8	9	86	.....	220	7	53	50	136	88
	1899	9	.....	.....	12	110	.....	248	7	56	52	166	114
Foundry and machine-shop products.....	1909	8	123	5	21	97	69	170	17	54	125	240	115
	1904	17	102	7	13	82	.....	175	10	35	25	111	56
	1899	19	.....	.....	17	422	.....	587	23	202	242	511	209
Lumber and timber products.....	1909	11	394	8	20	366	1,430	507	26	198	755	1,082	327
	1904	7	251	5	13	233	.....	378	12	112	379	554	175
	1899	10	.....	.....	6	233	.....	341	4	105	179	379	200
Printing and publishing.....	1909	21	267	17	99	151	118	229	55	88	74	331	257
	1904	110	183	15	28	140	.....	242	34	88	57	267	210
	1899	20	.....	.....	22	169	.....	340	24	95	60	252	192
Slaughtering and meat packing.....	1909	3	20	3	1	16	55	27	1	9	100	123	23
	1904	7	15	7	.....	8	.....	15	.....	4	26	38	12
	1899	4	.....	.....	.....	11	.....	5	.....	5	26	37	11
Tobacco manufactures.....	1909	18	520	25	2	493	5	216	7	335	621	1,111	490
	1904	18	284	22	1	261	.....	155	1	159	200	425	228
	1899	15	.....	.....	1	187	.....	102	1	96	227	401	174
All other industries.....	1909	59	18,344	39	253	18,552	57,711	21,024	403	7,348	15,124	25,708	10,584
	1904	54	14,298	35	316	13,947	.....	22,322	452	5,007	13,111	22,319	9,208
	1899	64	.....	.....	156	14,654	.....	18,750	285	5,037	9,994	18,637	8,645

¹ Excluding statistics for one establishment, to avoid disclosure of individual operations.² Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—NEW HAMPSHIRE.

TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.

CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaries employed.	Wage earners (average number).							
Expressed in thousands.													
Berlin.....	1909	20	1,906	18	98	1,790	25,537	\$13,059	\$160	\$379	\$3,654	\$5,897	\$2,243
	1904	17	2,398	12	104	2,282	.....	10,504	139	1,133	3,065	5,989	2,324
	1899	17	63	2,810	6,704	83	1,067	3,111	5,985	2,874
Concord.....	1909	111	3,059	110	256	2,693	6,381	5,574	264	1,641	3,546	6,476	2,930
	1904	80	2,949	79	216	2,654	.....	5,701	238	1,436	2,831	5,374	2,543
	1899	86	140	2,432	4,254	135	1,300	2,088	4,211	2,123
Dover.....	1909	51	3,227	49	143	3,030	10,395	6,398	183	1,430	3,236	6,370	3,134
	1904	42	3,034	43	132	2,859	.....	7,789	182	1,227	3,869	6,043	2,174
	1899	40	99	2,797	6,408	139	1,229	3,273	5,440	2,167
Keene.....	1909	64	1,993	47	177	1,769	5,158	2,959	165	973	1,337	3,483	1,646
	1904	50	1,808	46	77	1,685	.....	2,280	84	767	1,377	2,691	1,314
	1899	57	111	1,576	2,122	93	718	1,446	2,584	1,138
Laconia.....	1909	43	2,252	39	67	2,146	2,203	3,168	88	981	2,013	3,818	1,805
	1904	55	2,088	56	75	1,957	.....	2,399	83	831	1,720	3,097	1,377
	1899	53	42	1,535	1,844	49	575	1,194	2,152	958
Nashua.....	1909	104	7,757	92	353	7,312	17,567	12,854	441	3,112	10,379	17,326	6,947
	1904	78	6,462	68	235	6,159	.....	9,405	266	2,508	8,483	12,858	4,375
	1899	72	179	5,777	9,287	180	2,327	6,126	10,096	3,970
Portsmouth.....	1909	36	1,097	23	77	992	1,840	3,137	103	500	1,361	2,871	1,510
	1904	27	730	24	68	638	.....	2,631	96	348	888	2,602	1,714
	1899	38	.....	.....	.....	94	1,323	.....	3,912	112	657	1,875	2,086

¹ Figures do not agree with those published in 1904, because it was necessary to revise the totals in order to include data only for those establishments located within the corporate limits of the city.

