REPORTS BY STATES
WITH STATISTICS FOR PRINCIPAL CITIES

ALABAMA.

INDUSTRIES IN GENERAL.

General character of the state.—Alabama, with a gross area of 51,998 square miles, of which 719 represent water surface, had a population of 2,138,093 in 1910, as compared with 1,828,697 in 1900 and 1,513,401 in 1890. It ranked eighteenth among the 49 states and territories of continental United States as regards population both in 1910 and in 1900. The density of population for the entire state was 41.7 per square mile, the corresponding figure for 1900 being 35.7. The population is mostly rural. In 1910 only 17.3 per cent of the entire population of the state resided in incorporated cities and towns having a population of 2,500 inhabitants or over, as compared with 11.3 per cent in 1900.

The state has seven cities and towns which had a population of over 10,000: Anniston, Bessemer, Birmingham, Gadsden, Mobile, Montgomery, and Selma. These cities contained 12.6 per cent of the total population of the state, and were credited with 33.8 per cent of the total value of its manufactures. Eliminating these cities, only 4.7 per cent of the population resided in cities and towns of 2,500 inhabitants or over.

The state is traversed by nearly all the trunk line railroads of the South, and most of these pass through Birmingham, the principal manufacturing center of the state. The Alabama and Tombigbee Rivers with their tributaries furnish facilities for navigation. Mobile is one of the most important seaports on the Gulf of Mexico. In addition, the two ports of New Orleans and Pensacola in the adjoining states are easily accessible by rail.

Importance and growth of manufactures.—The rapid growth of manufactures in Alabama during the last 30 years has been due largely to the development of rich mineral resources, particularly in the northern part of the state in what is known as the "Birmingham district." The close proximity of the coal fields to the iron mines has made the iron industry very prosperous. At the same time the great abundance of available coal and extensive forest resources have given a marked impetus to other manufacturing industries. During 1879 an average of 10,019 wage earners, representing eight-tenths of 1 per cent of the total population, were employed in manufactures, while in 1909 an average of 72,148 wage earners, or 3.4 per cent of the total population, were so engaged. During this period the value of products per capita of the total population of the state increased from $11 to $68. The total value of manufactured products increased during this time from $13,566,000 to $145,962,000, or nearly tenfold, while the proportion which the value of the manufactures of the state represents of the total value of the manufactures of the United States increased from three-tenths of 1 per cent in 1879 to seven-tenths of 1 per cent in 1909.

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.[1]	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments	3,398	1,882	2,000	80.6	—5.9
Persons engaged in manufactures	81,972	67,884	(2)	20.8	.....
Proprietors and firm members	3,769	1,948	(2)	93.5	.....
Salaried employees	6,055	3,763	2,259	60.9	66.6
Wage earners (average number)	72,148	62,173	52,711	16.0	18.0
Primary horsepower	357,837	293,185	173,208	22.1	69.3
Capital	$173,180,000	$105,383,000	$60,166,000	64.3	75.2
Expenses	129,153,000	94,252,000	59,097,000	37.0	59.5
Services	33,849,000	25,745,000	16,971,000	31.5	51.7
Salaries	6,565,000	3,867,000	2,059,000	69.8	87.8
Wages	27,284,000	21,878,000	14,912,000	24.7	46.7
Materials	83,443,000	60,458,000	37,998,000	38.0	59.1
Miscellaneous	11,861,000	8,049,000	4,128,000	47.4	95.0
Value of products	145,962,000	109,170,000	72,110,000	33.7	51.4
Value added by manufacture (value of products less cost of materials)	62,519,000	48,712,000	34,112,000	28.3	42.8

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

[2] Figures not available.

In 1909 the state of Alabama had 3,398 manufacturing establishments, which gave employment to an average of 81,972 persons during the year and paid out $33,849,000 in salaries and wages. Of the persons employed, 72,148 were wage earners. These establishments turned out products to the value of

$145,962,000, to produce which materials costing $83,443,000 were used. The value added by manufacture was thus $62,519,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, this table shows a remarkable development in the manufactures of the state during the 10-year period, 1899–1909. During the earlier five-year period, 1899–1904, the number of establishments decreased 5.9 per cent, but every other item showed a large increase. From 1904 to 1909, the number of establishments increased greatly. The percentages of increase for other items were not, however, as great as those for the earlier period, although a substantial increase is indicated. The large increase in the number of establishments from 1904 to 1909 is due almost entirely to the gain in the number of sawmills and timber plants, for of the total increase of 1,516 establishments during the five years there was a gain of 1,153 in the number of this class of establishments.

As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the full extent indicated by the 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	**3,398**	**72,148**	**100.0**	**$145,962,000**	**100.0**	**$62,519,000**	**100.0**	**33.7**	**51.4**	**28.3**	**42.8**
Lumber and timber products	1,819	22,409	31.1	26,058,000	17.9	16,913,000	27.1	42.6	37.6	29.3	57.9
Cotton goods, including cotton small wares	51	12,731	17.6	22,212,000	15.2	7,839,000	12.5	32.5	105.6	65.1	42.7
Iron and steel, blast furnaces	19	3,783	5.2	21,236,000	14.5	5,759,000	9.2	27.6	23.4	2.2	—4.2
Foundry and machine-shop products	102	5,898	8.2	11,550,000	7.9	5,323,000	8.5	30.7	61.3	25.2	56.0
Oil, cottonseed, and cake	71	1,618	2.2	9,178,000	6.3	2,103,000	3.4	59.1	93.2	73.1	37.8
Coke	35	2,580	3.6	8,843,000	6.1	2,472,000	4.0	43.2	65.7	13.5	107.0
Cars and general shop construction and repairs by steam-railroad companies	21	6,308	8.7	7,528,000	5.2	3,753,000	6.0	12.7	60.1	11.2	57.7
Fertilizers	42	1,233	1.7	6,423,000	4.4	2,159,000	3.5	174.4	13.2	193.7	7.9
Flour-mill and gristmill products	72	168	0.2	2,779,000	1.9	374,000	0.6	58.8	11.3	92.8	—5.8
Printing and publishing	274	1,117	1.5	2,768,000	1.9	2,102,000	3.4	42.2	67.8	38.7	70.8
Turpentine and rosin	175	3,519	4.9	2,472,000	1.7	1,986,000	3.2	1.6	19.7	3.3	39.0
Bread and other bakery products	83	574	0.8	1,725,000	1.2	652,000	1.0	55.4	62.8	46.8	50.5
Brick and tile	71	1,353	1.9	1,135,000	0.8	847,000	1.4	34.0	28.7	31.7	24.9
Ice, manufactured	45	343	0.5	777,000	0.5	576,000	0.9	46.1	119.8	40.5	114.7
Copper, tin, and sheet-iron products	23	236	0.3	733,000	0.5	322,000	0.5	124.8	—0.3	133.3	—5.5
Cordage and twine and jute and linen goods	5	427	0.6	696,000	0.5	217,000	0.3	39.5	96.5	83.9	34.1
Gas, illuminating and heating	13	259	0.4	687,000	0.5	473,000	0.8	93.5	52.4	76.5	47.3
Carriages and wagons and materials	35	424	0.6	684,000	0.5	381,000	0.6	—7.6	23.3	5.0	4.3
Hosiery and knit goods	6	611	0.8	591,000	0.4	277,000	0.4	28.5	.....	34.5	.....
Pottery, terra-cotta, and fire-clay products	21	425	0.6	559,000	0.4	389,000	0.6	104.8	21.3	99.5	18.2
Stoves and furnaces, including gas and oil stoves	10	361	0.5	501,000	0.3	329,000	0.5	77.0	.....	61.3	.....
Marble and stone work	25	358	0.5	493,000	0.3	310,000	0.5	119.1	—11.8	100.0	—4.9
Confectionery	9	138	0.2	490,000	0.3	141,000	0.2	31.7	89.8	—7.2	76.7
Lime	15	411	0.6	426,000	0.3	244,000	0.4	30.3	.....	6.6	.....
Mattresses and spring beds	9	82	0.1	347,000	0.2	133,000	0.2	34.5	136.7	43.0	158.3
Clothing, men's, including shirts	5	194	0.3	333,000	0.2	130,000	0.2	150.4	—49.2	165.3	—55.5
Leather goods	11	80	0.1	220,000	0.2	103,000	0.2	.....	.....	.....	.....
Tobacco manufactures	27	153	0.2	194,000	0.1	127,000	0.2	—20.5	—12.2	—25.3	—7.6
Patent medicines and compounds and druggists' preparations	18	32	(2)	123,000	0.1	85,000	0.1	—6.1	125.9	—4.5	147.2
All other industries	286	4,323	6.0	14,201,000	9.7	6,000,000	9.6	.....	.....	.....	.....

[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.

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

Iron and steel.—In Alabama the importance of the iron industry as a whole is due to the exploitation of the rich mineral deposits of iron ore, coal, and limestone, which are found in close proximity in the northern part of the state. These favorable conditions are conducive to the production of pig iron at a relatively low cost. The combined iron and steel industry, including blast furnaces and rolling mills and steel works, exceeded in value of products any of the other industries of the state. The value of products of the blast furnaces alone, as shown in the above table, amounted to $21,236,000, being exceeded only by that reported for the lumber and the cotton industries.

The statistics for the rolling mills and steel works could not be shown without disclosing individual operations and are therefore included under the head of "All other industries." Prior to 1897 the manufacture of steel was not extensive in Alabama, but since that date the continued improvements in the

basic open-hearth process have caused a remarkable development in the industry.

Lumber and timber products.—In addition to sawmills and timber camps, this classification includes planing mills and wooden packing-box factories. In 1909 the lumber industry was the most important single industry in the state from the standpoint of value of products, value added by manufacture, and number of wage earners. This industry alone employed 31.1 per cent of the total average number of wage earners engaged in all industries combined. The value of products represented 17.9 per cent and the value added by manufacture 27.1 per cent of the respective totals for the state.

Cotton goods, including cotton small wares.—During the period from 1899 to 1904 the growth of this industry was remarkable, the number of establishments increasing 48.4 per cent and the value of products 105.6 per cent. Although the percentages of increase were less during the period from 1904 to 1909, the figures indicate a decided development. It is interesting to note, moreover, that from 1899 to 1904 the percentage of increase in value of products was higher than that in value added by manufacture, while from 1904 to 1909 the rate of increase in value added by manufacture was far greater than that shown for value of products. This was due partly to the enormous rise in the price of cotton during the former period, and partly to the manufacture of a better grade of goods during the latter period. The other textile industries for which separate statistics are shown are cordage and twine and hosiery and knit goods, which are allied closely to the cotton-goods industry, the output of these mills being manufactured almost entirely from cotton materials.

Foundry and machine-shop products.—This class of manufacture is, in a measure, allied with the iron and steel industry and to a certain extent stimulated by it. More than one-half of the total value of its products represented the output of cast-iron pipe works. The industry includes also allied industries, such as the manufacture of hardware, steam fittings, and structural ironwork. It was really of greater importance in the state of Alabama than is indicated by the statistics, as some machine shops manufactured a distinctive product and were assigned to other classifications.

Oil, cottonseed, and cake.—The statistics presented include those for all establishments engaged primarily in extracting oil from cotton seed or in refining cottonseed oil. Since 1899, when 28 cottonseed-oil mills, with products valued at $2,986,000, were reported in the state, this industry has grown rapidly; in 1909 there were 71 mills in operation and their products amounted to $9,178,000.

Coke.—The importance of this industry is due to the abundant supply of coal suitable for coking purposes and to the demand for coke for fuel in the manufacture of iron and steel.

The first four industries listed in the preceding table held the same relative rank when measured by value added by manufacture as when measured by value of products. Considerable change is noted, however, in the order of the other industries when ranked according to value added by manufacture, the most prominent being in the case of the flour-mill and gristmill industry, which falls from the ninth to the seventeenth place. In this industry, owing to the comparatively simple manufacturing 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 is true to a varying degree in some of the other industries.

This table also shows the percentages of increase for the leading industries in respect to value of products and value added by manufacture where the statistics are comparable. The fertilizer industry showed a greater rate of increase from 1904 to 1909 both in value of products and in value added by manufacture than any other of the specified industries, namely, 174.4 per cent and 193.7 per cent, respectively. The men's clothing industry, the manufacture of copper, tin, and sheet-iron products, the marble and stone work industry, and the manufacture of pottery, terra-cotta, and fire-clay products also showed remarkable increases both in gross value of products and in value added by manufacture. From 1904 to 1909 three of the industries presented separately in the table, namely, the carriage and wagon industry, tobacco manufactures, and the manufacture of patent medicines showed a decrease in value of products, while the two last named also showed a decrease in value added by manufacture. From 1899 to 1904 four industries showed a decrease in value of products and six a decrease in value added by manufacture.

In addition to the industries shown separately in the above table, and the steel works and rolling mills, there are 18 industries which had a value of products in 1909 in excess of $100,000. They are included under the head of "All other industries" in the table, because in some cases the operations of individual establishments would be disclosed if they were shown separately; in other cases, because the returns do not properly represent the true condition of the industry, for the reason that it is more or less interwoven with one or more other industries; while for others, because 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: Agricultural implements; brass and bronze products; cars and general shop construction and repairs by street-railroad companies; cars, steam-railroad, not including operations of railroad companies; cement; charcoal; coffee and spice, roasting and grinding; cooperage and wooden

goods, not elsewhere specified; cordials and sirups; explosives; food preparations; iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills; mineral and soda waters; oils, not elsewhere specified; roofing materials; shipbuilding, including boat building; slaughtering and meat packing; and wood preserving. The statistics for 1909, however, for street-railroad repair shops and cooperage and wooden goods 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. 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	**81,972**	**75,066**	**6,906**
Proprietors and officials	6,598	6,544	54
Proprietors and firm members	3,769	3,727	42
Salaried officers of corporations	862	853	9
Superintendents and managers	1,967	1,964	3
Clerks	3,226	2,836	390
Wage earners (average number)	72,148	65,686	6,462
16 years of age and over	68,495	63,413	5,082
Under 16 years of age	3,653	2,273	1,380

The average number of persons engaged in manufactures during 1909 was 81,972, of whom 72,148 were wage earners. Of the remainder, 6,598 were proprietors and officials and 3,226 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	**81,972**	**8.0**	**3.9**	**88.0**
Cars and general shop construction and repairs by steam-railroad companies	6,610	1.1	3.5	95.4
Coke	2,800	3.0	4.9	92.1
Cotton goods, including cotton small wares	13,041	1.4	1.0	97.6
Fertilizers	1,473	6.9	9.4	83.7
Flour-mill and gristmill products	315	34.9	11.7	53.3
Foundry and machine-shop products	6,462	4.0	4.7	91.3
Iron and steel, blast furnaces	4,325	4.8	7.7	87.5
Lumber and timber products	25,927	11.7	1.8	86.4
Oil, cottonseed, and cake	1,984	9.7	8.7	81.6
Printing and publishing	1,955	23.6	19.2	57.1
Turpentine and rosin	3,965	9.7	1.6	88.8
All other industries	13,115	11.5	6.3	82.2

Of the total number of persons engaged in all manufacturing industries, 8 per cent were proprietors and officials, 3.9 per cent clerks, and 88 per cent wage earners. In the flour-mill and gristmill and 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 into the class of proprietors and officials is very much higher than for most other industries or for all industries combined. Similar conditions prevail to some extent in the lumber industry, in which the proprietors and officials formed 11.7 per cent of the total number of persons engaged. The smallest proportion for this class is shown for steam-railroad repair shops and is due to the fact that these establishments are operated by corporations which report no proprietors and whose general officials are not, as a rule, assigned to the supervision of this particular branch of the work.

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 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	**72,148**	**87.9**	**7.0**	**5.1**
Cars and general shop construction and repairs by steam-railroad companies	6,308	99.8	0.1	0.1
Coke	2,580	97.4	.....	2.6
Cotton goods, including cotton small wares	12,731	50.2	31.1	18.7
Fertilizers	1,233	99.4	.....	0.6
Flour-mill and gristmill products	168	99.4	.....	0.6
Foundry and machine-shop products	5,898	98.3	(2)	1.7
Iron and steel, blast furnaces	3,783	99.3	.....	0.7
Lumber and timber products	22,409	97.9	0.5	1.6
Oil, cottonseed, and cake	1,618	98.6	0.1	1.3
Printing and publishing	1,117	79.7	13.8	6.5
Turpentine and rosin	3,519	99.0	.....	1.0
All other industries	10,784	86.7	8.0	5.3

[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, 87.9 per cent of the average number of wage earners were males 16 years of age and over; 7 per cent, females 16 years of age and over; and 5.1 per cent, persons under the age of 16. Nearly four-fifths of the total number of female wage earners 16 years of age and over were employed in cotton mills, and of the total number of wage earners under 16 about two-thirds were employed in this industry. The only other industry listed in the table which

employed women and children to any considerable extent was printing and publishing, the proportions being 13.8 and 6.5 per cent, respectively.

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	81,972	100.0	67,884	100.0	20.8
Proprietors and firm members	3,769	4.6	1,948	2.9	93.5
Salaried employees	6,055	7.4	3,763	5.5	60.9
Wage earners (average number)	72,148	88.0	62,173	91.6	16.0

Comparable figures are not obtainable for 1899. The table shows a greater percentage of increase in proprietors and firm members than in either of the other two classes. This is due probably to the fact that there has been a large increase in the number of small establishments in which the proprietors or their immediate representatives do a large part of the work. The percentage of increase in salaried employees is also greatly in excess of that shown for wage earners.

The table in the next column 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	72,148	100.0	62,173	100.0	52,711	100.0
16 years of age and over	68,495	94.9	58,043	93.4	49,302	93.5
Male	63,413	87.9	53,496	86.0	45,837	87.0
Female	5,082	7.0	4,547	7.3	3,465	6.6
Under 16 years of age	3,653	5.1	4,130	6.6	3,409	6.5

The table indicates that there has not been much change at the last three censuses in the proportion of male and female wage earners. There was, however, an actual decrease from 1904 to 1909 in the employment of children under 16 years of age, which is in contrast with the increase shown for the preceding five-year period. In 1909 males 16 years of age and over formed 87.9 per cent of all wage earners, as compared with 86 per cent in 1904 and 87 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 fertilizer, the lumber and timber, the cottonseed-oil, and the turpentine and rosin 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 32, are 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. The wage earners for the lumber industry are divided in the table in such a manner as to show separately the number engaged in the mills and in the logging operations.

MONTH.	WAGE EARNERS.															
	All industries.		Fertilizers.		Lumber and timber products.						Oil, cottonseed, and cake.		Turpentine and rosin.		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.	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.
January	70,620	90.7	1,446	51.9	21,367	87.6	8,192	87.2	13,175	87.3	2,565	90.5	2,831	73.3	42,411	91.2
February	70,394	90.4	2,316	83.2	21,571	88.4	8,158	86.9	13,413	88.9	2,048	72.2	2,951	76.4	41,508	89.3
March	71,048	91.3	2,785	100.0	21,480	88.1	8,192	87.2	13,288	88.1	1,635	57.7	3,215	83.3	41,033	90.2
April	69,168	88.8	1,844	66.2	21,505	88.2	8,248	87.8	13,257	87.9	930	32.8	3,682	95.4	41,207	88.6
May	67,041	86.0	1,083	38.9	21,127	86.6	8,202	87.3	12,925	85.7	600	21.2	3,793	98.3	41,038	88.2
June	67,561	86.8	771	27.7	20,803	85.3	8,046	85.7	12,757	84.6	524	18.5	3,860	100.0	41,603	89.5
July	68,902	88.5	667	23.9	21,667	88.8	8,505	90.5	13,162	87.2	430	15.2	3,840	99.5	42,298	91.0
August	72,193	92.7	658	23.6	23,296	95.5	9,023	96.1	14,273	94.6	459	16.2	3,841	99.5	43,939	94.5
September	75,507	97.0	793	28.5	23,708	97.2	9,234	98.3	14,474	95.9	1,877	66.2	3,775	97.8	45,354	97.5
October	77,196	99.2	700	25.1	23,703	97.6	9,155	97.5	14,638	97.0	2,835	100.0	3,733	96.7	46,135	99.2
November	77,854	100.0	821	29.5	24,303	99.2	9,393	100.0	14,810	98.2	2,827	99.7	3,505	90.8	46,498	99.9
December	77,686	99.8	911	32.7	24,390	100.0	9,304	99.1	15,086	100.0	2,682	94.6	3,198	82.8	46,505	100.0

The table indicates that for all industries combined the months of least activity were in the spring and summer. The minimum number were employed in June and the maximum in November. The lumber industry, in which a large percentage of the total number of wage earners were employed, had 3,587

less wage earners in December than in June. The variation in the number of wage earners employed was almost exactly the same in logging operations as in sawmills and planing mills and box factories. The remaining seasonal industries shown in the table employed comparatively few wage earners, and consequently do not affect greatly the total for all industries combined. One of the more important of these industries is the cottonseed-oil industry, in which the months of greatest employment depend largely upon the time of maturity of the cotton crop. From 430 wage earners in July the number in this industry increased to 2,835 in October, the month of greatest activity. From April to August, the months of least activity, the mills were employed chiefly in the making of refined cottonseed products, fertilizers, feed, etc. In the manufacture of fertilizers, in which cottonseed meal and cake forms an important ingredient, the month of maximum employment was five months later than in the cottonseed-oil industry, namely, in March. In the turpentine and rosin industry the greatest number of wage earners were employed in June, the month of least activity in the lumber industry.

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	**72,148**	**4,083**	**1,312**	**7,423**	**2,267**	**32,109**	**19,874**	**1,719**	**3,361**
Bread and other bakery products	574	15	8	45	171	268	21	32	14
Brick and tile	1,353	140	13	16	64	1,006	97	11	6
Carriages and wagons and materials	424	.....	113	15	15	263	18	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	6,308	123	.....	4,657	.....	283	1,243	.....	2
Clothing, men's, including shirts	194	97	83	.....	14	.....	.....	.....	.....
Coke	2,580	57	15	185	.....	825	1,007	49	442
Confectionery	138	8	.....	.....	.....	121	9	.....	.....
Copper, tin, and sheet-iron products	236	147	9	51	11	18	.....	.....	.....
Cordage and twine and jute and linen goods	427	.....	.....	.....	.....	207	220	.....	.....
Cotton goods, including cotton small wares	12,731	.....	36	.....	477	7,320	4,814	84	.....
Fertilizers	1,233	4	.....	16	.....	997	175	41	.....
Flour-mill and gristmill products	168	20	3	5	9	77	5	45	4
Foundry and machine-shop products	5,898	82	86	1,033	572	4,108	17	.....	.....
Gas, illuminating and heating	259	.....	.....	.....	10	7	128	.....	114
Hosiery and knit goods	611	.....	.....	.....	.....	493	118	.....	.....
Ice, manufactured	343	.....	.....	.....	.....	40	31	59	213
Iron and steel, blast furnaces	3,783	.....	.....	.....	.....	108	1,454	.....	2,221
Leather goods	80	.....	.....	13	2	65	.....	.....	.....
Lime	411	.....	.....	.....	15	111	171	57	57
Lumber and timber products	22,409	1,262	681	446	385	10,351	9,152	132	.....
Marble and stone work	358	26	6	13	40	273	.....	.....	.....
Mattresses and spring beds	82	.....	.....	13	30	39	.....	.....	.....
Oil, cottonseed, and cake	1,618	.....	.....	.....	.....	108	547	841	122
Pottery, terra-cotta, and fire-clay products	425	10	.....	4	.....	364	47	.....	.....
Printing and publishing	1,117	447	32	351	99	188	.....	.....	.....
Stoves and furnaces, including gas and oil stoves	361	39	.....	.....	.....	322	.....	.....	.....
Tobacco manufactures	153	85	.....	32	.....	6	30	.....	.....
Turpentine and rosin	3,519	1,243	187	248	24	1,393	359	65	.....
All other industries	4,355	278	40	280	329	2,748	211	303	166

It is evident from these figures that for the majority of wage earners employed in the manufacturing industries of Alabama the prevailing hours of labor are 60 or over but less than 72 a week, or 10 or over but less than 12 a day, 20.9 per cent of the total number being employed in establishments where the prevailing hours are less than 60 per week, and 7 per cent being employed in establishments where they are 72 or more per week. Considering the single groups, by far the largest proportion of wage earners, 44.5 per cent, work 60 hours a week; the next largest proportion, 27.5 per cent, work more than 60 and less than 72 a week; while 10.3 per cent work 54 hours a week, or 9 hours a day.

Cottonseed-oil mills, blast furnaces, and ice factories are the only establishments in which more than half of the wage earners work 72 hours or more a week, and the last two classes of factories are in operation seven days in the week.

Location of establishments.—The next table shows that the manufacturing industries of the state are carried on chiefly in districts outside cities and towns of 10,000 inhabitants 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 or towns which came within the group having over 10,000 inhabitants.

ITEM.	Year.	Total.	LOCATION OF ESTABLISHMENTS.		PER CENT OF TOTAL.	
			In cities or towns with population of 10,000 and over.	Outside districts.	In cities or towns with population of 10,000 and over.	Outside districts.
Population	1910	2,138,093	270,206	1,867,887	12.6	87.4
	1900	1,828,697	107,230	1,721,467	5.9	94.1
Number of establishments.	1909	3,398	579	2,819	17.0	83.0
	1899	2,000	274	1,726	13.7	86.3
Average number of wage earners.	1909	72,148	19,227	52,921	26.6	73.4
	1899	52,711	7,389	45,322	14.0	86.0
Value of products	1909	$145,961,638	$49,345,723	$96,615,915	33.8	66.2
	1899	72,109,929	15,028,755	57,081,174	20.8	79.2
Value added by manufacture.	1909	62,519,120	19,811,680	42,707,440	31.7	68.3
	1899	34,111,696	7,792,168	26,319,558	22.8	77.2

The figures indicate that the cities and towns having 10,000 inhabitants or over have gained considerably on the districts outside, as the proportion of the average number of wage earners, value of products, and value added by manufacture reported for such cities and large towns has increased decidedly during the decade covered by the table. In 1909 such cities and towns reported 26.6 per cent of the average number of wage earners, as compared with 14 per cent in 1899, and 33.8 per cent of the value of products, as compared with 20.8 per cent in 1899.

The increase in the population of certain cities and towns has affected the grouping in this table. Prior to 1910 the cities of Anniston and Selma and the towns of Bessemer and Gadsden had less than 10,000 inhabitants and so were included with the districts outside. In 1909 the manufacturing establishments in these four places employed 5,582 wage earners and turned out products valued at $14,346,328, which represent 7.7 per cent and 9.8 per cent of the respective totals for the state. If these figures for 1909 were deducted from the total for the cities and towns and added to the districts outside, the proportions of the totals falling to the cities and towns would still show increases over 1899, but the gains would be materially reduced.

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

CITY OR TOWN.	1910	1900
Birmingham	132,685	38,415
Mobile	51,521	38,469
Montgomery	38,136	30,346
Selma	13,649	[1] 8,713
Anniston	12,794	[1] 9,695
Bessemer	10,864	[1] 6,358
Gadsden	10,557	[1] 4,282

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

The relative importance in manufactures of each of these seven cities and towns 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 OR TOWN.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
Birmingham	8,999	3,087	3,490	$24,128,214	$7,592,958	$8,599,418
Bessemer	1,816	(1)	(1)	6,106,098	(1)	(1)
Montgomery	2,284	1,940	1,528	5,442,287	3,877,653	2,943,668
Mobile	2,362	2,496	2,371	5,428,894	4,942,331	3,485,669
Anniston	2,167	2,005	1,445	4,332,890	3,326,513	1,863,122
Selma	813	668	699	2,382,249	1,138,817	1,419,466
Gadsden	786	(1)	(1)	1,525,091	(1)	(1)

[1] Figures not available.

The average number of wage earners in Birmingham and Montgomery increased from census to census, but Mobile shows a decrease of 5.4 per cent in this respect from 1904 to 1909. Each of these cities showed an increase in value of products from 1904 to 1909, and all but Birmingham an increase from 1899 to 1904. Although Birmingham showed a decrease of 11.7 per cent in value of products from 1899 to 1904, it showed an increase of 217.8 per cent for the period from 1904 to 1909. The large increase during the later period was due partly to the absorption by Birmingham of Ensley and Pratt City, as well as some of the surrounding districts.

Birmingham, the principal manufacturing city, is the center of the iron and steel industry of the state. In 1909, as in 1904, the principal industries were blast furnaces, foundries and machine shops, steam-railroad repair shops, and printing and publishing. Each of these industries reported a value of products in excess of $1,000,000 at the later census. A considerable number of the important industries of the city could not be shown separately in Table I without disclosing individual operations. The most important of these industries which are included under the head of "All other industries" in that table are: Brass and bronze products; cars and general shop construction and repairs by steam-railroad companies; coke; cotton goods, including cotton small wares; flour-mill and gristmill products; iron and steel, blast furnaces; oil, cottonseed, and cake; and pottery, terra-cotta, and fire-clay products.

In 1909 Montgomery and Mobile reported approximately the same value of products. The manufacture of cottonseed oil and cake held first rank in the city of Montgomery. The manufactures of Mobile are shown separately in Table I, as this city has a population of over 50,000. Its leading industries are: Bread and other bakery products; cars and general shop con-

struction and repairs by steam-railroad companies; flour-mill and gristmill products; foundry and machine-shop products; lumber and timber products; and printing and publishing, none of which had a value of products in 1909 exceeding $1,000,000. In Anniston the foundry and machine shops, which include the large cast-iron and steel-pipe industry, constituted by far the most important branch of manufacturing, while in Bessemer the manufactures are centered in the iron and steel industry.

Gadsden and Selma are of less importance as manufacturing cities and towns. The principal industry of Selma was the manufacture of cottonseed products, while Gadsden had no one predominating industry.

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	3,398	72,148	$145,961,638	$62,519,120
1904	1,882	62,173	109,169,922	48,711,554
Individual:				
1909	1,695	9,869	12,452,801	7,648,628
1904	816	6,902	9,266,408	5,805,446
Firm:				
1909	906	7,380	9,968,801	5,941,525
1904	480	5,503	7,140,059	4,512,108
Corporation:				
1909	788	54,879	123,502,394	48,898,098
1904	578	49,740	92,725,327	38,363,338
Other:				
1909	9	20	37,642	30,869
1904	8	28	38,128	30,662
Per cent of total:				
1909	100.0	100.0	100.0	100.0
1904	100.0	100.0	100.0	100.0
Individual:				
1909	49.9	13.7	8.5	12.2
1904	43.4	11.1	8.5	11.9
Firm:				
1909	26.7	10.2	6.8	9.5
1904	25.5	8.9	6.5	9.3
Corporation:				
1909	23.2	76.1	84.6	78.2
1904	30.7	80.0	84.9	78.8
Other:				
1909	0.3	(1)	(1)	(1)
1904	0.4	(1)	(1)	0.1
Flour-mill and gristmill products, 1909	72	168	$2,779,274	$373,834
Individual	45	68	1,010,719	136,063
Firm	17	38	638,784	111,477
Corporation	10	62	1,129,771	126,294
Per cent of total	100.0	100.0	100.0	100.0
Individual	62.5	40.5	36.4	36.4
Firm	23.6	22.6	23.0	29.8
Corporation	13.9	36.9	40.6	33.8
Foundry and machine-shop products, 1909	102	5,898	$11,550,217	$5,323,199
Individual	32	269	480,513	289,666
Firm	15	237	601,393	363,001
Corporation	55	5,392	10,468,311	4,670,532
Per cent of total	100.0	100.0	100.0	100.0
Individual	31.4	4.6	4.2	5.4
Firm	14.7	4.0	5.2	6.8
Corporation	53.9	91.4	90.6	87.7
Lumber and timber products, 1909	1,819	22,409	$26,057,662	$16,913,023
Individual	1,064	6,256	6,517,093	4,466,673
Firm	583	4,133	4,456,608	3,126,640
Corporation [2]	172	12,020	15,083,961	9,319,710
Per cent of total	100.0	100.0	100.0	100.0
Individual	58.5	27.9	25.0	26.4
Firm	32.0	18.4	17.1	18.5
Corporation [2]	9.5	53.6	57.9	55.1
Printing and publishing, 1909	274	1,117	$2,768,247	$2,102,254
Individual	163	410	683,299	548,473
Firm	52	137	229,582	179,810
Corporation	53	568	1,837,175	1,355,922
Other	6	2	18,191	18,049
Per cent of total	100.0	100.0	100.0	100.0
Individual	59.5	36.7	24.7	26.1
Firm	19.0	12.3	8.3	8.6
Corporation	19.3	50.8	66.4	64.5
Other	2.2	0.2	0.7	0.9
Turpentine and rosin, 1909	175	3,519	$2,471,999	$1,986,207
Individual	72	1,073	727,984	505,496
Firm	78	1,683	1,193,848	995,891
Corporation	25	763	550,167	454,820
Per cent of total	100.0	100.0	100.0	100.0
Individual	41.1	30.5	29.4	28.5
Firm	44.6	47.8	48.3	48.6
Corporation	14.3	21.7	22.3	22.9

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

[2] Includes the group "Other," to avoid disclosure of individual operations.

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 23.2 per cent of the total number of establishments were, in 1909, under corporate ownership, as against 76.9 per cent under all other forms. The corresponding figures for 1904 were 30.7 per cent and 69.3 per cent, respectively. For all industries combined the proportion of the total value of products which the establishments under each form of ownership contributed remained about the same at each census. Among the important industries not shown in this table, all of the steam-railroad repair shops, the coke establishments, the cotton mills, and the blast furnaces, and all but six of the fertilizer factories and seven of the cottonseed-oil mills were under corporate 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. 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 manu-

facture. The totals as reported for all industries are shown for the last two censuses, while for the five most 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	**3,398**	**72,148**	**$145,961,638**	**$62,519,120**
1904	**1,882**	**62,173**	**109,169,922**	**48,711,554**
Less than $5,000:				
1909	1,614	4,226	3,484,496	2,493,709
1904	577	1,246	1,438,922	1,084,455
$5,000 and less than $20,000:				
1909	1,002	9,128	10,232,102	7,048,024
1904	677	6,313	7,191,803	5,051,073
$20,000 and less than $100,000:				
1909	493	12,983	21,920,233	11,275,069
1904	395	12,566	18,218,703	10,203,718
$100,000 and less than $1,000,000:				
1909	267	31,993	68,275,808	26,824,753
1904	219	31,631	57,254,914	23,396,568
$1,000,000 and over:				
1909	22	13,818	42,048,999	14,877,565
1904	14	10,417	25,070,580	8,975,140
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	47.5	5.9	2.4	4.0
1904	30.7	2.0	1.3	2.2
$5,000 and less than $20,000:				
1909	29.5	12.7	7.0	11.3
1904	36.0	10.2	6.6	10.4
$20,000 and less than $100,000:				
1909	14.5	18.0	15.0	18.0
1904	21.0	20.2	16.7	20.9
$100,000 and less than $1,000,000:				
1909	7.9	44.3	46.8	42.9
1904	11.6	50.9	52.4	48.0
$1,000,000 and over:				
1909	0.6	19.2	28.8	23.8
1904	0.7	16.8	23.0	18.4
Average per establishment:				
1909	.....	21	$42,955	$18,399
1904	.....	33	58,007	25,883
Flour-mill and gristmill products, 1909	**72**	**168**	**$3,779,274**	**$373,834**
Less than $5,000	18	14	51,415	9,275
$5,000 and less than $20,000	29	43	318,636	57,543
$20,000 and less than $100,000	18	51	761,830	79,518
$100,000 and less than $1,000,000	7	60	1,647,393	227,498
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	25.0	8.3	1.8	2.5
$5,000 and less than $20,000	40.3	25.6	11.5	15.4
$20,000 and less than $100,000	25.0	30.4	27.4	21.3
$100,000 and less than $1,000,000	9.7	35.7	59.3	60.9
Average per establishment	.....	2	$38,601	$5,192
Foundry and machine-shop products, 1909	**102**	**5,898**	**$11,550,317**	**$5,323,199**
Less than $5,000	17	32	46,825	33,496
$5,000 and less than $20,000	25	198	277,885	177,954
$20,000 and less than $100,000	29	813	1,350,282	751,123
$100,000 and less than $1,000,000	27	3,000	5,442,238	2,776,751
$1,000,000 and over	4	1,855	4,432,987	1,583,875
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	16.7	0.5	0.4	0.6
$5,000 and less than $20,000	24.5	3.4	2.4	3.3
$20,000 and less than $100,000	28.4	13.8	11.7	14.1
$100,000 and less than $1,000,000	26.5	50.9	47.1	52.2
$1,000,000 and over	3.9	31.5	38.4	29.8
Average per establishment	.....	58	$113,237	$52,188
Lumber and timber products, 1909	**1,819**	**22,409**	**$26,057,662**	**$16,913,023**
Less than $5,000	1,120	3,193	2,174,628	1,619,371
$5,000 and less than $20,000	481	4,746	4,790,814	3,517,960
$20,000 and less than $100,000	167	5,250	6,872,217	4,362,348
$100,000 and less than $1,000,000	51	9,220	12,220,003	7,413,344
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	61.6	14.2	8.3	9.6
$5,000 and less than $20,000	26.4	21.2	18.4	20.8
$20,000 and less than $100,000	9.2	23.4	26.4	25.8
$100,000 and less than $1,000,000	2.8	41.1	46.9	43.8
Average per establishment	.....	12	$14,325	$9,298
Printing and publishing, 1909	**274**	**1,117**	**$2,768,247**	**$2,102,254**
Less than $5,000	182	301	460,291	371,120
$5,000 and less than $20,000	69	308	615,850	500,276
$20,000 and less than $100,000	17	286	669,290	460,893
$100,000 and less than $1,000,000	6	222	1,022,816	769,965
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	66.4	26.9	16.6	17.7
$5,000 and less than $20,000	25.2	27.6	22.2	23.8
$20,000 and less than $100,000	6.2	25.6	24.2	21.9
$100,000 and less than $1,000,000	2.2	19.9	36.9	36.6
Average per establishment	.....	4	$10,103	$7,672
Turpentine and rosin, 1909	**175**	**3,519**	**$2,471,999**	**$1,986,207**
Less than $5,000	35	179	108,631	77,598
$5,000 and less than $20,000	105	1,909	1,175,753	933,589
$20,000 and less than $100,000	35	1,431	1,187,615	975,020
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	20.0	5.1	4.4	3.9
$5,000 and less than $20,000	60.0	54.2	47.6	47.0
$20,000 and less than $100,000	20.0	40.7	48.0	49.1
Average per establishment	.....	20	$14,126	$11,350

This table shows that in 1909, of the 3,398 establishments only 22, or six-tenths of 1 per cent, had a value of products exceeding $1,000,000. These establishments, however, employed an average of 13,818 wage earners, or 19.2 per cent of the total number in all establishments, and reported 28.8 per cent of the total value of products and 23.8 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, 47.5 per cent, of the total number of establishments, but the value of their products amounted to only 2.4 per cent of the total. Measured by number of wage earners and value of products, the largest group consisted of those establishments having products of $100,000 but less than $1,000,000 in value, the wage earners in these establishments forming 44.3 per cent of the total number and the value of their products amounting to 46.8 per cent of the total. About three-fourths of the total value of products was reported by establishments having products valued at not less than $100,000.

The fact that the average number of wage earners per establishment decreased from 33 to 21, the average value of products from $58,007 to $42,955, and the value added by manufacture from $25,883 to $18,399 is due to the increase in the number of small establishments, largely in the lumber 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 11 important industries individually, and gives not only the number of establishments falling into each group but also the average number of wage earners employed.