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Average number.	Wage earners.		Total.	16 and over.		Under 16.				
					Male.	Female.		Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	1,961	84,191	2,014	1,265	1,441	813	78,658	De 80,936	Jy 76,324	(1)	(1)	(1)	(1)	(1)	288,991		
2 Agricultural implements.....	5	32	6	2	.....	.....	24	Mh 35	Jy 2	27	27	.....	.....	.....	265
3 Artificial stone.....	5	11	4	.....	.....	.....	7	Jy 15	Ja 2	14	14	.....	.....	.....	5
4 Blacking and cleansing and polishing preparations.....	6	39	5	3	2	10	19	Mh 20	Au 18	20	16	4	.....	.....	60
5 Boots and shoes, including cut stock and findings.....	68	15,113	61	251	271	319	14,211	No 15,200	My 13,744	15,369	10,195	4,807	220	147	8,582		
6 Boxes, fancy and paper.....	12	192	15	6	2	1	168	De 178	Je 158	181	52	129	.....	.....	142
7 Brass and bronze products.....	5	63	4	3	.....	.....	56	Je 63	Ja 49	50	59	.....	.....	.....	123
8 Bread and other bakery products.....	157	692	22	2	17	7	454	Jy 483	Ap 431	473	371	83	9	10	185		
9 Brick and tile.....	29	443	24	15	8	1	395	My 706	Mh 67	318	314	2	2	.....	727	
10 Brooms.....	5	17	5	.....	.....	.....	12	Ap 15	Au 9	12	11	.....	.....	.....	9
11 Butter, cheese, and condensed milk.....	29	85	13	16	3	3	50	Jy 57	De 45	52	50	1	2	.....	492	
12 Canning and preserving.....	6	37	7	3	.....	1	26	Se 153	Jy	148	92	56	.....	.....	60
13 Carriages and wagons and materials.....	44	493	44	14	10	5	420	Ap 437	Au 400	437	435	2	.....	.....	1,231
14 Clothing, men's, including shirts.....	12	540	12	9	39	9	471	No 529	Je 414	524	46	478	.....	.....	234
15 Clothing, women's.....	8	273	9	10	6	7	241	Fe 271	Au 203	260	93	234	1	2	134		
16 Confectionery.....	10	41	9	1	.....	2	29	Ja 32	Au 28	30	19	11	.....	.....	4
17 Cooperage and wooden goods, not elsewhere specified.....	30	773	37	13	4	6	713	Ja 789	Au 504	794	741	31	19	3	3,180		
18 Copper, tin, and sheet-iron products.....	9	44	12	3	1	2	26	My 32	Ja 15	25	25	.....	.....	.....	48
19 Cotton goods, including cotton small wares.....	21	22,504	3	60	112	39	22,290	Oc 22,466	De 21,941	22,016	10,935	10,643	265	178	63,966		
20 Cutlery and tools, not elsewhere specified.....	12	316	11	9	17	11	268	De 318	My 230	318	297	16	5	.....	470	
21 Electrical machinery, apparatus, and supplies.....	6	218	2	9	5	9	193	My 211	Ja 167	206	146	60	.....	.....	422
22 Electroplating.....	3	5	1	1	.....	.....	3	De 4	Je 3	4	4	.....	.....	.....	13
23 Flour-mill and gristmill products.....	105	288	140	7	13	3	116	De 121	Jy 112	120	129	.....	.....	.....	5,592
24 Foundry and machine-shop products.....	81	2,792	66	103	170	57	2,396	De 2,690	Ap 2,254	2,707	2,579	115	13	.....	3,782	
25 Furniture and refrigerators.....	26	935	25	28	35	24	823	No 893	Jy 718	911	862	23	25	1	2,695		
26 Gas, illuminating and heating.....	14	301	2	20	25	7	247	Jy 323	Ja 191	305	305	.....	.....	.....	220
27 Hosiery and knit goods.....	21	3,223	25	38	10	21	3,129	No 3,246	Au 3,011	3,302	1,034	2,204	27	37	2,315		
28 Leather goods.....	9	333	3	16	7	7	300	Oc 320	Jy 269	301	273	28	.....	.....	781
29 Liquors, malt.....	4	321	.....	13	28	8	272	Jy 292	Ap 255	272	272	.....	.....	.....	1,183
30 Lumber and timber products.....	539	9,449	639	142	105	49	8,464	Fe 10,651	Au 6,164	11,229	11,037	138	38	16	44,693		
31 Marble and stone work.....	99	1,718	135	35	16	5	1,527	My 1,782	Ja 979	1,532	1,531	.....	1	.....	3,620
32 Mattresses and spring beds.....	4	25	4	2	.....	.....	19	My 23	Fe 13	17	13	4	.....	.....	101
33 Needles, pins, and hooks and eyes.....	7	451	1	7	1	4	438	De 474	Ja 393	474	243	224	3	4	217		
34 Optical goods.....	3	90	3	3	1	1	91	Ja 100	De 85	85	68	.....	.....	.....	186
35 Paper and wood pulp.....	34	3,668	134	88	139	15	3,413	Oc 3,618	Au 3,255	3,423	3,292	131	.....	.....	79,912
36 Patent medicines and compounds and druggists' preparations.....	22	61	17	5	8	2	29	Ap 36	No 24	36	25	10	.....	1	118	
37 Printing and publishing.....	143	984	138	42	87	40	677	Fe 721	Au 046	710	485	210	14	1	1,895		
38 Slaughtering and meat packing.....	8	37	10	.....	3	.....	24	Ja 24	Jy 24	24	24	.....	.....	.....	87
39 Shipbuilding, including boat building.....	8	18	9	.....	.....	.....	9	Jy 12	Ja 6	9	9	.....	.....	.....	41
40 Surgical appliances and artificial limbs.....	5	50	7	.....	.....	.....	43	Fe 47	Au 37	45	41	4	.....	.....	244
41 Tobacco manufactures.....	51	640	63	6	.....	.....	571	Ja 584	Je 547	594	433	156	5	.....	5
42 Woolen, worsted, and felt goods, and wool hats.....	39	9,701	21	102	59	33	9,486	Au 9,694	Fe 9,237	9,752	5,488	4,112	73	79	30,485		
43 All other industries.....	207	7,196	108	178	237	105	6,508	.....	.....	.....	.....	.....	.....	.....	15,687