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	**3,398**	**131**	**1,790**	**924**	**288**	**123**	**93**	**34**	**11**	**4**
Cars and general shop construction and repairs by steam-railroad companies	21	.....	2	2	2	.....	4	6	4	1
Coke	35	.....	1	8	8	10	6	2	.....	.....
Cotton goods, including cotton small wares	51	.....	.....	.....	7	11	20	7	4	2
Fertilizers	42	.....	16	11	5	7	3	.....	.....	.....
Flour-mill and gristmill products	72	11	57	3	1	.....	.....	.....	.....	.....
Foundry and machine-shop products	102	2	26	26	14	17	12	5	.....	.....
Iron and steel, blast furnaces	19	.....	.....	.....	2	3	10	2	2	.....
Lumber and timber products	1,819	39	1,079	546	84	33	26	11	1	.....
Oil, cottonseed, and cake	71	.....	8	32	27	3	1	.....	.....	.....
Printing and publishing	274	47	185	32	9	1	.....	.....	.....	.....
Turpentine and rosin	175	2	29	81	57	5	1	.....	.....	.....
All other industries	717	30	387	183	72	33	10	1	.....	1
	AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**72,148**	.....	**4,550**	**10,327**	**9,119**	**8,579**	**14,468**	**12,037**	**7,962**	**5,106**
Cars and general shop construction and repairs by steam-railroad companies	6,308	.....	4	14	47	.....	487	1,937	2,425	1,394
Coke	2,580	.....	9	109	272	758	902	530	.....	.....
Cotton goods, including cotton small wares	12,731	.....	.....	.....	292	776	3,439	2,599	3,467	2,158
Fertilizers	1,233	.....	58	88	163	532	392	.....	.....	.....
Flour-mill and gristmill products	168	.....	113	25	30	.....	.....	.....	.....	.....
Foundry and machine-shop products	5,898	.....	76	324	476	1,103	1,730	2,189	.....	.....
Iron and steel, blast furnaces	3,783	.....	.....	.....	73	211	1,529	727	1,243	.....
Lumber and timber products	22,409	.....	2,721	5,886	2,652	2,332	4,196	3,795	827	.....
Oil, cottonseed, and cake	1,618	.....	28	453	844	178	115	.....	.....	.....
Printing and publishing	1,117	.....	460	322	265	70	.....	.....	.....	.....
Turpentine and rosin	3,519	.....	92	1,147	1,824	306	150	.....	.....	.....
All other industries	10,784	.....	989	1,959	2,181	2,313	1,528	260	.....	1,554
	PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**100.0**	.....	**6.3**	**14.3**	**12.6**	**11.9**	**20.1**	**16.7**	**11.0**	**7.1**
Cars and general shop construction and repairs by steam-railroad companies	100.0	.....	0.1	0.2	0.7	.....	7.7	30.7	38.4	22.1
Coke	100.0	.....	0.3	4.2	10.5	29.4	35.0	20.5	.....	.....
Cotton goods, including cotton small wares	100.0	.....	.....	.....	2.3	6.1	27.0	20.4	27.2	17.0
Fertilizers	100.0	.....	4.7	7.1	13.2	43.1	31.8	.....	.....	.....
Flour-mill and gristmill products	100.0	.....	67.3	14.9	17.9	.....	.....	.....	.....	.....
Foundry and machine-shop products	100.0	.....	1.3	5.5	8.1	18.7	29.3	37.1	.....	.....
Iron and steel, blast furnaces	100.0	.....	.....	.....	1.9	5.6	40.4	19.2	32.9	.....
Lumber and timber products	100.0	.....	12.1	26.3	11.8	10.4	18.7	16.9	3.7	.....
Oil, cottonseed, and cake	100.0	.....	1.7	28.0	52.2	11.0	7.1	.....	.....	.....
Printing and publishing	100.0	.....	41.2	28.8	23.7	6.3	.....	.....	.....	.....
Turpentine and rosin	100.0	.....	2.6	32.6	51.8	8.7	4.3	.....	.....	.....
All other industries	100.0	.....	9.2	18.2	20.2	21.4	14.2	2.4	.....	14.4

The per cent distribution of the number of establishments is not shown in this table; of the 3,398 establishments reported for all industries, 3.9 per cent employed no wage earners; 52.7 per cent, from 1 to 5; 27.2 per cent, from 6 to 20; and only 16.3 per cent, 21 and over. The most numerous single group consists of the 1,790 establishments employing from 1 to 5 wage earners and the next of the 924 establishments employing from 6 to 20 wage earners. There were 49 establishments that employed over 250 wage earners, while 4 employed over 1,000.

Of the total number of wage earners, 54.9 per cent were in establishments employing over 100 wage earners. The single group having the largest number of employees was the group comprising the establishments employing from 101 to 250 wage earners. This group employed 14,468 wage earners, or 20.1 per cent of the total. The individual industries listed in this table but not in the preceding one, namely, coke, cotton goods, blast furnaces, and steam-railroad repair shops, are industries in which comparatively large establishments do most of the business, as appears from the classification according to the number of wage earners. The fertilizer and cottonseed-oil establishments appear to be somewhat smaller.

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 important industries separately. The figures on which the percentages are based appear in Table II, page 32.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries	**5.1**	**21.1**	**64.6**	**9.2**
Cars and general shop construction and repairs by steam-railroad companies	4.2	44.8	50.1	0.9
Coke	2.7	15.6	77.4	4.3
Cotton goods, including cotton small wares	2.3	17.4	72.5	7.8
Fertilizers	5.4	6.9	75.4	12.3
Flour-mill and gristmill products	2.0	2.2	93.8	2.0
Foundry and machine-shop products	6.2	27.7	58.2	7.9
Iron and steel, blast furnaces	3.9	10.9	81.0	4.2
Lumber and timber products	5.4	33.8	42.6	18.2
Oil, cottonseed, and cake	4.0	5.2	84.0	6.8
Printing and publishing	20.7	29.2	29.9	20.3
Turpentine and rosin	6.9	49.8	26.7	16.6
All other industries	8.0	20.6	61.0	10.4

This table shows that, for all industries combined, 64.6 per cent of the total expenses were incurred for materials, 26.2 per cent for services—that is, salaries and wages—and but 9.2 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

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 absolute increase in primary power was mainly in steam and electric power. In 1909, as in 1904, steam formed the major part of the power, but notwithstanding an increase during this period of 47,805 horsepower, the proportion of this kind of power decreased from 95.7 per cent in 1904 to 91.7 per cent in 1909. The more general use of the gas engine is shown, the number of such engines being 248 in 1909, as against 77 in 1904 and 38 in 1899. The figures also show that the practice of renting power is on the increase, 2.9 per cent of the total power being rented in 1909, as against but five-tenths of 1 per cent in 1904 and four-tenths of 1 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, the horsepower of such motors increasing from 3,062 in 1899 to 8,666 in 1904 and 29,824 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	**4,909**	**2,279**	**2,016**	**357,837**	**293,185**	**173,208**	**100.0**	**100.0**	**100.0**
Owned	3,879	2,279	2,016	347,546	291,643	172,487	97.1	99.5	99.6
Steam	3,463	2,129	1,828	328,275	280,470	162,453	91.7	95.7	93.8
Gas	248	77	38	4,616	472	376	1.3	0.2	0.2
Water wheels	147	63	150	13,812	9,483	9,421	3.9	3.2	5.4
Water motors	21	10	(2)	111	35	(2)	(3)	(3)	(2)
Other	.....	.....	.....	732	1,183	237	0.2	0.4	0.1
Rented	1,030	(2)	(2)	10,291	1,542	721	2.9	0.5	0.4
Electric	1,030	(2)	(2)	10,104	1,448	359	2.8	0.5	0.2
Other	.....	.....	.....	187	94	362	0.1	(3)	0.2
Electric motors	**2,500**	**296**	**69**	**39,928**	**10,114**	**3,421**	**100.0**	**100.0**	**100.0**
Run by current generated by establishment	1,470	296	69	29,824	8,666	3,062	74.7	85.7	89.5
Run by rented power	1,030	(2)	(2)	10,104	1,448	359	25.3	14.3	10.5

[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 consumed 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.	Anthracite coal (tons).	Bituminous coal (tons).	Coke (tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
All industries	**17,903**	**6,352,202**	**3,041,326**	**186,077**	**11,370**	**18,715**
Brick and tile	.....	113,766	946	24,224	29	.....
Cars and general shop construction and repairs by steam-railroad companies	.....	61,210	2,338	1,202	652	.....
Coke	.....	5,156,407	.....	.....	.....	.....
Cotton goods, including cotton small wares	.....	190,686	.....	3,812	40	.....
Fertilizers	.....	33,549	.....	420	85	.....
Flour-mill and gristmill products	.....	5,773	100	1,712	313	.....
Foundry and machine-shop products	.....	65,783	107,547	6,043	809	12
Gas, illuminating and heating	.....	53,505	1,894	.....	4,000	.....
Iron and steel, blast furnaces	.....	142,649	2,907,745	91	.....	6,000
Lime	.....	21,412	250	22,967	5	.....
Lumber and timber products	10	16,816	.....	7,972	470	.....
Oil, cottonseed, and cake	5	81,733	.....	8,553	45	.....
Pottery, terra-cotta, and fire-clay products	.....	43,192	.....	1,606	36	.....
Printing and publishing	2	1,522	10	343	334	1,799
Turpentine and rosin	.....	.....	225	16,310	3	.....
All other industries	17,886	364,109	20,276	90,762	4,549	10,904

NOTE.—In addition, there were 41,068 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 kind of machines used in manufactures, which do not appear on the general schedules. Certain data of this character for seven important industries in Alabama are here presented.

Lumber and timber products.—The lumber industry is an important one in Alabama. The total quantity of lumber sawed has increased from year to year, a total of 1,691,001 M feet representing the cut for 1909, as compared with 1,101,386 M feet in 1899. Yellow pine formed 89.1 per cent of the total cut of the state in 1909.

The following is a statement of the quantity of products, by classes, of the sawmill branch of the lumber industry for 1909 and 1899:

PRODUCT.	1909	1899
Rough lumber ..... M feet b. m..	1,691,001	1,101,386
Lath ..... thousands..	50,979	28,721
Shingles ..... thousands..	245,871	267,273

Cotton goods, including cotton small wares.—This industry was first reported for the state of Alabama at the census of 1839, when the value of cotton products reported was $17,547. The industry increased but slowly up to the census of 1889, when it began to grow more rapidly, until in 1909 the value of products amounted to $22,211,748. In the latter year Alabama held eighth place among the cotton manufacturing states in respect to number of establishments, and ninth place in respect to both number of producing spindles and value of products.

The table following shows in detail for the cotton-goods industry the quantity and cost of materials, the quantity and value of products, and the number of the principal machines used, as reported at the last three censuses.

The principal material used was domestic cotton, which was largely obtained directly from the plantations of the state. No Egyptian or other foreign cotton was reported used in 1899 and only a small amount in 1904 and 1909. The cotton consumed in this industry in 1909 amounted to 116,232,495 pounds and cost $12,616,233, the increase since 1904 being 17,131,817 pounds, or 17.3 per cent, in quantity, and $1,530,470, or 13.8 per cent, in cost.

Increases both in quantity and value were shown for every class of products from 1899 to 1904, except drills, which showed a decrease in quantity. Increases were also shown for every class of products from 1904 to 1909, except brown or bleached sheetings or shirtings, which showed decreases in both quantity and value. The latter class of products, which was the most important in 1899 and 1904 when measured by value, became second in importance in 1909, being exceeded by yarns for sale. It continued, however, to lead all other products in respect to quantity. Plain cloths for printing or converting, which show an increase from 1904 to 1909 of 7,882,560 square yards in quantity and $641,134 in value, ranked second in quantity and fourth in value. The partly manufactured articles, yarns manufactured for sale, and cotton waste, represent a certain amount of duplication, because, although they are the products of one set of mills, they become the materials of other establishments.

MATERIAL, PRODUCT, OR MACHINE.	1909	1904	1899
Materials used, total cost	$14,373,247	$12,010,798	$4,825,981
Cotton:			
Pounds	116,232,495	99,100,678	67,987,299
Cost	$12,616,233	$11,085,763	$4,206,721
Starch	$101,218	$91,304	$38,537
Chemicals and dyestuffs	$71,114	$86,672	$21,032
Fuel and rent of power and heat	$445,568	$303,192	$141,987
All other materials	$1,139,114	$443,867	$417,704
Products, total value	$22,211,748	$16,760,332	$8,153,136
Plain cloths for printing or converting:			
Square yards	48,108,666	40,226,106	10,460,526
Value	$2,187,301	$1,546,167	$342,690
Brown or bleached sheetings or shirtings:			
Square yards	75,130,788	108,518,564	72,432,173
Value	$4,818,284	$5,195,880	$2,841,008
Duck:			
Square yards	29,435,832	25,645,853	15,614,278
Value	$4,234,763	$3,066,062	$1,709,200
Drills:			
Square yards	21,790,867	11,602,266	14,867,094
Value	$1,865,822	$680,891	$607,927
Yarns for sale:			
Pounds	25,560,583	18,413,437	14,432,028
Value	$5,100,971	$3,552,319	$1,965,139
Cotton waste for sale:			
Pounds	10,405,797	6,873,474	6,764,490
Value	$219,872	$208,143	$101,696
All other products	$3,784,735	$2,510,870	$585,476
Machinery:			
Producing spindles, number	885,803	758,087	411,328
Looms, number	16,014	15,659	8,549

Oil, cottonseed, and cake.—Alabama holds sixth place among the states in the value of its cottonseed products and shows a continuous growth from 1899 to 1909. The following table shows the quantity of cotton seed crushed and the quantity of crude products, by kinds, in 1909, 1904, and 1899.

MATERIAL OR PRODUCT.	QUANTITY.		
	1909	1904	1899
Cotton seed crushed ..... tons..	310,754	265,653	172,093
Crude products manufactured:			
Oil ..... gallons..	13,061,384	10,634,364	6,704,951
Meal and cake ..... tons..	141,162	107,229	60,389
Hulls ..... tons..	95,351	95,517	80,167
Linters ..... pounds..	13,770,427	8,420,399	4,331,016

The statistics in this table include all the cotton seed crushed during the year, regardless of the extent to which the establishments were engaged in other industries. Furthermore, the crude products reported represent the total product derived from crushing cotton seed, whether sold as such or used as intermedi-

ate products in further processes of manufacture, such as the refining of oil and the mixing of fertilizer and feed. The average crush per mill has fallen off during the past five years, but not to the same extent as during the previous five years. The high price of cotton seed has resulted in recent years in the crushing of a large percentage of the seed produced. Of the 71 mills reported in 1909 as crushing seed, 8 crushed less than 1,000 tons each during the census year, 15 crushed 1,000 but less than 2,000 tons, 27 crushed 2,000 but less than 5,000 tons, 15 crushed 5,000 but less than 10,000 tons, 5 crushed 10,000 but less than 20,000 tons, and 1 crushed more than 20,000 tons. The ratios which the several crude products in 1909 bore to the total weight of the seed when received at the mill were as follows: Crude oil, 15.8 per cent; meal and cake, 45.4 per cent; hulls, 30.7 per cent; and linters, 2.2 per cent. It will be observed that hulls represented a considerably smaller proportion of the total product in 1909 than in 1904 or 1899.

Fertilizers.—This industry has shown the most rapid growth of any in the state during the past five years. In 1909 Alabama held seventh place among the states in the manufacture of fertilizer. The following table shows in detail the quantity and value of the different kinds of products reported for the years 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value	**$6,423,233**	**$2,341,133**	**$2,068,162**
Superphosphates:			
From minerals, bones, etc.—			
Tons	109,519	58,190	38,246
Value	$1,147,291	$457,478	$369,587
Ammoniated—			
Tons	87,353	11,681	2,000
Value	$1,581,800	$219,874	$35,000
Complete fertilizers:			
Tons	121,824	83,642	92,253
Value	$2,202,445	$1,557,133	$1,433,355
All other fertilizers:			
Tons	92,481	7,128	6,670
Value	$982,357	$90,173	$104,766
All other products	$419,340	$16,474	$125,454

The statistics in this table are for establishments whose chief products are fertilizers. In addition to the 42 establishments the products of which are given in this table, there were 20 establishments, 19 of which were primarily engaged in the manufacture of cottonseed oil and 1 in slaughtering and meat packing, which produced as by-products 25,959 tons of fertilizer, valued at $503,503.

Complete fertilizer was the product of chief value reported at each census, showing an increase of $859,090, or 59.9 per cent, from 1899 to 1909. The quantity in 1909 exceeded that for 1899 by 32.1 per cent, although there was a small decrease from 1899 to 1904. The greatest absolute increase in value from 1904 to 1909 was in ammoniated superphosphates, which increased $1,361,926. The increase in value of "superphosphates from minerals, bones, etc.," during the same period was nearly equal to that in complete fertilizers, the former being $689,813 and the latter $735,312.

Flour-mill and gristmill products.—Gristmills predominate in this industry. All of the 72 establishments reported corn products, 12 reported wheat products, and only 1 reported flour as its chief product. The following is a tabular statement of the quantity and value of the different kinds of these products for 1909 and 1904:

PRODUCT.	QUANTITY.		VALUE.	
	1909	1904	1909	1904
Total value			**$2,779,274**	**$1,750,452**
Wheat flour:				
White ... barrels	15,629	28,483	92,790	158,320
Graham ... barrels	607		4,560	
Rye flour ... barrels		100		562
Corn meal ... barrels	534,288	364,992	1,856,501	941,779
Hominy and grits ... pounds	4,889,356	2,579,356	90,579	44,234
Feed ... tons	22,776	25,720	699,041	571,179
Offal ... tons	976	1,445	20,904	28,980
All other products			15,799	5,398

Printing and publishing.—This industry embraces the printing and publishing of books, and of newspapers and periodicals, job printing, bookbinding, and the engraving of steel and copper plate, including plate printing. The following table shows the number and circulation of the different classes 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	**227**	**213**	**186**	**518,074**	**399,005**	**230,079**
Daily	26	21	19	139,345	99,853	48,645
Sunday	9	10	11	78,679	52,756	(1)
Semiweekly	6	1	[2] 3	9,305	3,783	5,040
Weekly	179	171	143	278,245	213,543	155,244
Monthly	4	7	4	8,700	11,820	6,800
All other classes	3	3	6	3,800	17,250	14,350

[1] Included in circulation of dailies. [2] Includes one triweekly publication.

The weekly publications are the most important class, measured by both number of publications and aggregate circulation per issue. The daily, weekly, and semiweekly publications increased in number from 1904 to 1909, the monthly and Sunday publications decreased, and those included under the head of "All other classes" showed the same number for both years. Each class of publications, with the exception of monthlies and those included under the head of "All other classes," showed considerable increases in aggregate circulation per issue in 1909, as compared with 1904. Of the dailies, 11 were morning and 15 evening editions in 1909 and 8 morning and 13 evening editions in 1904. All of the publications were in the English language, except three weeklies, two of which were in German and one in Italian.

Turpentine and rosin.—This industry, which is dependent upon the longleaf pine forests, is carried on principally in the southern part of the state. Alabama holds third place among the states in the

quantity and value of its turpentine and rosin products. The following table shows the quantity and value of the products distilled from crude turpentine in 1909 and 1904:

PRODUCT.	1909	1904
Total value	$2,471,999	$2,434,365
Turpentine:		
Gallons	2,840,242	3,108,118
Value	$1,253,737	$1,501,563
Rosin:		
Barrels (280 pounds)	309,763	360,469
Value	$1,214,054	$930,053
All other products	$4,208	$2,749

All products combined showed an increase of 1.5 per cent in value, but turpentine showed a decrease of 8.6 per cent in quantity and of 16.5 per cent in value; rosin, a decrease of 14.1 per cent in quantity, with an increase of 30.5 per cent in value; and "All other products," an increase of 53.1 per cent in value. The working unit in turpentine operations is called a crop, which consists of 10,500 boxes or cups. In 1909 there were 1,948 crops worked, of which 468 were from virgin trees, 504 from yearlings, 497 from third-year trees, and 479 from older trees. Of the total number of trees worked in Alabama during 1909, 16 per cent were treated through the cup system.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. There were 38 such establishments in Alabama in 1909, 23 of which were in cities of over 10,000 population.

The following table summarizes the statistics:

Number of establishments	38
Persons engaged in the industry	1,274
Proprietors and firm members	26
Salaried employees	140
Wage earners (average number)	1,108
Primary horsepower	1,041
Capital	$545,892
Expenses	789,656
Services	469,762
Materials	146,657
Miscellaneous	173,237
Amount received for work done	909,130

The most common form of ownership was the corporate, with 18 establishments. The individual and partnership forms of ownership were represented by 15 and 5 establishments, respectively. Five establishments had receipts for the year's business of less than $5,000; 19, $5,000 but less than $20,000; 13, $20,000 but less than $100,000; and 1, $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 follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January	988	83.2	July	1,158	97.6
February	1,043	87.9	August	1,175	99.0
March	1,062	89.5	September	1,187	100.0
April	1,093	92.1	October	1,134	95.5
May	1,107	93.3	November	1,106	93.2
June	1,137	95.8	December	1,103	92.9

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		**1,041**
Owned	32	838
Steam	30	834
Gas	2	4
Rented—Electric	81	203

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

KIND.	Unit.	Quantity.
Bituminous coal	Tons	14,317
Coke	Tons	1,216
Wood	Cords	360
Oil	Barrels	48
Gas	1,000 feet	3,006

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	55	964
Persons engaged in the industry	237	1,887
Proprietors and firm members	113	1,303
Salaried employees	1	3
Wage earners (average number)	123	581
Primary horsepower	1,302	18,395
Capital	$52,867	$894,078
Expenses	22,715	2,050,076
Services	18,525	58,363
Materials	1,385	[1] 1,967,022
Miscellaneous	2,805	24,691
Value of products	55,271	[1] 2,326,136

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—All industries	1909	3,393	81,972	3,769	6,055	72,148	357,837	$173,180	$6,565	$27,284	$83,443	$145,902	$62,519
	1904	1,882	67,884	1,948	3,763	62,173	293,185	105,383	3,867	21,878	60,458	109,170	48,712
	1899	2,000	.....	.....	2,259	52,711	173,208	60,166	2,059	14,912	37,998	72,110	34,112
Bread and other bakery products	1909	83	773	94	105	574	334	898	93	248	1,073	1,725	652
	1904	52	585	59	51	475	251	473	42	161	666	1,110	444
	1899	51	391	54	55	282	161	261	29	87	387	682	295
Brick and tile	1909	71	1,500	56	91	1,353	5,127	1,942	100	434	288	1,135	847
	1904	63	1,178	60	74	1,044	3,360	1,033	72	301	204	847	643
	1899	72	1,259	93	44	1,122	1,501	432	25	257	143	658	515
Carriages and wagons and materials	1909	35	508	40	44	424	991	752	45	194	303	684	381
	1904	26	439	30	29	380	554	581	29	165	377	740	363
	1899	47	.....	.....	29	461	.....	436	19	140	252	600	348
Cars and general shop construction and repairs by steam-railroad companies.	1909	21	6,610	.....	302	6,308	4,928	4,732	313	3,372	3,775	7,528	3,753
	1904	16	5,740	.....	239	5,501	3,125	2,104	235	2,993	3,306	6,681	3,375
	1899	19	4,148	.....	118	4,030	1,588	2,019	113	1,941	2,032	4,172	2,140
Clothing, men's, including shirts	1909	5	220	6	20	194	38	216	20	48	203	333	130
	1904	3	128	5	6	117	16	67	5	27	84	133	49
	1899	7	213	9	13	191	25	96	11	47	152	262	110
Coke	1909	35	2,800	.....	220	2,580	5,766	17,770	226	1,283	6,371	8,843	2,472
	1904	24	2,272	.....	107	2,165	3,075	3,425	96	924	3,997	6,175	2,178
	1899	15	1,637	2	43	1,592	692	3,855	40	536	2,674	3,726	1,052
Confectionery	1909	9	166	10	18	138	174	121	17	41	349	490	141
	1904	10	194	9	23	162	189	159	13	39	220	372	152
	1899	11	.....	.....	19	124	.....	88	10	16	110	196	86
Copper, tin, and sheet-iron products	1909	23	312	22	54	236	33	438	51	132	411	733	322
	1904	10	146	10	18	118	3	152	17	61	133	326	138
	1899	11	.....	.....	9	101	.....	127	11	42	181	327	146
Cordage and twine and jute and linen goods	1909	5	452	.....	25	427	1,700	749	27	117	479	696	217
	1904	4	305	.....	12	293	625	396	13	64	381	499	118
	1899	4	292	.....	10	282	625	298	11	48	166	254	88
Cotton goods, including cotton small wares	1909	51	13,041	.....	310	12,731	42,637	30,954	460	3,454	14,373	22,212	7,839
	1904	46	11,740	1	259	11,480	27,505	24,758	343	2,458	12,011	16,760	4,749
	1899	31	8,491	.....	159	8,332	22,997	11,639	198	1,482	4,826	8,153	3,327
Fertilizers	1909	42	1,473	12	228	1,233	4,434	8,507	305	392	4,264	6,423	2,159
	1904	19	636	6	79	551	1,485	3,051	68	153	1,606	2,341	735
	1899	17	531	32	60	439	1,450	1,407	62	95	1,387	2,068	681
Flour-mill and gristmill products	1909	72	315	84	63	168	3,559	1,080	51	57	2,405	2,779	374
	1904	40	230	42	29	159	2,124	372	20	54	1,556	1,750	194
	1899	37	.....	.....	24	138	.....	365	20	41	1,367	1,573	206
Foundry and machine-shop products	1909	102	6,462	67	497	5,898	9,859	11,984	662	2,958	6,227	11,550	5,323
	1904	[1] 71	4,943	43	311	4,589	5,376	6,192	426	2,133	4,588	8,840	4,252
	1899	[2] 74	3,752	60	231	3,461	4,400	4,827	251	1,330	2,756	5,482	2,726
Gas, illuminating and heating	1909	13	403	4	140	259	599	4,730	74	133	214	687	473
	1904	13	193	.....	57	136	1,370	926	38	52	87	355	268
	1899	11	115	.....	40	75	124	1,121	31	32	51	233	182
Hosiery and knit goods	1909	6	634	.....	23	611	750	627	28	124	314	591	277
	1904	8	531	4	22	505	805	563	18	93	254	460	206
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ice, manufactured	1909	45	469	26	100	343	6,117	2,281	85	138	201	777	576
	1904	39	336	32	61	243	3,784	1,480	52	104	122	532	410
	1899	21	212	11	41	160	1,792	611	33	53	51	242	191
Iron and steel, blast furnaces	1909	19	4,325	.....	542	3,783	106,189	23,816	740	2,077	15,477	21,236	5,759
	1904	19	5,216	.....	262	4,954	101,048	19,326	321	1,939	11,012	16,646	5,634
	1899	19	5,182	.....	148	5,034	58,844	11,587	237	1,382	7,610	13,488	5,878
Leather goods	1909	11	112	7	25	80	97	132	14	37	117	220	103
	1904	[2] 6	50	6	4	40	7	64	2	17	106	170	64
	1899	9	.....	.....	6	33	.....	47	4	13	43	85	42
Lime	1909	15	458	7	40	411	723	849	39	136	182	426	244
	1904	10	540	12	25	503	918	825	24	143	98	327	220
	[4] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lumber and timber products	1909	1,819	25,927	2,387	1,131	22,409	102,527	24,442	1,168	7,259	9,145	26,058	16,913
	1904	666	17,751	836	780	16,135	55,512	14,164	814	5,546	5,195	18,279	13,084
	1899	[1] 846	.....	.....	523	14,882	41,588	8,202	392	3,619	4,998	13,286	8,288
Marble and stone work	1909	25	427	29	40	358	787	680	52	168	183	493	310
	1904	11	226	11	17	198	344	273	16	75	70	225	155
	1899	16	.....	.....	19	267	.....	264	17	84	92	255	163

[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 can not be shown without disclosing individual operations.
[4] Not reported separately.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—Continued.													
Mattresses and spring beds	1909	9	105	5	18	82	111	$239	$21	$36	$214	$347	$133
	1904	8	115	7	12	96	70	137	10	30	165	258	93
	1899	6	53	5	12	36	44	50	6	14	73	109	36
Oil, cottonseed, and cake	1909	71	1,984	13	353	1,618	17,215	7,202	334	437	7,075	9,178	2,103
	1904	58	1,698	17	281	1,400	12,883	5,169	254	381	4,554	5,769	1,215
	1899	28	886	21	106	759	5,657	1,610	99	197	2,104	2,986	882
Patent medicines and compounds and druggists' preparations.	1909	18	72	19	21	32	.....	116	16	17	38	123	85
	1904	14	56	10	19	27	6	127	12	7	42	131	89
	1899	5	.....	.....	8	20	.....	15	3	7	22	58	36
Pottery, terra-cotta, and fire-clay products	1909	21	478	19	34	425	1,193	1,016	46	144	170	559	389
	1904	16	305	19	21	265	805	445	20	87	78	273	195
	1899	21	270	28	15	227	425	200	8	67	60	225	165
Printing and publishing	1909	274	1,955	299	539	1,117	1,092	2,010	462	650	666	2,768	2,102
	1904	[1] 241	1,462	269	278	915	712	1,409	245	469	432	1,947	1,515
	1899	[1] 196	1,127	232	96	799	443	847	97	342	273	1,160	887
Stoves and furnaces, including gas and oil stoves.	1909	10	407	2	44	361	542	568	56	170	172	501	329
	1904	7	194	1	18	175	261	184	17	125	79	283	204
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco manufactures	1909	27	192	31	8	153	.....	98	9	66	67	194	127
	1904	32	219	37	13	169	.....	128	10	77	74	244	170
	1899	[1] 26	233	29	18	186	.....	116	14	88	94	278	184
Turpentine and rosin	1909	175	3,965	255	191	3,519	384	1,397	125	906	486	2,472	1,986
	1904	144	3,342	229	194	2,919	151	767	99	745	511	2,434	1,923
	1899	152	4,114	230	162	3,716	50	1,176	67	781	651	2,034	1,383
All other industries	1909	286	5,427	275	829	4,323	39,881	22,834	926	2,056	8,201	14,201	6,000
	1904	206	7,114	193	462	6,459	66,812	16,573	536	2,455	8,395	14,263	5,868
	1899	248	.....	.....	251	5,962	.....	8,470	251	2,171	5,443	9,518	4,075

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

BIRMINGHAM—All industries	**1909**	**248**	**10,412**	**152**	**1,261**	**8,999**	**55,311**	**$23,718**	**$1,435**	**$4,392**	**$14,010**	**$24,128**	**$10,118**
	1904	**122**	**4,551**	**97**	**467**	**3,987**	.....	**5,739**	**485**	**1,709**	**3,949**	**7,593**	**3,644**
	1899	**109**	.....	.....	**284**	**3,490**	.....	**4,314**	**321**	**1,359**	**3,980**	**8,599**	**4,619**
Bread and other bakery products	1909	14	400	12	55	333	162	613	61	142	561	912	351
	1904	8	287	5	36	246	.....	224	32	75	344	534	190
	1899	8	121	7	27	87	.....	67	17	27	145	253	108
Carriages and wagons and materials	1909	7	100	8	8	84	59	78	7	53	51	133	82
	1904	4	37	5	4	28	.....	21	2	14	14	36	22
	1899	6	61	7	.....	54	.....	23	.....	23	28	70	42
Foundry and machine-shop products	1909	41	2,955	25	249	2,681	3,932	7,029	351	1,328	2,962	5,479	2,517
	1904	13	914	7	78	829	.....	1,315	115	351	871	1,624	753
	1899	[1] 15	.....	.....	63	723	.....	1,018	75	287	613	1,269	656
Lumber and timber products	1909	15	297	2	53	242	1,620	379	33	112	596	815	219
	1904	3	158	1	14	143	.....	235	16	55	149	232	83
	1899	[1] 4	100	4	6	90	.....	49	5	35	77	140	63
Marble and stone work	1909	4	48	5	5	38	87	36	6	23	48	98	50
	1904	3	44	5	4	35	.....	46	3	14	16	48	32
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Patent medicines and compounds and druggists' preparations.	1909	8	31	10	9	12	.....	22	7	8	13	61	48
	1904	4	20	2	12	6	.....	30	8	1	13	65	52
	1899	3	.....	.....	8	11	.....	12	3	5	11	32	21
Printing and publishing	1909	49	649	36	266	347	322	707	234	248	300	1,154	854
	1904	32	400	34	125	241	.....	471	111	166	185	731	546
	1899	18	278	11	64	203	.....	233	66	115	125	435	310
All other industries	1909	110	5,932	54	616	5,262	49,129	14,854	736	2,478	9,479	15,476	5,997
	1904	55	2,691	38	194	2,459	.....	3,397	198	1,033	2,357	4,323	1,966
	1899	55	.....	.....	116	2,322	.....	2,912	155	867	2,981	6,400	3,419

[1] Excluding statistics for one establishment, to avoid disclosure of individual operations.
[2] Not reported separately.
[3] Figures can not be shown without disclosing individual operations.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
MOBILE—All industries	1909	126	2,828	109	357	2,362	5,845	$5,250	$366	$1,199	$2,939	$5,429	$2,490
	1904	139	2,862	128	238	2,496	.....	3,824	235	1,199	2,322	4,942	2,620
	1899	118	.....	.....	161	2,371	.....	2,606	146	948	1,542	3,486	1,944
Bread and other bakery products	1909	12	122	15	18	89	88	86	9	45	205	306	101
	1904	14	116	15	5	96	.....	94	8	41	140	248	108
	1899	17	101	18	8	75	.....	62	3	29	93	162	69
Carriages and wagons and materials	1909	4	46	5	2	39	38	43	2	25	19	57	38
	1904	4	37	4	.....	33	.....	21	.....	19	11	49	38
	1899	5	26	4	1	21	.....	6	1	9	12	35	23
Confectionery	1909	3	14	2	4	8	.....	9	3	3	18	31	13
	1904	4	15	2	2	11	.....	20	(1)	5	14	35	21
	1899	4	.....	.....	4	8	.....	6	2	3	11	21	10
Flour-mill and gristmill products	1909	5	44	5	15	24	258	266	16	12	786	900	114
	1904	6	51	7	14	30	.....	88	7	18	614	677	63
	1899	3	33	3	7	23	.....	62	6	9	404	454	50
Foundry and machine-shop products	1909	6	230	1	32	197	471	401	35	118	114	316	202
	1904	9	351	3	30	318	.....	500	39	193	92	446	354
	1899	7	273	10	11	252	.....	185	11	121	108	304	196
Ice, manufactured	1909	5	45	2	7	36	834	280	8	15	26	90	64
	1904	7	76	7	14	55	.....	392	10	28	36	144	108
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lumber and timber products	1909	18	558	13	40	505	2,319	1,032	48	202	492	936	444
	1904	13	414	10	26	378	.....	572	30	152	360	761	401
	1899	[3] 4	.....	.....	18	383	.....	228	23	128	281	567	286
Marble and stone work	1909	3	33	1	6	26	103	52	6	16	21	53	32
	1904	4	45	3	3	39	.....	68	2	26	30	84	54
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing	1909	20	278	21	72	185	218	271	78	115	105	414	309
	1904	[4] 18	242	19	35	188	.....	272	37	104	72	345	273
	1899	[4] 15	180	25	15	140	.....	176	17	69	38	200	162
Tobacco manufactures	1909	10	122	11	6	105	.....	68	7	45	42	129	87
	1904	16	158	18	12	128	.....	111	9	58	53	178	125
	1899	11	172	11	16	145	.....	92	12	71	66	200	134
All other industries	1909	40	1,336	33	155	1,148	1,516	2,742	154	603	1,111	2,197	1,086
	1904	44	1,357	40	97	1,220	.....	1,691	98	560	900	1,975	1,054
	1899	47	.....	.....	81	1,324	.....	1,689	71	509	529	1,543	1,017

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

Anniston	1909	39	2,352	23	162	2,167	9,310	$4,345	$210	$870	$2,824	$4,333	$1,509
	[5] 1904	35	2,162	19	138	2,005	.....	2,026	145	573	1,878	3,327	1,449
	1899	25	.....	.....	45	1,445	.....	1,774	49	495	969	1,863	894
Bessemer	1909	31	2,111	23	272	1,816	15,120	7,812	310	991	4,239	6,106	1,867
	[6] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[6] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Gadsden	1909	27	871	16	69	786	1,524	987	66	355	904	1,525	621
	[6] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[6] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montgomery	1909	73	2,723	46	393	2,284	6,355	5,234	353	1,003	3,024	5,442	2,418
	1904	59	2,236	54	242	1,940	.....	3,212	247	640	2,189	3,878	1,689
	1899	52	.....	.....	120	1,528	.....	2,020	109	500	1,715	2,944	1,229
Selma	1909	35	974	28	133	813	2,686	1,722	115	349	1,505	2,382	787
	1904	26	757	24	65	668	.....	879	61	295	627	1,139	512
	1899	32	.....	.....	85	690	.....	573	73	255	852	1,419	567

[1] Less than $500.
[2] Figures can not be shown without disclosing individual operations.
[3] Excluding statistics for two establishments, to avoid disclosure of individual operations.
[4] Excluding statistics for one establishment, to avoid disclosure of individual operations.
[5] 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.
[6] Figures not available.

TABLE II.—DETAIL STATEMENT FOR

	INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Wage earners. Number. Maximum month.	Wage earners. Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	**3,398**	**81,972**	**3,769**	**2,829**	**2,836**	**390**	**72,148**	**No 77,854**	**Je 67,561**	(1)	(1)	(1)	(1)	(1)	**357,837**
2	Artificial stone	16	85	17	8	1	2	57	Oc 72	Mh 45	83	83	.....	.....	.....	35
3	Baskets, and rattan and willow ware	3	102	4	1	.....	1	96	Je 181	Au 17	134	84	11	35	4	190
4	Bread and other bakery products	83	773	94	18	59	28	574	No 634	Fe 527	618	464	122	26	6	334
5	Brick and tile	71	1,500	56	67	19	5	1,353	Se 1,689	Fe 808	1,657	1,589	.....	68	.....	5,127
6	Brooms	6	32	8	2	1	.....	21	De [2] 24	Au 18	23	21	.....	2	.....	13
7	Canning and preserving	10	67	19	1	.....	1	46	Au 136	Ja [3]	195	33	112	22	28	51
8	Carriages and wagons and materials	35	508	40	22	18	4	424	Oc 441	Au 402	431	421	.....	10	.....	991
9	Cars and general shop construction and repairs by steam-railroad companies.	21	6,610	.....	70	219	13	6,308	De 6,751	Je 6,007	6,751	6,737	6	8	.....	4,928
10	Cars and general shop construction and repairs by street-railroad companies.	6	165	.....	9	3	1	152	Ja 164	Jy [2] 144	144	144	.....	.....	.....	208
11	Clothing, men's, including shirts	5	220	6	7	11	2	194	Mh 220	Jy 171	211	14	194	1	2	38
12	Coke	35	2,800	.....	83	120	17	2,580	No 2,899	Je 2,254	3,019	2,941	.....	78	.....	5,766
13	Confectionery	9	166	10	5	9	4	138	Oc 173	Mh 123	157	129	21	7	.....	174
14	Cooperage and wooden goods, not elsewhere specified.	4	100	3	6	2	3	86	Ja 93	Jy [2] 81	91	88	.....	3	.....	240
15	Copper, tin, and sheet-iron products	23	312	22	32	16	6	236	Se 268	Ja 202	236	225	.....	11	.....	33
16	Cordage and twine and jute and linen goods.	5	452	.....	11	7	7	427	Ja 502	No 390	402	198	102	47	55	1,700
17	Cotton goods, including cotton smallwares	51	13,041	.....	184	110	16	12,731	De 13,061	My 12,539	13,282	6,668	4,125	1,281	1,208	42,637
18	Fertilizers	42	1,473	12	89	129	10	1,233	Mh 2,785	Au 658	1,421	1,413	.....	8	.....	4,484
19	Flour-mill and gristmill products	72	315	84	26	32	5	168	Au [2] 183	Ja 159	193	192	.....	1	.....	3,559
20	Foundry and machine-shop products	102	6,462	67	191	269	37	5,898	No 6,529	Ap 5,234	6,580	6,470	1	109	.....	9,859
21	Furniture and refrigerators	5	69	4	4	3	.....	58	De 67	Au [2] 49	71	67	.....	4	.....	197
22	Gas, illuminating and heating	13	403	4	40	90	10	259	Au 292	Fe 215	268	268	.....	.....	.....	599
23	Hosiery and knit-goods	6	634	.....	15	6	2	611	De 667	Je 560	645	156	312	60	117	750
24	Ice, manufactured	45	469	26	67	27	6	343	Jy 517	De 193	339	333	.....	6	.....	6,117
25	Iron and steel, blast furnaces	19	4,325	.....	208	300	34	3,783	No 4,609	Je 3,318	4,513	4,483	.....	30	.....	106,189
26	Leather goods	11	112	7	12	11	2	80	No [2] 83	Je 76	84	76	3	4	1	97
27	Lime	15	458	7	24	13	3	411	Se 427	Mh 391	444	436	.....	8	.....	723
28	Lumber and timber products	1,819	25,927	2,387	654	440	37	22,409	De 24,390	Je 20,803	27,224	26,661	126	406	31	102,527
29	Marble and stone work	25	427	29	21	18	1	358	Ja 414	Jy 329	352	352	.....	.....	.....	787
30	Mattresses and spring beds	9	105	5	9	6	3	82	De 99	Ap [2] 67	99	78	15	6	.....	111
31	Oil, cottonseed, and cake	71	1,984	13	180	164	9	1,618	Oc 2,835	Jy 430	2,798	2,761	1	36	.....	17,215
32	Patent medicines and compounds and druggists' preparations.	18	72	19	10	9	2	32	Mh 36	Se 29	39	28	8	3	.....	.....
33	Pottery, terra-cotta, and fire-clay products.	21	478	19	18	14	2	425	Oc 583	My 333	565	540	.....	25	.....	1,193
34	Printing and publishing	274	1,955	299	163	307	69	1,117	De 1,162	Au 1,098	1,175	936	162	72	5	1,092
35	Stoves and furnaces, including gas and oil stoves.	10	407	2	31	9	4	361	Oc 397	Ja 329	375	368	.....	7	.....	542
36	Tobacco manufactures	27	192	31	6	2	.....	153	Je 160	Se 146	162	146	11	5	.....	.....
37	Turpentine and rosin	175	3,965	255	128	62	1	3,519	Je 3,860	Ja 2,831	3,693	3,655	.....	38	.....	384
38	All other industries [4]	236	4,807	220	407	330	43	3,807	.....	.....	.....	.....	.....	.....	.....	38,947

[1] No figures given for reasons explained in the Introduction.
[2] Same number reported for one or more other months.
[3] None reported for one or more other months.
[4] All other industries embrace—

Agricultural implements	3
Awnings, tents, and sails	3
Baking powders and yeast	1
Blacking and cleansing and polishing preparations	1
Boxes, fancy and paper	2
Brass and bronze products	3
Butter, cheese, and condensed milk	1
Cars, steam-railroad, not including operations of railroad companies	1
Cement	2
Charcoal	17
Coffee and spice, roasting and grinding	9
Coffins, burial cases, and undertakers' goods	3
Cordials and sirups	4
Dyeing and finishing textiles	1
Electrical machinery, apparatus, and supplies	1
Explosives	2
Flags, banners, regalia, society badges, and emblems	1
Flavoring extracts	1
Food preparations	3
Foundry supplies	1
Glass, cutting, staining, and ornamenting	1
Grease and tallow	1
Hand stamps and stencils and brands	1
Hats and caps, other than felt, straw, and wool	1
Ink, writing	1
Instruments, professional and scientific	1
Iron and steel, steel works and rolling mills	6

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	$173,180,038	$129,153,148	$4,108,956	$2,456,013	$27,284,266	$17,299,231	$66,143,287	$330,141	$909,513	$1,469,883	$9,151,858	$145,961,638	$62,519,120
2	51,397	62,301	4,445	1,600	21,422	198	29,220	1,312	450	2,000	1,654	88,907	59,489
3	56,069	43,748	1,200	140	27,135	240	11,664	.....	219	.....	3,150	50,680	38,776
4	898,413	1,527,364	34,923	58,028	247,653	24,065	1,048,712	20,154	6,527	.....	87,302	1,725,407	652,630
5	1,942,486	950,014	81,391	18,698	434,341	244,237	43,752	2,931	7,644	.....	117,020	1,135,134	847,145
6	21,108	50,633	1,560	300	9,755	307	35,454	1,336	146	.....	1,775	59,178	23,417
7	21,715	23,799	360	90	5,443	231	16,262	500	160	.....	753	24,867	8,374
8	751,944	605,045	26,324	18,469	194,087	10,422	292,609	12,718	5,120	1,456	43,840	683,880	380,849
9	4,732,077	7,528,405	105,582	207,064	3,372,284	104,239	3,670,318	225	7,215	17,261	44,217	7,528,405	3,753,848
10	266,247	195,126	7,976	1,325	96,192	4,408	78,131	.....	591	.....	6,443	195,126	112,527
11	216,494	295,182	10,695	9,544	47,615	1,848	201,107	4,118	1,243	.....	19,012	333,035	130,080
12	17,770,498	8,233,965	133,597	92,697	1,282,594	6,100,324	271,153	16,345	33,831	.....	303,424	8,842,512	2,471,035
13	121,499	430,417	6,900	10,564	40,585	4,211	345,263	7,875	1,631	.....	13,388	489,667	140,193
14	191,942	96,298	6,444	1,901	23,116	185	52,987	200	808	.....	10,657	100,358	47,186
15	438,054	639,502	37,792	13,131	132,364	1,974	408,828	8,947	3,840	.....	32,626	733,361	322,559
16	749,281	689,661	21,647	5,647	117,307	15,900	462,705	1,047	4,314	.....	61,094	695,910	217,305
17	30,954,016	19,829,579	362,070	97,488	3,454,147	445,568	13,927,679	.....	126,735	13,176	1,402,716	22,211,748	7,838,501
18	8,507,401	5,658,019	156,423	148,931	392,413	93,177	4,171,188	3,164	64,429	1,491	626,813	6,423,233	2,158,868
19	1,079,602	2,565,247	28,590	22,006	57,424	27,377	2,378,063	12,799	4,547	579	33,862	2,779,274	373,834
20	11,984,488	10,693,218	368,617	293,482	2,958,407	450,145	5,776,873	18,462	53,421	11,065	762,746	11,550,217	5,323,199
21	90,932	64,995	3,936	3,324	21,936	1,197	26,630	300	795	1,000	5,877	75,984	48,157
22	4,729,503	557,160	35,354	38,593	133,344	141,910	72,172	.....	34,869	278	100,640	687,145	473,063
23	627,282	508,184	22,180	6,020	124,096	10,653	303,002	622	1,818	.....	39,793	591,000	277,345
24	2,281,453	536,562	68,242	16,981	138,189	130,687	70,451	6,816	18,841	15	86,340	776,645	575,507
25	23,816,400	19,103,561	479,804	260,038	2,077,477	8,383,340	7,094,021	11,615	133,068	3,225	600,973	21,235,984	5,758,623
26	131,544	184,401	8,000	5,845	37,355	901	115,041	6,912	768	50	8,869	220,123	103,521
27	848,535	383,816	27,477	11,500	135,659	58,324	123,437	216	1,839	.....	25,364	425,692	243,931
28	24,442,461	21,486,509	806,903	361,403	7,258,751	59,067	9,085,572	52,586	183,396	1,236,890	2,441,941	26,057,662	16,913,023
29	679,631	441,666	36,872	15,026	168,424	19,850	163,073	5,607	3,696	1,800	27,318	492,979	310,056
30	238,785	296,375	12,636	8,140	35,681	2,804	211,271	3,873	840	.....	21,130	346,992	132,917
31	7,201,840	8,418,248	219,777	114,530	436,761	229,056	6,845,738	8,150	57,067	2,493	504,676	9,178,016	2,103,222
32	115,685	90,781	8,784	6,830	16,818	199	37,672	3,077	865	550	15,386	122,849	84,978
33	1,015,974	454,363	32,135	13,823	143,841	71,316	98,080	.....	3,190	.....	91,378	558,840	388,844
34	2,010,310	2,230,542	227,287	235,057	650,472	38,471	627,522	49,242	17,269	60,800	324,422	2,768,247	2,102,254
35	568,369	463,900	45,631	10,100	169,688	17,281	154,664	.....	2,706	23,500	40,330	501,348	329,403
36	98,447	172,355	6,900	1,720	65,541	332	66,490	5,328	15,856	49	10,139	194,259	127,437
37	1,396,587	1,818,862	90,793	34,597	905,855	568	485,224	.....	14,536	78,126	209,163	2,471,999	1,986,207
38	22,131,569	11,823,345	579,709	311,381	1,850,094	604,099	7,340,059	63,074	95,223	14,079	965,627	13,604,975	5,660,817

[1] All other industries embrace—Continued.

Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills	1
Iron and steel forgings	1
Jewelry	1
Leather, tanned, curried, and finished	1
Looking-glass and picture frames	1
Mineral and soda waters	114
Models and patterns, not including paper patterns	2
Oil, not elsewhere specified	2
Paint and varnish	3
Photo-engraving	2
Roofing materials	4
Saws	1
Shipbuilding, including boat building	4
Show cases	1
Slaughtering and meat packing	4
Stationery goods, not elsewhere specified	1
Surgical appliances and artificial limbs	1
Toys and games	1
Upholstering materials	1
Wall plaster	1
Wirework, including wire rope and cable	1
Wood distillation, not including turpentine and rosin	2
Wood preserving	1
Wood, turned and carved	11
Woolen, worsted, and felt goods, and wool hats	2

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

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

BIRMINGHAM.

	INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	Wage earners. 16 and over. Male.	Wage earners. 16 and over. Female.	Wage earners. Under 16.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horse-power.
1	**All industries**	**248**	**10,412**	**152**	**466**	**688**	**107**	**8,999**	**8,373**	**444**	**182**	**10,150**	**9,448**	**495**	**167**	**40**	**55,311**
2	Bread and other bakery products	14	400	12	11	32	12	333	220	101	12	359	237	109	7	6	162
3	Carriages and wagons and materials	7	100	8	4	4	.....	84	84	.....	.....	80	80	.....	.....	.....	59
4	Foundry and machine-shop products	41	2,955	25	82	146	21	2,681	2,630	.....	51	3,007	2,949	1	57	.....	3,032
5	Lumber and timber products	15	297	2	22	27	4	242	227	4	11	327	307	5	15	.....	1,620
6	Marble and stone work	4	48	5	4	1	.....	38	38	.....	.....	40	40	.....	.....	.....	87
7	Patent medicines and compounds and druggists' preparations.	8	31	10	3	6	.....	12	11	1	.....	14	13	1	.....	.....	.....
8	Printing and publishing	49	649	36	68	163	35	347	272	64	11	375	294	69	10	2	322
9	All other industries[1]	110	5,932	54	272	309	35	5,262	4,891	274	97	5,948	5,528	310	78	32	49,129

[1] All other industries embrace: Agricultural implements, 1; artificial stone, 2; awnings, tents, and sails, 1; blacking and cleansing and polishing preparations, 1; boxes, fancy and paper, 2; brass and bronze products, 3; brick and tile, 4; brooms, 2; cars and general shop construction and repairs by steam-railroad companies, 4; cars and general shop construction and repairs by street-railroad companies, 1; cement, 1; clothing, men's, including shirts, 2; coffee and spice, roasting and grinding, 3; coffins, burial cases, and undertakers' goods, 1; coke, 3; confectionery, 3; copper, tin, and sheet-iron products, 5; cordials and sirups, 3; cotton goods, including cotton small wares, 1; electrical machinery, apparatus, and supplies, 1; fertilizers, 1; flags, banners, regalia, society badges, and emblems, 1; flavoring extracts, 1; flour-mill and gristmill products, 2; food preparations, 1; foundry supplies, 1; furniture and refrigerators, 3; gas, illuminating and heating, 1; grease and tallow, 1; hand stamps and stencils and

MOBILE.

1	**All industries**	**126**	**2,828**	**109**	**136**	**180**	**41**	**2,362**	**2,240**	**76**	**46**	**2,472**	**2,346**	**79**	**47**	.....	**5,845**
2	Bread and other bakery products	12	122	15	.....	10	8	89	84	.....	5	94	89	.....	5	.....	88
3	Carriages and wagons and materials	4	46	5	.....	2	.....	39	39	.....	.....	41	41	.....	.....	.....	38
4	Confectionery	3	14	2	1	2	1	8	7	1	.....	8	7	1	.....	.....	.....
5	Flour-mill and gristmill products	5	44	5	3	10	2	24	24	.....	.....	24	24	.....	.....	.....	258
6	Foundry and machine-shop products	6	230	1	20	10	2	197	190	.....	7	198	191	.....	7	.....	471
7	Ice, manufactured	5	45	2	7	.....	.....	36	36	.....	.....	35	35	.....	.....	.....	834
8	Lumber and timber products	18	558	13	23	16	1	505	497	.....	8	556	547	.....	9	.....	2,319
9	Marble and stone work	3	33	1	4	1	1	26	26	.....	.....	26	26	.....	.....	.....	103
10	Printing and publishing	20	278	21	20	43	9	185	148	26	11	192	154	27	11	.....	218
11	Tobacco manufactures	10	122	11	4	2	.....	105	102	.....	3	104	101	.....	3	.....	.....
12	All other industries[2]	40	1,336	33	54	84	17	1,148	1,087	49	12	1,194	1,131	51	12	.....	1,516

[2] All other industries embrace: Awnings, tents, and sails, 2; baking powders and yeast, 1; brooms, 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, men's, including shirts, 1; coffee and spice, roasting and grinding, 4; cooperage and wooden goods, not elsewhere specified, 1; copper, tin, and sheet-iron products, 6; fertilizers, 1; gas, illuminating and heating, 2; glass, cutting, staining,

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

1	ANNISTON	39	2,352	23	72	79	11	2,167	1,727	273	167	2,210	1,762	279	103	66	9,310
2	BESSEMER	31	2,111	23	125	123	24	1,816	1,809	.....	7	2,214	2,205	.....	9	.....	15,120
3	GADSDEN	27	871	16	40	25	4	786	777	.....	9	891	881	.....	10	.....	1,524
4	MONTGOMERY	73	2,723	46	134	236	23	2,284	2,008	217	59	2,573	2,262	245	47	19	6,355
5	SELMA	35	974	28	55	68	10	813	780	9	24	928	891	10	27	.....	2,686

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.

BIRMINGHAM.

	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	$23,718,147	$21,549,129	$800,019	$635,095	$4,392,476	$3,568,448	$10,441,252	$101,671	$140,205	$85,523	$1,384,440		$24,128,214	$10,118,514
2	612,794	833,883	25,423	35,211	142,443	9,796	551,533	2,502	3,135	.....	63,840		912,372	351,043
3	77,522	120,576	4,400	2,780	53,311	2,177	48,828	6,480	677	.....	1,923		133,277	82,272
4	7,028,881	5,109,071	185,569	165,627	1,328,380	213,952	2,747,606	12,642	25,815	2,550	426,924		5,478,590	2,517,032
5	378,707	770,675	15,638	17,370	111,902	3,426	592,361	3,936	1,382	.....	24,570		814,558	218,771
6	35,838	83,433	4,760	936	23,307	2,052	46,215	1,425	271	1,500	2,967		97,741	49,474
7	22,325	37,816	3,164	4,325	8,055	55	13,131	1,539	255	550	6,742		60,584	47,398
8	706,550	1,016,462	118,724	115,296	247,700	15,308	285,135	15,546	5,050	41,448	171,655		1,153,540	853,097
9	14,855,530	13,577,213	442,341	293,550	2,477,282	3,321,682	6,156,443	57,601	103,020	39,475	685,819		15,477,552	5,999,427

brands, 1; hats and caps, other than felt, straw, and wool, 1; ice, manufactured, 5; ink, writing, 1; iron and steel, blast furnaces, 5; iron and steel forgings, 1; jewelry, 1; leather goods, 4; lime, 1; mattresses and spring beds, 2; mineral and soda waters, 6; models and patterns, not including paper patterns, 2; oil, cottonseed, and cake, 3; oil, not elsewhere specified, 2; paint and varnish, 2; photo-engraving, 1; pottery, terra-cotta, and fire-clay products, 3; roofing materials, 3; saws, 1; slaughtering and meat-packing, 1; stationery goods, not elsewhere specified, 1; stoves and furnaces, including gas and oil stoves, 2; surgical appliances and artificial limbs, 1; tobacco manufactures, 2; wall paper, 1; wirework, including wire rope and cable, 1.

MOBILE.

1	$5,250,102	$4,941,312	$193,259	$173,101	$1,199,328	$116,304	$2,822,547	$05,770	$46,136	$11,912	$312,895	$5,428,894	$2,490,043
2	86,101	273,520	.....	8,764	45,069	4,666	200,347	3,534	1,247	.....	9,902	305,722	100,709
3	43,240	51,715	.....	1,560	25,464	753	18,582	3,312	189	.....	1,855	57,487	38,152
4	9,305	26,474	1,000	1,600	2,873	589	17,634	900	95	.....	1,783	30,822	12,599
5	265,829	835,762	6,300	9,359	11,900	4,292	781,455	5,780	1,303	75	15,247	899,725	113,978
6	401,170	297,003	27,260	8,096	118,164	6,957	106,968	540	3,507	3,100	22,411	315,814	201,889
7	279,549	55,041	7,516	.....	14,990	20,268	6,168	.....	2,088	.....	4,015	89,809	63,443
8	1,031,993	841,053	32,578	15,222	202,428	8,049	484,250	20,330	7,955	.....	70,232	930,040	443,741
9	52,314	45,733	5,198	610	15,981	2,941	18,221	960	340	.....	1,482	52,747	31,585
10	271,047	352,062	25,566	52,045	115,300	8,323	96,781	8,475	2,259	8,087	34,620	414,029	308,925
11	67,999	115,498	5,100	1,720	45,199	187	42,118	3,468	9,612	.....	8,094	129,086	86,781
12	2,741,447	2,047,442	82,741	74,194	601,948	59,279	1,050,024	18,471	17,481	50	143,254	2,197,544	1,088,241

and ornamenting, 1; leather goods, 2; looking-glass and picture frames, 1; mattresses and spring beds, 2; mineral and soda waters, 5; oil, cottonseed, and cake, 1; patent medicines and compounds and druggists' preparations, 1; shipbuilding, including boat building, 3; upholstering materials, 1; wood preserving, 1.

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

1	$4,344,992	$4,140,507	$140,723	$68,939	$809,533	$497,134	$2,326,956	$26,041	$34,118	.....	$177,153	$4,332,890	$1,508,860
2	7,811,982	5,873,505	199,183	110,840	990,562	1,537,681	2,701,030	1,950	19,008	$5,280	307,311	6,106,098	1,866,787
3	986,844	1,396,219	44,905	21,589	354,592	14,882	888,669	2,871	6,820	6,210	55,672	1,525,091	621,540
4	5,234,285	4,788,194	195,558	156,998	1,003,476	132,937	2,890,580	32,384	52,851	2,676	320,734	5,442,287	2,418,770
5	1,721,792	2,204,394	61,852	52,742	348,754	67,253	1,527,770	10,639	14,635	15,320	105,420	2,382,249	787,226

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ARIZONA.

INDUSTRIES IN GENERAL.

General character of the territory.—Arizona (which was a territory at the time of the Thirteenth Census but has since become a state) had an area of 112,920 square miles, and a population in 1910 of 204,354, as compared with 122,931 in 1900 and 88,243 in 1890. It ranked forty-sixth among the 49 states and territories as regards population in 1910 and forty-seventh in 1900. Arizona is very rich in mineral deposits, particularly in copper, and the gold and silver mines are also productive of much wealth. The smelting and refining of copper is by far the largest single industry in the territory and reported 81.7 per cent of the total value of products in 1909. Thirty-one per cent of the entire population of the territory resided in incorporated cities and towns having a population of 2,500 or over, as compared with 15.9 per cent in 1900.

One of the large industries in Arizona is the Portland cement mines at Roosevelt, operated in connection with the Salt River irrigation project. The totals for this plant are not included in the statistics for the territory because the work is carried on by the United States Government. In 1909 this plant's capital was about $220,000; the average number of employees, 44; and the value of products, $214,132.

There are but two cities in the territory having a population of over 10,000—Tucson, with a population of 13,193, and Phoenix, with 11,134. Eliminating these two cities, only 19.1 per cent of the population resided in incorporated places of 2,500 or over. The density of population for the entire territory was 1.8 per square mile, the corresponding figure for 1900 being 1.1.

Importance and growth of manufactures.—The following table gives the more important figures relative to all classes of manufactures combined for the territory 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	311	169	154	84.0	9.7
Persons engaged in manufactures	7,202	5,217	(1)	38.0	.....
Proprietors and firm members	261	133	(1)	96.2	.....
Salaried employees	500	291	205	71.8	42.0
Wage earners (average number)	6,441	4,793	3,126	34.4	53.3
Primary horsepower	39,140	21,412	8,537	82.8	150.8
Capital	$32,873,000	$14,396,000	$9,518,000	128.3	51.2
Expenses	41,131,000	20,244,000	10,843,000	103.2	86.7
Services	6,303,000	4,441,000	2,556,000	41.9	73.7
Salaries	798,000	472,000	269,000	69.1	75.5
Wages	5,505,000	3,969,000	2,287,000	38.7	73.5
Materials	33,600,000	14,595,000	7,877,000	130.2	85.3
Miscellaneous	1,228,000	1,208,000	410,000	1.6	194.6
Value of products	50,257,000	28,083,000	20,439,000	79.0	37.4
Value added by manufacture (value of products less cost of materials)	16,657,000	13,488,000	12,562,000	23.5	7.4

[1] Figures not available.

In 1909 the territory of Arizona had 311 manufacturing establishments, which gave employment to an average of 7,202 persons during the year and paid out $6,303,000 in salaries and wages. Of the persons employed, 6,441 were wage earners. These establishments turned out products to the value of $50,257,000, to produce which materials costing $33,600,000 were utilized. The value added by manufacture was thus $16,657,000, 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 Arizona as a whole showed a much greater development during the five-year period 1904–1909 than during the period 1899–1904. While the number of establishments increased 84 per cent and the value of products 79 per cent from 1904 to 1909, the average number of wage earners increased only 34.4 per cent and the value added by manufacture 23.5 per cent. The comparatively low percentage of increase in value added by manufacture is due largely to the figures reported for the copper smelting and refining industry. 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 manufac-

turing expenses. As a result, the cost of materials used by smelters which are operated by mining companies may represent either the bare cost of mining, its market value at the smelters as though purchased from other producers, or an arbitrary cost placed upon it by the bookkeeping methods of the companies.

As pointed out in the Introduction, it would be improper to assume that manufactures increased in volume during the period 1904–1909 to the extent indicated by the 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 territory 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	**311**	**6,441**	**100.0**	**$50,257,000**	**100.0**	**$16,657,000**	**100.0**	**79.0**	**37.4**	**23.5**	**7.4**
Smelting and refining, copper	8	3,129	48.6	41,059,000	81.7	11,817,000	70.9	80.4	31.7	15.0	—5.9
Cars and general shop construction and repairs by steam-railroad companies	10	1,089	16.9	2,394,000	4.8	1,093,000	6.6	80.1	49.8	5.4	118.3
Lumber and timber products	23	839	13.0	1,419,000	2.8	1,082,000	6.5	.....	.....	.....	.....
Flour-mill and gristmill products	10	54	0.8	1,317,000	2.6	188,000	1.1	77.3	65.8	84.3	43.7
Printing and publishing	64	268	4.2	784,000	1.6	616,000	3.7	66.8	.....	69.7	.....
Butter, cheese, and condensed milk	11	58	0.9	538,000	1.1	150,000	0.9	101.5	80.4	94.8	196.2
Ice, manufactured	23	117	1.8	501,000	1.0	357,000	2.1	93.4	94.7	77.6	120.9
Bread and other bakery products	40	112	1.7	478,000	1.0	204,000	1.2	95.1	124.8	80.5	91.5
All other industries	122	775	12.0	1,767,000	3.5	1,150,000	6.9	.....	.....	.....	.....

[1] Percentages ase 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, in which they are arranged in the order of the value of products, call for brief consideration.

Smelting and refining, copper.—At the United States census of mines and quarries in 1902 Arizona ranked third in the gross value of the copper contents of the ore mined; and in 1909, according to the United States Geological Survey, there was taken from its mines 26.6 per cent of the total copper ore reported for the United States. The importance of the industry in the territory in its connection with manufactures may perhaps be understood better when it is considered that in 1909 the smelting and refining of copper gave employment to an average of 3,129 wage earners, or 48.6 per cent of the average number for all industries combined, and the value of its products amounted to $41,059,000, or 81.7 per cent of the total for the territory.

Cars and general shop construction and repairs by steam-railroad companies.—This industry represents the work done in the car shops operated by steam-railroad companies and is exclusive of minor repairs in roundhouses. The operations consist almost exclusively of repairs to the rolling stock and equipment. Employment was given to an average of 1,089 wage earners in 1909 and products to the value of $2,394,000 were reported.

Lumber and timber products.—While Arizona is not important among the states and territories for its lumber products, this industry gave employment to 839 wage earners, and the value of its products amounted to $1,419,000. The logging plants which produce the logs and bolts, as well as the mills which manufacture lumber, shingles, cooperage materials, or carry the manufacture further, producing finished lumber, sash, doors, blinds, interior finish, etc., are included under this classification.

Measured by value added by manufacture, the three leading industries held the same relative rank as when measured by value of products. Of the five other industries, printing and publishing becomes fourth in order instead of flour-mill and gristmill products, while the latter industry and butter, cheese, and condensed milk become seventh and eighth in order, and manufactured ice and bakery products go to fifth and sixth places, respectively.

In the flour-mill and gristmill industry, 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 or the number of establishments.

The table shows also the percentages of increase for these industries in respect to value of products and value added by manufacture. Butter, cheese, and condensed milk showed the greatest per cent of increase (101.5) from 1904 to 1909 for value of products, and also in value added by manufacture (94.8). There are some marked variations among the several

industries specified as regards the relative increases from 1899 to 1904 and from 1904 to 1909, respectively. For four industries the percentage of increase in the value of products was greater from 1904 to 1909 than from 1899 to 1904; for two industries it was smaller. The percentage of increase in value added by manufacture was greater for two industries and smaller for four.

In addition to the eight industries presented separately there are seven other industries each of which had a value of products in 1909 in excess of $100,000. 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, the comparable statistics for the different census years can not be presented on account of change in classification; and for others, the tables showing comparable statistics are limited to industries having in 1909 products valued at $400,000 or over. These industries are: Beet sugar; brick and tile; copper, tin, and sheet-iron products; foundry and machine-shop products; gas, illuminating and heating; liquors, malt; and marble and stone work.

Persons engaged in manufacturing industries.—The following table shows 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	7,202	7,119	83
Proprietors and officials	427	417	10
Proprietors and firm members	261	253	8
Salaried officers of corporations	51	50	1
Superintendents and managers	115	114	1
Clerks	334	299	35
Wage earners (average number)	6,441	6,403	38
16 years of age and over	6,404	6,366	38
Under 16 years of age	37	37	.....

The average number of persons engaged in manufactures during 1909 was 7,202. Of these, 6,441 were wage earners, the remainder being divided between proprietors and officials (427) and clerks (334). Corresponding figures for separate industries will be found in Table II.

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

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries	7,202	5.9	4.6	89.4
Bread and other bakery products	164	28.7	3.0	68.3
Butter, cheese, and condensed milk	75	13.3	9.3	77.3
Cars and general shop construction and repairs by steam-railroad companies	1,141	1.5	3.1	95.4
Flour-mill and gristmill products	*75*	*17.3*	*10.7*	*72.0*
Ice, manufactured	152	16.4	6.6	77.0
Lumber and timber products	911	5.0	2.9	92.1
Printing and publishing	408	17.9	16.4	65.7
Smelting and refining, copper	3,268	0.7	3.5	95.7
All other industries	1,008	17.1	6.1	76.9

Of the total number of persons engaged in all manufacturing industries, 5.9 per cent were proprietors and officials, 4.6 per cent clerks, and 89.4 per cent wage earners. In the bakery, the manufacturing of ice, and the printing and publishing industries the majority of the establishments are small, and the work is done to a large extent by the proprietors or their immediate representatives; therefore the proportion of persons engaged in these industries falling into the class of proprietors and officials is very much higher than for most other industries or all industries combined, being 28.7 per cent for bakery products, 16.4 per cent for manufactured ice, and 17.9 per cent for printing and publishing. The smallest proportion for this class (0.7 per cent) is shown for copper smelting and refining, as these establishments are large and of corporate ownership, for which proprietors are not reported.

The following table shows, 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 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 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	6,441	98.8	0.6	0.6
Bread and other bakery products	112	88.4	8.0	3.6
Butter, cheese, and condensed milk	*58*	*100.0*	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	1,089	99.4	.....	0.6
Flour-mill and gristmill products	54	100.0	.....	.....
Ice, manufactured	117	100.0	.....	.....
Lumber and timber products	839	99.6	0.1	0.2
Printing and publishing	268	89.9	5.2	4.8
Smelting and refining, copper	3,129	99.8	.....	0.2
All other industries	775	97.5	1.8	0.6

[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, 98.8 per cent of the average number of wage earners were males over 16 years of age. The proportion of females over 16 years and of persons of both sexes under that age was the same, six-tenths of 1 per cent. The largest proportion of women and children were employed in the bakery and printing and publishing industries.

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 table following 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	**7,202**	**100.0**	**5,217**	**100.0**	**38.0**
Proprietors and firm members	261	3.6	133	2.5	96.2
Salaried employees	500	6.9	291	5.6	71.8
Wage earners (average number)	6,441	89.4	4,793	91.9	34.4

Comparable figures are not obtainable for 1899. It will be noticed that there was a much greater per cent of increase in the proprietors and firm members and the salaried employees than in the number of wage earners.

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.)

This table indicates that for all industries combined the proportion of children employed under 16 years of age, though smaller than it was in 1899, has increased slightly since 1904. 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 98.8 per cent of all wage earners, as compared with 98.9 per cent in 1904 and 98 per cent in 1899.

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total	**6,441**	**100.0**	**4,793**	**100.0**	**3,126**	**100.0**
16 years of age and over	6,404	99.4	4,775	99.6	3,091	98.9
Male	6,366	98.8	4,742	98.9	3,064	98.0
Female	38	0.6	33	0.7	27	0.9
Under 16 years of age	37	0.6	18	0.4	35	1.1

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 48, is shown, for practically all of the important industries in the territory, 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.		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	6,093	88.5	556	53.3	392	55.6	164	46.1	5,537	94.5
February	6,024	87.5	545	52.3	402	57.0	143	40.2	5,479	93.5
March	6,003	87.2	547	52.4	431	61.1	116	32.6	5,456	93.1
April	6,048	87.8	592	56.8	450	63.8	142	39.9	5,456	93.1
May	6,439	93.5	846	81.1	552	78.3	294	82.6	5,593	95.5
June	6,869	99.7	1,018	97.6	670	95.0	348	97.8	5,851	99.9
July	6,888	100.0	1,043	100.0	687	97.4	356	100.0	5,845	99.8
August	6,845	99.4	986	94.5	705	100.0	281	78.9	5,859	100.0
September	6,640	96.4	997	95.6	693	98.3	304	85.4	5,643	96.3
October	6,634	96.3	1,016	97.4	705	100.0	311	87.4	5,618	95.9
November	6,452	93.7	993	95.2	686	97.3	307	86.2	5,459	93.2
December	6,360	92.3	935	89.6	664	94.2	271	76.1	5,425	92.6

For all industries combined, the month of lowest reported employment, March, showed 87.2 per cent as many wage earners as the month of the maximum employment, July. Excluding the lumber industry, in which employment is more or less seasonal, the minimum is 92.6 per cent of the maximum.

Prevailing hours of labor.—In the table following, 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.

It is evident from these figures that for the great majority of wage earners employed in the manufacturing industries of Arizona the prevailing hours of labor range from 54 to 60 a week, or from 9 to 10 a day. Only 10.5 per cent of the total were employed in establishments working less than 9 hours a day and 6.6 per cent were employed in establishments working more than 10 hours a day. This condition is due chiefly to the fact that 4,709, or 73.1 per cent of the total average number of wage earners and 88.1 per cent of those employed from 54 to 60 hours, were reported by steam-railroad repair shops, the copper smelters and refineries, and the lumber 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	**6,441**	**579**	**95**	**749**	**3,441**	**1,155**	**260**	**12**	**150**
Bread and other bakery products	112	14	.....	22	.....	28	29	3	16
Butter, cheese, and condensed milk	58	2	3	.....	6	1	46	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	1,089	133	92	528	13	211	112	.....	.....
Flour-mill and gristmill products	54	9	.....	16	.....	21	5	3	.....
Ice, manufactured	117	2	.....	6	16	1	47	6	39
Lumber and timber products	839	11	.....	7	.....	821	.....	.....	.....
Printing and publishing	268	212	.....	55	1	.....	.....	.....	.....
Smelting and refining, copper	3,129	.....	.....	.....	3,129	.....	.....	.....	.....
All other industries	775	196	.....	115	276	72	21	.....	95

Location of establishments.—The next table shows to what extent manufacturing in Arizona is centralized in the two cities of Phoenix and Tucson, the only cities having a population of 10,000 or over. (See Introduction.)

ITEM.	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	204,354	24,327	180,027	11.9	88.1
Number of establishments	311	92	219	29.6	70.4
Average number of wage earners	6,441	859	5,582	13.3	86.7
Value of products	50,256,694	3,503,762	46,752,932	7.0	93.0
Value added by manufacture	16,656,454	1,370,224	15,286,230	8.2	91.8

In 1909 only 7 per cent of the total value of products was reported from these two cities, and of the total number of wage earners but 13.3 per cent were employed in them.

Character of ownership.—The first table on page 42 shows conditions in respect to the 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.

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 39.2 per cent of the total number of establishments were in 1909 under corporate ownership, as against 60.7 per cent under all other forms. The corresponding figures for 1904 were 42 per cent and 58 per cent, respectively. Five years is too short a period to reveal any pronounced change in character of ownership. For all industries combined, as measured by value of products and value added by manufacture, corporations lost ground, relatively, as compared with individuals and firms.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909	311	6,441	$50,256,694	$16,656,454
1904	169	4,793	28,083,192	13,488,135
Individual:				
1909	141	306	1,055,203	548,537
1904	70	182	581,552	326,508
Firm:				
1909	48	388	895,816	645,625
1904	28	114	365,856	237,934
Corporation:				
1909 [1]	122	5,747	48,305,675	15,462,292
1904	71	4,497	27,135,784	12,923,693
Per cent of total:				
1909	100.0	100.0	100.0	100.0
1904	100.0	100.0	100.0	100.0
Individual:				
1909	45.3	4.8	2.1	3.3
1904	41.4	3.8	2.1	2.4
Firm:				
1909	15.4	6.0	1.8	3.9
1904	16.6	2.4	1.3	1.8
Corporation:				
1909 [1]	39.2	89.2	96.1	92.8
1904	42.0	93.8	96.6	95.8
Bread and other bakery products, 1909	40	112	$478,289	$203,800
Individual	33	94	414,184	171,850
Firm [2]	7	18	64,105	31,950
Per cent of total	100.0	100.0	100.0	100.0
Individual	82.5	83.9	86.6	84.3
Firm [2]	17.5	16.1	13.4	15.7
Flour-mill and gristmill products, 1909	10	54	$1,316,757	$188,158
Individual [3]	3	6	131,058	26,008
Corporation [1]	7	48	1,185,699	162,150
Per cent of total	100.0	100.0	100.0	100.0
Individual [3]	30.0	11.1	10.0	13.8
Corporation [1]	70.0	88.9	90.0	86.2
Ice, manufactured, 1909	23	117	$501,228	$357,642
Individual	3	6	34,636	29,443
Firm	3	13	50,115	30,291
Corporation	17	98	416,477	297,908
Per cent of total	100.0	100.0	100.0	100.0
Individual	13.0	5.1	6.9	8.2
Firm	13.0	11.1	10.0	8.5
Corporation	73.9	83.8	83.1	83.3
Lumber and timber products, 1909	23	839	$1,419,114	$1,082,074
Individual	10	15	57,144	28,939
Firm	3	5	23,144	10,158
Corporation [1]	10	819	1,338,825	1,042,977
Per cent of total	100.0	100.0	100.0	100.0
Individual	43.5	1.8	4.0	2.7
Firm	13.0	0.6	1.6	0.9
Corporation [1]	43.5	97.6	94.3	96.4
Printing and publishing, 1909	64	268	$784,487	$616,420
Individual	35	74	149,209	120,733
Firm	8	40	192,944	166,860
Corporation	21	154	442,334	328,827
Per cent of total	100.0	100.0	100.0	100.0
Individual	54.7	27.6	19.0	19.6
Firm	12.5	14.9	24.6	27.1
Corporation	32.8	57.5	56.4	53.3

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

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 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	311	6,441	$50,256,694	$16,656,454
1904	169	4,793	28,083,192	13,488,135
Less than $5,000:				
1909	117	129	273,045	186,124
1904	53	55	131,553	101,003
$5,000 and less than $20,000:				
1909	113	369	1,139,895	689,982
1904	65	252	702,212	461,652
$20,000 and less than $100,000:				
1909	55	675	2,519,424	1,424,581
1904	34	499	1,658,579	843,931
$100,000 and less than $1,000,000:				
1909	17	1,712	4,047,429	2,099,212
1904	10	1,638	2,828,867	1,806,350
$1,000,000 and over:				
1909	9	3,556	42,276,901	12,256,555
1904	7	2,349	22,761,981	10,275,199
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	37.6	2.0	0.5	1.1
1904	31.4	1.1	0.5	0.7
$5,000 and less than $20,000:				
1909	36.3	5.7	2.3	4.1
1904	38.5	5.3	2.5	3.4
$20,000 and less than $100,000:				
1909	17.7	10.5	5.0	8.6
1904	20.1	10.4	5.9	6.3
$100,000 and less than $1,000,000:				
1909	5.5	26.6	8.1	12.6
1904	5.9	34.2	10.1	13.4
$1,000,000 and over:				
1909	2.9	55.2	84.1	73.6
1904	4.1	49.0	81.1	76.2
Average per establishment:				
1909	.....	21	$161,597	$53,558
1904	.....	28	166,173	79,811
Bread and other bakery products, 1909	40	112	$478,289	$203,800
Less than $5,000	11	3	21,972	7,997
$5,000 and less than $20,000	23	53	240,410	101,026
$20,000 and less than $100,000	6	56	215,907	94,777
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	27.5	2.7	4.6	3.9
$5,000 and less than $20,000	57.5	47.3	50.3	49.6
$20,000 and less than $100,000	15.0	50.0	45.1	46.5
Average per establishment	.....	3	$11,957	$5,095
Flour-mill and gristmill products, 1909	10	54	$1,316,757	$188,158
$20,000 and less than $100,000 [1]	5	12	210,911	39,487
$100,000 and less than $1,000,000	5	42	1,105,846	148,671
Per cent of total	100.0	100.0	100.0	100.0
$20,000 and less than $100,000 [1]	50.0	22.2	16.0	21.0
$100,000 and less than $1,000,000	50.0	77.8	84.0	79.0
Average per establishment	.....	5	$131,676	$18,816
Ice, manufactured, 1909	23	117	$501,228	$357,642
Less than $5,000	3	4	10,984	6,286
$5,000 and less than $20,000	10	28	105,204	74,106
$20,000 and less than $100,000	10	85	385,040	277,250
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	13.0	3.4	2.2	1.8
$5,000 and less than $20,000	43.5	23.9	21.0	20.7
$20,000 and less than $100,000	43.5	72.6	76.8	77.5
Average per establishment	.....	5	$21,793	$15,550
Lumber and timber products, 1909	23	839	$1,419,114	$1,082,074
Less than $5,000	10	14	19,054	13,747
$5,000 and less than $20,000	7	19	86,455	43,758
$100,000 and less than $1,000,000 [2]	6	806	1,313,605	1,024,569
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	43.5	1.7	1.3	1.3
$5,000 and less than $20,000	30.4	2.3	6.1	4.0
$100,000 and less than $1,000,000 [2]	26.1	96.1	92.6	94.7
Average per establishment	.....	36	$61,701	$47,047
Printing and publishing, 1909	64	268	$784,487	$616,420
Less than $5,000	30	42	74,431	63,048
$5,000 and less than $20,000	26	108	263,424	210,516
$20,000 and less than $100,000	8	118	446,632	342,856
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	46.9	15.7	9.5	10.2
$5,000 and less than $20,000	40.6	40.3	33.6	34.2
$20,000 and less than $100,000	12.5	44.0	56.9	55.6
Average per establishment	.....	4	$12,258	$9,632

[1] Includes the group "Less than $5,000."
[2] Includes the group "$20,000 and less than $100,000."

This table shows that in 1909, of the 311 establishments, only 9, or 2.9 per cent, had a value of product exceeding $1,000,000. Of this number, 8 were establishments engaged in copper smelting and refining. These establishments, however, in that year had an average of 3,556 wage earners, or 55.2 per cent of the total number in all establishments reported, 84.1 per cent of the total value of products, and 73.6 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 very considerable proportion (37.6 per cent) of the total number of establishments, but the value of their products amounted to only 0.5 per cent of the total.

The five years from 1904 to 1909 was rather too short a period to show extensive changes, and no clear tendencies can be seen as to the relative importance of the classes.

The table shows, however, that when the size of establishment is measured by value of products the flour-mill and gristmill industry is conducted chiefly in large establishments, while the bakery, printing and publishing, manufactured ice, and lumber industries are conducted in smaller 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 average number of wage earners employed. The next table shows such a classification for all industries combined and for eight important industries, and gives not only the number of establishments falling into each group but also the average number of wage earners employed.

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	311	36	201	44	10	6	6	6	2	.....
Bread and other bakery products	40	7	29	4	.....	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk	11	.....	7	3	1	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	10	.....	.....	2	2	3	2	1	.....	.....
Flour-mill and gristmill products	10	.....	6	4	.....	.....	.....	.....	.....	.....
Ice, manufactured	23	.....	18	4	1	.....	.....	.....	.....	.....
Lumber and timber products	23	3	14	1	1	2	.....	2	.....	.....
Printing and publishing	64	9	41	13	1	.....	.....	.....	.....	.....
Smelting and refining, copper	8	.....	.....	.....	.....	.....	3	3	2	.....
All other industries	122	17	86	13	4	1	1	.....	.....	.....
	AVERAGE NUMBER OF WAGE EARNERS.									
All industries	6,441	.....	464	476	302	484	1,049	2,123	1,543	.....
Bread and other bakery products	112	.....	64	48	.....	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk	58	.....	9	22	27	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	1,089	.....	.....	31	81	280	270	427	.....	.....
Flour-mill and gristmill products	54	.....	16	38	.....	.....	.....	.....	.....	.....
Ice, manufactured	117	.....	54	40	23	.....	.....	.....	.....	.....
Lumber and timber products	839	.....	33	13	30	117	.....	646	.....	.....
Printing and publishing	268	.....	106	137	25	.....	.....	.....	.....	.....
Smelting and refining, copper	3,129	.....	.....	.....	.....	.....	536	1,050	1,543	.....
All other industries	775	.....	182	147	116	87	243	.....	.....	.....
	PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.									
All industries	100.0	.....	7.2	7.4	4.7	7.5	16.3	33.0	24.0	.....
Bread and other bakery products	100.0	.....	57.1	42.9	.....	.....	.....	.....	.....	.....
Butter, cheese, and condensed milk	100.0	.....	15.5	37.9	46.6	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	100.0	.....	.....	2.8	7.4	25.7	24.8	39.2	.....	.....
Flour-mill and gristmill products	100.0	.....	29.6	70.4	.....	.....	.....	.....	.....	.....
Ice, manufactured	100.0	.....	46.2	34.2	19.7	.....	.....	.....	.....	.....
Lumber and timber products	100.0	.....	3.9	1.5	3.6	13.9	.....	77.0	.....	.....
Printing and publishing	100.0	.....	39.6	51.1	9.3	.....	.....	.....	.....	.....
Smelting and refining, copper	100.0	.....	.....	.....	.....	.....	17.1	33.6	49.3	.....
All other industries	100.0	.....	23.5	19.0	15.0	11.2	31.4	.....	.....	.....