1 No figures given for reasons explained in the Introduction.
 2 Same number reported for one or more other months.
 3 Same number reported throughout the year.
 4 All other industries embrace—

Awnings, tents, and sails.....	7	Cars and general shop construction and repairs by street-railroad companies.....	2	Fancy articles, not elsewhere specified.....	5
Baskets, and rattan and willow ware.....	2	Cars, steam-railroad, not including operations of railroad companies.....	1	Flavoring extracts.....	2
Belting and hose, leather.....	1	Clocks.....	1	Food preparations.....	1
Billiard tables and materials.....	1	Coffins, burial cases, and undertakers' goods.....	1	Furnishing goods, men's.....	3
Boxes, cigar.....	1	Cordage and twine and jute and linen goods.....	2	Gloves and mittens, leather.....	1
Brushes.....	2	Corsets.....	1	Glue.....	1
Buttons.....	1	Dairymen's, poultryers', and apiculturists' supplies.....	1	Grease and tallow.....	4
Carpets and rugs, other than rag.....	1	Dyeing and finishing textiles.....	2	Hair work.....	1
Carpets, rag.....	1	Engraving and diesinking.....	2	Hand stamps and stencils and brands.....	2
Cars and general shop construction and repairs by steam-railroad companies.....	5			Hats, fur-felt.....	1
				Hones and whetstones.....	2

MANUFACTURES—NEW HAMPSHIRE.