The per cent distribution of the number of establishments is not shown in this table; of the 311 establishments reported for all industries, 11.6 per cent employed no wage earners; 64.6 per cent, 1 to 5; and 14.1 per cent, 6 to 20. The most numerous single group consists of the 201 establishments employing from 1 to 5 wage earners, and the next of the 44 establishments employing from 6 to 20 wage earners. There were 8 establishments that employed over 250 wage earners, and 2 that employed over 500.

Of the total number of wage earners, 57 per cent were in establishments employing over 250 wage earners. The single group having the largest number of employees was the group employing from 251 to

500 wage earners. This group employed 2,123, or 33 per cent of the total. Two of the individual industries listed in this table but not in the preceding one, namely, cars and general shop construction and repairs by steam-railroad companies and copper smelting and refining, are industries in which large establishments do most of the business, as appears from the classification according to the number of wage earners.

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	**1.9**	**13.4**	**81.7**	**3.0**
Bread and other bakery products	1.4	23.7	68.1	6.7
Butter, cheese, and condensed milk	4.3	10.1	76.7	8.9
Cars and general shop construction and repairs by steam-railroad companies	3.2	40.8	54.3	1.7
Flour-mill and gristmill products	2.1	3.4	91.1	3.4
Ice, manufactured	7.9	31.8	40.9	19.3
Lumber and timber products	7.9	47.5	25.0	19.6
Printing and publishing	16.0	35.7	25.8	22.5
Smelting and refining, copper	0.9	8.5	89.3	1.3
All other industries	8.0	39.1	41.5	11.4

This table shows that, for all industries combined, 81.7 per cent of the total expenses were incurred for materials, 15.3 per cent for services—that is, salaries and wages—and but 3 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries, the expense for materials, for example, falling from 91.1 per cent in the flour-mill and gristmill industry to 25 per cent and 25.8 per cent in the lumber and timber products and printing and publishing industries, respectively.

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 from 1904 to 1909 was in power generated by steam engines, since both water power and power generated by gas engines showed a decrease. However, a slight increase in the number of gas engines is shown, there being 31 such engines in 1909, as compared with 28 in 1904, although the total horsepower developed by them decreased from 1,392 in 1904 to 1,285 in 1909. The figures also show that the practice of renting electric power is on the increase, 8.5 per cent of the total power being rented electric in 1909, as compared with eight-tenths of 1 per cent in 1904, and four-tenths of 1 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 increasing rapidly, the horsepower of such motors increasing from 496 in 1899 to 4,656 in 1904 and to 11,786 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	**445**	**184**	**158**	**39,140**	**21,412**	**8,537**	**100.0**	**100.0**	**100.0**
Owned	209	184	158	35,626	20,997	8,499	91.0	98.1	99.6
Steam	174	148	131	34,193	18,828	7,653	87.4	87.9	89.6
Gas	31	28	19	1,285	1,392	371	3.3	6.5	4.3
Water wheels	4	8	8	129	267	400	0.3	1.2	4.7
Other	.....	.....	.....	19	510	75	(2)	2.4	0.9
Rented	236	(3)	(3)	3,514	415	38	9.0	1.9	0.4
Electric	236	(3)	(3)	3,314	165	38	8.5	0.8	0.4
Other	.....	.....	.....	200	250	.....	0.5	1.2	.....
Electric motors	**496**	**120**	**30**	**15,100**	**4,821**	**534**	**100.0**	**100.0**	**100.0**
Run by current generated by establishment	260	120	30	11,786	4,656	496	78.1	96.6	92.9
Run by rented power	236	(3)	(3)	3,314	165	38	21.9	3.4	7.1

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

Fuel.—Closely related to the question of kind of power employed is that of 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	**7,561**	**60,256**	**463,233**	**14,558**	**610,594**	**1,865**
Bread and other bakery products	.....	197	10	1,426	29	120
Butter, cheese, and condensed milk	.....	107	.....	112	7,113	.....
Cars and general shop construction and repairs by steam-railroad companies	.....	11,114	48	.....	50,114	.....
Flour-mill and gristmill products	.....	790	.....	170	2,349	.....
Ice, manufactured	.....	5,848	.....	99	41,800	.....
Lumber and timber products	.....	127	.....	.....	4,089	.....
Printing and publishing	.....	55	.....	54	41	1,000
Smelting and refining, copper	7,459	40,543	463,016	1,494	420,148	.....
All other industries	102	1,475	159	11,203	84,911	745

NOTE.—In addition, there were 20 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 value of materials and products which do not appear on the general schedules. Data for three important industries in Arizona are here presented.

Flour-mill and gristmill products.—This industry has increased 77.3 per cent in value of products since 1904, the total value for 1909 being $1,316,757.

The tabular statement following gives the quantity and value of products for the last two census years:

PRODUCT.	QUANTITY.		VALUE.	
	1909	1904	1909	1904
All products	.....	.....	**$1,316,757**	**$743,124**
Wheat flour:				
White.....barrels..	79,275	72,459	528,648	419,299
Graham.....barrels..	251	439	1,596	2,812
Corn meal.....barrels..	1,902	913	9,121	4,225
Barley meal.....pounds..	8,892,033	8,773,000	150,570	136,846
Feed.....tons..	14,550	3,380	507,506	102,012
Offal.....tons..	3,586	3,435	105,159	77,930
All other products	.....	.....	14,157	.....

Measured by value of products white flour and feed together constituted 78.7 per cent of the total value of products in 1909, the proportion for white flour alone being 40.1 per cent. Barley meal constituted 11.4 per cent of the total value of products and offal 8 per cent. While white flour increased only 9.4 per cent in quantity from 1904 to 1909, it increased 26.1 per cent in value.

Feed shows the largest rate of increase both in quantity and in value, 330.5 per cent and 397.5 per cent, respectively. Graham flour was the only item showing a decrease from 1904 to 1909.

Lumber and timber products.—This industry was the second largest in the territory as regards capital invested, and third in average number of wage earners and value of products.

The following is a statement of the quantity of products of the sawmills, by classes, reported at the censuses of 1909 and 1899:

	QUANTITY.	
	1909	1899
Rough lumber.....M feet b. m..	62,731	36,182
Lath.....thousands..	7,816	2,040
Shingles.....thousands..	583	350

The rough lumber sawed in 1909 amounted to 62,731 M feet, as compared with 36,182 M feet in 1899, a gain of 26,549 M feet, or 73.4 per cent. The lath output increased, in 1909, 5,776,000 over 1899, a gain of 283.1 per cent; and as reported for the same years shingles gained 233,000, or 66.6 per cent.

Printing and publishing.—The progress of the newspaper and periodical branch of the industry is indicated in the following table, which shows the number and aggregate circulation per issue of the different classes of publications for the years 1909, 1904, and 1899:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total	73	60	47	79,808	66,589	34,054
Daily	19	16	10	33,328	22,354	11,456
Sunday	9	4	4	17,400	10,273	(1)
Weekly	41	38	32	24,675	30,286	22,392
All other classes	4	2	1	4,405	3,676	206

[1] Included in circulation of dailies.

The total number of publications and total circulation increased during the decade and during each of the five-year periods. The gain in number during the earlier five-year period, 1899–1904, was 13, or 27.7 per cent, and that in circulation 32,535, or 95.5 per cent. During the later five-year period, 1904–1909, the number increased 13, or 21.7 per cent, but the circulation only increased 13,219, or 19.9 per cent. The class of publications having the largest circulation in 1909 was the dailies, while in 1904 and in 1899 the weeklies had the largest circulation. The dailies also show the most pronounced absolute increase in circulation from 1904 to 1909, while the circulation of the weeklies decreased during the same period. Of the 19 daily newspapers published in 1909, 8, with an aggregate circulation of 17,840, were morning papers. In 1909 all of the publications were in the English language, except 6 weeklies, with an aggregate circulation of 3,000, which were printed in Spanish.

Laundries.—Statistics for steam laundries are not included in the general tables. In 1909 there were 13 such establishments in the territory of Arizona, 3 of which were in Phoenix and 2 in Tucson.

The most common form of organization was the individual, with seven establishments, the general partnerships having two and the incorporated companies four establishments. Five establishments had receipts for the year's business of $5,000 but less than $20,000; eight, of $20,000 but less than $100,000.

The following statement summarizes the statistics:

Number of establishments	13
Persons engaged in the industry	309
Proprietors and firm members	11
Salaried employees	15
Wage earners (average number)	283
Primary horsepower	298
Capital	$193,351
Expenses	303,206
Services	169,747
Materials	74,153
Miscellaneous	59,306
Amount received for work done	369,282

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	280	96.2	July	280	96.2
February	290	99.7	August	266	91.4
March	286	98.3	September	268	92.1
April	291	100.0	October	283	97.3
May	290	99.7	November	285	97.9
June	282	96.9	December	291	100.0

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

KIND.	Number of engines or motors.	Horsepower.
Primary power, total		298
Owned—Steam	12	283
Rented—Electric	2	15

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

KIND.	Unit.	Quantity.
Anthracite coal	Tons	620
Bituminous coal	Tons	1,357
Wood	Cords	1,282
Oil	Barrels	3.782
Gas	1,000 feet	1,000

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

Number of establishments	4
Persons engaged in the industry	8
Proprietors and firm members	5
Wage earners (average number)	3
Primary horsepower	108
Capital	$22,400
Expenses	41,018
Services	1,660
Materials	[1] 38,879
Miscellaneous	479
Value of products	[1] 46,159

[1] Includes estimate of all grain ground.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
TERRITORY—All industries	**1909**	**311**	**7,202**	**261**	**500**	**6,441**	**39,140**	**$32,873**	**$798**	**$5,505**	**$33,600**	**$50,257**	**$16,657**
	1904	**169**	**5,217**	**133**	**291**	**4,793**	**21,412**	**14,396**	**472**	**3,969**	**14,595**	**28,083**	**13,488**
	1899	**154**	.....	.....	**205**	**3,126**	**8,537**	**9,518**	**269**	**2,287**	**7,877**	**20,439**	**12,562**
Bread and other bakery products	1909	40	164	45	7	112	10	133	6	96	274	478	204
	1904	16	91	24	1	66	.....	85	(1)	53	132	245	113
	1899	8	47	10	2	35	.....	34	2	23	50	109	59
Butter, cheese, and condensed milk	1909	11	75	1	16	58	350	240	22	51	388	538	150
	1904	5	39	2	7	30	203	180	7	22	190	267	77
	1899	7	33	4	14	15	101	73	6	9	122	148	26
Cars and general shop construction and repairs by steam-railroad companies.	1909	10	1,141	.....	52	1,089	892	677	77	976	1,301	2,394	1,093
	1904	7	1,198	.....	39	1,159	481	523	54	961	292	1,329	1,037
	1899	7	590	.....	14	576	215	430	21	437	412	887	475
Flour-mill and gristmill products	1909	10	75	4	17	54	784	674	26	42	1,129	1,317	188
	1904	9	50	.....	14	36	465	404	18	24	641	743	102
	1899	9	.....	.....	11	36	527	210	9	20	377	448	71
Ice, manufactured	1909	23	152	9	26	117	2,509	1,080	28	112	144	501	357
	1904	13	97	12	13	72	1,199	420	12	55	58	259	201
	1899	9	67	11	12	44	609	220	10	31	42	133	91
Lumber and timber products	1909	23	911	30	42	839	2,053	2,342	106	639	337	1,419	1,082
	1904	[2] 9	576	8	26	542	2,338	1,469	56	413	208	1,037	829
	1899	17	.....	.....	23	381	890	632	34	267	192	619	427
Printing and publishing	1909	64	408	51	89	268	221	680	104	232	168	784	616
	1904	50	269	37	43	189	94	397	51	161	107	470	363
	1899	[2] 32	182	28	15	139	70	187	18	74	46	237	191
Smelting and refining, copper	1909	8	3,268	.....	139	3,129	29,042	21,487	310	2,776	29,242	41,059	11,817
	1904	7	2,456	.....	107	2,349	15,649	9,341	218	2,050	12,487	22,762	10,275
	1899	9	1,728	.....	80	1,648	5,731	7,266	141	1,277	6,371	17,287	10,916
All other industries	1909	122	1,008	121	112	775	2,310	5,560	119	581	617	1,767	1,150
	1904	53	441	50	41	350	932	1,577	56	230	480	971	491
	1899	56	.....	.....	34	252	.....	457	28	149	265	571	306

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

Phoenix	1909	57	432	58	70	304	609	$1,258	$69	$242	$864	$1,467	$603
Tucson	1909	35	625	28	42	555	1,403	902	57	512	1,270	2,037	767

[1] Less than $500.

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

TABLE II.—DETAIL STATEMENT FOR

	INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Wage earners. Number. Maximum month.	Wage earners. Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	**311**	**7,202**	**261**	**166**	**299**	**35**	**6,441**	**Jy 6,888**	**Mh 6,003**	(1)	(1)	(1)	(1)	(1)	**39,140**
2	Artificial stone	14	48	19	4	.....	.....	25	No 36	Ja[2] 17	42	42	.....	.....	.....	2
3	Bread and other bakery products	40	164	45	2	1	4	112	De 115	Ja[2] 112	116	103	9	4	.....	19
4	Brick and tile	21	126	28	.....	.....	.....	98	Oc 141	Au 59	178	178	.....	.....	.....	100
5	Butter, cheese, and condensed milk	11	75	1	9	4	3	58	Je 67	Ja 52	56	56	.....	.....	.....	350
6	Cars and general shop construction and repairs by steam-railroad companies.	10	1,141	.....	17	34	1	1,089	Au 1,140	Fe 988	1,100	1,094	.....	6	.....	892
7	Cars and general shop construction and repairs by street-railroad companies.	4	10	.....	.....	.....	.....	10	Ja[2] 11	Ap[2] 9	10	10	.....	.....	.....	5
8	Confectionery	3	21	3	1	4	4	9	Se[2] 10	Ja[2] 8	14	11	3	.....	.....	7
9	Copper, tin, and sheet-iron products	7	43	8	.....	.....	1	34	No[2] 37	Jy[2] 30	37	37	.....	.....	.....	4
10	Flour-mill and gristmill products	10	75	4	9	7	1	54	Au 62	My[2] 50	53	53	.....	.....	.....	784
11	Foundry and machine-shop products	10	80	7	6	3	.....	64	Ja 78	Au[2] 59	65	65	.....	.....	.....	136
12	Gas, illuminating and heating	8	33	.....	6	5	2	20	Ja[2] 20	Fe[2] 19	20	20	.....	.....	.....	153
13	Ice, manufactured	23	152	9	16	9	1	117	Jy 165	Ja 76	100	100	.....	.....	.....	2,509
14	Leather goods	4	21	5	1	.....	.....	15	Jy[2] 18	Fe[2] 12	18	18	.....	.....	.....	2
15	Lumber and timber products	23	911	30	16	20	6	839	Jy 1,043	Fe 545	997	994	1	2	.....	2,953
16	Marble and stone work	4	275	8	2	18	.....	247	Mh 290	De 213	229	229	.....	.....	.....	1,300
17	Printing and publishing	64	408	51	22	58	9	268	De 287	Mh 259	285	256	15	14	.....	221
18	Smelting and refining, copper	8	3,268	.....	24	112	3	3,129	Fe 3,252	No 3,018	3,057	3,050	.....	7	.....	29,042
19	Tobacco manufactures	11	58	10	2	7	.....	39	Ja 47	Jy 4	45	35	10	.....	.....	.....
20	All other industries[3]	36	293	33	29	17	.....	214	.....	.....	.....	.....	.....	.....	.....	601

[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—

Beet sugar	1	Electrical machinery, apparatus, and supplies	1	Furniture and refrigerators	1
Carriages and wagons and materials	1	Fancy articles, not elsewhere specified	1	Gas and electric fixtures and lamps and reflectors	1
Canning and preserving	2	Food preparations	1	Hand stamps and stencils and brands	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. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	16 and over. Male.	16 and over. Female.	Under 16.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	PHOENIX	57	432	58	25	34	11	304	290	7	7	321	307	7	7	.....	669
2	TUCSON	35	625	23	16	23	3	555	546	8	1	578	569	8	1	.....	1,403

THE TERRITORY, 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	$32,872,935	$41,131,324	$398,348	$399,793	$5,505,183	$5,788,487	$27,811,753	$58,757	$214,427	$18,796	$935,780	$50,256,694	$16,656,454
2	19,086	33,247	450	.....	10,058	30	19,553	420	51	1,400	685	42,816	23,233
3	133,057	402,879	2,450	3,220	95,674	12,106	262,383	12,174	2,058	.....	12,814	478,289	203,800
4	129,620	92,779	.....	.....	55,083	23,382	3,504	600	588	.....	8,722	117,448	90,562
5	240,469	505,740	15,440	6,470	50,929	16,748	371,342	260	1,668	387	42,496	538,427	150,337
6	677,180	2,393,930	35,662	41,365	976,289	50,859	1,249,859	.....	4,409	.....	35,487	2,393,930	1,093,212
7	32,643	18,630	.....	.....	9,430	308	7,966	.....	176	700	50	18,630	10,356
8	23,698	25,650	1,000	1,200	5,430	1,118	14,190	1,040	160	.....	1,512	28,050	12,742
9	61,050	120,764	.....	520	31,980	888	81,300	2,628	511	.....	2,937	143,516	61,328
10	673,985	1,238,428	18,000	8,149	41,964	20,163	1,108,436	4,800	4,595	.....	32,321	1,316,757	188,158
11	252,051	116,459	8,570	3,080	46,554	7,161	39,723	2,310	2,391	.....	6,670	119,632	72,748
12	577,982	101,117	7,562	4,765	19,658	40,526	6,579	.....	4,558	.....	17,469	137,400	90,295
13	1,079,907	350,758	21,060	6,692	111,711	118,965	24,621	.....	10,243	.....	57,466	501,228	357,642
14	29,303	63,552	1,200	.....	13,273	35	45,693	1,630	280	.....	1,441	73,854	28,126
15	2,342,117	1,345,679	63,100	43,158	638,857	15,782	321,258	820	16,628	8,061	238,015	1,419,114	1,082,074
16	210,358	265,883	6,000	15,600	214,818	8,227	19,835	120	509	.....	774	335,050	306,988
17	679,943	650,048	32,921	71,463	232,246	18,004	149,973	25,457	5,606	7,431	107,757	784,487	616,420
18	21,486,563	32,755,170	130,020	180,171	2,775,523	5,387,328	23,854,232	.....	128,416	.....	299,480	41,059,240	11,817,080
19	47,489	57,263	3,120	5,300	15,047	100	23,260	1,029	4,764	817	3,826	72,211	48,851
20	4,176,434	592,448	51,793	8,640	159,159	66,667	208,046	5,469	26,816	.....	65,858	676,615	401,902

[8] All other industries embrace—Continued.

Lime	2	Models and patterns, not including paper patterns	1	Pottery, terra-cotta, and fire-clay products	1
Liquors, malt	2	Patent medicines and compounds and druggists' preparations	1	Soap	1
Mineral and soda waters	18				

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	$1,258,006	$1,200,338	$32,386	$37,052	$242,350	$54,504	$809,196	$12,043	$9,955	$7,624	$85,228	$1,467,142	$603,442
2	901,954	1,937,249	28,258	28,412	511,959	55,968	1,213,870	11,104	6,517	2,024	79,137	2,036,620	766,782

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ARKANSAS.

INDUSTRIES IN GENERAL.

General character of the state.—Arkansas, with a gross area of 53,335 square miles, of which 810 represent water surface, ranks twenty-sixth in size among the 49 states and territories of continental United States. Its population in 1910 was 1,574,449, as compared with 1,311,564 in 1900 and 1,128,211 in 1890. It ranked twenty-fifth in population both in 1910 and in 1900. The density of population of the state was 30 per square mile in 1910, the corresponding figure for 1900 being 25.

No city in the state has a population of over 50,000, although five cities—Little Rock, Fort Smith, Pine Bluff, Hot Springs and Argenta—each had a population exceeding 15,000 in 1910. Of the entire population of the state, 12.[illegible] per cent resided in cities and incorporated towns having a population of 2,500 or over in 1910, as against 8.5 per cent in 1900.

The railroad facilities of Arkansas are good, except in the mountainous regions of the north central and west central sections. In general, the principal railroads traversing the state are those connecting the Gulf cities on the south with the large cities of the North Central states. The state has a number of navigable rivers which have been important factors in its industrial development. Arkansas contains large deposits of bituminous and semianthracite coal, which are accessible for industrial purposes, and its extensive timber areas provide abundant material for the lumber and timber products industry, which is by far the most important branch of manufactures in the state.

Importance and growth of manufactures.—Although Arkansas is comparatively unimportant as a manufacturing state, its manufactures have shown marked increases in recent years. In 1849 the 261 manufacturing establishments reported gave employment to an average of 842 wage earners, representing four-tenths of 1 per cent of the total population of the state. In 1909 an average of 44,982 wage earners were employed, representing 2.9 per cent of the total population. During this period of 60 years the gross value of products per capita of the entire population increased from $2.56 to $47.58.

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, with the percentages of increase:

	NUMBER OR AMOUNT.			PER CENT OF INCREASE.	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments	2,925	1,907	1,746	53.4	9.2
Persons engaged in manufactures	51,730	37,557	(1)	37.7	.....
Proprietors and firm members	3,455	2,140	(1)	61.4	.....
Salaried employees	3,293	2,328	1,549	41.5	50.3
Wage earners (average number)	44,982	33,089	31,525	35.9	5.0
Primary horsepower	173,088	109,509	79,560	58.1	37.6
Capital	$70,174,000	$46,306,000	$25,385,000	51.5	82.4
Expenses	64,830,000	45,301,000	32,116,000	43.1	41.1
Services	22,574,000	16,854,000	11,446,000	33.9	47.2
Salaries	3,461,000	2,310,000	1,262,000	49.8	83.0
Wages	19,113,000	14,544,000	10,184,000	31.4	42.8
Materials	34,935,000	21,799,000	18,288,000	60.3	19.2
Miscellaneous	7,321,000	6,648,000	2,382,000	10.1	179.1
Value of products	74,916,000	53,865,000	39,888,000	39.1	35.0
Value added by manufacture (value of products less cost of materials)	39,981,000	32,066,000	21,600,000	24.7	48.4

[1] Figures not available.

In 1909 the state of Arkansas had 2,925 manufacturing establishments, which gave employment to an average of 51,730 persons during the year and paid out $22,574,000 in salaries and wages. Of the persons employed, 44,982 were wage earners.

These establishments turned out products to the value of $74,916,000, to produce which materials costing $34,935,000 were used. The value added by manufacture was thus $39,981,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

The relative importance and growth of the leading manufacturing industries of the state are shown in the next table. It should be borne in mind, in considering the returns presented in 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.

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	2,925	44,982	100.0	$74,916,000	100.0	$39,981,000	100.0	39.1	35.0	24.7	48.5
Lumber and timber products	1,697	32,932	73.2	40,640,000	54.2	26,340,000	65.9	27.0	20.2	15.7	48.2
Oil, cottonseed, and cake	44	1,086	2.4	7,789,000	10.4	1,784,000	4.5	57.7	54.9	141.1	−38.0
Flour-mill and gristmill products	113	312	0.7	5,615,000	7.5	756,000	1.9	51.7	34.2	38.7	7.1
Cars and general shop construction and repairs by steam-railroad companies	16	3,249	7.2	4,154,000	5.5	2,395,000	6.0	35.0	46.9	39.4	29.2
Printing and publishing	295	981	2.2	2,082,000	2.8	1,546,000	3.9	44.3	42.3	37.7	44.5
Carriages and wagons and materials	58	973	2.2	1,664,000	2.2	844,000	2.1	115.5	39.1	98.1	74.6
Bread and other bakery products	133	310	0.7	1,177,000	1.6	500,000	1.3	68.9	436.2	31.6	484.6
Foundry and machine-shop products	42	447	1.0	1,051,000	1.4	620,000	1.6	58.3	48.2	38.7	52.6
Furniture and refrigerators	20	680	1.5	975,000	1.3	496,000	1.2	16.6	259.2	−2.2	242.6
Ice, manufactured	49	352	0.8	820,000	1.1	613,000	1.5	88.0	127.0	60.5	126.0
Cooperage and wooden goods, not elsewhere specified	9	504	1.1	761,000	1.0	411,000	1.0	14.8	177.4	70.5	197.5
Wood, turned and carved	25	383	0.9	612,000	0.8	289,000	0.7	14.6	635.3	−13.2	825.0
Brick and tile	42	585	1.3	601,000	0.8	433,000	1.1	−24.1	185.0	−27.2	164.4
Leather goods	14	92	0.2	456,000	0.6	173,000	0.4	.....	.....	.....	.....
Copper, tin, and sheet-iron products	18	113	0.3	404,000	0.5	186,000	0.5	231.1	.....	135.4	.....
Marble and stone work	28	148	0.3	354,000	0.5	227,000	0.6	45.1	18.4	30.5	41.5
Canning and preserving	44	292	0.6	279,000	0.4	98,000	0.2	.....	[illegible]	.....	.....
Mattresses and spring beds	6	94	0.2	263,000	0.4	107,000	0.3	220.	[illegible]	74.4	44.4
Gas, illuminating and heating	5	48	0.1	219,000	0.3	129,000	0.3	−22	[illegible]	38.3	106.9
Confectionery	11	107	0.2	217,000	0.3	102,000	0.3	−2	[illegible]	14.6	107.0
All other industries	256	1,294	2.9	4,783,000	6.4	1,932,000	4.8	.....	.....	.....	.....

[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.

Although one industry predominates greatly 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 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 includes logging operations, sawmills, planing mills, and establishments manufacturing wooden packing boxes, and gave employment in 1909 to an average of 32,932 wage earners, representing 73.2 per cent of the total number of wage earners employed in all the manufacturing industries of the state. It comprised 1,697 establishments, or 58 per cent of the total number of manufacturing establishments, and reported products valued at $40,640,000, or 54.2 per cent of the total value of all manufactured products of the state. This classification does not include the operations of custom sawmills, which are usually small, the statistics for which are shown separately on page 63. Many of the mills of Arkansas are small portable outfits used at certain seasons of the year for sawing logs cut in the process of clearing land for agricultural purposes.

If the number of establishments engaged in industries such as cooperage, the turning and carving of wood, and the furniture industry is added to the number reported for the lumber industry, the total number of woodworking establishments in 1909 becomes 1,751, representing 59.9 per cent of the total number of manufacturing establishments for the state. These combined industries gave employment to an average of 34,499 wage earners, or 76.7 per cent of the total number employed in all manufacturing industries, and reported products amounting to $42,988,000, or 57.4 per cent of the total value of the manufactured products of the state.

Oil, cottonseed, and cake.—The statistics presented include those for all establishments engaged primarily in extracting oil from cotton seed. This industry was second in importance among the industries of the state in each of the three census years, 1909, 1904, and 1899. In 1909 the industry gave employment to 1,086 wage earners and reported products valued at $7,789,000. The total value of products increased 55.9 per cent from 1899 to 1904 and 57.7 per cent from 1904 to 1909, while the number of establishments increased from 20 to 42 during the earlier period and from 42 to 44 during the later period. In 1909 Arkansas occupied sixth place among the states in the value of its crude cottonseed products, and seventh place in 1904. At both censuses it ranked sixth in the quantity of seed crushed.

Flour-mill and gristmill products.—This industry ranked third in the state in 1909 when measured by value of products. In that year it gave employment to 312 wage earners, and its products were valued at $5,615,000. Because of the comparatively simple processes involved in this industry, 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 classification does not include custom flour mills and gristmills, statistics for which are shown separately on page 63.

Cars and general shop construction and repairs by steam-railroad companies.—This branch of manufactures represents the work done in the car shops of steam-railroad companies, and is practically confined to repairs to the rolling stock and equipment. The statistics do not include minor repairs made in roundhouses. This industry gave employment to an average of 3,249 wage earners, holding second place in this respect in the state.

Printing and publishing.—Under this classification are included in Arkansas all establishments engaged in job printing and the printing and publishing of books, newspapers, and periodicals. This industry, which included 295 establishments, the second largest number reported for any manufacturing industry in the state, employed an average of 981 wage earners in 1909, and reported products valued at $2,082,000.

Carriages and wagons and materials.—This industry shows an increase of $892,000, or 115.5 per cent, in value of products from 1904 to 1909.

This table shows also the percentages of increase for these leading industries in value of products and value added by manufacture where these statistics are comparable. The manufacture of copper, tin, and sheet-iron products, the carriage and wagon, and the mattress and spring-bed industries showed remarkable increases both in gross value of products and in value added by manufacture during the period 1904 to 1909. For the same period the brick and tile and manufactured-gas industries decreased both in value of products and in value added by manufacture, while the confectionery industry decreased in value of products and the furniture and the wood turning and carving industries decreased in value added by manufacture.

For the period 1899 to 1904 the cottonseed-products industry decreased in value added by manufacture, whereas the bakery-products, furniture, manufactured-ice, cooperage, wood turning and carving, brick and tile, manufactured-gas, and confectionery industries increased largely both in value of products and in value added by manufacture.

In addition to the 20 industries presented separately in the table, there are 13 other industries in the state each of which reported in 1909 a value of products in excess of $100,000. These are included under the head of "All other industries" in the table, because in some cases the operations of individual establishments would be disclosed if they were shown separately; in other cases, the returns do not present properly the true condition of the industry, for the reason that it is more or less interwoven with one or more other industries; and in still other cases, because comparable statistics for the different census years can not be presented either on account of changes in classification or because the figures are not available. These industries are: Awnings, tents, and sails; butter, cheese, and condensed milk; clothing, men's, including shirts; cotton goods, including cotton small wares; explosives; fertilizers; lime; liquors, malt; mineral and soda waters; patent medicines and compounds and druggists' preparations; coffee and spice, roasting and grinding; rice, cleaning and polishing; and wood preserving. Figures for 1909, however, for the following industries may be found in Table II: Butter, cheese, and condensed milk; clothing, men's, including shirts; lime; patent medicines and compounds and druggists' preparations; and rice, cleaning and polishing.

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	**51,730**	**50,701**	**1,029**
Proprietors and officials	4,922	4,849	73
Proprietors and firm members	3,455	3,389	66
Salaried officers of corporations	438	432	6
Superintendents and managers	1,029	1,028	1
Clerks	1,826	1,620	206
Wage earners (average number)	44,982	44,232	750
16 years of age and over	44,457	43,763	694
Under 16 years of age	525	469	56

The average number of persons engaged in manufactures during 1909 was 51,730, of whom 44,982 were wage earners. Of the remainder, 4,922 were proprietors and officials and 1,826 were clerks. Corresponding figures for individual industries will be found in Table II, page 66.

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 10 important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries	**51,730**	**9.5**	**3.5**	**87.0**
Bread and other bakery products	491	33.2	3.7	63.1
Carriages and wagons and materials	1,126	10.5	3.1	86.4
Cars and general shop construction and repairs by steam-railroad companies	3,464	2.5	3.7	93.8
Flour-mill and gristmill products	549	31.7	14.5	56.8
Foundry and machine-shop products	503	13.3	7.3	79.4
Furniture and refrigerators	766	5.4	5.9	88.8
Ice, manufactured	458	15.3	7.9	76.9
Lumber and timber products	36,662	7.9	2.3	89.8
Oil, cottonseed, and cake	1,350	7.9	11.6	80.4
Printing and publishing	1,672	29.1	12.3	58.7
All other industries	4,620	15.0	5.9	79.1

Of the total number of persons engaged in all manufacturing industries, 9.5 per cent were proprietors and officials, 3.5 per cent clerks, and 87 per cent wage earners. The highest percentage of proprietors and officials shown for any individual industry (33.2) is that for the bakeries. In this industry and 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 who fall into the class of proprietors and officials is very much higher than in most other industries or in all industries combined.

On account of the large average number of wage earners to an individual establishment in the furniture and refrigerator, lumber and timber products, steam-railroad repair shop, and cottonseed-oil industries, these industries show the smallest proportion of proprietors and officials.

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 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	**44,982**	**97.3**	**1.5**	**1.2**
Bread and other bakery products	310	82.6	12.3	5.2
Carriages and wagons and materials	973	98.9	.....	1.1
Cars and general shop construction and repairs by steam-railroad companies	3,249	100.0	.....	.....
Flour-mill and gristmill products	312	98.7	0.3	1.0
Foundry and machine-shop products	447	99.6	.....	0.4
Furniture and refrigerators	680	93.1	2.8	4.1
Ice, manufactured	352	100.0	.....	.....
Lumber and timber products	32,932	99.0	0.1	0.9
Oil, cottonseed, and cake	1,086	100.0	.....	.....
Printing and publishing	981	75.9	20.8	3.3
All other industries	3,660	85.2	10.9	4.0

[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, 97.3 per cent of the average number of wage earners were males 16 years of age and over; 1.5 per cent, females 16 years of age and over; and 1.2 per cent, children under 16 years of age. The largest proportions of female wage earners reported for any of the industries shown separately in the above table, 20.8 per cent and 12.3 per cent, were for printing and publishing and for the bakeries, respectively. Children formed 5.2 per cent of the total number of wage earners in the bakeries, and 4.1 per cent in the furniture 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 following table makes this comparison according to occupational status:

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				
	1909		1904		Per cent of increase, 1904-1909.
	Number.	Percent distribution.	Number.	Percent distribution.	
Total	**51,730**	**100.0**	**37,557**	**100.0**	**37.7**
Proprietors and firm members	3,455	6.7	2,140	5.7	61.4
Salaried employees	3,293	6.4	2,328	6.2	41.5
Wage earners (average number)	44,982	87.0	33,089	88.1	35.9

Comparable figures are not obtainable for 1899. The table shows a greater percentage of increase in the number of proprietors and firm members than in the other two classes. The proportion of proprietors and firm members and of salaried employees was slightly larger in 1909 than in 1904, while that of wage earners was slightly smaller. 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.	Percent distribution.	Number.	Per cent distribution.
Total	**44,982**	**100.0**	**33,089**	**100.0**	**31,525**	**100.0**
16 years of age and over	44,457	98.8	32,567	98.4	30,907	98.0
Male	43,763	97.3	32,066	96.9	30,483	96.7
Female	694	1.5	501	1.5	424	1.3
Under 16 years of age	525	1.2	522	1.6	618	2.0

This table indicates that for all industries combined there has been both an actual and a proportional decrease during the last 10 years in the employment of children under 16 years of age. Little change is shown in the proportions of adult male and female wage earners, both classes having made actual increases during the decade. In 1909 males 16 years of age and over formed

97.3 per cent of all wage earners, as compared with 96.9 per cent in 1904 and 96.7 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, and also the percentage which the number reported for each month is of the greatest number reported for any month. In Table II, page 66, are shown, for practically all 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.

There was comparatively little fluctuation in employment from month to month. The number of wage earners in such seasonal industries as canning and preserving and the manufacture of cottonseed oil are not sufficiently large to greatly influence the totals for the state.

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January	41,295	82.9	July	44,840	90.0
February	41,500	83.3	August	47,500	95.4
March	42,845	86.0	September	49,582	99.6
April	42,391	85.1	October	49,802	100.0
May	41,416	83.2	November	48,550	97.5
June	42,384	85.1	December	47,683	95.7

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	**44,982**	**1,249**	**1,320**	**3,401**	**1,039**	**34,931**	**1,556**	**1,166**	**320**
Bread and other bakery products	310	27	.....	16	.....	157	66	31	13
Brick and tile	585	.....	2	37	.....	546	.....	.....	.....
Canning and preserving	202	18	.....	.....	.....	236	5	18	15
Carriages and wagons and materials	973	10	.....	34	180	746	3	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	3,249	.....	.....	2,304	92	643	186	.....	24
Confectionery	107	3	.....	1	.....	96	7	.....	.....
Cooperage and wooden goods, not elsewhere specified	504	.....	.....	.....	.....	504	.....	.....	.....
Copper, tin, and sheet-iron products	113	58	19	18	3	15	.....	.....	.....
Flour-mill and gristmill products	312	71	2	4	3	120	24	79	.....
Foundry and machine-shop products	447	2	.....	145	16	284	.....	.....	.....
Furniture and refrigerators	680	3	46	3	61	567	.....	.....	.....
Ice, manufactured	352	.....	5	.....	.....	12	74	47	214
Leather goods	92	4	.....	42	14	32	.....	.....	.....
Lumber and timber products	32,932	484	1,130	382	515	29,329	925	167	.....
Marble and stone work	148	16	.....	38	.....	94	.....	.....	.....
Mattresses and spring beds	94	8	.....	25	7	54	.....	.....	.....
Oil, cottonseed, and cake	1,086	.....	.....	.....	.....	180	82	802	22
Printing and publishing	981	419	49	182	87	237	3	4	.....
Wood, turned and carved	383	.....	.....	7	39	337	.....	.....	.....
All other industries	1,342	126	67	163	22	733	181	18	32

It is evident from these figures that for the great majority of wage earners employed in the manufacturing industries of Arkansas the prevailing hours of labor were 60 a week, 15.5 per cent of the total being employed in establishments where the hours were less than 60 a week, and only 6.8 per cent being employed in establishments where they were more than 60 a week.

It will be noted that in most of the industries the employment was confined mainly to a week of 60 hours. Practically all the wage earners in the cottonseed-oil and manufactured-ice industries, however, were employed in establishments where the prevailing hours were more than 60 a week, while for a large number of the wage earners in the printing and publishing industry and the manufacture of copper, tin, and sheet-iron products the prevailing hours of labor were less than 54 per week.

Location of establishments.—The next table shows the extent to which the manufactures of Arkansas are carried on 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 10,000 inhabitants and 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	1,574,449	110,590	1,463,859	7.0	93.0
	1900	1,311,564	61,390	1,250,174	4.7	95.3
Number of establishments.	1909	2,925	339	2,586	11.6	88.4
	1899	1,746	165	1,581	9.5	90.5
Average number of wage earners.	1909	44,982	7,082	37,900	15.7	84.3
	1899	31,525	3,064	28,461	9.7	90.3
Value of products	1909	$74,916,367	$18,693,769	$56,222,598	25.0	75.0
	1899	39,887,578	6,320,887	33,566,691	15.8	84.2
Value added by manufacture.	1909	39,981,455	8,331,722	31,649,733	20.8	79.2
	1899	21,599,533	3,102,228	18,497,305	14.4	85.6

In 1909, 25 per cent of the total value of products was reported from cities having over 10,000 inhabitants, and 15.7 per cent of the average number of wage earners were employed in such cities. The figures indicate that during the past 10 years this class of cities has gained decidedly, relatively speaking, in industrial importance, as compared with the remainder of the state. This change is due largely to the difference between the composition of the group in 1909 and in 1899. In 1910 the group of cities having 10,000 inhabitants and over consisted of Argenta, Fort Smith, Hot Springs, Little Rock, and Pine Bluff. In 1900 Hot Springs had less than 10,000 inhabitants and Argenta had not been incorporated, so that for 1899 these cities are not included among the cities for which a special presentation is made. Much of the industrial activity outside of this group of cities is the result of the development of the lumber industry of the state.

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

CITY.	1910	1900
Little Rock	45,941	38,307
Fort Smith	23,975	11,587
Pine Bluff	15,102	11,496
Hot Springs	14,434	9,973
Argenta	11,138	.....

The relative importance in manufactures of each of the five cities having a population of 10,000 and 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
Little Rock	2,017	1,971	1,397	$6,881,662	$4,689,787	$3,379,030
Argenta	2,157	(1)	(1)	4,841,661	(1)	(1)
Fort Smith	1,455	1,049	677	3,739,246	2,329,454	1,401,320
Pine Bluff [2]	1,118	1,425	990	2,386,630	2,499,814	1,540,537
Hot Springs	335	239	94	844,570	597,029	190,667

[1] Not incorporated in 1900.
[2] 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.

The cities of Little Rock, Fort Smith, and Hot Springs showed increases in the average number of wage earners and in value of products, both from 1899 to 1904 and from 1904 to 1909. Pine Bluff increased in both respects from 1899 to 1904, but decreased from 1904 to 1909. The percentages of increase were generally greater from 1899 to 1904 than from 1904 to 1909. The city of Argenta was not incorporated in 1900, and since the totals for the city are shown in 1909 for the first time, comparative figures are not available.

The largest percentage of increase in value of products and average number of wage earners from 1899 to 1904, 213.1 per cent and 154.3 per cent, is shown for Hot Springs. This city also shows the greatest percentage of increase in number of wage earners from 1904 to 1909, 40.2, but Fort Smith shows the greatest percentage of increase in value of products, 60.5, due chiefly to the establishment of such new industries as the manufacture of brick and tile, carriages and wagons and materials, furniture, and canning and preserving. From 1904 to 1909 the value of the manufactured products of Fort Smith increased 60.5 per cent, and the average number of wage earners employed there 38.7 per cent. During this latter period Little Rock, the largest and most important city in the state, showed an increase of 46.7 per cent in value of products and of 2.3 per cent in the average number of wage earners, while Pine Bluff showed a decrease of 4.5 per cent in value of products and of 21.5 per cent in number of wage earners.

In Little Rock in 1909 the cottonseed-oil mills, the lumber industry, and printing and publishing were the most important; in Argenta, the steam-railroad repair shops and flour mills and gristmills; in Fort Smith, the manufacture of furniture and refrigerators and of carriages and wagons; in Pine Bluff, the lumber industry and cottonseed-oil mills; and in Hot Springs, the lumber industry and bakeries.

The statistics for that part of Texarkana which lies in Arkansas are included with those for the outside districts in the table on page 55. The following statement presents the totals for the entire city and for the parts situated in Arkansas and in Texas, respectively:

	Total for city.	Texarkana, Ark.	Texarkana, Tex.
Population	15,445	5,655	9,790
Number of establishments	47	21	26
Persons engaged in manufactures	1,063	240	823
Proprietors and firm members	40	22	18
Salaried employees	148	45	103
Wage earners (average number)	875	173	702
Primary horsepower	2,902	1,335	1,567
Capital	$1,792,436	$398,387	$1,394,049
Expenses	2,405,671	983,468	1,422,203
Services	575,548	109,173	466,375
Salaries	156,519	34,593	121,926
Wages	419,029	74,580	344,449
Materials	1,671,127	822,017	849,110
Miscellaneous	158,996	52,278	106,718
Value of products	2,646,521	1,052,087	1,594,434
Value added by manufacture (value of products less cost of materials)	975,394	230,070	745,324

The leading industries of Texarkana, Ark., are the manufacture of flour-mill and gristmill products and of cottonseed oil and cake, and of Texarkana, Tex., the cooperage shops and the steam-railroad repair shops.

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 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, 21.9 per cent of the total number of establishments were in 1909 under corporate ownership, as against 78.1 per cent under all other forms. The corresponding figures for 1904 were 27.2 per cent and 72.8 per cent, respectively. In 1909 the establishments operated by corporations, however, reported 74.2 per cent of the total value of products, as against 25.8 per cent for those under all other forms of ownership, while in 1904 the corresponding figures were 71.9 per cent and 28.1 per cent, respectively. The greatest decrease in relative numerical importance from 1904 to 1909 is shown for the establishments operated by corporations, while the largest decrease in relative importance as measured by value of products is shown for establishments operated by firms, which reported 13.8 per cent of the total value of products in 1904 and 11.7 per cent in 1909.

The 15 establishments in 1909 reported under other forms of ownership, consisted of 2 wooden-box factories, 3 butter factories, 1 canning factory, 1 planing mill, and 2 printing and publishing establishments, reported as cooperative, and 6 printing and publishing establishments which were operated by fraternal and religious societies.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909	2,925	44,982	$74,916,307	$39,981,455
1904	1,907	33,089	53,864,394	32,065,048
Individual:				
1909	1,406	7,453	10,472,470	6,422,606
1904	846	4,277	7,684,593	4,526,814
Firm:				
1909	804	5,835	8,773,033	5,368,602
1904	534	4,400	7,410,401	4,696,112
Corporation:				
1909	640	31,637	55,585,992	28,142,542
1904	518	24,335	38,724,017	22,819,709
Other:				
1909	15	57	84,872	47,705
1904	9	17	44,483	22,413
Per cent of total:				
1909	100.0	100.0	100.0	100.0
1904	100.0	100.0	100.0	100.0
Individual:				
1909	50.1	16.6	14.0	16.1
1904	44.4	12.9	14.3	14.1
Firm:				
1909	27.5	13.0	11.7	13.4
1904	28.0	13.5	13.8	14.6
Corporation:				
1909	21.9	70.3	74.2	70.4
1904	27.2	73.5	71.9	71.2
Other:				
1909	0.5	0.1	0.1	0.1
1904	0.5	0.1	0.1	0.1
Carriages and wagons and materials, 1909	58	973	$1,664,467	$844,811
Individual	19	119	155,646	105,785
Firm	18	164	277,761	165,027
Corporation	21	690	1,231,060	573,999
Per cent of total	100.0	100.0	100.0	100.0
Individual	32.8	12.2	9.4	12.5
Firm	31.0	16.9	16.7	19.5
Corporation	36.2	70.9	74.0	67.9
Flour-mill and gristmill products, 1909	113	312	$5,615,486	$756,634
Individual	52	73	638,400	127,157
Firm	33	51	804,086	112,602
Corporation	28	188	4,172,901	516,875
Flour-mill and gristmill products, 1909—Continued.				
Per cent of total	100.0	100.0	100.0	100.0
Individual	46.0	23.4	11.4	16.8
Firm	29.2	16.3	14.3	14.9
Corporation	24.8	60.3	74.3	68.3
Foundry and machine-shop products, 1909	42	447	$1,050,906	$620,211
Individual	14	74	157,350	93,737
Firm	12	38	78,745	56,562
Corporation	16	335	814,811	469,912
Per cent of total	100.0	100.0	100.0	100.0
Individual	33.3	16.6	15.0	15.1
Firm	28.6	8.5	7.5	9.1
Corporation	38.1	74.9	77.5	75.8
Lumber and timber products, 1909	1,697	32,932	$40,640,327	$26,340,660
Individual	854	5,798	5,502,457	4,002,419
Firm	536	4,737	5,842,431	4,045,088
Corporation	304	22,393	29,289,463	18,290,502
Other	3	4	5,976	2,651
Per cent of total	100.0	100.0	100.0	100.0
Individual	50.3	17.6	13.5	15.2
Firm	31.6	14.4	14.4	15.4
Corporation	17.9	68.0	72.1	69.4
Other	0.2	(1)	(1)	(1)
Oil, cottonseed, and cake, 1909	44	1,086	$7,788,885	$1,783,911
Individual	3	90	921,443	273,054
Corporation	41	996	6,867,442	1,510,857
Per cent of total	100.0	100.0	100.0	100.0
Individual	6.8	8.3	11.8	15.3
Corporation	93.2	91.7	88.2	84.7
Printing and publishing, 1909	295	981	$2,082,365	$1,546,742
Individual	194	412	697,547	545,670
Firm	66	193	398,252	294,601
Corporation	27	354	952,061	676,699
Other	8	22	34,505	29,772
Per cent of total	100.0	100.0	100.0	100.0
Individual	65.8	42.0	33.5	35.3
Firm	22.4	19.7	19.1	19.0
Corporation	9.2	36.1	45.7	43.7
Other	2.7	2.2	1.7	1.9

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

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 establishments for all industries combined and for certain 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 individual industries figures are given for 1909 only.

This table shows that in 1909 of the 2,925 manufacturing establishments only four, or one-tenth of 1 per cent, had products exceeding $1,000,000 in value. The four establishments belonging to this group, however, employed an average of 3,362 wage earners, or 7.5 per cent of the total number in all establishments, and reported 7.3 per cent of the total value of products

and 6.4 per cent of the total value added by manufacture. On the other hand, the very small establishments—that is, those having products valued at less than $5,000—constituted a considerable proportion (47.5 per cent) of the total number of establishments, but the value of their products amounted to only 4.1 per cent of the total. More than one-half of the total value of products was reported by establishments having a product valued at not less than $100,000.

The decreases between 1904 and 1909 in the average value of products per establishment from $28,246 to $25,612, in the average value added by manufacture from $16,814 to $13,669, and in the average number of wage earners per establishment from 17 to 15 seem to indicate a tendency toward the establishment of small plants in the state, but may be the result of a more thorough canvass of the smaller establishments in 1909 than in 1904.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909	2,925	44,982	$74,916,367	$39,981,455
1904	1,907	33,089	53,864,394	32,065,048
Less than $5,000:				
1909	1,390	3,501	3,056,457	2,169,126
1904	741	1,301	1,792,050	1,248,236
$5,000 and less than $20,000:				
1909	943	7,315	9,579,083	6,326,701
1904	628	4,242	6,541,347	4,301,842
$20,000 and less than $100,000:				
1909	418	10,832	18,400,828	10,127,304
1904	412	10,490	18,053,803	10,357,168
$100,000 and less than $1,000,000:				
1909	170	19,972	38,436,426	18,786,422
1904[1]	126	17,056	27,477,194	16,157,802
$1,000,000 and over:				
1909	4	3,362	5,443,573	2,571,902
1904	.....	.....	.....	.....
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	47.5	7.8	4.1	5.4
1904	38.9	3.9	3.3	3.9
$5,000 and less than $20,000:				
1909	32.2	16.3	12.8	15.8
1904	32.9	12.8	12.1	13.4
$20,000 and less than $100,000:				
1909	14.3	24.1	24.6	25.3
1904	21.6	31.7	33.5	32.3
$100,000 and less than $1,000,000:				
1909	5.8	44.4	51.3	47.0
1904[1]	6.6	51.5	51.0	50.4
$1,000,000 and over:				
1909	0.1	7.5	7.3	6.4
1904	.....	.....	.....	.....
Average per establishment:				
1909	.....	15	$25,612	$13,669
1904	.....	17	28,246	16,814
Carriages and wagons and materials, 1909	58	973	$1,664,467	$844,811
Less than $5,000	15	19	45,562	27,811
$5,000 and less than $20,000	24	193	266,346	171,206
$20,000 and less than $100,000[2]	19	761	1,352,559	645,794
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	25.9	2.0	2.7	3.3
$5,000 and less than $20,000	41.4	19.8	16.0	20.3
$20,000 and less than $100,000[2]	32.8	78.2	81.3	76.4
Average per establishment	.....	17	$28,698	$14,566
Flour-mill and gristmill products, 1909	113	312	$5,615,486	$756,634
Less than $5,000	21	22	65,125	11,350
$5,000 and less than $20,000	52	71	496,186	97,678
$20,000 and less than $100,000	30	78	1,189,176	196,496
$100,000 and less than $1,000,000[1]	10	141	3,864,999	451,110
Flour-mill and gristmill products, 1909—Continued.				
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	18.6	7.1	1.2	1.5
$5,000 and less than $20,000	46.0	22.8	8.8	12.9
$20,000 and less than $100,000	26.5	25.0	21.2	26.0
$100,000 and less than $1,000,000[1]	8.8	45.2	68.8	59.6
Average per establishment	.....	3	$49,695	$6,696
Foundry and machine-shop products, 1909	42	447	$1,050,906	$620,211
Less than $5,000	11	11	23,500	16,671
$5,000 and less than $20,000	22	136	229,995	158,110
$20,000 and less than $100,000	6	85	284,868	159,866
$100,000 and less than $1,000,000	3	215	512,543	285,564
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	26.2	2.5	2.2	2.7
$5,000 and less than $20,000	52.4	30.4	21.9	25.5
$20,000 and less than $100,000	14.3	19.0	27.1	25.8
$100,000 and less than $1,000,000	7.1	48.1	48.8	46.0
Average per establishment	.....	11	$25,022	$14,767
Lumber and timber products, 1909	1,697	32,932	$40,840,327	$26,340,660
Less than $5,000	840	2,761	1,760,550	1,334,797
$5,000 and less than $20,000	521	5,195	5,360,761	3,877,463
$20,000 and less than $100,000	239	7,676	10,670,030	6,715,275
$100,000 and less than $1,000,000[1]	97	17,300	22,848,986	14,413,125
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	49.5	8.4	4.3	5.1
$5,000 and less than $20,000	30.7	15.8	13.2	14.7
$20,000 and less than $100,000	14.1	23.3	26.3	25.5
$100,000 and less than $1,000,000[1]	5.7	52.5	56.2	54.7
Average per establishment	.....	19	$23,948	$15,522
Oil, cottonseed, and cake, 1909	44	1,086	$7,788,885	$1,783,911
$20,000 and less than $100,000	14	166	969,285	205,169
$100,000 and less than $1,000,000	30	920	6,819,600	1,578,742
Per cent of total	100.0	100.0	100.0	100.0
$20,000 and less than $100,000	31.8	15.3	12.4	11.5
$100,000 and less than $1,000,000	68.2	84.7	87.6	88.5
Average per establishment	.....	25	$177,020	$40,543
Printing and publishing, 1909	295	981	$2,082,365	$1,546,742
Less than $5,000	214	294	481,536	379,580
$5,000 and less than $20,000	64	300	519,071	403,089
$20,000 and less than $100,000	13	196	451,994	343,708
$100,000 and less than $1,000,000	4	191	629,764	420,365
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	72.5	30.0	23.1	24.5
$5,000 and less than $20,000	21.7	30.6	24.9	26.1
$20,000 and less than $100,000	4.4	20.0	21.7	22.2
$100,000 and less than $1,000,000	1.4	19.5	30.2	27.2
Average per establishment	.....	3	$7,059	$5,243

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

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

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 10 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 2,925 establishments reported for all industries, 5.8 per cent employed no wage earners; 53.8 per cent, from 1 to 5; 27.2 per cent, from 6 to 20; and 7.8 per cent, from 21 to 50. The most numerous single group consists of the 1,573 establishments employing from 1 to 5 wage earners, and the next,

of the 795 establishments employing from 6 to 20 wage earners. Twenty-six establishments employed over 250 wage earners, 2 of which, a steam-railroad repair shop and a lumber mill, employed 1,000 each.

Of the total number of wage earners, 26.5 per cent were in establishments employing over 250 wage earners. The single group having the largest number of employees was the group made up of establishments employing from 6 to 20 wage earners. This group employed 8,580 wage earners, or 19.1 per cent of the total. Eighty-four and four-tenths per cent of the employees in the steam-railroad repair shops and 27 per cent of those in the lumber industry worked in establishments employing over 250 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	**2,925**	**169**	**1,573**	**795**	**229**	**79**	**54**	**19**	**5**	**2**
Bread and other bakery products	133	23	98	10	2	.....	.....	.....	.....	.....
Carriages and wagons and materials	58	2	23	18	11	2	2	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	16	.....	3	4	3	1	2	1	1	1
Flour-mill and gristmill products	113	17	87	8	1	.....	.....	.....	.....	.....
Foundry and machine-shop products	42	4	16	18	2	1	1	.....	.....	.....
Furniture and refrigerators	20	.....	4	6	4	6	.....	.....	.....	.....
Ice, manufactured	49	.....	31	15	3	.....	.....	.....	.....	.....
Lumber and timber products	1,697	28	829	563	149	61	45	17	4	1
Oil, cottonseed, and cake	44	.....	1	20	21	2	.....	.....	.....	.....
Printing and publishing	295	53	205	31	5	.....	1	.....	.....	.....
All other industries	458	42	276	102	28	6	3	1	.....	.....
	AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**44,982**	.....	**3,913**	**8,580**	**7,221**	**5,622**	**7,702**	**6,385**	**3,116**	**2,443**
Bread and other bakery products	310	.....	158	89	63	.....	.....	.....	.....	.....
Carriages and wagons and materials	973	.....	52	199	341	132	249	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	3,249	.....	7	60	117	92	229	440	874	1,430
Flour-mill and gristmill products	312	.....	174	93	45	.....	.....	.....	.....	.....
Foundry and machine-shop products	447	.....	30	168	60	73	107	.....	.....	.....
Furniture and refrigerators	680	.....	15	76	146	443	.....	.....	.....	.....
Ice, manufactured	352	.....	97	149	106	.....	.....	.....	.....	.....
Lumber and timber products	32,932	.....	2,310	6,103	4,703	4,334	6,583	5,644	2,242	1,013
Oil, cottonseed, and cake	1,086	.....	5	266	674	141	.....	.....	.....	.....
Printing and publishing	981	.....	444	291	131	.....	115	.....	.....	.....
All other industries	3,660	.....	612	1,086	835	407	419	301	.....	.....
	PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**100.0**	.....	**8.7**	**19.1**	**16.1**	**12.5**	**17.1**	**14.2**	**6.9**	**5.4**
Bread and other bakery products	100.0	.....	51.0	28.7	20.3	.....	.....	.....	.....	.....
Carriages and wagons and materials	100.0	.....	5.3	20.5	35.0	13.6	25.6	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	100.0	.....	0.2	1.8	3.6	2.8	7.1	13.5	26.9	44.0
Flour-mill and gristmill products	100.0	.....	55.8	29.8	14.4	.....	.....	.....	.....	.....
Foundry and machine-shop products	100.0	.....	8.7	37.6	13.4	16.3	23.9	.....	.....	.....
Furniture and refrigerators	100.0	.....	2.2	11.2	21.5	65.1	.....	.....	.....	.....
Ice, manufactured	100.0	.....	27.6	42.3	30.1	.....	.....	.....	.....	.....
Lumber and timber products	100.0	.....	7.0	18.5	14.3	13.2	20.0	17.1	6.8	3.1
Oil, cottonseed, and cake	100.0	.....	0.5	24.5	62.1	13.0	.....	.....	.....	.....
Printing and publishing	100.0	.....	45.3	29.7	13.4	.....	11.7	.....	.....	.....
All other industries	100.0	.....	16.7	29.7	22.8	11.1	11.4	8.2	.....	.....

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 next 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.

This table shows that, for all industries combined, 53.9 per cent of the total expense was incurred for materials, 34.8 per cent for services—that is, salaries and wages—and 11.3 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries. The flour mills and gristmills and the cottonseed-oil mills show the smallest labor cost and the highest cost of materials, relatively. The largest proportion for wages is shown for the steam-railroad repair shops, the lumber industry being second.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries	**5.3**	**29.5**	**53.9**	**11.3**
Bread and other bakery products	1.2	17.4	72.8	8.6
Carriages and wagons and materials	6.4	28.3	57.2	8.1
Cars and general shop construction and repairs by steam-railroad companies	6.3	49.7	42.4	1.7
Flour-mill and gristmill products	1.9	2.3	93.4	2.4
Foundry and machine-shop products	9.8	33.2	47.0	10.0
Furniture and refrigerators	8.4	32.9	50.6	8.1
Ice, manufactured	12.7	31.8	34.2	21.3
Lumber and timber products	5.2	38.1	41.7	15.0
Oil, cottonseed, and cake	3.9	6.1	83.5	6.5
Printing and publishing	13.5	34.2	34.1	18.2
All other industries	6.2	20.1	64.2	9.5

Engines and power.—The following table shows 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 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	3,648	1,911	1,649	173,088	109,509	79,560	100.0	100.0	100.0
Owned	3,124	1,911	1,649	170,252	108,924	79,304	98.4	99.5	99.7
Steam	2,858	1,781	1,584	168,152	107,699	78,016	97.2	98.4	98.1
Gas	245	114	39	1,374	482	326	0.8	0.4	0.4
Water wheels	20	14	26	639	576	734	0.4	0.5	0.9
Water motors	1	2	(2)	35	8	(2)	(3)	(3)	(2)
Other	.....	.....	.....	52	159	228	(3)	0.2	0.3
Rented	524	(2)	(2)	2,836	585	256	1.6	0.5	0.3
Electric	524	(2)	(2)	2,581	484	201	1.5	0.4	0.2
Other	.....	.....	.....	255	101	55	0.1	0.1	0.1
Electric motors	**838**	**88**	**17**	**7,417**	**2,191**	**480**	**100.0**	**100.0**	**100.0**
Run by current generated by establishment	314	88	17	4,836	1,707	279	65.2	77.9	58.1
Run by rented power	524	(2)	(2)	2,581	484	201	34.8	22.1	41.9

[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.

In 1909, of the total primary power, 98.4 per cent was owned and 1.6 per cent, mostly electric power, was rented. In 1899 the proportions were 99.7 per cent and three-tenths of 1 per cent, respectively. The figures show a gain in the per cent of rented power during the decade, and yet of the actual gain, 93,528 horsepower, 90,948, or 97.2 per cent, was in power owned, and but 2,580, or 2.8 per cent, in rented power. In 1909, of the owned power, 98.8 per cent was steam. The use of water power in manufactures was very small.

The practice by manufacturing establishments of transforming power generated in their establishments into electric power and of utilizing the same in manufactures by means of motors is shown to be rapidly increasing. The horsepower of motors of this character increased from 279 in 1899 to 4,836 in 1909.

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	**884**	**877,017**	**6,327**	**73,857**	**26,766**	**886,794**
Bread and other bakery products	25	891	58	5,055	34	11,518
Brick and tile	.....	22,445	.....	19,894	1	289,500
Carriages and wagons and materials	70	1,130	.....	78	79	38,381
Cars and general shop construction and repairs by steam-railroad companies	80	36,510	1,488	660	11,151	.....
Flour-mill and gristmill products	53	11,047	140	7,277	374	11,956
Foundry and machine-shop products	4	2,614	823	319	323	9,143
Furniture and refrigerators	350	3,580	.....	3	2	34,513
Gas, illuminating and heating	.....	4,894	2,238	.....	11,114	.....
Ice, manufactured	86	49,455	1,500	5,733	.....	148,523
Lumber and timber products	150	24,469	.....	3,155	712	5,096
Oil, cottonseed, and cake	.....	62,692	.....	6,227	2,032	57,980
Printing and publishing	49	686	27	601	621	4,257
All other industries	17	656,604	53	24,855	323	275,927

NOTE.—In addition, there were 1,386 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 five important industries in Arkansas are here presented.

Lumber and timber products.—The following table shows the quantities of lumber, lath, and shingles produced in the sawmill branch of the industry for 1909 and 1899:

PRODUCT.	QUANTITY.	
	1909	1899
Rough lumber ..... M feet b. m..	2,111,300	1,623,987
Lath ..... thousands..	78,362	21,164
Shingles ..... thousands..	208,080	349,522

The production of rough lumber, already large in 1899, increased 30 per cent during the decade, and the production of lath increased 270.3 per cent, while that of shingles decreased 40.5 per cent. The total cut of rough lumber in Arkansas, 2,111,300 M feet board measure, represented 4.7 per cent of the total for all states in 1909, while in 1899 the 1,623,987 M feet reported represented 4.6 per cent of the total. At both censuses the state occupied fifth place among the lumber-producing states.

In 1909 Arkansas ranked first among the states in the production of red-gum lumber, reporting 28.4 per cent of the total amount cut in the United States. In the same year it ranked first in the output of cottonwood lumber, with 20.5 per cent of the total; first in that of ash, with 11.4 per cent of the total; and second in that of hickory, with 13.5 per cent of the total. In 1909 yellow pine was the principal timber cut in the state. In that year the output of this timber amounted to 1,313,668 M feet board measure, representing 62.2 per cent of the total rough-lumber cut in the state.

Oil, cottonseed, and cake.—The following table, which shows the quantity of the cotton seed crushed and the quantities of the principal products, indicates the steady growth of this important industry in Arkansas.

MATERIAL OR PRODUCT.	1909	1904	1899
Cotton seed, crushed ..... tons..	278,337	238,227	190,015
Crude products, manufactured:			
Oil ..... gallons..	11,435,430	9,557,668	7,224,971
Meal and cake ..... tons..	116,709	94,263	65,459
Hulls ..... tons..	94,209	84,374	90,083
Linters ..... pounds..	12,889,498	8,572,572	4,613,519

The quantity of cotton seed crushed increased 48,212 tons, or 25.4 per cent, from 1899 to 1904, and 40,110 tons, or 16.8 per cent, from 1904 to 1909. There was an increase in the quantity of each of the crude products manufactured, that for oil, the most important, being 32.3 per cent from 1899 to 1904, and 19.6 per cent from 1904 to 1909. During the decade the production of oil, meal and cake, and linters per ton of seed crushed increased, while that of hulls decreased.

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 by the introduction of cold-process mills which extract the oil from the seed without hulling.

Flour-mill and gristmill products.—The following table shows the quantity and value of the products of the flour mills and gristmills for 1909 and 1904:

PRODUCT.	QUANTITY.		VALUE.	
	1909	1904	1909	1904
All products	.....	.....	$5,615,486	$3,702,495
Wheat flour:				
White ..... barrels..	238,878	377,760	1,302,167	1,869,206
Graham ..... barrels..	125	270	750	1,320
Corn meal and flour ..... barrels..	514,502	353,628	1,666,070	831,938
Hominy and grits ..... pounds..	2,498,700	222,800	41,024	4,452
Feed ..... tons..	84,129	31,389	2,376,401	687,760
Offal ..... tons..	10,132	18,396	223,180	299,544
All other products	.....	.....	5,294	8,275

The wheat products, shown in the above table, decreased in quantity and value from 1904 to 1909, while the corn products increased. These fluctuations are due probably to changes in crop conditions and in the demand of local markets. The output of white flour decreased from 377,760 barrels in 1904 to 238,878 in 1909. Corn meal and corn flour, on the other hand, increased from 353,628 barrels in 1904 to 514,502 barrels in 1909; that of hominy and grits from 222,800 pounds to 2,498,700 pounds; and that of feed from 31,389 tons to 84,129 tons. In 1909 the merchant mills of the state were equipped with 507 pairs of rolls and 106 runs of stone, as compared with 601 pairs of rolls and 50 runs of stone reported in 1904. During the last census year five mills in the state manufactured barrels and one manufactured sacks.

Printing and publishing.—Although the printing and publishing industry in Arkansas shows considerable growth as a whole during the last five years when measured by its financial statistics, the number of publications has decreased slightly, as shown by the next table, which gives the number of publications and their aggregate circulation per issue for the last three census years.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total	288	291	246	496,299	365,957	262,903
Daily	29	27	20	60,175	39,942	38,140
Sunday	7	7	10	50,593	24,337	(1)
Semiweekly	5	5	[2] 5	5,868	6,200	12,285
Weekly	234	232	199	241,413	246,118	187,578
Monthly	12	14	8	136,750	45,330	18,900
All other classes	1	6	4	1,500	4,030	6,000

[1] Included in circulation of dailies. [2] Includes one triweekly.

Of the six different classes of publications, two show small increases in number in 1909, as compared with 1904, for two the number is the same, and two show decreases. There were decided increases in the total aggregate circulation during each five-year period, the largest increase being shown for the monthly publications. The semiweeklies, however, and the publications included under the head of "All other classes," decreased in circulation throughout the decade. All publications were printed in the English language excepting three weeklies, which were printed in German.

Carriages and wagons and materials.—The following table shows the number and value of carriages and wagons manufactured in 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value	$1,664,467	$771,563	$555,049
Carriages (family and pleasure):			
Number	20	35	800
Value	$1,765	$2,045	$55,828
Wagons:			
Number	7,415	1,625	1,149
Value	$436,663	$102,736	$71,355
Business—			
Number	461	547	(1)
Value	$41,409	(1)	(1)
Farm—			
Number	6,954	1,078	(1)
Value	$395,254	(1)	(1)
All other products, including parts, and amount received for repair work	$1,226,039	$666,782	$427,866

[1] Not reported separately.

The total value of products increased from $555,049 in 1899 to $1,664,467 in 1909, or nearly 200 per cent. During this period the number of wagons manufactured increased from 1,149 to 7,415 and their value from $71,355 to $436,663. Of the total value of products in 1909, the value of wagons formed 26.2 per cent, that of carriages one-tenth of 1 per cent, and that of all other products, which includes the value of carriage and wagon materials and the amount received for repair work, 73.7 per cent.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. There were 45 such establishments in the state, of which 6 were in Little Rock, 3 in Fort Smith, 3 in Hot Springs, and 2 in Pine Bluff.

The following statement summarizes the statistics:

Number of establishments	45
Persons engaged in the industry	850
Proprietors and firm members	53
Salaried employees	56
Wage earners (average number)	741
Primary horsepower	900
Capital	$568,411
Expenses	523,658
Services	316,811
Materials	122,806
Miscellaneous	84,041
Amount received for work done	684,036

Twenty-two of the 45 establishments were under individual ownership, 14 under firm ownership, and 9 under corporate ownership. Twelve establishments had receipts for the year's business in excess of $20,000; 17 had receipts of between $5,000 and $20,000; and 16 had receipts of less than $5,000 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	681	85.7	July	795	100.0
February	703	88.4	August	771	97.0
March	726	91.3	September	763	96.0
April	733	92.2	October	754	94.8
May	752	94.6	November	721	90.7
June	766	96.4	December	724	91.1

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

KIND.	Number of engines or motors.	Horsepower.
Primary power, total		900
Owned:		
Steam	37	837
Gas	2	18
Rented:		
Electric	7	30
Other		15

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

KIND.	Unit.	Quantity.
Bituminous coal	Tons	9,091
Coke	Tons	6
Wood	Cords	1,682
Oil	Barrels	138
Gas	1,000 feet	129,582

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	39	769
Persons engaged in the industry	156	1,832
Proprietors and firm members	51	1,086
Salaried employees	.....	19
Wage earners (average number)	105	727
Primary horsepower	970	18,523
Capital	$46,700	$696,441
Expenses	20,003	1,496,243
Services	16,434	39,784
Materials	918	[1] 1,435,982
Miscellaneous	2,651	20,477
Value of products	39,439	[1] 1,709,189

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—All industries	1909	2,825	51,730	3,455	3,293	44,982	173,088	$70,174	$3,461	$19,113	$34,935	$74,916	$39,981
	1904	1,907	37,557	2,140	2,328	33,089	109,509	46,306	2,310	14,544	21,799	53,864	32,065
	1899	1,746	.....	.....	1,549	31,525	79,560	25,385	1,262	10,184	18,288	39,888	21,600
Bread and other bakery products	1909	133	491	161	20	310	174	421	12	161	677	1,177	500
	1904	63	257	68	18	171	87	180	18	85	317	697	380
	1899	23	90	25	4	61	.....	74	2	24	65	130	65
Brick and tile	1909	42	697	55	57	585	2,178	1,300	60	219	168	601	433
	1904	55	629	68	36	525	1,851	943	38	186	197	792	595
	1899	55	491	66	23	402	555	310	18	100	52	277	225
Canning and preserving	1909	44	379	65	22	292	428	255	9	54	181	279	98
	1904	[1] 67	302	100	8	194	202	124	2	38	104	180	76
	1899	34	182	44	2	136	.....	33	(2)	22	51	101	50
Carriages and wagons and materials	1909	58	1,126	63	90	973	3,749	1,823	92	405	820	1,664	844
	1904	33	541	31	50	460	1,632	747	39	174	346	772	426
	1899	40	.....	.....	30	348	.....	400	16	111	311	555	244
Cars and general shop construction and repairs by steam-railroad companies.	1909	16	3,464	.....	215	3,249	2,560	1,561	261	2,061	1,759	4,154	2,395
	1904	13	2,643	.....	135	2,508	1,161	561	152	1,545	1,360	3,078	1,718
	1899	21	2,030	.....	103	1,927	920	721	98	1,204	765	2,095	1,330
Confectionery	1909	11	139	13	19	107	42	120	12	32	115	217	102
	1904	5	128	5	11	112	60	164	13	33	191	280	89
	1899	3	.....	.....	13	66	.....	93	8	16	82	125	43
Cooperage and wooden goods, not elsewhere specified.	1909	9	531	5	22	504	2,400	1,471	39	210	350	761	411
	1904	26	356	39	22	295	812	525	22	119	422	663	241
	1899	10	145	11	8	126	.....	151	5	35	158	239	81
Copper, tin, and sheet-iron products	1909	18	150	25	12	113	20	191	10	77	218	404	186
	1904	8	69	9	1	59	.....	65	1	41	43	122	79
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products	1909	113	549	133	104	312	5,946	1,599	97	122	4,859	5,615	756
	1904	91	434	116	55	263	4,430	1,353	45	104	3,157	3,702	545
	1899	79	.....	.....	33	277	3,985	828	21	94	2,249	2,758	509
Foundry and machine-shop products	1909	42	563	42	74	447	824	1,418	90	304	431	1,051	620
	1904	33	418	27	28	363	641	762	31	200	217	664	447
	1899	[4] 36	336	34	27	275	1,029	432	25	132	155	448	293
Furniture and refrigerators	1909	20	766	9	77	680	1,985	1,873	79	311	479	975	496
	1904	[1] 14	733	4	43	686	1,164	846	43	256	330	837	507
	1899	8	219	9	4	206	.....	150	3	65	85	233	148
Gas, illuminating and heating	1909	5	71	.....	23	48	189	1,651	16	24	90	219	129
	1904	10	147	1	29	117	465	1,438	23	51	72	281	209
	1899	7	57	.....	23	34	.....	829	16	22	38	139	101
Ice, manufactured	1909	49	458	17	89	352	8,281	1,905	77	192	207	820	613
	1904	38	333	7	65	261	4,622	1,317	45	123	106	488	382
	1899	15	178	8	21	149	2,207	569	22	56	46	215	169
Leather goods	1909	14	132	11	29	92	83	375	32	60	283	456	173
	1904	[4] 7	78	7	9	62	27	174	10	37	105	210	105
	1899	[1] 4	.....	.....	.....	13	.....	26	.....	7	18	37	19
Lumber and timber products	1909	1,697	36,662	2,135	1,595	32,932	122,387	42,346	1,793	13,060	14,800	40,640	26,340
	1904	929	26,348	1,079	1,360	23,909	77,570	29,619	1,415	10,265	9,235	31,993	22,758
	1899	[4] 965	.....	.....	974	25,072	59,786	16,261	771	7,482	11,271	26,624	15,353
Marble and stone work	1909	28	202	38	16	148	494	151	15	91	127	354	227
	1904	21	155	24	16	115	402	251	15	73	70	244	174
	1899	23	.....	.....	24	105	.....	74	8	56	83	206	123
Mattresses and spring beds	1909	6	113	5	14	94	193	117	19	43	156	263	107
	1904	4	49	1	3	45	152	80	3	18	43	82	39
	1899	3	.....	.....	2	31	.....	14	2	11	22	49	27
Oil, cottonseed, and cake	1909	44	1,350	3	261	1,086	13,029	5,239	281	441	6,005	7,789	1,784
	1904	42	1,135	3	210	922	9,988	4,106	197	329	4,200	4,940	740
	1899	20	762	1	94	667	5,060	2,485	116	233	1,996	3,189	1,193
Printing and publishing	1909	295	1,672	417	274	981	846	1,910	212	538	536	2,082	1,546
	1904	277	1,360	361	104	895	538	1,315	93	438	320	1,443	1,123
	1899	230	1,038	261	73	704	.....	778	57	265	237	1,014	777
Wood, turned and carved	1909	25	431	13	35	383	1,850	419	34	168	323	612	289
	1904	21	451	22	26	403	1,355	264	21	154	201	534	333
	1899	5	66	2	3	61	.....	27	3	21	32	68	36
All other industries	1909	256	1,784	245	245	1,294	5,430	4,029	221	540	2,851	4,783	1,932
	1904	150	991	168	99	724	2,350	1,472	84	275	703	1,862	1,099
	1899	165	.....	.....	83	865	.....	1,130	71	228	572	1,386	814

[1] Excluding statistics for one establishment, to avoid disclosure of individual operations.
[2] Less than $500.
[3] Figures can not be shown without disclosing individual operations.
[4] Excluding statistics for two establishments, to avoid disclosure of individual operations.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
Argenta	1909	18	2,357	12	188	2,157	2,885	$2,240	$212	$1,400	$2,685	$4,842	$2,157
	[1] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fort Smith	1909	83	1,793	87	251	1,455	4,202	3,206	278	741	2,006	3,739	1,733
	1904	63	1,198	43	106	1,049	.....	1,726	113	481	1,113	2,329	1,216
	1899	66	.....	.....	63	677	.....	897	56	256	650	1,401	751
Hot Springs	1909	71	430	69	26	335	1,644	770	28	210	303	845	542
	1904	22	299	25	35	239	.....	549	28	115	288	597	309
	1899	21	.....	.....	9	94	.....	149	6	34	85	191	106
Little Rock	1909	125	2,566	119	430	2,017	6,610	6,045	445	1,080	4,014	6,882	2,868
	1904	104	2,305	97	237	1,971	.....	4,493	249	938	2,559	4,690	2,131
	1899	62	.....	.....	209	1,397	.....	2,928	181	544	1,779	3,379	1,600
Pine Bluff	1909	42	1,265	32	115	1,118	4,584	2,585	126	605	1,354	2,387	1,033
	[2] 1904	34	1,526	17	84	1,425	.....	2,696	99	574	1,421	2,500	1,079
	1899	37	.....	.....	91	900	.....	1,644	77	443	789	1,541	752

[1] Not incorporated in 1900.
[2] 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. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Wage earners. Number. Maximum month.	Wage earners. Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	2,925	51,730	3,455	1,467	1,620	206	44,982	Oc 49,802	Ja 41,295	(1)	(1)	(1)	(1)	(1)	173,088
2	Artificial stone	17	58	19	.....	.....	.....	39	Se 54	Fe 24	52	51	.....	1	.....	2
3	Bread and other bakery products	133	491	161	2	11	7	310	No 345	Mh 282	338	279	41	15	3	174
4	Brick and tile	42	697	55	30	24	3	585	Jy 790	Ja 284	713	689	.....	24	.....	2,178
5	Brooms	9	40	7	4	2	.....	27	Oc [2] 37	Ap [2] 17	37	32	4	1	.....	43
6	Butter, cheese, and condensed milk	9	28	4	10	1	.....	13	Jy [2] 16	Ja [2] 11	15	13	1	.....	1	163
7	Canning and preserving	44	379	65	14	6	2	292	Se 1,057	Mh 4	1,354	456	789	22	87	428
8	Carriages and wagons and materials	58	1,126	63	55	28	7	973	Se 1,096	Ja 837	1,114	1,101	.....	13	.....	3,749
9	Cars and general shop construction and repairs by steam-railroad companies.	16	3,464	.....	88	123	4	3,249	Se 3,539	Ap 2,930	3,443	3,442	1	.....	.....	2,560
10	Cars and general shop construction and repairs by street-railroad companies.	6	67	.....	4	2	.....	61	Ap 65	Se [2] 57	63	63	.....	.....	.....	103
11	Clothing, men's, including shirts	3	90	3	4	9	.....	74	De 78	Ja [2] 72	78	16	62	.....	.....	25
12	Confectionery	11	139	13	1	12	6	107	De 114	Se 102	114	69	31	3	11	42
13	Cooperage and wooden goods, not elsewhere specified.	9	531	5	8	13	1	504	No 640	Ja 400	609	609	.....	.....	.....	2,400
14	Copper, tin, and sheet-iron products	18	150	25	5	4	3	113	Se 119	Ja 106	112	108	.....	4	.....	20
15	Flour-mill and gristmill products	113	549	133	41	49	14	312	Mh 346	De 261	342	338	1	3	.....	5,946
16	Foundry and machine-shop products	42	563	42	33	34	7	447	De 518	Fe 404	519	517	.....	2	.....	824
17	Furniture and refrigerators	20	766	9	32	39	6	680	Fe [2] 759	Se 571	874	813	25	36	.....	1,985
18	Gas, illuminating and heating	5	71	.....	7	9		48	Ap 55	Ja 42	43	43	.....	.....	.....	189
19	Ice, manufactured	49	458	17	53	34	2	352	Jy 575	Ja 158	364	364	.....	.....	.....	8,281
20	Jewelry	6	17	7	.....	.....	.....	10	Se [2] 11	Ja [2] 1	11	9	2	.....	.....	4
21	Kaolin and ground earths	3	7	1	1	.....	.....	5	Ja [2] 8	Ap [2] 3	11	11	.....	.....	.....	145
22	Leather goods	14	132	11	13	13	3	92	Ja [2] 97	Oc [2] 87	97	87	5	5	.....	83
23	Lime	9	174	6	6	5	.....	157	Se 191	Ja 105	199	199	.....	.....	.....	137
24	Liquors, distilled	7	15	8	1	.....	.....	6	No [2] 12	Jy [2] 3	12	12	.....	.....	.....	180
25	Lumber and timber products	1,697	36,662	2,135	769	758	68	32,932	Oc 36,172	My 30,252	30,769	39,381	40	338	10	122,387
26	Marble and stone work	28	202	38	4	10	2	148	Oc 187	Ja 95	162	162	.....	.....	.....	494
27	Mattresses and spring beds	6	113	5	9	4	1	94	No 128	My [2] 71	106	89	16	1	.....	193
28	Oil, cottonseed, and cake	44	1,350	3	104	155	2	1,086	No 1,996	Jy 326	1,969	1,969	.....	.....	.....	13,029
29	Patent medicines and compounds and druggists' preparations.	25	88	24	13	10	2	39	De 46	Jy 31	46	26	17	3	.....	3
30	Pottery, terra-cotta, and fire-clay products.	5	54	6	2	1	.....	45	Mh 49	De 39	49	40	.....	9	.....	31
31	Printing and publishing	295	1,672	417	69	167	38	981	De 1,018	Je 952	1,041	791	216	34	.....	846
32	Rice, cleaning and polishing	5	64	.....	8	19	.....	37	Oc 117	Ap [3] 0	96	96	.....	.....	.....	1,610
33	Tobacco manufactures	19	76	25	1	1	.....	49	De 58	Se 43	61	41	13	7	.....	.....
34	Wood, turned and carved	25	431	13	23	5	7	383	Jy 410	Je 325	466	464	.....	2	.....	1,850
35	All other industries [4]	133	1,006	135	53	72	14	732	.....	.....	.....	.....	.....	.....	.....	3,034

[1] No figures given for reasons explained in the Introduction.
[2] Same number reported for one or more other months.
[3] None reported for one or more other months.
[4] All other industries embrace—

Agricultural implements	1	Charcoal	1	Dairymen's, poulterers', and apiarists' supplies	2
Awnings, tents, and sails	5	Coffee and spice, roasting and grinding	3	Electrical machinery, apparatus, and supplies	1
Baskets, and rattan and willow ware	1	Coffins, burial cases, and undertakers' goods	1	Explosives	1
Brass and bronze products	1	Corsets	1	Fancy articles, not elsewhere specified	1
Buttons	3	Cotton goods, including cotton small wares	2	Fertilizers	1
Carpets, rag	1	Cutlery and tools, not elsewhere specified	1	Food preparations	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. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	16 and over. Male.	16 and over. Female.	Under 16.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	ARGENTA	18	2,357	12	66	115	7	2,157	2,153	.....	4	2,171	2,166	.....	5	.....	2,885
2	FORT SMITH	83	1,793	87	90	136	25	1,455	1,298	118	39	1,620	1,445	131	42	2	4,202
3	HOT SPRINGS	71	430	69	14	9	3	335	314	19	2	344	322	20	2	.....	1,644
4	LITTLE ROCK	125	2,566	119	138	247	45	2,017	1,852	127	38	2,217	2,036	140	30	11	6,619
5	PINE BLUFF	42	1,265	32	47	58	10	1,118	1,100	11	7	1,256	1,236	13	7	.....	4,584

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	$70,174,345	$64,829,785	$2,044,941	$1,415,935	$19,112,896	$980,371	$33,954,541	$193,497	$643,753	$2,034,264	$4,449,587	$74,916,367	$39,981,455
2	32,096	48,774	.....	.....	18,418	63	27,247	675	141	.....	2,230	65,781	38,471
3	421,063	930,636	2,800	8,765	101,477	22,411	654,932	24,824	3,061	370	51,996	1,176,979	409,636
4	1,300,259	502,346	33,365	26,843	219,252	132,332	35,749	650	4,240	.....	49,915	601,034	432,953
5	39,344	45,243	2,225	668	11,053	619	27,030	470	212	.....	2,966	55,528	27,879
6	96,640	119,842	4,364	100	6,526	3,535	101,841	100	309	.....	3,067	131,235	25,859
7	255,452	252,631	7,191	1,680	54,172	6,416	174,414	614	1,030	125	6,989	278,903	98,073
8	1,823,299	1,433,090	63,679	28,142	404,881	9,146	810,510	6,837	10,301	5,547	94,047	1,664,467	844,811
9	1,561,456	4,148,926	155,570	105,182	2,060,608	76,327	1,682,409	.....	5,283	971	62,576	4,153,926	2,395,190
10	76,642	86,349	2,545	1,179	36,396	1,941	39,705	.....	607	.....	3,976	86,349	44,703
11	94,684	185,182	7,800	24,218	25,359	177	121,360	2,400	432	.....	3,436	100,706	75,169
12	120,470	176,929	1,800	10,617	31,792	3,493	111,197	4,290	884	.....	12,851	217,159	102,404
13	1,470,817	704,525	25,580	13,440	209,983	913	348,614	470	2,295	.....	103,230	760,720	411,193
14	191,063	331,013	5,344	4,068	77,460	1,396	216,547	5,870	1,073	75	18,268	403,736	185,763
15	1,598,556	5,201,732	51,666	45,544	121,677	38,984	4,819,868	6,185	8,663	5,050	104,095	5,615,486	756,694
16	1,418,366	916,633	55,176	34,893	304,223	24,932	405,763	5,976	5,707	16,087	63,876	1,050,906	620,211
17	1,872,638	945,621	46,586	32,639	311,236	11,168	467,599	2,610	4,972	.....	68,811	974,715	495,948
18	1,651,368	157,320	9,103	7,288	24,371	53,781	36,600	.....	8,636	.....	17,541	218,891	128,510
19	1,904,571	604,048	54,385	22,435	191,800	158,526	48,060	17,617	16,971	405	93,849	819,938	613,352
20	19,752	31,313	.....	.....	3,136	311	25,900	663	157	.....	1,146	46,075	19,864
21	34,500	12,029	120	.....	1,444	1,184	8,681	.....	95	.....	505	17,340	7,475
22	374,995	400,825	18,680	13,194	60,350	2,758	280,217	7,277	2,768	.....	15,581	455,949	172,974
23	231,222	142,836	5,850	3,680	51,017	33,948	44,215	180	742	.....	3,195	161,039	82,876
24	45,902	49,732	200	.....	2,391	1,057	9,929	.....	33,525	.....	2,630	71,130	60,144
25	42,346,234	34,312,349	1,007,191	695,625	13,059,680	108,338	14,101,329	23,884	440,903	1,077,764	2,717,626	40,640,327	26,340,060
26	151,100	279,435	8,500	6,932	90,737	10,688	116,050	2,120	1,315	855	41,638	354,199	226,861
27	116,705	240,050	13,411	5,278	43,407	5,087	150,807	2,875	362	.....	18,823	262,551	100,657
28	5,239,091	7,195,329	162,531	117,991	440,626	175,160	5,829,814	4,000	40,600	.....	424,607	7,788,885	1,783,911
29	103,586	103,381	8,610	10,428	14,100	461	49,012	4,858	612	300	14,940	144,364	94,891
30	50,043	32,023	1,600	100	17,162	5,839	2,598	56	78	300	4,290	41,624	33,187
31	1,910,317	1,570,254	88,745	123,125	537,046	20,980	505,643	49,510	10,202	23,540	201,863	2,082,365	1,546,742
32	575,312	940,524	11,975	11,311	22,848	2,446	849,247	.....	421	.....	42,276	944,726	93,033
33	24,386	69,583	250	900	22,985	191	31,610	2,755	7,568	.....	3,324	84,201	52,400
34	419,224	564,126	26,770	7,532	167,601	16,575	306,511	630	2,223	2,300	33,975	612,387	289,301
35	2,603,132	2,095,156	71,320	51,238	307,007	40,183	1,422,933	15,086	27,305	575	159,449	2,736,746	1,273,030

[1] All other industries embrace—Continued.