735

THE STATE, BY INDUSTRIES: 1909.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$139,989,682	\$149,214,798	\$2,435,129	\$1,756,049	\$36,200,262	\$3,191,981	\$94,965,035	\$276,032	\$1,232,443	\$1,072,186	\$5,085,681	\$164,581,019	\$66,424,003
2 56,700	31,791	3,100	11,518	1,020	18,220	473	2,400	43,280	29,040	10,866	7,597	29,040
3 11,775	8,384	5,000	3,715	575	2,604	23	532	10,866	7,597	125,885	67,282	67,282
4 46,830	109,814	8,130	13,137	1,594	57,012	425	106	23,910	23,910	23,910	23,910	23,910
5 12,700,431	37,408,502	449,402	400,295	6,897,133	119,815	28,095,325	56,936	26,206	12,900	1,350,490	39,439,544	11,224,404
6 123,219	222,300	7,100	1,651	65,240	2,550	135,826	4,335	547	5,051	272,832	134,456	134,456
7 97,597	83,191	5,750	28,538	3,782	41,108	1,050	257	2,706	101,951	57,061	57,061	57,061
8 500,801	1,413,532	1,130	15,892	249,009	35,712	1,019,111	29,738	3,284	3,572	50,034	1,683,232	628,409
9 536,065	440,617	20,770	6,470	198,964	144,786	11,532	1,732	3,522	21,750	31,141	533,045	376,777
10 13,280	25,262	6,055	1,758	5,892	244	17,680	230	30	1,180	31,250	13,326	13,326
11 213,526	770,877	2,760	520	9,832	657	30,137	250	243	2,623	53,344	22,550	22,550
12 53,876	47,022	10,900	11,304	239,898	13,959	332,211	6,597	6,900	925	34,044	733,755	388,185
13 1,066,747	665,255	10,054	36,461	161,062	5,546	456,557	3,054	1,548	681	27,444	734,616	322,513
14 458,406	703,607	14,003	12,054	75,178	3,227	251,231	600	1,191	17,398	395,704	141,255	141,255
15 864,513	62,602	1,200	15,137	1,363	37,017	3,937	182	25	2,941	79,941	141,561	141,561
16 33,225	873,949	14,960	5,793	322,934	2,040	447,261	7,625	6,811	12,649	53,976	948,001	498,790
17 867,845	62,886	3,016	1,900	16,282	1,255	33,823	1,657	420	3,843	82,329	47,251	47,251
18 44,489	30,176,118	268,490	157,430	8,938,317	712,063	18,411,187	4,232	295,624	198	1,402,927	33,601,830	14,477,080
19 29,176,121	323,463	18,494	18,860	146,064	3,776	95,540	885	2,598	37,246	327,805	228,489	228,489
20 482,640	309,852	14,844	9,213	87,338	4,236	150,371	1,500	1,121	41,229	387,843	233,236	233,236
21 378,355	4,177	936	1,690	89	658	708	25	71	4,841	4,094	4,094	4,094
22 3,075	2,945,464	5,520	11,432	61,790	13,133	2,795,544	8,559	10,197	192	39,047	3,137,344	378,667
23 1,329,235	4,057,930	172,140	183,863	1,294,285	89,986	1,698,871	14,674	5,436	500,031	4,946,894	3,248,037	3,248,037
24 6,179,438	1,371,858	30,558	35,167	333,133	9,801	638,163	7,126	7,721	41,339	156,756	1,544,451	848,487
25 1,599,851	412,110	23,355	22,708	105,891	150,357	29,004	178	13,922	1,628	531,305	401,944	401,944
26 2,214,529	4,157,043	76,137	20,761	1,143,227	35,995	2,599,678	2,690	13,093	128,181	137,281	4,704,119	2,128,446
27 3,529,826	514,577	16,003	6,612	136,601	2,909	233,914	882	2,401	61,355	640,666	351,143	351,143
28 579,036	1,890,093	43,289	35,501	194,937	50,254	495,175	312,775	258,162	1,644,300	1,093,970	1,093,970	1,093,970
29 2,641,843	13,342,103	221,712	111,530	3,023,088	24,407	7,238,700	39,466	103,280	774,084	904,816	15,284,357	3,021,070
30 13,866,251	1,531,516	40,835	11,977	1,061,502	54,686	243,301	5,803	8,992	24,214	74,206	1,815,262	1,520,275
31 1,720,824	40,031	1,084	6,471	1,030	30,089	339	83	955	49,100	13,001	13,001	13,001
32 20,960	233,522	9,236	1,450	170,783	3,819	33,957	1,140	1,068	274,822	237,046	237,046	237,046
33 246,318	103,505	4,120	1,600	48,437	2,733	33,043	150	411	13,071	119,879	84,103	84,103
34 166,092	12,857,734	293,719	101,762	2,105,769	1,019,534	8,233,835	4,457	113,368	921	894,369	13,994,251	4,740,882
35 27,533,569	178,707	6,383	9,476	17,178	1,223	77,385	1,955	729	1,500	62,878	223,559	144,951
36 167,223	867,571	66,943	49,543	356,049	21,270	237,519	23,237	5,253	20,439	82,318	1,130,647	371,858
37 1,066,016	186,527	2,352	14,216	2,671	161,841	400	509	4,538	199,221	84,700	84,700	84,700
38 62,482	11,495	4,471	362	4,471	4,163	131	60	1,300	327	17,175	12,050	12,050
39 11,495	39,182	17,507	100	19,660	119	1,790	1,790	48,825	20,065	20,065	20,065	20,065
40 60,064	1,164,948	10,692	376,291	1,235	674,718	5,384	72,668	23,960	1,249,727	573,774	573,774	573,774
41 273,634	15,950,446	107,755	91,460	3,648,713	365,625	10,729,545	3,757	114,331	2,274	797,036	16,730,652	5,035,882
42 15,102,739	343,474	275,034	3,505,826	274,135	8,405,241	21,761	73,190	17,393	795,301	15,681,763	7,002,387	7,002,387
43 14,341,557												