Furnishing goods, men's	1	Liquors, malt	1	Shipbuilding, including boat building	1
Gas and electric fixtures and lamps and reflectors	1	Looking-glass and picture frames	1	Sporting and athletic goods	1
Grease and tallow	2	Mineral and soda waters	78	Surgical appliances and artificial limbs	1
Hair work	1	Paint and varnish	1	Upholstering materials	2
Hand stamps and stencils and brands	2	Paper goods, not elsewhere specified	1	Vinegar and cider	3
Hones and whetstones	2	Photo-engraving	1	Wood preserving	1
Leather, tanned, curried, and finished	1	Pumps, not including steam pumps	1	Woolen, worsted, and felt goods, and wool hats	2

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	$2,239,570	$4,429,568	$110,509	$101,075	$1,399,550	$70,158	$2,615,111	$2,088	$6,845	$351	$123,881	$4,841,061	$2,156,392
2	3,205,881	3,313,054	150,728	127,489	740,640	47,052	1,958,602	33,531	21,057	1,717	232,148	3,739,246	1,733,502
3	769,645	593,475	18,149	10,312	209,891	31,726	271,582	14,193	5,947	375	31,300	844,570	541,262
4	6,044,859	6,132,816	226,982	218,122	1,080,331	145,505	3,808,204	59,277	44,894	72,314	417,187	6,881,662	2,867,953
5	2,584,925	2,308,934	67,342	58,255	604,680	65,131	1,288,886	8,569	24,471	890	190,710	2,386,630	1,032,613

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CALIFORNIA.

INDUSTRIES IN GENERAL.

General character of the state.—California, with a gross area of 158,297 square miles, of which 2,645 represent water surface, ranks second in size among the states of the Union. Its population in 1910 was 2,377,549, as compared with 1,485,053 in 1900 and 1,213,398 in 1890. In 1910 the density of population for the entire state was 15.3 per square mile, the corresponding figure for 1900 being 9.5. It ranked twelfth among the 49 states and territories as regards population in 1910 and twenty-first in 1900. Sixty-one and eight-tenths per cent of the entire population of the state resided in 1910 in cities and incorporated towns having a population of 2,500 or over, as against 52.4 per cent in 1900.

San Francisco, with a population of 416,912, Los Angeles, with 319,198, and Oakland, with 150,174, were the only cities in the state having over 50,000 inhabitants in 1910, but there were 18 other cities having a population of 10,000 or over. (See table on page 78.) These 21 cities contained 53.3 per cent of the total population of the state in 1910, and were credited with 55.7 per cent of the total value of its manufactured products in 1909. Only 8.5 per cent of the population of the state resided in incorporated places of between 2,500 and 10,000 inhabitants.

San Francisco Bay, which has an area of about 450 square miles, is by far the most important harbor of the state. On this bay are located the cities of San Francisco and Oakland, the former being the most important port on the Pacific coast. Los Angeles and San Diego, in southern California, are the ports of the state next in importance. Several trunk lines and local railways, which operated 7,529 miles of track in 1909,[1] furnish excellent transportation facilities by land, and the lower courses of the Sacramento and San Joaquin Rivers are available for transportation by water. These two rivers, together with numerous smaller rivers and many mountain streams in various parts of the state, afford abundant water power, some of which is transformed into electric energy which in some instances is transmitted over exceptionally long distances.

The natural resources of the state give rise to several of its leading industries, such as the lumber industry, canning and preserving, flour milling and gristmilling, petroleum refining, the refining of beet sugar, the wine industry, and the manufacture of cement. The high cost of fuel, the greater part of which had to be brought from outside the state, retarded the early development of manufactures, but the discovery of an abundance of oil in the state, the development of the oil fields, and the utilization during recent years of electricity generated by water power have given a decided impetus to manufactures in California.

Importance and growth of manufactures.—Although agriculture and mining are the principal industries in California, the state shows a marked growth in manufactures during the last 40 years. The gross value of products per capita of the total population increased from $119 in 1869 to $223 in 1909, and the proportion which the manufactures of the state represented of the total value of the products of manufacturing industries in the United States advanced from 1.6 per cent to 2.6 per cent during the same time. California ranked sixteenth among the states in 1869 in gross value of manufactured products, but had advanced to eleventh place in 1909.

The table on page 70 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.

In 1909 the state of California had 7,659 manufacturing establishments, which gave employment to an average of 141,576 persons during the year and paid out $107,097,000 in salaries and wages. Of the persons employed, 115,296 were wage earners. These establishments turned out products to the value of $529,761,000, to produce which materials costing $325,238,000 were utilized. The value added by manufacture was thus $204,523,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

The totals presented in this report do not include the statistics for an establishment operated by the Federal Government—the United States navy yard, located at Mare Island. In 1909 this plant employed an average of 1,917 wage earners and the value of the work performed was $4,335,000.

In general, the table brings out the fact that the manufacturing industries of California, in most respects, showed a higher rate of development during the five-year period 1899–1904 than during the succeeding five-year period 1904–1909. During the period 1899–1904 the average number of wage earners increased 30 per cent, the value of products 42.7 per cent, and the

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

value added by manufacture 63.8 per cent. For the later period, 1904–1909, the corresponding percentages were 14.9, 44.3, and 35, respectively. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the full extent indicated by the figures relating to values, since the increase shown is certainly due, in part, to the increase that has taken place in the price of commodities.

	Number or amount.			Per cent of increase.	
	1909	1904	1899	1904–1909	1899–1904
Number of establishments	7,659	6,839	4,997	12.0	36.9
Persons engaged in manufactures	141,576	120,040	(1)	17.9	.....
Proprietors and firm members	8,077	7,402	(1)	9.1	.....
Salaried employees	18,203	12,283	6,877	48.2	78.6
Wage earners (average number)	115,296	100,355	77,224	14.9	30.0
Primary horsepower	329,100	210,359	126,953	56.4	65.7
Capital	$537,134,000	$282,647,000	$175,468,000	90.0	61.1
Expenses	476,154,000	321,928,000	225,404,000	47.9	42.8
Services	107,097,000	79,056,000	47,385,000	35.5	66.8
Salaries	22,955,000	14,399,000	7,495,000	59.4	92.1
Wages	84,142,000	64,657,000	39,890,000	30.1	62.1
Materials	325,238,000	215,726,000	164,894,000	50.8	30.8
Miscellaneous	43,819,000	27,146,000	13,125,000	61.4	106.8
Value of products	529,761,000	367,218,000	257,386,000	44.3	42.7
Value added by manufacture (value of products less cost of materials)	204,523,000	151,492,000	92,492,000	35.0	63.8

[1] Figures not available.

The relative importance and growth of the leading manufacturing industries of the state are shown in the table on page 71.

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 other establishments.

In addition to the 56 industries presented separately in the table, there are 24 other industries in the state which had a value of products in 1909 exceeding $500,000.[1] These are included under the head of "All other industries" in the table in some cases because the operations of individual establishments would be disclosed if they were shown separately; in others, because the returns do not properly present the true condition of the industry, as it is interwoven with one or more other industries, and in still others because comparable statistics for prior census years are not available, or can not be presented on account of changes in classification. Of these 24 industries, those of special importance are the smelting and refining of lead, the refining of cane sugar, the smelting and refining of copper, the manufacture of beet sugar, the manufacture of explosives, and shipbuilding, including boat building. The 1909 statistics, however, for the shipbuilding industry are given in Table II, page 102.

The most important industries listed in the table on page 71, in which they are arranged in the order of value of products, call for brief discussion in order to show the scope of the classifications where these are not on their face entirely clear, or to point out important facts in relation to the growth of the industries in the state.

Lumber and timber products.—This industry embraces logging operations, sawmills, planing mills, and establishments engaged in the manufacture of wooden-packing boxes. It does not include mills engaged exclusively in custom sawing. The industry is the leading one in the state, giving employment in 1909 to 22,935 wage earners, or 19.9 per cent of the total for all manufacturing industries, and the value of its products amounted to $45,000,000, or 8.5 per cent of the total. While the growth of the industry during the five-year period 1904–1909 was considerable, its development was much less rapid than during the earlier period, 1899–1904.

Slaughtering and meat packing.—This classification includes the wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage only. The animals slaughtered are largely cattle and sheep from the foothills and lower mountain slopes and from the plateau region of the northeastern part of the state and southeastern Oregon, conditions in these sections being very favorable to stock raising. About half of the stock slaughtered is raised within the state.[2] The fact that within recent years the meat packers have been able to overcome, through refrigera-

[1] These industries are:

Artificial flowers and feathers and plumes.
Awnings, tents, and sails.
Bags, other than paper.
Baking powders and yeast.
Beet sugar.
Chocolate and cocoa products.
Cordage and twine and jute and linen goods.
Explosives.
Glass.
Glass, cutting, staining, and ornamenting.
Iron and steel pipe, wrought.
Lead, bar, pipe, and sheet.
Malt.
Matches.
Mineral and soda waters.
Oil, not elsewhere specified.
Roofing materials.
Shipbuilding, including boat building.
Smelting and refining, copper.
Smelting and refining, lead.
Soap.
Sugar refining, not including beet sugar.
Wirework, including wire rope and cable.
Woolen, worsted, and felt goods, and wool hats.

[2] California: Its Products, Resources, Industries, and Attractions, 1909, p. 95.

tion, climatic difficulties which required the excessive use of salt in preserving meats has been an important factor in the growth of this industry. The total value of products reported for the industry in 1909, $34,280,000, represents an increase of $18,463,000, or 116.7 per cent, as compared with the amount reported for 1899.

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	7,659	115,206	100.0	$529,761,000	100.0	$204,523,000	100.0	44.3	42.7	35.0	63.8
Lumber and timber products	644	22,935	19.9	45,000,000	8.5	20,631,000	13.0	30.0	70.5	15.4	89.0
Slaughtering and meat packing	94	1,641	1.4	34,280,000	6.5	5,832,000	2.9	55.7	39.2	78.8	48.2
Canning and preserving	196	7,757	6.7	32,915,000	6.2	8,906,000	4.4	26.2	74.6	19.9	54.9
Foundry and machine-shop products	543	8,377	7.3	26,731,000	5.1	13,830,000	6.8	51.9	35.1	35.4	43.7
Flour-mill and gristmill products	125	948	0.8	25,188,000	4.8	3,296,000	1.6	24.7	54.9	7.3	51.9
Printing and publishing	1,240	7,556	6.6	25,032,000	4.7	18,705,000	9.1	30.9	80.7	28.1	83.0
Cars and general shop construction and repairs by steam-railroad companies	42	9,342	8.1	18,719,000	3.5	9,170,000	4.5	90.3	30.2	39.3	76.6
Petroleum, refining	29	930	0.8	17,878,000	3.4	3,980,000	1.9	211.0	723.6	146.0	677.9
Bread and other bakery products	804	4,018	3.5	17,710,000	3.3	7,333,000	3.6	66.8	117.7	50.8	115.8
Butter, cheese, and condensed milk	161	597	0.5	12,761,000	2.4	1,621,000	0.8	63.2	118.3	19.1	126.1
Leather, tanned, curried, and finished	40	1,398	1.2	9,367,000	1.8	2,328,000	1.1	16.0	9.0	7.8	35.3
Liquors, malt	83	1,290	1.1	9,319,000	1.8	6,760,000	3.3	24.1	47.7	28.5	38.2
Liquors, vinous	181	1,287	1.1	8,937,000	1.7	4,263,000	2.1	33.6	69.9	41.2	114.0
Gas, illuminating and heating	74	1,666	1.4	8,927,000	1.7	6,323,000	3.1	64.9	71.2	49.6	86.6
Copper, tin, and sheet-iron products	233	1,938	1.7	6,804,000	1.3	3,239,000	1.6	14.6	12.4	22.2	49.1
Cement	8	2,407	2.1	6,504,000	1.2	4,322,000	2.1	306.2	.....	361.3	.....
Coffee and spice, roasting and grinding	44	352	0.3	6,492,000	1.2	1,875,000	0.9	38.6	49.3	30.9	74.4
Food preparations	129	716	0.6	5,608,000	1.0	1,538,000	0.8	247.1	37.9	137.0	37.2
Liquors, distilled	33	193	0.2	5,353,000	1.0	4,518,000	2.2	359.5	389.5	471.9	1,580.9
Clothing, men's, including shirts	74	2,385	2.1	5,121,000	1.0	2,226,000	1.1	—2.2	11.0	—10.1	23.1
Furniture and refrigerators	129	1,053	1.4	4,496,000	0.9	2,638,000	1.3	58.6	123.5	70.9	125.7
Paint and varnish	35	396	0.3	3,758,000	0.7	1,106,000	0.5	58.6	88.2	59.8	118.3
Confectionery	89	1,002	0.9	3,624,000	0.7	1,486,000	0.7	3.4	95.9	—20.1	109.8
Iron and steel, steel works and rolling mills	5	1,038	0.9	3,520,000	0.7	1,172,000	0.6	136.4	65.3	65.1	80.2
Marble and stone work	128	1,415	1.2	3,380,000	0.6	2,197,000	1.1	41.1	113.5	58.1	84.4
Tobacco manufactures	332	1,465	1.3	3,360,000	0.6	2,143,000	1.0	5.3	69.1	2.3	82.7
Cars and general shop construction and repairs by street-railroad companies	21	1,902	1.6	3,000,000	0.6	1,857,000	0.9	145.0	.....	142.1	.....
Brick and tile	78	1,703	1.5	2,750,000	0.5	1,804,000	0.9	43.8	129.7	14.1	136.7
Agricultural implements	25	622	0.5	2,670,000	0.5	1,229,000	0.6	79.9	9.3	61.7	—7.2
Ice, manufactured	77	666	0.6	2,331,000	0.4	1,707,000	0.9	78.3	155.8	75.3	157.8
Fertilizers	15	226	0.2	2,313,000	0.4	517,000	0.3	158.7	33.2	37.9	99.5
Leather goods	88	710	0.6	2,244,000	0.4	1,143,000	0.6	5.6	24.8	3.1	40.7
Cooperage and wooden goods, not elsewhere specified	38	416	0.4	2,167,000	0.4	588,000	0.3	26.1	21.6	0.7	25.6
Mattresses and spring beds	35	528	0.5	2,164,000	0.4	921,000	0.4	114.3	144.0	72.1	190.8
Carriages and wagons and materials	155	760	0.7	2,052,000	0.4	1,203,000	0.6	—12.8	19.0	—19.8	25.0
Boots and shoes, including cut stock and findings	18	695	0.6	1,924,000	0.4	804,000	0.4	11.0	—6.9	9.5	—3.3
Pottery, terra-cotta, and fire-clay products	20	1,027	0.9	1,797,000	0.3	1,292,000	0.6	2.0	134.5	—5.4	178.6
Gas and electric fixtures and lamps and reflectors	41	553	0.5	1,715,000	0.3	905,000	0.5	.....	.....	.....	.....
Clothing, women's	64	791	0.7	1,672,000	0.3	790,000	0.4	—4.2	—11.9	—9.8	—9.4
Electrical machinery, apparatus, and supplies	27	435	0.4	1,613,000	0.3	685,000	0.3	60.7	80.6	20.2	189.3
Firearms and ammunition	5	160	0.1	1,577,000	0.3	410,000	0.2	102.2	19.6	51.9	67.7
Jewelry	58	574	0.5	1,557,000	0.3	893,000	0.4	7.6	108.8	16.7	161.1
Patent medicines and compounds and druggists' preparations	89	310	0.3	1,549,000	0.3	910,000	0.4	7.2	—7.5	—0.2	12.9
Automobiles, including bodies and parts	41	478	0.4	1,470,000	0.3	770,000	0.4	3,983.3	.....	3,247.8	.....
Chemicals	13	244	0.2	1,306,000	0.3	544,000	0.3	16.2	—45.5	28.3	—35.3
Gloves and mittens, leather	23	570	0.5	1,231,000	0.2	673,000	0.3	35.1	—1.1	48.9	—6.6
Sulphuric, nitric, and mixed acids	6	217	0.2	1,161,000	0.2	421,000	0.2	26.0	.....	32.0	.....
Babbitt metal and solder	5	52	(2)	1,120,000	0.2	273,000	0.1	55.3	30.9	108.4	50.6
Paper and wood pulp	4	312	0.3	960,000	0.2	529,000	0.3	51.2	.....	44.5	.....
Boxes, fancy and paper	10	624	0.5	965,000	0.2	523,000	0.3	84.2	59.3	84.8	45.1
Salt	19	402	0.3	746,000	0.1	504,000	0.2	73.9	12.9	63.1	17.5
Furnishing goods, men's	11	134	0.1	721,000	0.1	264,000	0.1	163.1	—58.2	146.7	—63.7
Brass and bronze products	29	195	0.2	679,000	0.1	384,000	0.2	—27.8	15.9	—38.0	50.6
Artificial stone	66	320	0.3	643,000	0.1	423,000	0.2	95.4	.....	112.6	.....
Lime	15	410	0.4	609,000	0.1	397,000	0.2	6.5	.....	3.4	.....
Stoves and furnaces, including gas and oil stoves	17	215	0.2	514,000	0.1	308,000	0.2	84.2	.....	70.2	.....
All other industries	976	14,341	12.4	131,833,000	24.9	33,288,000	16.3	.....	.....	.....	.....

[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.

Canning and preserving.—This classification includes the canning of fruits and vegetables, fish, oysters, clams, etc., the preparation of pickled, smoked, and dried fish, the packing of dried fruits by packing houses which make a specialty of such business, and the manufacture of pickles, preserves, jellies, sauces, etc., but it does not include the drying and packing of fruits by the grower on the farm, nor does it include the canning of meats, soups, and similar products in meat-packing establishments (the statistics for which are included with those for the slaughtering and meat-packing industry). The climate of the state is especially

favorable to the growth of fruits of all kinds, and large quantities are canned, dried, and preserved for sale in the eastern and foreign markets. The canning, pickling, smoking, and drying of fish and the canning of oysters form comparatively unimportant branches of the industry. California far exceeds any other state in the value of products for this industry, the amount reported for 1909 being $32,915,000, or 21 per cent of the total for the United States.

Foundry and machine-shop products.—This industry embraces, in addition to the general class of foundries and machine shops, establishments engaged in such special lines as the manufacture of gas machines and gas and water meters, hardware, plumbers' supplies, steam fittings and heating apparatus, and structural ironwork. It does not, however, include establishments which manufacture distinctive products covered by other classifications, such as cash registers and calculating machines, or electrical machinery, apparatus, and supplies. This industry ranked third among the manufacturing industries of the state in 1909 in number of wage earners, giving employment to 8,377, or 7.3 per cent of the total for all industries.

Flour-mill and gristmill products.—The statistics for all merchant mills grinding wheat, rye, buckwheat, corn, or other grains are included in this classification. It does not, however, include factories making fancy cereals or other food preparations as a chief product, or mills doing custom grinding exclusively. The statistics for the latter mills are presented separately on page 91. The industry shows an increase of $12,143,000, or 93.1 per cent, in value of products during the decade 1899–1909.

Printing and publishing.—This classification includes job printing, the printing and publishing of books, newspapers and periodicals, and music, bookbinding, steel engraving, and lithographing. More establishments were reported for this industry in 1909 than for any other in the state. The 1,240 establishments reporting included 705 publishing newspapers and periodicals and 481 doing book and job work exclusively. The average number of wage earners employed in the newspaper and periodical branch of the industry was 3,650, and the value of products $15,239,000; the average number of wage earners engaged in book and job work was 2,907, and the value of products $7,438,000. These two branches of the industry together employed 86.8 per cent of the average number of wage earners and reported 90.6 per cent of the total value of products for the entire industry in 1909.

Cars and general shop construction and repairs by steam-railroad companies.—This industry represents the work done in the car shops operated by steam-railroad companies, but does not cover minor repairs in roundhouses. The operations consist almost exclusively of repairs to the rolling stock and equipment. It is seventh in importance, as measured by value of products, among the industries given in the table and shows a remarkable development for the 10-year period. In 1909 the industry gave employment to an average of 9,342 wage earners, the second largest number reported for any manufacturing industry in the state, and the value of the work done amounted to $18,719,000.

Petroleum, refining.—The recent development of the extensive oil fields of the state has made California the leading state of the Union in the production of crude petroleum. The refining of petroleum has made remarkable progress in the state during the last few years, the value of the products of the industry in 1909 being $17,878,000, or over twenty-five times as great as in 1899, when it was only $698,000.

Butter, cheese, and condensed milk.—This industry, which in California is confined chiefly to the manufacture of butter, has made marked progress during the past decade, the value of products increasing from $3,583,000 in 1899 to $12,761,000 in 1909, a gain of 256.2 per cent. The manufacture of cheese and condensed milk decreased materially during the period 1904–1909.

Leather, tanned, curried, and finished.—The tanning, currying, and finishing of leather did not become prominent in California until about 1861. From that time, however, it grew rapidly and since 1877 the local supply of hides and skins has not been large enough to satisfy the requirements of the industry, so that it has been necessary to supplement it by hides and skins brought in from other states or imported from foreign countries.[1] In 1879 there were 142 establishments in the state engaged in the leather industry, their total output being valued at $6,193,573. Since that time the number of establishments has decreased, but, with the exception of a slight decrease during the first decade following 1879, the value of products has shown a substantial increase from census to census.

Liquors, malt.—This industry shows considerable growth for the decade, the gain both in value of products and in value added by manufacture being greater, however, for the five-year period 1899–1904 than for the following five-year period.

Liquors, vinous.—The extensive vineyards of California have placed this state far ahead of any other in the wine industry. In 1909 the value of products for the industry in the state, $8,937,000, represented 68.1 per cent of the total for the United States, as compared with $6,689,000, or 60.3 per cent, in 1904 and $3,938,000, or 60.1 per cent, in 1899.

Gas, illuminating and heating.—The manufacture of gas is notable in California because of the extensive use of petroleum. On account of the lack of coal in the state, the product of the gas plants has been limited to the manufacture of carbureted water gas and oil gas. According to the statistics for 1909, the production of oil gas greatly exceeded that of carbureted water gas.

[1] The Commerce and Industries of the Pacific Coast, p. 189. History of California, Vol. VII, p. 91.

The total value of products reported for the industry in 1909 was $8,927,000, an increase of $5,765,000, or 182.3 per cent, over that for 1899.

Cement.—California has numerous beds of soft limestone and clay which are relatively low in magnesia and which are being utilized to a considerable extent for the manufacture of Portland cement. In 1904 there were four establishments engaged in the industry, employing 596 wage earners and reported products valued at $1,601,000, while in 1909 the industry had increased to eight establishments, giving employment to an average of 2,407 wage earners and reporting a product valued at $6,504,000. The counties in which the industry is most extensively carried on, named in order of importance, are Solano, Santa Cruz, and San Bernardino.

With the exception of the lumber industry, which holds first place on either basis, the rank of the industries shown separately in the preceding table in respect to value added by manufacture, differs considerably from their rank in value of products, which is the order in which they are arranged in the table. The printing and publishing industry ranks second among these industries in value added by manufacture, instead of slaughtering and meat packing, which falls to ninth place, while the foundry and machine-shop industry becomes third, instead of canning and preserving, which drops to fifth place. The steam-railroad repair shops rise from seventh place to fourth, the bakery industry from ninth to sixth, the brewery industry from twelfth to seventh, and the gas industry from fourteenth to eighth. On the other hand, the flour-mill and gristmill industry drops from fifth place to fourteenth, petroleum refining from eighth to thirteenth, and the butter, cheese, and condensed-milk industry from tenth to twenty-fifth.

A number of industries, particularly the butter, cheese, and condensed-milk, flour-mill and gristmill, slaughtering and meat-packing, and petroleum-refining industries, have a much lower rank in value added by manufacture and in average number of wage earners than in value of products. This condition is due mainly to the comparatively simple processes of manufacture existing in these industries, as a result of which by far the greater proportion of the gross value of products represents the cost of materials, while the proportion representing wages, which usually constitute the principal factor in value added by manufacture, is relatively small.

The percentages of increase or decrease in value of products and value added by manufacture for the five-year periods 1904–1909 and 1899–1904 are given for each industry presented separately in the preceding table for which comparable statistics are shown separately in Table I, page 92.

The automobile industry, which in California had its beginning but a short time prior to the census of 1904, shows a much higher rate of increase in both respects from 1904 to 1909 than any other of these industries, the value of products in 1909 being more than forty times as great and the value added by manufacture more than thirty-three times as great as in 1904. The distillery, cement, food-preparation, and petroleum-refining industries also show remarkable increases in both value of products and value added by manufacture during the same period.

The making of women's clothing is the only industry shown separately in the table for which decreases in both value of products and value added by manufacture are shown for both five-year periods. The manufacture of men's clothing, of carriages and wagons, and of brass and bronze products show decreases in both respects for the later five-year period, 1904 to 1909, while for the confectionery industry and the manufacture of pottery, terra-cotta, and fire-clay products and of patent medicines and compounds and druggists' preparations decreases in value added by manufacture only are shown for that period. In addition to the women's clothing industry, four others show decreases in both value of products and value added by manufacture for the earlier five-year period, 1899–1904, while one shows a decrease in value of products only and one a decrease in value added by manufacture only.

The value of products of the breweries and the distilleries includes a very large amount of Federal internal-revenue tax, and is, therefore, misleading as an indication of the importance of these industries from a purely manufacturing standpoint. In the case of the wine industry the amount of internal-revenue tax included is much smaller relatively than in the other two liquor industries, as no internal-revenue tax is imposed upon wine made from grapes grown by the manufacturer himself, or upon wine made from purchased grapes when it is sold at the place where it is made or at the general business office of the manufacturer. The establishments included in this industry also make considerable quantities of brandy, some of which is sold, in which case it is subject to the regular internal-revenue tax on distilled liquors; most of the brandy made, however, is used in fortifying the wine produced in the same establishment and is not subject to tax.

Persons engaged in manufacturing industries.—The next 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.

The average number of persons engaged in manufactures during 1909 was 141,576, of whom 115,296 were wage earners. Of the remainder, 13,640 were proprietors and officials, and 12,640 were clerks. Corresponding figures for individual industries will be found in Table II, page 100.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes	**141,576**	**123,929**	**17,647**
Proprietors and officials	13,640	13,293	347
Proprietors and firm members	8,077	7,826	251
Salaried officers of corporations	2,103	2,036	67
Superintendents and managers	3,460	3,431	29
Clerks	12,640	9,672	2,968
Wage earners (average number)	115,296	100,964	14,332
16 years of age and over	114,236	100,218	14,018
Under 16 years of age	1,060	746	314

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 20 important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries	**141,576**	**9.6**	**8.9**	**81.4**
Bread and other bakery products	5,801	21.2	9.6	69.3
Butter, cheese, and condensed milk	918	22.8	12.2	65.0
Canning and preserving	8,714	5.0	6.0	89.0
Cars and general shop construction and repairs by steam-railroad companies	9,688	0.7	2.8	96.4
Cement	2,521	1.0	3.6	95.5
Clothing, men's, including shirts	2,859	11.3	5.3	83.4
Coffee and spice, roasting and grinding	707	11.0	39.2	49.8
Copper, tin, and sheet-iron products	2,511	17.0	5.8	77.2
Flour-mill and gristmill products	1,392	14.9	17.0	68.1
Food preparations	1,108	23.1	12.3	64.6
Foundry and machine-shop products	10,218	9.8	8.2	82.0
Gas, illuminating and heating	2,538	6.7	27.7	65.6
Leather, tanned, curried, and finished	1,547	5.8	3.8	90.4
Liquors, distilled	264	17.8	9.1	73.1
Liquors, malt	1,626	10.5	9.8	79.7
Liquors, vinous	1,691	16.9	7.0	76.1
Lumber and timber products	25,079	4.8	3.8	91.5
Petroleum, refining	1,146	6.1	12.7	81.2
Printing and publishing	12,215	14.8	23.4	61.9
Slaughtering and meat packing	2,135	10.1	13.0	76.9
All other industries	46,898	11.4	8.5	80.1

Of the total number of persons engaged in all manufacturing industries, 9.6 per cent were proprietors and officials, 8.9 per cent clerks, and 81.4 per cent wage earners. In the bakery and the butter, cheese, and condensed-milk industries, and in the manufacture of food preparations, the majority of the establishments are comparatively small and the work is to a large extent done by the proprietors or their immediate representatives, so that the proportion of the persons engaged in these industries falling into the class of proprietors and officials is very much higher than for most other industries or for all industries combined. The smallest proportions shown for this class are for the steam-railroad repair shops and the cement industry, owing principally to the large number of wage earners employed per establishment in these 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 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 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	**115,296**	**86.9**	**12.2**	**0.9**
Bread and other bakery products	4,018	80.3	18.8	0.9
Butter, cheese, and condensed milk	597	93.8	6.2	.....
Canning and preserving	7,757	41.4	56.3	2.2
Cars and general shop construction and repairs by steam-railroad companies	9,342	100.0	.....	(2)
Cement	2,407	99.9	.....	0.1
Clothing, men's, including shirts	2,385	17.4	82.4	0.2
Coffee and spice, roasting and grinding	352	62.8	36.6	0.6
Copper, tin, and sheet-iron products	1,938	94.4	5.2	0.4
Flour-mill and gristmill products	948	97.9	2.1	.....
Food preparations	716	68.0	31.7	0.3
Foundry and machine-shop products	8,377	99.3	0.2	0.5
Gas, illuminating and heating	1,666	100.0	.....	.....
Leather, tanned, curried, and finished	1,398	99.7	.....	0.3
Liquors, distilled	193	86.5	13.5	.....
Liquors, malt	1,296	100.0	.....	.....
Liquors, vinous	1,287	98.8	1.2	.....
Lumber and timber products	22,935	99.2	0.6	0.2
Petroleum, refining	930	99.9	0.1	.....
Printing and publishing	7,556	81.9	15.7	2.4
Slaughtering and meat packing	1,641	97.4	1.8	0.8
All other industries	37,557	85.2	13.3	1.4

[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, 86.9 per cent of the average number of wage earners were males 16 years of age and over; 12.2 per cent females 16 years of age and over; and nine-tenths of 1 per cent children under the age of 16. A majority of the adult female wage earners were employed in the canning and preserving, men's clothing, and printing and publishing industries. Females 16 years of age or over formed a larger proportion (82.4 per cent) of the wage earners in the men's clothing industry than in any other important industry in the state. In the women's clothing industry slightly more than two-thirds of the wage earners belonged to this class, while in the manufacture of fancy and paper boxes and the confectionery industry the proportion exceeded three-fifths, and in the canning and preserving industry and the manufacture of leather gloves and mittens it exceeded one-half.

The canning and preserving and the printing and publishing industries, which were the only ones giving employment to an average of more than 100 wage earners under 16 years of age, together employed about one-third of the total number of such wage earners in all manufacturing industries of the state. The proportions which children formed of the total number of wage earners in these industries were also relatively high (2.2 per cent and 2.4 per cent, respec-

tively), although both were exceeded by that in the boot and shoe industry (5.6 per cent) and by those in other industries in which the actual number of children employed was small.

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	141,576	100.0	120,040	100.0	17.9
Proprietors and firm members	8,077	5.7	7,402	6.2	9.1
Salaried employees	18,203	12.9	12,283	10.2	48.2
Wage earners (average number)	115,296	81.4	100,355	83.6	14.9

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

The table in the next column 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.)

The table shows that for all industries combined the proportion of wage earners under 16 years of age was decidedly less in 1909 than in 1899, the actual number of such employees having decreased 42.5 per cent during this period. The proportion of adult female wage earners was less in 1904 than in 1899, and in 1909 than in 1904, although the actual number increased from 1899 to 1904 and was practically the same in 1909 as in 1904. Males 16 years of age and over formed 86.9 per cent of all wage earners in 1909, as compared with 84.4 per cent in 1904 and 79.7 per cent in 1899.

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Percent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total	115,296	100.0	100,355	100.0	77,224	100.0
16 years of age and over	114,236	99.1	98,772	98.4	75,382	97.6
Male	100,218	86.9	84,688	84.4	61,574	79.7
Female	14,018	12.2	14,084	14.0	13,808	17.9
Under 16 years of age	1,060	0.9	1,583	1.6	1,842	2.4

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 canning and preserving and lumber industries, 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 100, are shown, for the majority 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. The wage earners for the lumber industry are divided in the table below in such a manner as to show separately the number engaged in the mills and in the logging operations.

MONTH.	WAGE EARNERS.											
	All industries.		Canning and preserving.		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.	Number.	Per cent of maximum.
January	94,747	71.6	2,854	17.8	14,401	49.7	12,150	63.5	2,251	22.8	77,492	85.1
February	94,252	71.3	2,781	17.3	14,441	49.8	12,074	63.1	2,367	24.0	77,030	84.6
March	100,372	75.9	2,870	17.9	16,825	58.0	12,793	66.8	4,032	40.9	80,677	88.6
April	108,437	82.0	3,878	24.2	21,853	75.4	15,014	78.4	6,839	69.4	82,706	90.8
May	115,839	87.6	5,063	31.6	26,755	92.3	17,525	91.5	9,230	93.7	84,021	92.3
June	119,911	90.6	6,808	42.4	28,533	98.4	18,681	97.6	9,852	99.9	84,570	92.9
July	124,886	94.4	11,567	72.1	28,986	100.0	19,131	99.9	9,855	100.0	84,333	92.6
August	131,202	99.2	16,047	100.0	28,961	99.9	19,148	100.0	9,813	99.6	86,194	94.6
September	132,280	100.0	14,781	92.1	27,932	96.4	18,833	98.4	9,099	92.3	89,567	98.3
October	129,864	98.2	12,952	80.7	25,835	89.1	17,990	94.0	7,845	79.6	91,077	100.0
November	121,486	91.8	8,951	55.8	22,807	78.7	16,897	88.2	5,910	60.0	89,728	98.5
December	110,281	83.4	4,542	28.3	17,894	61.7	14,795	77.3	3,099	31.4	87,845	96.5

Canning and preserving is a seasonal industry, giving employment to a large number of persons in July, August, September, and October, and to a comparatively small number during most of the other months of the year. The number of wage earners employed in the industry varied from 2,781 in February to 16,047 in August. The variation of employment in the lumber industry was not so great, but as this industry employed a much larger average number of wage earners than the canning and preserving indus-

try, it exerted a greater influence upon the total number of wage earners employed in all manufacturing industries in the state. The number reported for this industry in January, the month of minimum employment, was 14,585 less than the number shown for July, the month of maximum employment, the variation in this one industry representing nearly one-half of the total variation between the numbers employed during these months in all industries combined. There are other seasonal industries in the state not shown in the table because the numbers of wage earners employed are too small to affect the totals materially. In the manufacture of beet sugar the maximum, 3,420, was reported for September and the minimum, 772, for February, while in the production of vinous liquors the greatest number, 2,868, was employed in October and the smallest, 793, in June.