* All other industries embrace—Continued.

House-furnishing goods, not elsewhere specified...	2	Musical instruments, pianos and organs and materials...	4	Soap.....	3
Instruments, professional and scientific.....	2	Paper goods, not elsewhere specified.....	4	Sporting and athletic goods.....	1
Iron and steel forgings.....	1	Photo-engraving.....	1	Steam packing.....	1
Jewelry.....	1	Pottery, terra-cotta, and fire-clay products.....	2	Stoves and furnaces, including gas and oil stoves.....	2
Jewelry and instrument cases.....	1	Rubber goods, not elsewhere specified.....	1	Toys and games.....	9
Kaolin and ground earths.....	1	Saws.....	2	Umbrellas and canes.....	1
Labels and tags.....	1	Show cases.....	1	Upholstering materials.....	11
Lasts.....	1	Signs and advertising novelties.....	1	Vinegar and cider.....	23
Leather, tanned, curried, and finished.....	4	Silk and silk goods, including throwsters.....	1	Wheelbarrows.....	1
Locomotives, not made by railroad companies.....	1	Silverware and plated ware.....	2	Wrework, including wire rope and cable.....	5
Mineral and soda waters.....	28			Wood, turned and carved.....	29
Mucilage and paste.....	1				

MANUFACTURES—NEW HAMPSHIRE.

TABLE III.—DETAIL STATEMENT FOR CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES,
CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES.
MANCHESTER.

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.			
					Male.	Female.	Total.	16 and over.			Under 16.	Male.	Female.	Male.	Female.	
								Male.	Female.							
1 All industries	175	25,718	156	219	371	237	24,735	13,840	10,583	312	25,301	14,214	10,762	228	97	61,796
2 Boots and shoes, including cut stock and findings	14	5,327	9	94	140	170	4,896	3,334	1,430	132	5,310	3,616	1,551	80	63	2,294
3 Bread and other bakery products	38	171	44	1	.....	1	125	99	23	3	138	109	25	4	.....	31
4 Carriages and wagons and materials	5	52	6	3	3	1	39	39	.....	.....	39	39	.....	.....	.....	83
5 Foundry and machine-shop products	8	123	5	11	4	6	97	97	.....	.....	101	101	.....	.....	.....	69
6 Lumber and timber products	11	394	8	10	7	3	366	306	.....	.....	376	376	.....	.....	.....	1,430
7 Printing and publishing	21	267	17	13	66	20	151	110	41	.....	155	113	42	.....	.....	118
8 Slaughtering and meat packing	3	20	3	.....	1	.....	16	16	.....	.....	16	16	.....	.....	.....	55
9 Tobacco manufactures	18	520	25	2	.....	.....	493	345	148	.....	508	350	152	.....	.....	5
10 All other industries ¹	59	18,844	39	85	141	27	18,552	9,434	8,941	177	18,658	9,488	8,902	144	34	57,711

¹ All other industries embrace: Artificial stone, 1; awnings, tents, and sails, 1; billiard tables and materials, 1; blacking and cleansing and polishing preparations, 1; boxes, cigar, 1; boxes, fancy and paper, 2; brass and bronze products, 1; brooms, 1; cars and general shop construction and repairs by street-railroad companies, 1; clothing, women's, 2; confectionery, 2; copper, tin, and sheet-iron products, 1; cotton goods, including cotton small wares, 2; cutlery and tools, not elsewhere specified, 1; electroplating, 2; flavoring extracts, 1; flour-mill and gristmill products, 1; food preparations, 1; gas, illuminating and heating, 1; grease and tallow, 1; hair work, 1; hand