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	**115,296**	**22,765**	**9,652**	**34,674**	**6,968**	**31,107**	**7,125**	**386**	**2,619**
Agricultural implements	622	2	.....	584	.....	20	16	.....	.....
Artificial stone	320	191	19	110	.....	.....	.....	.....	.....
Automobiles, including bodies and parts	478	42	8	261	.....	166	1	.....	.....
Babbitt metal and solder	52	.....	13	15	.....	24	.....	.....	.....
Boots and shoes, including cut stock and findings	695	.....	.....	641	.....	35	19	.....	.....
Boxes, fancy and paper	624	56	171	397	.....	.....	.....	.....	.....
Brass and bronze products	195	19	113	25	35	3	.....	.....	.....
Bread and other bakery products	4,018	413	55	1,552	644	1,011	278	33	32
Brick and tile	1,703	186	.....	1,410	.....	72	10	.....	25
Butter, cheese, and condensed milk	597	58	11	56	85	120	244	5	18
Canning and preserving	7,757	332	53	428	147	6,083	514	46	154
Carriages and wagons and materials	760	270	48	327	40	72	.....	3	.....
Cars and general shop construction and repairs by steam-railroad companies	9,342	76	.....	7,761	12	1,461	32	.....	.....
Cars and general shop construction and repairs by street-railroad companies	1,902	36	291	1,187	311	49	28	.....	.....
Cement	2,407	1	.....	.....	212	.....	1,986	.....	208
Chemicals	244	1	.....	24	.....	160	.....	.....	59
Clothing, men's, including shirts	2,385	1,327	721	178	.....	124	35	.....	.....
Clothing, women's	791	328	109	187	1	143	23	.....	.....
Coffee and spice, roasting and grinding	352	53	63	183	10	43	.....	.....	.....
Confectionery	1,002	119	156	489	147	74	17	.....	.....
Cooperage and wooden goods, not elsewhere specified	416	36	37	301	.....	22	20	.....	.....
Copper, tin, and sheet-iron products	1,938	1,138	160	256	366	18	.....	.....	.....
Electrical machinery, apparatus, and supplies	435	133	75	199	27	1	.....	.....	.....
Fertilizers	226	8	1	97	12	84	24	.....	.....
Firearms and ammunition	156	9	.....	46	101	.....	.....	.....	.....
Flour-mill and gristmill products	948	117	71	77	53	371	255	4	.....
Food preparations	716	100	45	137	100	307	27	.....	.....
Foundry and machine-shop products	8,377	1,326	2,774	2,586	1,218	414	59	.....	.....
Furnishing goods, men's	134	58	43	33	.....	.....	.....	.....	.....
Furniture and refrigerators	1,653	835	30	662	89	37	.....	.....	.....
Gas and electric fixtures and lamps and reflectors	553	246	23	284	.....	.....	.....	.....	.....
Gas, illuminating and heating	1,666	127	7	.....	965	4	533	8	22
Gloves and mittens, leather	570	188	340	42	.....	.....	.....	.....	.....
Ice, manufactured	666	32	.....	28	102	256	131	1	116
Iron and steel, steel works and rolling mills	1,038	.....	348	69	179	442	.....	.....	.....
Jewelry	574	35	80	379	25	12	25	.....	18
Leather goods	710	36	68	584	5	17	.....	.....	.....
Leather, tanned, curried, and finished	1,398	2	67	1,193	116	20	.....	.....	.....
Lime	410	6	.....	94	1	127	182	.....	.....
Liquors, distilled	193	.....	.....	111	5	67	8	2	.....
Liquors, malt	1,296	1,215	.....	21	41	10	3	4	2
Liquors, vinous	1,287	33	4	306	215	387	318	23	1
Lumber and timber products	22,935	3,859	68	2,709	228	14,732	1,324	15	.....
Marble and stone work	1,415	1,022	23	93	223	34	20	.....	.....
Mattresses and spring beds	528	249	75	204	.....	.....	.....	.....	.....
Paint and varnish	396	28	27	285	55	1	.....	.....	.....
Paper and wood pulp	312	.....	.....	.....	.....	181	116	15	.....
Patent medicines and compounds and druggists' preparations	310	118	117	66	.....	9	.....	.....	.....
Petroleum, refining	930	25	.....	485	31	18	64	22	285
Pottery, terra-cotta, and fire-clay products	1,027	18	.....	660	.....	250	99	.....	.....
Printing and publishing	7,556	5,485	1,038	778	119	119	17	.....	.....
Salt	402	.....	.....	64	.....	289	1	48	.....
Slaughtering and meat packing	1,641	55	37	455	.....	1,029	47	6	12
Stoves and furnaces, including gas and oil stoves	215	81	42	92	.....	.....	.....	.....	.....
Sulphuric, nitric, and mixed acids	217	.....	.....	100	.....	33	82	2	.....
Tobacco manufactures	1,465	1,018	152	87	.....	182	25	1	.....
All other industries	14,341	1,617	2,069	5,276	1,048	1,074	542	148	1,667

It is evident from these figures that for the majority of wage earners employed in the manufacturing industries of California the usual hours of labor ranged from 54 to 60 a week; 28.1 per cent of the total were, however, employed in establishments where a week of less than 54 hours prevailed, and 8.8 per cent in establishments where the prevailing hours were more than 60 a week.

In a number of industries, conspicuous among which are the tanning, currying, and finishing of leather, the brick and tile industry, and the steam-railroad repair shops, the employment was mainly confined to a week of 54 hours. More than three-fourths of the wage earners in the canning and preserving industry and more than three-fifths of those in the lumber and slaughtering and meat-packing industries, however, were employed in plants where 60 hours constituted a week's work, while over nine-tenths of the wage earners employed in the breweries and nearly three-fourths of those employed in the printing and publishing industry and in marble and stone work were in establishments where the prevailing hours were 48 or less per week.

Location of establishments.—The following table shows the extent to which the manufactures of California are centralized in cities of 10,000 inhabitants or over. (See Introduction.)

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 to 100,000.		100,000 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.	Number or amount.	Per cent of total.
Population	1910	2,377,549	1,266,930	53.3	196,701	8.3	183,945	7.7	886,284	37.3	1,110,619	46.7
	1900	1,485,053	640,357	43.1	98,854	6.7	96,242	6.5	445,261	30.0	844,696	56.9
Number of establishments	1909	7,659	4,881	63.7	666	8.7	653	8.5	3,562	46.5	2,778	36.3
	1899	4,997	2,967	59.4	379	7.6	306	6.1	2,282	45.7	2,030	40.6
Average number of wage earners	1909	115,296	69,599	60.4	8,525	7.4	8,598	7.5	52,476	45.5	45,697	39.6
	1899	77,224	47,953	62.1	4,063	5.3	6,162	8.0	37,728	48.9	29,271	37.9
Value of products	1909	$529,760,528	$294,851,479	55.7	$40,393,144	7.6	$30,488,066	5.8	$223,970,269	42.3	$234,909,049	44.3
	1899	257,385,521	151,245,681	58.8	14,225,527	5.5	14,862,891	5.8	122,157,263	47.5	106,139,840	41.2
Value added by manufacture	1909	204,522,454	125,929,111	61.6	14,791,657	7.2	14,144,347	6.9	96,993,107	47.4	78,593,343	38.4
	1899	92,491,252	60,571,549	65.5	5,223,451	5.6	6,814,012	7.4	48,534,086	52.5	31,919,703	34.5

In 1909, 55.7 per cent of the total value of manufactured products was reported from cities having over 10,000 inhabitants, and 60.4 per cent of the average number of wage earners in manufacturing industries were employed in such cities. The figures indicate that there has been a considerable decrease during the last 10 years in the relative industrial importance of this class of cities, largely on account of the rapid growth of the lumber and petroleum-refining industries, which are mainly carried on outside of cities of this size, and also in part because of the setback given to the manufacturing industries of San Francisco by the earthquake and fire of 1906.

As a result of the increase during the decade in the population of certain cities, the composition of the groups shown in the table differs considerably for the two censuses. For 1909 the group of cities having over 100,000 inhabitants comprises San Francisco, Los Angeles, and Oakland; in 1900, however, the population of Oakland was less than 100,000, so that for 1899 it is included in the group made up of cities having between 25,000 and 100,000 inhabitants. Berkeley, San Diego, and San Jose, which for 1909 are included in this latter group, had less than 25,000 inhabitants in 1900, and for 1899, therefore, their statistics are included with those for the cities having between 10,000 and 25,000 inhabitants. Pasadena, which for 1909 is included in the group of cities having between 25,000 and 100,000 inhabitants and Long Beach, Riverside, San Bernardino, Bakersfield, Eureka, Santa Barbara, Vallejo, Santa Cruz, Redlands, and Pomona, which are included in the group comprising cities having between 10,000 and 25,000 inhabitants, all had less than 10,000 inhabitants in 1900, so that for 1899 their statistics are not included with those for incorporated places of this size. The total value of products in 1909 for the 11 cities last mentioned was $16,623,644, representing 3.1 per cent of the total for the state. The cities having a population of over 10,000 in 1900 thus reported only 52.6 per cent of the total value of manufactured products in 1909, as compared with 58.8 per cent in 1899, showing that the growth of the manufacturing industries in these cities has not kept pace with that of the industries in the remainder of the state.

A somewhat larger proportion of the total number of wage earners in manufacturing industries, value of manufactured products, and value added by manufacture was reported in 1909 from cities having between 10,000 and 25,000 inhabitants than in 1899. The proportions of the total number of wage earners and value added by manufacture reported from cities having between 25,000 and 100,000 inhabitants, on the other hand, were slightly smaller, while the proportion of the total value of manufactured products reported from such cities was the same in both years. The cities having a population of over 100,000 show a considerable decrease in their proportion of the

totals for each of these three items, which was doubtless due in considerable measure to the disastrous effects of the earthquake and fire of 1906 in San Francisco. The addition of Oakland to these cities in 1909 and the rapid growth of the manufacturing industries of Los Angeles were, however, sufficient to counterbalance the actual losses sustained by San Francisco between 1904 and 1909, so that the absolute figures for this class of cities show marked increases in 1909 as compared with 1899. Of the total value of products shown for the state in 1909, 7.6 per cent was reported from the 13 cities having between 10,000 and 25,000 inhabitants; 5.8 per cent from the 5 cities having between 25,000 and 100,000 inhabitants; and 42.3 per cent from the 3 cities having over 100,000 inhabitants.

The population in 1910 and 1900 of the 21 cities which had 10,000 inhabitants or over in 1910 is given in the following tabular statement:

CITY.	1910	1900	CITY.	1910	1900
San Francisco	416,912	342,782	Long Beach	17,809	2,252
Los Angeles	319,198	102,479	Riverside	15,212	7,973
Oakland	150,174	66,960	San Bernardino	12,779	6,150
Sacramento	44,696	29,282	Bakersfield	12,727	4,836
Berkeley	40,434	13,214	Eureka	11,845	7,327
San Diego	39,578	17,700	Santa Barbara	11,659	6,587
Pasadena	30,291	9,117	Vallejo	11,340	7,965
San Jose	28,946	21,500	Santa Cruz	11,146	5,659
Fresno	24,892	12,470	Redlands	10,449	4,797
Alameda	23,383	16,464	Pomona	10,207	5,526
Stockton	23,253	17,506			

The relative industrial importance of each of the foregoing cities 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, so far as comparative figures are available:

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
San Francisco	28,244	38,429	32,555	$133,041,069	$137,788,233	$107,023,567
Los Angeles	17,327	10,424	5,173	68,586,274	34,814,475	15,133,696
Oakland [1]	6,905	3,353	2,476	22,342,926	9,014,705	5,368,258
Sacramento [1]	4,514	4,203	3,686	13,976,911	10,072,893	9,494,633
Stockton	1,594	1,333	1,185	11,849,252	8,029,490	5,525,391
Fresno [1]	1,938	1,915	819	11,090,195	9,753,632	2,752,201
San Jose [1]	1,430	1,260	1,221	5,610,427	4,298,216	3,291,641
San Diego	1,071	541	255	4,740,990	1,974,430	669,682
Berkeley	1,084	338	211	4,435,374	1,473,888	651,286
Eureka	946	(2)	(2)	3,011,682	(2)	(2)
Bakersfield	746	(2)	(2)	2,818,744	(2)	(2)
Alameda	915	279	372	2,554,417	696,761	1,335,326
Vallejo	203	(2)	(2)	1,895,562	(2)	(2)
Pasadena	499	318	177	1,724,364	966,695	330,578
San Bernardino	729	(2)	(2)	1,659,705	(2)	(2)
Riverside	267	(2)	(2)	1,177,962	(2)	(2)
Santa Barbara	265	(2)	(2)	1,169,195	(2)	(2)
Santa Cruz	274	(2)	(2)	1,161,269	(2)	(2)
Long Beach	277	(2)	(2)	927,180	(2)	(2)
Pomona	224	(2)	(2)	559,661	(2)	(2)
Redlands	147	(2)	(2)	518,320	(2)	(2)

[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.
[2] Figures not available.

With the single exception of San Francisco, every city for which comparative statistics are presented shows an increase in value of products from 1904 to 1909, while all except Alameda show an increase from 1899 to 1904. The greatest relative gain from 1904 to 1909, 266.6 per cent, was made by Alameda, and was due in part to the establishment there of foundries and machine shops as a new industry, to the increased output of the planing mills, and to greater activity in the shipbuilding industry. The next largest relative increase, 200.9 per cent, is that reported for Berkeley, which was the result mainly of the increased output of its foundries and machine shops, bakeries, and planing mills, the increased production of cocoanut oil and the establishment of new industries, such as the manufacture of fertilizers, the refining of petroleum, and the canning and preserving industry. The remarkable increases shown for Alameda and Berkeley and also for Oakland are doubtless due largely to the influx of population and business from San Francisco following the earthquake in 1906. The greatest gains shown for the decade 1899–1909 are those of 607.9 per cent for San Diego and 581 per cent for Berkeley. San Francisco shows a decrease of 3.4 per cent in 1909 as compared with 1904, indicating that the city had not yet recovered from the effects of the earthquake and fire of April, 1906; owing, however, to the gain from 1899 to 1904, the figures for 1909 represent an increase of 24.3 per cent as compared with 1899.

In 1909 San Francisco reported 25.1 per cent of the total value of products and 24.5 per cent of the average number of wage earners for all manufacturing industries in the state. The corresponding proportions for 1899 were 41.6 per cent and 42.2 per cent, respectively. Measured by value of products, San Francisco held sixteenth place among the manufacturing cities of the United States in 1909, thirteenth in 1904, and twelfth in 1899. The effect of the earthquake and fire of 1906 upon the manufacturing industries of the city is indicated to some extent by the next table, which shows for the 15 leading industries presented separately in Table I the value of products in 1909 and 1904, with the percentage which it formed of the total for the industry in the state, the percentage of increase or decrease in 1909 as compared with 1904, and the rank of the industry in the city in value of products in each year.

Six of the 15 industries included in the table show decreases in value of products in 1909 as compared with 1904, the largest decrease, 23.4 per cent, or nearly one-fourth, being in the men's clothing industry, although an even larger decrease, 65.5 per cent, was reported for the paint and varnish industry, which is not shown in the table. The roasting and grinding of coffee and spice, the tanning, currying, and finishing of leather, the furniture and refrigerator industry, and the manufacture of food preparations are the only industries showing any considerable increase. In the case of all of the industries shown in the table, with the exception of the tanning, currying, and finishing of leather and the furniture and refrigerator industry, the value of products reported from San Francisco represented a smaller proportion of the state total in 1909 than in 1904, the difference in

some cases being considerable. Of the total value of products for the men's clothing industry, for example, only 71.9 per cent was reported from this city in 1909, as compared with 91.7 per cent in 1904. Changes have also occurred in the ranking of the different industries shown in the table, on the basis of value of products, although the printing and publishing industry was first in both years. The foundry and machine-shop and the slaughtering and meat-packing industries, which ranked second and third, respectively, in 1904, had changed places in 1909, mainly as the result of the decrease shown for the former industry. The men's clothing industry, which ranked fifth in 1904, had dropped to eighth place in 1909, while the manufacture of copper, tin, and sheet-iron products dropped from seventh place in 1904 to ninth in 1909, and the brewery industry from eighth in 1904 to eleventh in 1909. On the other hand, the rank of the roasting and grinding of coffee and spice, the lumber industry, the tanning, currying, and finishing of leather, and the manufacture of furniture and refrigerators was higher in 1909 than in 1904.

INDUSTRY.	VALUE OF PRODUCTS.					RANK.[1]	
	1909		1904		Per cent of increase, 1904–1909.[2]	1909	1904
	Amount.	Per cent of total for state.	Amount.	Per cent of total for state.			
Printing and publishing	$12,201,000	48.7	$10,847,000	56.7	12.5	1	1
Slaughtering and meat packing	10,270,000	30.0	9,209,000	41.8	11.5	2	3
Foundry and machine-shop products	9,622,000	36.0	10,525,000	59.8	—8.6	3	2
Bread and other bakery products	5,268,000	29.7	4,882,000	46.0	7.9	4	4
Coffee and spice, roasting and grinding	4,973,000	76.6	3,980,000	85.0	24.9	5	10
Canning and preserving	4,776,000	14.5	4,636,000	17.8	3.0	6	6
Lumber and timber products	4,378,000	9.7	3,980,000	11.5	10.0	7	9
Clothing, men's, including shirts	3,682,000	71.9	4,804,000	91.7	—23.4	8	5
Copper, tin, and sheet-iron products	3,645,000	53.6	4,529,000	76.3	—19.5	9	7
Leather, tanned, curried, and finished	3,622,000	38.7	2,718,000	33.7	33.3	10	12
Liquors, malt	3,482,000	37.4	4,100,000	54.7	—15.2	11	8
Furniture and refrigerators	3,057,000	68.0	1,836,000	64.8	66.5	12	14
Flour-mill and gristmill products	2,781,000	11.0	3,423,000	16.9	—18.8	13	11
Food preparations	2,436,000	44.2	999,000	62.9	143.8	14	15
Tobacco manufactures	1,833,000	54.6	2,028,000	63.5	—9.6	15	13

[1] Excluding from consideration industries not shown separately in Table I.
[2] A minus sign (—) denotes decrease.

In addition to the industries included in the preceding table, sugar refining was one of the more important industries in San Francisco during 1909, but the statistics for this industry can not be shown separately without disclosing the operations of individual establishments. There were eight other industries in the city reporting products valued at more than $1,000,000 in 1909 for which separate statistics can not be presented for the same reason.[1]

[1] These industries are:

Babbitt metal and solder.
Bags, other than paper.
Baking powders and yeast.
Cars and general shop construction and repairs by steam-railroad companies.
Chocolate and cocoa products.
Gas, illuminating and heating.
Shipbuilding, including boat building.
Wirework, including wire rope and cable.

There was a remarkable growth in the building operations of the city from 1904 to 1909, which is reflected in the increases in value of products reported for such industries as the manufacture of artificial stone (268.3 per cent), the structural-ironwork branch of the foundry and machine-shop industry (129.8 per cent), and the planing-mill branch of the lumber industry (18.7 per cent).

The value of products of the manufacturing industries of Los Angeles increased $33,771,799, or 97 per cent, from 1904 to 1909, the absolute increase being greater than that reported for any other city in the state. The increase for the decade as a whole was 353.2 per cent. Of the total value of manufactures for the state in 1909, 12.9 per cent was reported from this city. The average number of wage earners in the manufacturing industries of the city shows an increase of 66.2 per cent from 1904 to 1909 and 235 per cent for the decade. The leading industries of the city are shown in the following table, which gives the value of products reported for each industry in 1909, together with the percentage which it formed of the total for the industry in the state and the percentage of increase as compared with 1904:

INDUSTRY.	VALUE OF PRODUCTS.		
	Amount.	Per cent of state total.	Per cent of increase over 1904.
Foundry and machine-shop products	$7,777,000	29.1	118.6
Slaughtering and meat packing	7,464,000	21.8	84.8
Lumber and timber products	5,684,000	12.6	110.5
Flour-mill and gristmill products	5,347,000	21.2	91.0
Printing and publishing	5,192,000	20.7	48.0
Bread and other bakery products	4,670,000	26.4	167.8
Cars and general shop construction and repairs by steam-railroad companies	3,362,000	18.0	116.9
Liquors, malt	1,457,000	15.6	82.6
Butter, cheese, and condensed milk	1,417,000	11.1	109.3
Petroleum, refining	1,406,000	7.9	205.0
Canning and preserving	1,255,000	3.8	52.9
Coffee and spice, roasting and grinding	1,150,000	17.7	131.4
Copper, tin, and sheet-iron products	1,124,000	16.5	118.2

The rapid growth of the manufacturing industries of the city is brought out clearly by the fact that in 8 out of the 13 industries included in the table the value of products more than doubled during the five-year period.

Oakland ranks third among the cities of the state in value of manufactured products, showing an increase in that respect of $13,328,221, or 147.8 per cent, from 1904 to 1909 and $16,974,668, or 316.2 per cent, from 1899 to 1909. The leading industries of the city were bakeries, canning and preserving, the manufacture of cordage and twine, foundries and machine shops, the gas industry, the lumber industry, printing and publishing, steam-railroad repair shops, and steel works and rolling mills. The increase in the industrial importance of the city during the five-year period 1904–1909 was due largely to the growth of the brewery, lumber, foundry and machine-shop, bakery, printing and publishing, and canning and preserving industries, these six

industries contributing 37.4 per cent of the total increase in value of products for all manufacturing industries of the city during that period. The increase in the canning and preserving industry was particularly marked, the value of products for this industry in 1909 being more than fifteen times as great as in 1904.

In Sacramento, the capital of the state, steam-railroad repair shops constituted the most important industry, with steel works and rolling mills next in rank. The brewing of malt liquors, the flour-mill and gristmill industry, canning and preserving, and printing and publishing were other important industries. In Stockton the flour-mill and gristmill industry led all others, the value of its products representing nearly one-half of the total value of manufactures reported for the city. The manufacture of agricultural implements was also an important industry, 66.5 per cent of the total value of products for this industry in California being reported from Stockton.

In Fresno the canning and preserving industry, which is there confined largely to the drying of fruits, especially of raisins, was the leading industry in 1909, contributing 69.6 per cent of the total value of all manufactured products of the city. The city is one of the principal centers of the canning and preserving industry of the state, reporting nearly one-fourth of the total value of products for this industry in California and a much larger proportion of the total value of dried fruits. Canning and preserving was also the leading industry in San Jose, the output of the industry representing 31.4 per cent of the total value of all manufactured products for that city. Other important industries were printing and publishing, foundries and machine shops, and bakeries. The most important industries in San Diego were the lumber industry, flour mills and gristmills, slaughtering and meat packing, printing and publishing, and bakeries.

The foundry and machine-shop industry outranked all others in Berkeley in 1909, the value of its products in that year being nearly one hundred and twenty-one times that in 1904. Other leading industries, named in order of their relative importance, were the manufacture of cocoanut oil included under "Oil, not elsewhere specified," the fertilizer industry, and bakeries. The chief industry in Alameda was shipbuilding, this city reporting nearly one-fourth of the total value of products for this industry in the state. The lumber and the foundry and machine-shop industries, and the manufacture of pottery, terra-cotta, and fire-clay products were other important industries. In Eureka the lumber industry was the leading branch of manufacture in 1909, contributing nearly one-half of the total value of manufactured products reported for the city. This city also reported a considerable output of factory-made butter.

In the remaining cities shown in the table the chief industries were as follows: In Bakersfield and San Bernardino, steam-railroad repair shops; in Vallejo and Long Beach, flour mills and gristmills; in Pasadena, the planing-mill branch of the lumber industry; in Riverside and Santa Barbara, slaughtering and meat packing; in Santa Cruz, the tanning, currying, and finishing of leather; and in Pomona and Redlands, canning and preserving.

Character of ownership.—The table on page 81 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 the statistics for 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 all industries combined, 32.1 per cent of the total number of establishments were in 1909 under corporate ownership, as against 67.9 per cent under all other forms. The corresponding figures for 1904 were 28 per cent and 72 per cent, respectively. The establishments operated by corporations, however, reported 82.9 per cent of the total value of products in 1909, as against 17.1 per cent for those under all other forms of ownership, while in 1904 the corresponding figures were 76.5 per cent and 23.5 per cent, respectively. The greatest decrease in relative importance from 1904 to 1909 is shown for the establishments operated by individuals, which represented 45.9 per cent of the total number of establishments in 1909, as compared with 49.3 per cent in 1904, although the actual number increased from 3,375 to 3,516 during the same five-year period.

Establishments under corporate ownership reported more than one-half of the total value of products for each industry shown separately in the table, with the exception of the bakery industry, although in all but three of the industries such establishments constituted less than one-half of the total number.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909	7,659	115,296	$529,760,528	$204,522,454
1904	6,839	100,355	367,218,494	151,492,080
Individual:				
1909	3,516	12,704	49,909,595	23,760,907
1904	3,375	15,257	47,300,887	24,693,085
Firm:				
1909	1,597	9,342	36,539,495	15,624,296
1904	1,472	10,527	37,343,541	16,371,024
Corporation:				
1909	2,459	92,757	439,064,967	164,048,735
1904	1,917	74,284	280,742,589	109,966,122
Other:				
1909	87	433	4,180,471	1,088,516
1904	75	287	1,831,477	461,849
Per cent of total:				
1909	100.0	100.0	100.0	100.0
1904	100.0	100.0	100.0	100.0
Individual:				
1909	45.9	11.1	9.4	11.6
1904	49.3	15.2	12.9	16.3
Firm:				
1909	20.9	8.1	6.9	7.6
1904	21.5	10.5	10.2	10.8
Corporation:				
1909	32.1	80.5	82.9	80.2
1904	28.0	74.0	76.5	72.6
Other:				
1909	1.1	0.4	0.8	0.5
1904	1.1	0.3	0.5	0.3
Bread and other bakery products, 1909	864	4,018	$17,709,633	$7,332,268
Individual	624	1,633	7,526,828	3,164,475
Firm	180	952	4,103,140	1,746,388
Corporation[1]	51	1,433	6,079,665	2,421,405
Per cent of total	100.0	100.0	100.0	100.0
Individual	72.2	40.6	42.5	43.2
Firm	21.9	23.7	23.2	23.8
Corporation[1]	5.9	35.7	34.3	33.0
Butter, cheese, and condensed milk, 1909	161	597	$12,760,670	$1,620,970
Individual	52	155	2,263,798	351,602
Firm	28	51	994,872	153,344
Corporation	55	313	7,356,944	852,541
Other	26	78	2,145,056	263,483
Per cent of total	100.0	100.0	100.0	100.0
Individual	32.3	26.0	17.7	21.7
Firm	17.4	8.5	7.8	9.5
Corporation	34.2	52.4	57.7	52.6
Other	16.1	13.1	16.8	16.3
Canning and preserving, 1909	196	7,757	$32,914,829	$8,905,607
Individual	43	578	1,660,204	601,530
Firm	34	383	1,613,248	428,489
Corporation[1]	119	6,796	29,641,317	7,875,588
Per cent of total	100.0	100.0	100.0	100.0
Individual	21.9	7.5	5.0	6.8
Firm	17.3	4.9	4.9	4.8
Corporation[1]	60.7	87.6	90.1	88.4
Clothing, men's, including shirts, 1909	74	2,385	$5,120,509	$2,225,613
Individual	29	164	380,068	193,383
Firm	24	559	1,187,147	500,814
Corporation	21	1,662	3,553,294	1,531,416
Per cent of total	100.0	100.0	100.0	100.0
Individual	39.2	6.9	7.4	8.7
Firm	32.4	23.4	23.2	22.5
Corporation	28.4	69.7	69.4	68.8
Copper, tin, and sheet-iron products, 1909	233	1,938	$6,803,761	$3,238,905
Individual	106	406	1,425,547	708,283
Firm	74	266	958,869	530,745
Corporation	53	1,266	4,419,345	1,939,877
Per cent of total	100.0	100.0	100.0	100.0
Individual	45.5	20.9	21.0	23.7
Firm	31.8	13.7	14.1	16.4
Corporation	22.7	65.3	65.0	59.9
Flour-mill and gristmill products, 1909	125	948	$25,188,133	$3,296,182
Individual	33	109	2,471,416	275,969
Firm	21	51	951,061	114,929
Corporation[1]	71	788	21,765,656	2,905,284
Per cent of total	100.0	100.0	100.0	100.0
Individual	26.4	11.5	9.8	8.4
Firm	16.8	5.4	3.8	3.5
Corporation[1]	56.8	83.1	86.4	88.1
Food preparations, 1909	129	716	$5,508,097	$1,537,799
Individual	44	165	596,491	246,077
Firm	42	147	991,646	289,221
Corporation	36	392	3,361,175	983,829
Other	7	12	558,785	18,672
Per cent of total	100.0	100.0	100.0	100.0
Individual	34.1	23.0	10.8	16.0
Firm	32.6	20.5	18.0	18.8
Corporation	27.9	54.7	61.0	64.0
Other	5.4	1.7	10.1	1.2
Foundry and machine-shop products, 1909	543	8,377	$26,730,891	$13,830,000
Individual	207	995	2,794,226	1,647,244
Firm	118	694	2,017,447	1,201,107
Corporation	218	6,688	21,919,218	10,981,649
Per cent of total	100.0	100.0	100.0	100.0
Individual	38.1	11.9	10.5	11.9
Firm	21.7	8.3	7.5	8.7
Corporation	40.1	79.8	82.0	79.4
Liquors, malt, 1909	83	1,296	$9,319,041	$6,759,580
Individual	34	92	471,784	330,680
Firm	5	11	85,518	51,606
Corporation	44	1,193	8,761,739	6,377,274
Per cent of total	100.0	100.0	100.0	100.0
Individual	41.0	7.1	5.1	4.9
Firm	6.0	0.8	0.9	0.8
Corporation	53.0	92.1	94.0	94.3
Liquors, vinous, 1909	181	1,287	$8,936,848	$4,262,907
Individual	85	232	1,245,037	566,841
Firm	26	95	561,333	272,714
Corporation[1]	70	960	7,130,478	3,423,352
Per cent of total	100.0	100.0	100.0	100.0
Individual	47.0	18.0	13.9	13.3
Firm	14.4	7.4	6.3	6.4
Corporation[1]	38.7	74.6	79.8	80.3
Lumber and timber products, 1909	644	22,935	$45,000,276	$26,631,376
Individual	199	1,412	3,453,706	1,842,575
Firm	149	1,118	3,029,374	1,748,532
Corporation[1]	296	20,405	38,517,196	23,040,269
Per cent of total	100.0	100.0	100.0	100.0
Individual	30.9	6.2	7.7	6.9
Firm	23.1	4.9	6.7	6.6
Corporation[1]	46.0	89.0	85.6	86.5
Printing and publishing, 1909	1,240	7,556	$25,031,877	$18,704,574
Individual	709	1,885	6,762,762	5,142,337
Firm	194	719	1,812,749	1,398,227
Corporation	296	4,874	15,871,045	11,718,276
Other	41	78	585,321	445,734
Per cent of total	100.0	100.0	100.0	100.0
Individual	57.2	24.9	27.0	27.5
Firm	15.6	9.5	7.2	7.5
Corporation	23.9	64.5	63.4	62.6
Other	3.3	1.0	2.3	2.4
Slaughtering and meat packing, 1909	94	1,641	$34,280,003	$5,831,946
Individual	33	155	4,276,592	611,509
Firm	34	171	4,444,852	546,152
Corporation	27	1,315	25,558,559	4,674,285
Per cent of total	100.0	100.0	100.0	100.0
Individual	35.1	9.4	12.5	10.5
Firm	36.2	10.4	13.0	9.4
Corporation	28.7	80.1	74.6	80.1

[1] 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 table on the following page 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 certain 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 the individual 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	7,659	115,296	$529,760,528	$204,522,454
1904	6,839	100,355	367,218,494	151,492,080
Less than $5,000:				
1909	2,169	2,067	5,610,748	3,795,464
1904	2,088	2,242	5,306,470	3,634,462
$5,000 and less than $20,000:				
1909	2,785	10,279	29,208,047	17,546,524
1904	2,507	10,574	26,100,138	15,902,855
$20,000 and less than $100,000:				
1909	1,867	24,913	82,114,420	40,743,591
1904	1,615	25,111	72,176,276	37,594,307
$100,000 and less than $1,000,000:				
1909	767	53,128	210,723,384	86,922,761
1904	598	47,912	158,273,161	69,162,483
$1,000,000 and over:				
1909	71	24,909	202,103,929	55,514,114
1904	31	14,516	105,272,449	25,197,973
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	28.3	1.8	1.1	1.9
1904	30.5	2.2	1.4	2.4
$5,000 and less than $20,000:				
1909	36.4	8.9	5.5	8.6
1904	36.7	10.5	7.1	10.5
$20,000 and less than $100,000:				
1909	24.4	21.6	15.5	19.9
1904	23.6	25.0	19.7	24.8
$100,000 and less than $1,000,000:				
1909	10.0	46.1	39.8	42.5
1904	8.7	47.7	43.1	45.7
$1,000,000 and over:				
1909	0.9	21.6	38.2	27.1
1904	0.5	14.5	28.7	16.6
Average per establishment:				
1909	.....	15	$69,168	$26,704
1904	.....	15	53,695	22,151
Bread and other bakery products, 1909	864	4,018	$17,709,633	$7,332,268
Less than $5,000	224	119	648,234	302,401
$5,000 and less than $20,000	456	1,038	4,761,929	2,104,134
$20,000 and less than $100,000	163	1,395	6,119,284	2,503,133
$100,000 and less than $1,000,000 [1]	21	1,466	6,180,186	2,422,600
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	25.9	3.0	3.7	4.1
$5,000 and less than $20,000	52.8	25.8	26.9	28.7
$20,000 and less than $100,000	18.9	34.7	34.6	34.1
$100,000 and less than $1,000,000 [1]	2.4	36.5	34.9	33.0
Average per establishment	.....	5	$20,497	$8,486
Butter, cheese, and condensed milk, 1909	161	597	$12,760,670	$1,620,970
Less than $5,000	17	8	59,438	13,663
$5,000 and less than $20,000	35	39	425,101	79,942
$20,000 and less than $100,000	75	185	3,475,950	481,903
$100,000 and less than $1,000,000 [1]	34	365	8,800,181	1,045,462
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	10.6	1.3	0.5	0.8
$5,000 and less than $20,000	21.7	6.5	3.3	4.9
$20,000 and less than $100,000	46.6	31.0	27.2	29.7
$100,000 and less than $1,000,000 [1]	21.1	61.1	69.0	64.5
Average per establishment	.....	4	$79,259	$10,068
Canning and preserving, 1909	196	7,757	$32,914,829	$8,905,607
Less than $5,000	18	31	49,825	23,657
$5,000 and less than $20,000	34	189	358,142	169,354
$20,000 and less than $100,000	58	1,188	3,207,177	1,183,515
$100,000 and less than $1,000,000	82	5,527	22,614,604	6,138,032
$1,000,000 and over	4	822	6,685,081	1,391,049
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	9.2	0.4	0.2	0.3
$5,000 and less than $20,000	17.3	2.4	1.1	1.9
$20,000 and less than $100,000	29.6	15.3	9.7	13.3
$100,000 and less than $1,000,000	41.8	71.3	68.7	68.9
$1,000,000 and over	2.0	10.6	20.3	15.6
Average per establishment	.....	40	$167,933	$45,437
Clothing, men's, including shirts, 1909	74	2,385	$5,120,509	$2,225,613
Less than $5,000	12	20	28,564	21,135
$5,000 and less than $20,000	26	191	270,318	163,543
$20,000 and less than $100,000	22	427	924,998	388,300
$100,000 and less than $1,000,000	14	1,747	3,896,629	1,652,635
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	16.2	0.8	0.6	0.9
$5,000 and less than $20,000	35.1	8.0	5.3	7.3
$20 000 and less than $100,000	29.7	17.9	18.1	17.4
$100,000 and less than $1,000,000	18.9	73.2	76.1	74.3
Average per establishment	.....	32	$69,196	$30,076
Copper, tin, and sheet-iron products, 1909	233	1,938	$6,803,761	$3,238,905
Less than $5,000	64	57	182,744	120,083
$5,000 and less than $20,000	107	338	1,050,415	607,141
$20,000 and less than $100,000	50	619	2,174,242	1,114,065
$100,000 and less than $1,000,000	12	924	3,396,360	1,397,616
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	27.5	2.9	2.7	3.7
$5,000 and less than $20,000	45.9	17.4	15.4	18.7
$20,000 and less than $100,000	21.5	31.9	32.0	34.4
$100,000 and less than $1,000,000	5.2	47.7	49.9	43.2
Average per establishment	.....	8	$29,201	$13,901
Flour-mill and gristmill products, 1909	125	948	$25,188,133	$3,296,182
Less than $5,000	5	7	18,973	4,793
$5,000 and less than $20,000	24	37	297,193	56,086
$20,000 and less than $100,000	46	107	1,980,546	293,421
$100,000 and less than $1,000,000	45	531	13,925,443	1,755,824
$1,000,000 and over	5	266	8,965,978	1,186,058
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	4.0	0.7	0.1	0.1
$5,000 and less than $20,000	19.2	3.9	1.2	1.7
$20,000 and less than $100,000	36.8	11.3	7.9	8.9
$100,000 and less than $1,000,000	36.0	56.0	55.3	53.3
$1,000,000 and over	4.0	28.1	35.6	36.0
Average per establishment	.....	8	$201,505	$26,369
Food preparations, 1909	129	716	$5,508,097	$1,537,799
Less than $5,000	31	26	73,436	39,433
$5,000 and less than $20,000	46	142	471,090	235,943
$20,000 and less than $100,000	39	280	1,741,154	543,499
$100,000 and less than $1,000,000	13	268	3,222,417	718,924
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	24.0	3.6	1.3	2.6
$5,000 and less than $20,000	35.7	19.8	8.6	15.3
$20,000 and less than $100,000	30.2	39.1	31.6	35.3
$100,000 and less than $1,000,000	10.1	37.4	58.5	46.8
Average per establishment	.....	6	$42,698	$11,921
Foundry and machine-shop products, 1909	543	8,377	$26,730,891	$13,830,000
Less than $5,000	113	127	303,583	201,046
$5,000 and less than $20,000	220	998	2,392,406	1,561,666
$20,000 and less than $100,000	154	2,302	6,859,949	3,903,122
$100,000 and less than $1,000,000	53	3,627	13,248,304	6,120,991
$1,000,000 and over	3	1,323	3,926,649	2,043,175
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	20.8	1.5	1.1	1.5
$5,000 and less than $20,000	40.5	11.9	8.9	11.3
$20,000 and less than $100,000	28.4	27.5	25.7	28.2
$100,000 and less than $1,000,000	9.8	43.3	49.6	44.3
$1,000,000 and over	0.6	15.8	14.7	14.8
Average per establishment	.....	15	$49,228	$25,470
Liquors, malt, 1909	83	1,296	$9,319,041	$6,759,560
Less than $5,000	20	16	47,023	31,471
$5,000 and less than $20,000	18	50	202,988	144,080
$20,000 and less than $100,000	19	183	1,094,025	761,344
$100,000 and less than $1,000,000	26	1,047	7,975,005	5,822,665
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	24.1	1.2	0.5	0.5
$5,000 and less than $20,000	21.7	3.9	2.2	2.1
$20,000 and less than $100,000	22.9	14.1	11.7	11.3
$100,000 and less than $1,000,000	31.3	80.8	85.6	86.1
Average per establishment	.....	16	$112,278	$81,440
Liquors, vinous, 1909	181	1,287	$8,936,848	$4,262,907
Less than $5,000	19	14	47,618	25,417
$5,000 and less than $20,000	75	216	820,277	409,524
$20,000 and less than $100,000	69	390	2,905,549	1,204,476
$100,000 and less than $1,000,000 [1]	18	667	5,163,404	2,623,490
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	10.5	1.1	0.5	0.6
$5,000 and less than $20,000	41.4	16.8	9.2	9.6
$20,000 and less than $100,000	38.1	30.3	32.5	28.3
$100,000 and less than $1,000,000 [1]	9.9	51.8	57.8	61.5
Average per establishment	.....	7	$49,375	$23,552
Lumber and timber products, 1909	644	22,935	$45,000,276	$26,631,376
Less than $5,000	137	210	362,918	270,499
$5,000 and less than $20,000	190	954	2,091,127	1,310,856
$20,000 and less than $100,000	215	4,096	9,894,778	5,359,712
$100,000 and less than $1,000,000	98	13,684	27,693,341	16,180,124
$1,000,000 and over	4	3,991	4,958,112	3,510,185
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	21.3	0.9	0.8	1.0
$5,000 and less than $20,000	29.5	4.2	4.6	4.9
$20,000 and less than $100,000	33.4	17.9	22.0	20.1
$100,000 and less than $1,000,000	15.2	59.7	61.5	60.8
$1,000,000 and over	0.6	17.4	11.0	13.2
Average per establishment	.....	36	$69,876	$41,352

[1] 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.
Printing and publishing, 1909	**1,240**	**7,556**	**$25,031,877**	**$18,704,574**
Less than $5,000	584	510	1,491,046	1,202,496
$5,000 and less than $20,000	451	1,532	4,420,462	3,526,771
$20,000 and less than $100,000	164	2,465	6,672,722	5,026,255
$100,000 and less than $1,000,000 [1]	41	3,049	12,447,647	8,949,052
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	47.1	6.7	6.0	6.4
$5,000 and less than $20,000	36.4	20.3	17.7	18.9
$20,000 and less than $100,000	13.2	32.6	26.7	26.9
$100,000 and less than $1,000,000 [1]	3.3	40.4	49.7	47.8
Average per establishment	.....	6	$20,187	$15,084

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
Slaughtering and meat packing, 1909	**94**	**1,641**	**$34,280,003**	**$5,831,946**
Less than $5,000	4	5	13,204	4,824
$5,000 and less than $20,000	14	28	149,063	68,781
$20,000 and less than $100,000	34	100	1,749,518	343,754
$100,000 and less than $1,000,000	33	374	10,328,186	1,431,046
$1,000,000 and over	9	1,134	22,039,432	3,983,541
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	4.3	0.3	(2)	0.1
$5,000 and less than $20,000	14.9	1.7	0.4	1.2
$20,000 and less than $100,000	36.2	6.1	5.1	5.9
$100,000 and less than $1,000,000	35.1	22.8	30.1	24.5
$1,000,000 and over	9.6	69.1	64.3	68.3
Average per establishment	.....	17	$364,681	$62,042

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

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

This table shows that of the 7,659 manufacturing establishments in the state in 1909 only 71, or nine-tenths of 1 per cent, had a value of products exceeding $1,000,000. These establishments, however, employed an average of 24,909 wage earners, or 21.6 per cent of the total number in all establishments, and reported 38.2 per cent of the total value of products and 27.1 per cent of the total value added by manufacture.

On the other hand, the very small establishments—that is, those having products valued at less than $5,000—constituted a considerable proportion (28.3 per cent) of the total number of establishments, but the value of their products amounted to only 1.1 per cent of the total. The bulk of the manufacturing was done in establishments having products valued at not less than $100,000.

During the five years from 1904 to 1909 there was a considerable increase in the relative importance, as measured by value of products, of the largest establishments—those reporting products of not less than $1,000,000 in value—and a decrease in that of the remaining classes.

The fact that between 1904 and 1909 the average value of products per establishment increased from $53,695 to $69,168, and the value added by manufacture from $22,151 to $26,704, can not be taken as in itself indicating a tendency toward concentration. The increased values shown may be, and probably are, due in part, at least, to the general rise that has taken place in the prices of commodities. The average number of wage earners per establishment was 15 both in 1909 and in 1904.