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

1 BERLIN	20	1,906	18	10	84	4	1,790	1,779	0	5	1,854	1,843	0	3	2	25,537
2 CONCORD	111	3,050	110	91	101	64	2,693	2,385	283	25	2,783	2,465	292	18	8	6,381
3 DOVER	51	3,227	49	44	70	34	3,030	2,080	927	17	3,169	2,182	969	9	9	10,395
4 KEENE	64	1,993	47	65	71	41	1,769	1,450	269	50	1,980	1,630	303	38	20	5,158
5 LACONIA	43	2,252	39	28	31	8	2,146	1,286	840	14	2,247	1,340	880	10	5	2,203
6 NASHUA	104	7,757	92	100	149	104	7,312	5,006	2,156	150	7,641	5,163	2,223	75	80	17,567
7 PORTSMOUTH	36	1,097	28	35	27	15	992	734	244	14	1,012	749	240	10	4	1,840

MANUFACTURES—NEW HAMPSHIRE.

737

AND TOTALS FOR ALL INDUSTRIES IN CITIES OF 10,000 BUT LESS THAN 50,000 INHABITANTS: 1909.

CITIES OF 50,000 INHABITANTS OR MORE, BY INDUSTRIES.

MANCHESTER.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$26,220,942	\$44,123,153	\$490,293	\$389,462	\$10,444,355	\$694,053	\$29,803,046	\$79,615	\$342,175	\$9,662	\$1,870,492	\$46,811,919	\$16,314,820
2 3,817,699	16,734,706	178,232	185,187	2,323,360	32,795	13,294,853	32,205	7,086	.....	681,458	17,646,652	4,319,474
3 79,560	342,468	180	468	65,320	8,135	247,824	8,206	438	.....	11,798	409,616	153,657
4 149,666	154,222	4,900	2,496	24,362	2,425	112,707	4,702	920	.....	1,710	160,066	44,934
5 169,684	210,196	9,846	7,116	54,113	1,300	123,658	5,089	538	.....	8,536	240,350	115,392
6 507,021	1,004,892	17,249	8,384	198,193	1,310	753,746	2,580	3,845	.....	19,585	1,081,927	326,871
7 229,331	267,262	27,720	27,017	88,115	4,982	69,186	8,782	1,048	7,267	33,145	330,538	256,370
8 27,000	113,575	.....	624	9,052	1,356	99,000	.....	275	.....	3,268	122,980	22,624
9 216,341	1,048,095	7,000	.....	335,294	1,651	620,668	2,249	62,905	.....	19,328	1,111,170	489,851
10 21,024,740	24,247,737	245,166	158,170	7,346,537	641,099	14,481,874	15,712	265,120	2,395	1,091,664	25,708,620	10,585,647

stamps and stencils and brands, 1; hats, fur-felt, 1; hosiery and knit goods, 2; house-furnishing goods, not elsewhere specified, 1; jewelry, 1; leather goods, 2; liquors, malt, 1; locomotives, not made by railroad companies, 1; marble and stone work, 6; mattresses and spring beds, 2; mineral and soda waters, 4; needles, pins, and hooks and eyes, 2; paper and wood pulp, 1; patent medicines and compounds and druggists' preparations, 3; show cases, 1; wood, turned and carved, 2; woolen, worsted, and felt goods, and wool hats, 2.

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

1 \$13,058,880	\$5,270,094	\$44,090	\$121,832	\$879,381	\$340,943	\$3,313,386	\$3,003	\$57,431	\$100,000	\$410,028	\$5,896,595	\$2,242,266
2 5,373,615	5,942,331	155,747	108,261	1,641,249	138,565	3,407,558	15,757	20,011	45,812	409,371	6,476,477	2,930,354
3 6,397,658	5,186,065	82,304	100,239	1,485,505	169,535	3,066,087	9,107	48,638	1,360	223,170	6,370,110	3,134,488
4 2,958,564	3,235,945	86,813	78,033	972,930	65,565	1,771,297	30,925	12,625	13,395	204,362	3,483,291	1,646,429
5 3,168,317	3,286,059	60,939	26,973	980,651	37,284	1,975,648	9,389	14,510	16,825	163,940	3,818,440	1,805,008
6 12,859,926	14,814,191	223,647	217,636	3,111,722	205,455	10,173,620	18,700	92,376	19,566	751,409	17,326,134	6,947,059
7 3,136,989	2,510,412	68,986	39,461	500,407	69,889	1,291,093	9,100	260,540	3,296	258,640	2,871,188	1,510,209