The table shows further that when the size of establishments is measured by the average value of products per establishment the bakery industry, the manufacture of copper, tin, and sheet-iron products, and printing and publishing are conducted chiefly in rather small establishments, while the canning and preserving, flour-mill and gristmill, brewery, and slaughtering and meat-packing industries are conducted mainly in comparatively large 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 table on page 84 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 7,659 establishments reported for all manufacturing industries, 11.5 per cent employed no wage earners; 53.8 per cent employed from 1 to 5; 22.3 per cent, from 6 to 20; and 6.9 per cent, from 21 to 50. The most numerous single group consists of the 4,123 establishments employing from 1 to 5 wage earners, and the next of the 1,708 establishments employing from 6 to 20. There were 74 establishments that employed over 250 wage earners; 4 of these establishments, of which 2 were lumber mills and 2 steam-railroad repair shops, employed over 1,000 each.

Of the total number of wage earners, 60.6 per cent were in establishments employing over 50 wage earners each. The single group having the largest number of wage earners was the group comprising the establishments employing from 251 to 500. This group employed an aggregate of 20,103 wage earners, or 17.4 per cent of the total. Of the individual industries listed in the table but not in the preceding one, the steam-railroad repair shops, the manufacture of cement, the gas industry, the tanning, currying, and finishing of leather, and the refining of petroleum are industries in which comparatively large establishments do most of the business, as appears from the classification according to the number of wage earners employed.

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	7,659	882	4,123	1,708	526	212	134	56	14	4
Bread and other bakery products	864	130	585	124	16	4	4	1	.....	.....
Butter, cheese, and condensed milk	161	14	118	26	3	.....	.....	.....	.....	.....
Canning and preserving	196	4	37	58	51	29	13	4	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	42	.....	2	10	5	4	9	7	3	2
Cement	8	.....	2	.....	.....	.....	3	.....	3	.....
Clothing, men's, including shirts	74	5	26	23	8	6	4	2	.....	.....
Coffee and spice, roasting and grinding	44	.....	27	13	3	1	.....	.....	.....	.....
Copper, tin, and sheet-iron products	233	21	143	52	9	7	.....	1	.....	.....
Flour-mill and gristmill products	125	6	78	28	11	2	.....	.....	.....	.....
Food preparations	129	11	86	25	7	.....	.....	.....	.....	.....
Foundry and machine-shop products	543	23	266	174	44	24	9	2	1	.....
Gas, illuminating and heating	74	.....	38	27	3	3	1	2	.....	.....
Leather, tanned, curried, and finished	40	.....	10	11	10	6	3	.....	.....	.....
Liquors, distilled	33	5	21	5	1	1	.....	.....	.....	.....
Liquors, malt	83	6	38	23	10	5	1	.....	.....	.....
Liquors, vinous	181	2	138	33	5	1	2	.....	.....	.....
Lumber and timber products	644	13	276	179	95	35	26	15	3	2
Petroleum, refining	29	.....	6	18	3	.....	.....	2	.....	.....
Printing and publishing	1,240	343	648	180	42	16	10	1	.....	.....
Slaughtering and meat packing	94	5	51	25	6	4	1	2	.....	.....
All other industries	2,822	294	1,527	674	194	64	48	17	4	.....
	AVERAGE NUMBER OF WAGE EARNERS.									
All industries	115,296	.....	9,844	18,672	16,854	15,374	19,873	20,103	9,092	5,484
Bread and other bakery products	4,018	.....	1,278	1,148	515	252	504	321	.....	.....
Butter, cheese, and condensed milk	597	.....	227	290	80	.....	.....	.....	.....	.....
Canning and preserving	7,757	.....	96	701	1,798	2,069	1,918	1,175	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	9,342	.....	7	123	218	201	1,396	2,444	2,028	2,925
Cement	2,407	.....	6	.....	.....	.....	656	.....	1,745	.....
Clothing, men's, including shirts	2,385	.....	79	277	241	451	572	765	.....	.....
Coffee and spice, roasting and grinding	352	.....	72	141	80	59	.....	.....	.....	.....
Copper, tin, and sheet-iron products	1,938	.....	329	535	277	512	.....	285	.....	.....
Flour-mill and gristmill products	948	.....	174	283	333	158	.....	.....	.....	.....
Food preparations	716	.....	202	256	258	.....	.....	.....	.....	.....
Foundry and machine-shop products	8,377	.....	713	1,969	1,445	1,749	1,178	808	515	.....
Gas, illuminating and heating	1,666	.....	106	299	87	252	171	751	.....	.....
Leather, tanned, curried, and finished	1,398	.....	27	163	328	424	456	.....	.....	.....
Liquors, distilled	193	.....	41	54	27	71	.....	.....	.....	.....
Liquors, malt	1,296	.....	90	296	332	453	125	.....	.....	.....
Liquors, vinous	1,287	.....	352	321	164	60	390	.....	.....	.....
Lumber and timber products	22,935	.....	689	1,973	2,957	2,645	4,001	5,911	2,200	2,559
Petroleum, refining	930	.....	16	211	76	.....	.....	627	.....	.....
Printing and publishing	7,556	.....	1,505	1,961	1,347	1,113	1,369	261	.....	.....
Slaughtering and meat packing	1,641	.....	128	277	157	306	111	662	.....	.....
All other industries	37,557	.....	3,707	7,394	6,134	4,599	7,026	6,003	2,604	.....
	PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.									
All industries	100.0	.....	8.5	16.2	14.6	13.3	17.2	17.4	7.9	4.8
Bread and other bakery products	100.0	.....	31.8	28.6	12.3	6.3	12.5	8.0	.....	.....
Butter, cheese, and condensed milk	100.0	.....	38.0	48.6	13.4	.....	.....	.....	.....	.....
Canning and preserving	100.0	.....	1.2	9.0	23.2	26.7	24.7	15.1	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	100.0	.....	0.1	1.3	2.3	2.2	14.9	26.2	21.7	31.3
Cement	100.0	.....	0.2	.....	.....	.....	27.3	.....	72.5	.....
Clothing, men's, including shirts	100.0	.....	3.3	11.6	10.1	18.9	24.0	32.1	.....	.....
Coffee and spice, roasting and grinding	100.0	.....	20.5	40.1	22.7	16.8	.....	.....	.....	.....
Copper, tin, and sheet-iron products	100.0	.....	17.0	27.6	14.3	26.4	.....	14.7	.....	.....
Flour-mill and gristmill products	100.0	.....	18.4	29.9	35.1	16.7	.....	.....	.....	.....
Food preparations	100.0	.....	28.2	35.8	36.0	.....	.....	.....	.....	.....
Foundry and machine-shop products	100.0	.....	8.5	23.5	17.2	20.9	14.1	9.6	6.1	.....
Gas, illuminating and heating	100.0	.....	6.4	17.9	5.2	15.1	10.3	45.1	.....	.....
Leather, tanned, curried, and finished	100 0	.....	1.9	11.7	23.5	30.3	32.6	.....	.....	.....
Liquors, distilled	100.0	.....	21.2	28.0	14.0	36.8	.....	.....	.....	.....
Liquors, malt	100.0	.....	6.9	22.8	25.6	35.0	9.6	.....	.....	.....
Liquors, vinous	100.0	.....	27.4	24.9	12.7	4.7	30.3	.....	.....	.....
Lumber and timber products	100.0	.....	3.0	8.6	12.9	11.5	17.4	25.8	9.6	11.2
Petroleum, refining	100.0	.....	1.7	22.7	8.2	.....	.....	67.4	.....	.....
Printing and publishing	100.0	.....	19.9	26.0	17.8	14.7	18.1	3.5	.....	.....
Slaughtering and meat packing	100.0	.....	7.8	16.9	9.6	18.6	6.8	40.3	.....	.....
All other industries	100.0	.....	9.9	19.7	16.3	12.2	18.7	16.2	6.9	.....

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, 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 100.

The table shows that, for all industries combined, 68.3 per cent of the total expenses were incurred for materials, 22.5 per cent for services—that is, salaries and wages—and but 9.2 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries. The flour-mill and gristmill industry shows a higher percentage for materials

(92.2) and the distillery industry a lower percentage (16.7) than any other industry presented separately. The printing and publishing industry shows the highest percentage for services (48.8), while in the case of this item also the lowest percentage is that shown for the distillery industry (3.7). The high proportions which "miscellaneous expenses" represent of the total in the case of the distillery and brewery industries are due to the inclusion under this head of the internal-revenue tax. This tax, particularly in the case of the distillery industry, swells the item of "miscellaneous expenses" to such an extent as to cause abnormally small proportions to be shown for the other items of expense.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries	4.8	17.7	68.3	9.2
Bread and other bakery products	4.3	20.0	67.5	8.2
Butter, cheese, and condensed milk	1.7	3.8	91.3	3.2
Canning and preserving	3.5	11.1	77.4	7.9
Cars and general shop construction and repairs by steam-railroad companies	2.0	44.8	51.0	2.1
Cement	4.4	37.4	49.5	8.7
Clothing, men's, including shirts	4.4	22.8	62.7	10.2
Coffee and spice, roasting and grinding	8.8	4.1	76.5	10.6
Copper, tin, and sheet-iron products	5.3	27.6	59.4	7.7
Flour-mill and gristmill products	2.2	3.1	92.2	2.6
Food preparations	4.6	8.1	79.6	7.7
Foundry and machine-shop products	7.5	29.9	52.7	10.0
Gas, illuminating and heating	12.6	21.6	39.9	26.0
Leather, tanned, curried, and finished	2.4	11.2	80.2	6.1
Liquors, distilled	1.1	2.6	16.7	79.6
Liquors, malt	7.2	18.3	33.6	40.9
Liquors, vinous	5.8	9.2	63.3	21.7
Lumber and timber products	5.5	38.5	45.2	10.7
Petroleum, refining	2.3	5.1	87.9	4.7
Printing and publishing	18.2	30.6	30.1	21.1
Slaughtering and meat packing	1.7	4.1	90.2	3.9
All other industries	4.3	14.9	74.0	6.8

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 from 1904 to 1909 there was an increase of 118,741 horsepower, or 56.4 per cent, in the total power used in manufactures, while from 1899 to 1904 the increase was 83,406 horsepower, or 65.7 per cent. Of the total increase from 1904 to 1909, 40,348 horsepower was in that generated by steam engines and 77,174 horsepower in rented electric power. The more general use of gas engines is shown, there being 765 such engines, with an indicated capacity of 10,115 horsepower, reported in 1909, as against 689 engines, with 6,292 horsepower, in 1904, and 545 engines, with 3,244 horsepower, in 1899. Water wheels showed a decrease in number but an increase in total horsepower. The figures also show that the practice of renting electric power is increasing rapidly, 35.4 per cent of the total power being rented electric power in 1909, as against 18.7 per cent in 1904 and but 7.6 per cent in 1899. The proportion for 1909 is larger than for any other state in the Union.

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	14,249	3,313	2,874	329,100	210,359	126,953	100.0	100.0	100.0
Owned	3,447	3,313	2,874	211,341	168,474	114,723	64.2	80.1	90.4
Steam	2,520	2,408	2,158	193,526	153,178	105,190	58.8	72.8	82.9
Gas	765	689	545	10,115	6,292	3,244	3.1	3.0	2.6
Water wheels	115	137	171	7,390	6,965	4,680	2.2	3.3	3.7
Water motors	47	79	(2)	280	295	(2)	0.1	0.1	(2)
Other	.....	.....	.....	30	1,744	1,609	(3)	0.8	1.3
Rented	10,802	(2)	(2)	117,759	41,885	12,230	35.8	19.9	9.6
Electric	10,802	(2)	(2)	116,537	39,363	9,624	35.4	18.7	7.6
Other	.....	.....	.....	1,222	2,522	2,606	0.4	1.2	2.1
Electric motors	12,393	658	281	143,684	49,575	15,762	100.0	100.0	100.0
Run by current generated by establishment	1,591	658	281	27,147	10,212	6,138	18.9	20.6	38.9
Run by rented power	10,802	(2)	(2)	116,537	39,363	9,624	81.1	79.4	61.1

[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 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 having increased from 6,138 in 1899 to 10,212 in 1904 and 27,147 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 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	4,421	43,165	113,665	76,323	8,883,015	302,548
Bread and other bakery products	54	692	137	3,900	92,659	39,421
Butter, cheese, and condensed milk	65	347	.....	7,269	27,119	820
Canning and preserving	83	1,797	.....	3,529	141,958	12,816
Cars and general shop construction and repairs by steam-railroad companies	14	4,705	17	1,257	316,874	23,620
Cement	.....	.....	.....	.....	891,130	.....
Clothing, men's, including shirts	4	24	.....	3	1,321	1,909
Coffee and spice, roasting and grinding	.....	17	132	.....	2,912	18,445
Copper, tin, and sheet-iron products	15	154	207	107	1,180	5,644
Flour-mill and gristmill products	55	471	.....	871	150,034	.....
Food preparations	65	322	311	521	13,309	5,526
Foundry and machine-shop products	1,178	3,915	15,629	1,066	75,852	20,032
Gas, illuminating and heating	.....	300	.....	9	2,205,961	600
Leather, tanned, curried, and finished	232	2,297	.....	717	45,322	.....
Liquors, distilled	.....	21	.....	590	48,019	.....
Liquors, malt	50	430	204	2,121	179,276	330
Liquors, vinous	95	268	.....	3,875	68,500	.....
Lumber and timber products	26	389	.....	13,285	46,216	23,607
Petroleum, refining	.....	.....	.....	.....	1,280,666	.....
Printing and publishing	68	751	.....	482	3,018	33,586
Slaughtering and meat packing	108	294	32	1,501	153,290	990
All other industries	2,270	25,971	96,996	30,220	3,131,799	115,202

NOTE.—In addition, there were 15,164 tons of other varieties of fuel reported.

The most notable fact shown by the table is the large amount of oil and the small amounts of nearly all the other kinds of fuel used. The larger part of this oil is crude oil used as fuel in the generation of steam power, but increasing quantities of refined oil are being used in internal-combustion engines.

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 and other information for securing which no provision is made on the general schedule. Certain data of this character for eight important industries in California are here presented.

Lumber and timber products.—In the following tabular statement is shown the production of rough lumber, lath, and shingles in California for the census years 1909 and 1899:

PRODUCT.	QUANTITY.	
	1909	1899
Rough lumber.....M feet b. m..	1,143,507	737,035
Lath.....thousands..	32,615	11,507
Shingles.....thousands..	574,342	650,090

During the decade from 1899 to 1909 the output of rough lumber in California increased 55.1 per cent and that of lath 183.4 per cent, while the production of shingles decreased 11.7 per cent. The period of most rapid growth in the industry was from 1899 to 1904, when the output of lumber increased 46.2 per cent. The woods which supply the raw material are almost exclusively conifers, the hardwood cut in 1909, practically all of which was California or tan-bark oak, forming only one-fifth of 1 per cent of the total lumber production during the year. A total of 521,630 M feet board measure, or more than 45.6 per cent of the lumber output in 1909, was California redwood, a species of timber which does not occur in saw-log size outside of California. Chief among the other species sawed into lumber in 1909 were western pine, with a production of 364,748 M feet board measure, Douglas fir, with a production of 88,852 M feet, and sugar pine, with a production of 88,822 M feet.

A noteworthy peculiarity of the lumber industry in the state is the fact that the manufacture of shingles, while carried on to some extent in connection with that of lumber, nevertheless amounts practically to a separate and distinct industry. Over 88 per cent of the shingle output of the state for 1909 was manufactured from redwood, which timber possesses in very high degree the qualities most desirable in shingle material.

Slaughtering and meat packing.—The next table gives the quantity and cost of the various materials used in this industry and the quantity and value of the various products, for 1909, 1904, and 1899.

From 1904 to 1909 the number of beeves slaughtered increased 81,901, or 31.5 per cent; that of calves, 38,244, or 88.7 per cent; that of sheep, 81,484, or 8.2 per cent; and that of hogs, 30,234, or 9.6 per cent. The rate of increase in the cost of the animals slaughtered was much higher than that in the number slaughtered.

MATERIAL OR PRODUCT.	1909	1904	1899
Materials used, total cost.....	$28,448,057	$18,751,744	$13,616,305
Beeves slaughtered:			
Number.....	341,617	259,716	174,113
Cost.....	$14,348,274	$9,735,012	$6,017,752
Calves slaughtered:			
Number.....	81,344	43,100	28,531
Cost.....	$930,781	$412,644	$280,958
Sheep slaughtered:			
Number.....	1,071,998	990,514	695,058
Cost.....	$4,436,865	$3,284,003	$2,197,362
Hogs slaughtered:			
Number.....	344,319	314,085	228,675
Cost.....	$4,339,254	$2,891,457	$1,989,208
Dressed meat, purchased.....	$2,088,065	$1,439,004	$1,897,999
Fuel and rent of power.....	$184,764	$85,889	$75,162
All other materials.....	$2,120,054	$903,735	$1,157,894
Products, total value.....	$34,280,003	$22,012,756	$15,817,262
Beef, fresh:			
Pounds.....	186,315,779	140,301,999	93,818,021
Value.....	$13,820,710	$9,135,362	$5,972,469
Beef, salted or cured:			
Pounds.....	1,455,480	2,386,927	2,512,762
Value.....	$137,792	$171,352	$173,381
Veal, fresh:			
Pounds.....	12,077,330	6,470,074	3,964,808
Value.....	$1,104,753	$451,602	$326,705
Mutton, fresh:			
Pounds.....	44,220,813	38,021,994	29,605,967
Value.....	$4,215,624	$3,089,546	$2,173,934
Pork, fresh:			
Pounds.....	32,204,886	22,796,629	18,315,565
Value.....	$3,472,610	$1,821,101	$1,424,794
Pork, salted or cured:			
Pounds.....	13,964,304	23,183,338	28,795,334
Value.....	$2,305,753	$2,732,575	$2,878,861
Sausage, fresh or cured.....	$935,408	$666,125	$215,023
All other fresh meat:			
Pounds.....	3,435,527	350,000	2,295,977
Value.....	$216,755	$17,500	$191,283
Lard:			
Pounds.....	6,644,167	8,312,662	4,181,112
Value.....	$839,623	$635,500	$330,620
Tallow, oleo stock, and stearin:			
Pounds.....	11,363,156	(1)	(1)
Value.....	$604,712	(1)	(1)
Fertilizers and fertilizer materials:			
Tons.....	6,062	3,325	1,570
Value.....	$162,509	$67,669	$37,328
Hides:			
Number.....	374,278	272,042	201,444
Pounds.....	21,134,504	14,875,563	10,221,863
Value.....	$2,710,097	$1,465,939	$960,324
Pelts:			
Number.....	1,070,801	990,514	(1)
Value.....	$742,098	$742,499	(1)
Wool:			
Pounds.....	1,707,577	180,000	117,710
Value.....	$430,967	$51,100	$23,742
All other products, including amount received for custom or contract work...	$2,580,592	$964,886	$1,108,798

[1] Figures not available.

With the exception of salted and cured beef and salted and cured pork, all the meat products show increases in value and, so far as figures are given, in quantity from 1904 to 1909, as well as from 1899 to 1904. The largest absolute gain in quantity during the more recent five-year period, 46,013,780 pounds, is shown for fresh beef, while the largest relative gain, 881.6 per cent, was in "All other fresh meat." The percentages of increase in value were generally greater than those in quantity, owing to the higher prices of meats that prevailed in 1909. One of the most interesting facts brought out by the table is the increasing production of fresh pork and the decreasing production of salted and cured pork. In 1899 the output of salted and cured pork was over one and one-half times that of fresh pork, while in 1909 the output of the latter was nearly two and one-third times that of the former.

The output of lard decreased in quantity, but increased in value from 1904 to 1909, while the value in 1909 of the products included under the head of "All other products" was nearly three times that in 1904, owing in a measure to the increased production of lard substitutes. The number of hides reported increased 102,236, or 37.6 per cent, from 1904 to 1909, and their value $1,244,158, or 84.9 per cent.

Canning and preserving.—Although this industry in California dates from about 1875, its real importance and development did not commence until several years later. The value of its products, which in 1889 was $6,621,931, more than doubled during each of the two following decades, amounting in 1909 to $32,914,829. The quantity and value of the products, by classes, are given in the table in the next column for 1909, 1904, and 1899.

The case, which is used as the unit of measure for canned fruits and canned vegetables in the table, consists of 24 standard-size cans—No. 2 (also called 2-pound cans) for beans, peas, berries, cherries, and plums, and No. 3 (also called 3-pound cans) for all other fruits and vegetables. Where the output of fruits and vegetables has been reported in other forms by the canneries, the quantities so reported have been reduced to standard cases, as above specified.

California ranks first among the states in the production of canned asparagus, apricots, peaches, and pears, and of dried peaches and prunes; second in the production of canned sardines; and sixth in that of canned tomatoes. The state had a complete monopoly of the production of dried apricots and of raisins in the United States in 1909, neither of these products being reported from any other state.

The value of dried fruits constituted 49 per cent of the total value of products of the industry in 1909, as compared with 52.9 per cent in 1904 and 17.2 per cent in 1899. The increase in the value of the dried-fruit products during the decade 1899–1909 was 528 per cent, the greatest advance being from 1899 to 1904, when the gain was 437.1 per cent. The most important of the dried-fruit products, both in point of quantity and of value, were raisins and prunes. California reported the total output of raisins in the United States in 1909, as already stated, and 85.7 per cent of the total value of dried prunes produced.

Canned fruits, the second group of products in importance in respect to value, decreased in relative importance during both five-year periods, although the value of the output has remained approximately the same. The proportion which the value of this class of products formed of the total for the industry was 22 per cent in 1909, 26.8 per cent in 1904, and 49.1 per cent in 1899. The value of the output in 1909 shows an increase of $270,259, or 3.9 per cent, as compared with 1904; this increase, however, was not sufficient to make up for the decrease from 1899 to 1904, so that a decrease of $91,717, or 1.2 per cent, is shown for the decade as a whole. The fruit most largely canned in 1909 was peaches, the value of which constituted 9.2 per cent of the total reported for the canning and preserving industry.

The value of the vegetables canned increased throughout the period covered by the table, the rate of increase from 1904 to 1909 being much higher than that during the preceding five-year period. The value of canned asparagus formed over half of the value of all canned vegetables reported for the state in 1909.

PRODUCT.	1909	1904	1899
Total value	$32,914,829	$26,083,226	$14,940,882
Canned vegetables	$3,470,621	$2,366,661	$2,274,037
Asparagus—			
Cases	197,592	.....	.....
Value	$1,794,346	.....	.....
Beans—			
Cases	47,505	65,641	34,209
Value	$87,059	$133,494	$56,797
Peas—			
Cases	123,349	68,142	72,760
Value	$250,624	$144,033	$145,987
Pumpkins—			
Cases	10,941	18,852	1,033
Value	$15,165	$30,156	$1,860
Tomatoes—			
Cases	536,837	541,776	794,566
Value	$1,120,032	$845,805	$2,068,997
All other—			
Cases	64,480	286,172	148
Value	$202,795	$1,213,173	$396
Canned fruits	$7,248,342	$6,978,083	$7,340,059
Apples—			
Cases	67,710	31,286	25,287
Value	$136,855	$67,591	$71,427
Apricots—			
Cases	627,701	532,038	531,568
Value	$1,819,558	$1,619,757	$1,582,927
Berries—			
Cases	95,092	67,467	87,564
Value	$171,995	$168,640	$218,733
Cherries—			
Cases	224,084	171,298	49,375
Value	$491,575	$457,109	$155,813
Peaches—			
Cases	1,149,590	744,715	903,676
Value	$3,013,203	$2,040,524	$3,103,775
Pears—			
Cases	433,796	524,197	444,343
Value	$1,316,022	$1,577,823	$1,610,900
Plums—			
Cases	138,995	196,379	358,298
Value	$230,384	$349,307	$596,484
All other—			
Cases	20,013	54,215	.....
Value	$68,750	$97,272	.....
Dried fruits:			
Pounds	339,726,550	300,308,919	49,337,883
Value	$16,137,716	$13,800,601	$2,569,520
Apples—			
Pounds	6,860,170	811,254	3,087,220
Value	$481,173	$40,650	$155,893
Apricots—			
Pounds	29,205,569	19,559,573	5,310,217
Value	$2,277,177	$1,410,838	$442,544
Peaches—			
Pounds	46,827,391	25,845,364	5,502,390
Value	$2,422,043	$1,701,105	$301,495
Prunes—			
Pounds	118,917,876	114,580,431	24,102,329
Value	$4,394,922	$3,169,878	$907,041
Raisins—			
Pounds	111,774,767	121,409,881	10,734,221
Value	$4,837,933	$6,349,381	$720,268
All other—			
Pounds	26,140,777	18,102,416	601,506
Value	$1,724,408	$1,128,740	$42,279
Fish and oysters:			
Pounds	12,657,233	16,582,300	11,238,460
Value	$1,156,881	$1,011,222	$796,637
Canned fish—			
Sardines—			
Pounds	1,980,364	860,000	388,708
Value	$238,607	$78,000	$78,860
All other—			
Pounds	2,286,610	5,300,923	3,480,416
Value	$387,601	$378,524	$262,808
Smoked fish—			
Pounds	100,900	739,537	225,000
Value	$14,680	$71,088	$9,000
Salted fish—			
Pounds	8,289,359	9,681,840	7,144,336
Value	$515,993	$483,610	$445,969
All other products	$4,901,269	$1,926,659	$1,960,629

The canning and curing of fish and the canning of oysters and clams, constitute, in California, a minor branch of the canning and preserving industry. Of the 196 establishments reported for the industry in 1909, 15 canned or cured fish and canned oysters; 2 others canned oysters; and 1 canned clams. Sardines were the chief kind of fish canned, salmon was the leading variety smoked, and cod was the principal species salted.

It is worthy of note that over half of the value of products reported for the industry in the state in 1909 was returned by eight corporations having 38 plants which were reported as 33 establishments.

Flour-mill and gristmill products.—The following tabular statement gives the quantity and value of the various products of this industry for 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value	$25,188,133	$20,202,542	$13,045,260
Wheat flour:			
White—			
Barrels	1,774,958	2,408,358	2,653,935
Value	$10,209,567	$10,479,131	$7,928,449
Graham—			
Barrels	30,290	31,141	
Value	$166,134	$132,540	
Corn meal and corn flour:			
Barrels	50,969	52,254	92,356
Value	$222,399	$215,845	$215,213
Rye flour:			
Barrels	9,214	22,733	14,582
Value	$45,145	$105,946	$43,641
Buckwheat flour:			
Pounds	133,328	352,382	552,000
Value	$4,514	$12,753	$19,572
Hominy and grits:			
Pounds	736,669	987,983	3,097,560
Value	$20,937	$33,905	$36,835
Feed:			
Tons	336,431	228,069	111,944
Value	$10,462,069	$5,979,376	$2,242,136
Offal:			
Tons	79,643	99,070	84,107
Value	$2,056,372	$2,057,448	$1,155,775
All other products	$2,000,996	$1,185,598	$1,403,639

Measured by value, the most important single product in 1909 was feed, the output of which more than trebled in quantity and considerably more than quadrupled in value during the decade 1899–1909. The greatest relative gains in both quantity and value, and the largest absolute gain in quantity, were from 1899 to 1904, but the largest absolute increase in value was from 1904 to 1909. Much of the feed made in California was from barley, the crop of which in 1909 was over four times as great as the wheat crop and exceeded the combined yield of all other cereals in the state.

Wheat flour was the second product in importance in 1909, having been displaced from first place since 1904 by feed. The output of this product decreased during both five-year periods, while its value increased from 1899 to 1904 and decreased slightly from 1904 to 1909. The proportion which the value of wheat flour formed of the total for all flour-mill and gristmill products in the state decreased from 60.8 per cent in 1899 to 52.5 per cent in 1904 and 41.2 per cent in 1909. These decreases are in a measure due to the increasing quantities of wheat used in the manufacture of food preparations, the total value of which was $5,508,000 in 1909, or nearly three and one-half times that in 1904.

The output of all other products shown separately in the table decreased in both quantity and value between 1904 and 1909, with the exception of corn meal and corn flour, for which a slight increase in value was reported.

The following tabular statement classifies the mills reporting wheat flour in 1909 and 1904 according to their output:

OUTPUT.	NUMBER OF MILLS.	
	1909	1904
Total	66	83
Less than 1,000 barrels	12	8
1,000 barrels but less than 5,000	22	31
5,000 barrels but less than 20,000	19	22
20,000 barrels but less than 100,000	9	18
100,000 barrels and over	4	4

The number of pairs of rolls in use in the industry increased from 1,146 in 1899 to 1,415 in 1904, but decreased to 1,215 in 1909. The number of runs of stone and steel burrs decreased from 148 in 1899 to 88 in 1904 and 57 in 1909.

Printing and publishing.—The number and the aggregate circulation of the different classes of newspapers and periodicals reported in 1909, 1904, and 1899 are shown in the following tabular statement:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total	854	845	656	3,025,250	2,627,234	1,448,656
Daily	166	148	117	902,752	669,556	475,596
Sunday	36	36	34	616,916	598,167	(1)
Semiweekly	[2] 37	[3] 28	23	44,856	28,600	23,822
Weekly	495	487	397	730,424	769,155	618,146
Monthly	105	124	71	619,900	522,526	194,792
All other classes	15	22	14	110,402	39,230	136,300

[1] Included in circulation of dailies.
[2] Includes six triweekly publications.
[3] Includes two triweekly publications.

The total number of publications and their aggregate circulation increased much more rapidly from 1899 to 1904 than from 1904 to 1909. The gain in number during the earlier five-year period, 1899–1904, was 189, and that in circulation 1,178,578, while during the five-year period following the corresponding increases were 9 and 398,016, respectively. The class of publications having the largest circulation in 1909 was the dailies, while in 1904 and in 1899 the weeklies had the largest circulation. The dailies also show the most pronounced absolute increase in circulation from 1904 to 1909, while the circulation of the weeklies decreased slightly during the same period. Of the 166 daily newspapers published in 1909, 65, with an aggregate circulation of 457,289, were morning papers.

The increase shown for the more recent five-year period in the circulation of the publications included under the head of "All other classes" was due to the fact that a religious periodical of large circulation which was not classed as a periodical in 1904 was reported as a quarterly in 1909, and to the inclusion in 1909 of a semimonthly agricultural magazine which was not reported in 1904. This class, in 1909, included six semimonthly, five bimonthly, and four quarterly publications.

The number and aggregate circulation of the different classes of newspapers and periodicals printed respectively in English and in foreign languages are shown in the following table:

PERIOD OF ISSUE.	TOTAL.		IN ENGLISH.		IN FOREIGN LANGUAGES.[1]	
	Number.	Aggregate circulation per issue.	Number.	Aggregate circulation per issue.	Number.	Aggregate circulation per issue.
Total	854	3,025,250	800	2,890,686	54	134,564
Daily	166	902,752	153	854,119	13	48,633
Sunday	36	616,916	32	592,913	4	24,003
Semiweekly and triweekly	37	44,856	35	40,156	2	4,700
Weekly	495	730,424	465	694,246	30	36,178
Monthly	105	619,000	101	599,000	4	21,050
Quarterly	4	60,277	4	60,277	.....	
All other classes	11	50,125	10	49,375	1	

[1] Including those publications which were printed in English and also in one or more foreign languages.

Of the 13 dailies printed in foreign languages, 6 were printed in Japanese, 3 in Chinese, 2 in Italian, and 1 each in German and in French, while 3 of the 4 Sunday editions were in Japanese, and the other was in German. Both the semiweekly and the triweekly were in Italian, 3 of the 4 monthlies were in Portuguese and the other in Swedish, while the bimonthly periodical shown under the head of "All other classes" was in Armenian and English. Of the 30 weekly publications in foreign languages, 8 were printed in German, 6 in Italian, 5 in Portuguese, 3 in Spanish, 2 each in French and in Greek, and 1 each in Danish, Swedish, Croatian, and Servian. Of the 16 newspapers and periodicals in Japanese reported for the United States in 1909, 9 were published in California.

Petroleum, refining.—In the production of crude petroleum California leads all other states in the Union, and its refineries were supplied entirely from the native product. In 1909 the output of crude oil in the state was reported as 54,433,010 barrels, valued at $30,675,267, these figures representing 29.9 per cent of the total quantity and 23.9 per cent of the total value of crude oil produced in the United States. A large part of the California oils are heavy and useful mainly for the production of asphalt, as they have an asphaltum rather than a paraffin basis. The total number of refineries in the state increased from 4 in 1899 to 19 in 1904 and 29 in 1909.

The following table shows the quantity and cost of materials used in the refineries of the state, the quantity and value of the principal products, and the main equipment reported for 1909, 1904, and 1899:

MATERIAL, PRODUCT, AND EQUIPMENT.	1909	1904	1899
Materials used, total cost	$13,897,721	$4,130,809	$489,989
Crude petroleum:			
Barrels (42 gallons)	13,481,085	4,300,600	339,863
Cost	$10,105,341	$3,431,754	$405,150
Containers	$856,894	$131,404	$9,400
All other materials	$2,935,486	$567,651	$75,439
Products, total value	$17,878,006	$5,748,598	$697,877
Oils:			
Illuminating—			
Barrels (50 gallons)	1,728,863	647,934	45,849
Value	$5,047,759	$2,023,738	$170,066
Fuel (including gas oils)—			
Barrels	3,931,366	731,215	84,240
Value	$3,862,603	$618,178	$98,237
Lubricating—			
Barrels	186,672	54,018	2,052
Value	$1,137,661	$221,760	$10,262
Naphtha and gasoline (including gas naphtha)—			
Barrels	628,804	238,015	57,995
Value	$3,256,209	$926,063	$201,209
All other products	$4,573,774	$1,958,859	$218,103
Equipment:			
Stills, number	237	106	37
Heated by steam—			
Number	28	14	9
Capacity (barrels of 42 gallons)	4,934	(1)	(1)
Heated by superheated steam—			
Number	1	.....	6
Capacity (barrels of 42 gallons)	200	.....	(1)
Heated by fire—			
Number	208	92	22
Capacity (barrels of 42 gallons)	156,039	(1)	(1)
Agitators, number	56	47	7
Hydraulic or other presses, number	7	2	2
Storage tanks:			
For crude petroleum—			
Number	165	43	12
Capacity, gallons	29,037,397	12,439,724	(1)
For refined petroleum—			
Number	636	375	62
Capacity, gallons	55,413,986	49,410,383	(1)
Cooper shops, number	8	11	2
Tin shops, number	1	2	1

[1] Figures not available.

The output of fuel oils (including gas oils) refined in 1909 was greater than the combined output of all other products shown separately, forming 60.7 per cent of the total output of oils. The corresponding proportion for 1904 was 43.8 per cent and for 1899, 44.3 per cent. The fuel oils produced in California represented 11.6 per cent of the total output of fuel oils in the United States in 1909. Illuminating oils, the next product in importance, show a decided increase from census to census. The proportion which this latter class of oils formed of the total output of oils increased from 24.1 per cent in 1899 to 38.8 per cent in 1904, but decreased to 26.7 per cent in 1909.

In addition to the products shown separately in the table, a number of other products were reported, the most important being oil asphaltum, the output of which in 1909 was 139,473 tons of 2,000 pounds. No comparative figures, however, are available, as prior to 1909 this product was not reported separately. There was a great increase from 1899 to 1904 in the quantity of residuum or tar reported, but in 1909 the amount was very much reduced. Considerable quantities of

fuel and other distillates and some liquid asphalt were also reported in 1909.

The great increase in the industry is also reflected in the increase in equipment, such as stills, storage tanks, and agitators.

Butter, cheese, and condensed milk.—While this industry shows a decided increase in value of products for each of the five-year periods covered by the table, the number of establishments, as shown in Table I, page 92, though increasing considerably from 1899 to 1904, decreased 42.7 per cent from 1904 to 1909. The decrease is due entirely to a change in the manner of conducting the industry. In 1904 there were a number of local creameries which have since been abandoned or else are now used simply as collecting depots, from which the milk and cream are shipped to large central plants. In 1909 only one establishment in the industry was engaged primarily in the manufacture of condensed milk, whereas six were reported as so engaged in 1904 and two in 1899.

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

PRODUCT.	1909	1904	1899
Total value	$12,760,670	$7,820,937	$3,582,942
Butter:			
Pounds	37,283,450	26,837,386	13,147,137
Value	$11,644,453	$6,640,845	$2,854,632
Packed solid—			
Pounds	7,764,696	3,070,637	2,983,262
Value	$2,388,265	$742,929	$584,478
Prints or rolls—			
Pounds	29,518,754	23,766,749	10,163,875
Value	$9,256,188	$5,897,916	$2,270,154
Cream sold:			
Pounds	2,674,825	921,334	1,036,600
Value	$411,473	$132,277	$120,283
Cheese, full cream: [1]			
Pounds	1,567,640	3,601,051	2,676,543
Value	$252,582	$425,231	$279,125
All other products	$452,162	$622,584	$328,902

[1] Includes, in 1909, 123,000 pounds of part-cream cheese, valued at $13,296; in 1904, 174,005 pounds of "other kinds," valued at $26,375; and, in 1899, 251,838 pounds of "other kinds," valued at $34,615.

The total quantity of butter manufactured in the state during 1909 was 37,283,450 pounds, an increase of 38.9 per cent as compared with 1904 and of 183.6 per cent as compared with 1899. The value of butter represented 91.3 per cent of the total value of all products reported for the industry in 1909, as compared with 84.9 per cent in 1904 and 79.7 per cent in 1899. Although by far the largest part of the butter manufactured was in prints and rolls, there were large relative increases from 1904 to 1909 in the quantity and value of butter packed solid, amounting to 152.9 per cent and 221.5 per cent, respectively.

The output of cheese increased decidedly in both quantity and value from 1899 to 1904, but the totals shown for 1909 were less than those presented for 1899. These decreases are no doubt due in part to the increasing practice of separating the cream on the farm, as it is now more profitable to sell the separated cream to the butter factories. The greater profit resulting from the sale of milk to the dealers in the cities may also have been a factor in the decrease referred to.

Leather, tanned, curried, and finished.—The quantity and cost of the materials used and the quantity and value of the principal products reported for this industry are shown separately for 1909, 1904, and 1899 in the following table:

MATERIAL OR PRODUCT.	1909	1904	1899
Materials used, total cost	$7,039,453	$5,912,140	$5,809,428
Cattle hides:			
Number	611,421	634,417	585,186
Cost	$4,300,834	$3,528,424	$3,207,562
Calf and kip skins:			
Number	113,449	107,834	122,167
Cost	$302,613	$138,172	$138,507
Goatskins:			
Number	20,724	20,022	27,052
Cost	$10,501	$13,814	$12,000
Sheepskins:			
Number	1,328,712	1,510,067	1,381,579
Cost	$926,139	$829,275	$890,014
All other skins:			
Number	82,047	112,720	196,319
Cost	$77,921	$82,774	$147,280
Rough leather, purchased	$44,020	$113,160	$434,214
All other materials	$1,377,425	$1,206,521	$979,851
Products, total value	$9,366,545	8,072,257	$7,405,981
Leather	$8,237,323	$7,196,516	$6,559,482
Sole—			
Sides	472,236	575,393	556,063
Value	$3,100,226	$2,971,579	$2,532,988
Oak—			
Sides	429,716	575,393	556,063
Value	$2,940,734	$2,971,579	$2,532,988
Chrome—			
Sides	42,520	.....	.....
Value	$159,492	.....	.....
Upper, other than calf or kip skins	$112,601	$102,303	$150,473
Grain, satin, pebble, etc. (side leather)—			
Sides	24,268	22,780	60,603
Value	$83,776	$69,680	$139,572
Finished splits—			
Number	42,600	83,832	7,520
Value	$28,825	$32,623	$10,901
Horsehides—			
Number	9,427	3,600	.....
Value	$34,757	$12,600	.....
Calf and kip skins, tanned and finished—			
Number	127,852	106,571	122,152
Value	$408,957	$241,728	$195,124
Flesh—			
Number	5,583	68,688	85,000
Value	$16,084	$142,749	$141,529
Grain—			
Number	122,269	37,883	37,152
Value	$392,873	$98,979	$53,595
Goatskins—			
Number	10,360	3,000	6,400
Value	$24,294	$12,000	$6,040
Sheepskins, tanned and finished—			
Number	601,802	1,012,816	1,135,250
Value	$237,476	$341,262	$318,900
Harness—			
Sides	383,264	339,041	379,323
Value	$2,571,122	$1,904,647	$1,976,755
Glove	$733,587	$530,480	$525,507
Rough leather sold	$210,051	$352,799	$309,405
All other	$804,252	$727,118	$544,290
All other products	$1,090,436	$807,855	$843,710
Amount received for work on materials for others	$38,786	$7,886	$2,789

Untanned cattle hides constituted the principal material at each census, their value forming 61.1 per cent of the total reported for all materials in 1909, as against 59.7 per cent in 1904 and 55.2 per cent in 1899. The number of hides used increased 8.4 per cent from 1899 to 1904, but decreased slightly from 1904 to 1909. The number of calf and kip skins used in 1909 was somewhat larger than in 1904, and the number of goatskins also shows a slight increase; large decreases were, however, reported in the number of sheepskins and of the skins included under the head

of "All other skins." Each kind of skins used shows a decrease in 1909 as compared with 1899. There was also a pronounced decrease during the decade in both the quantity and cost of leather purchased in the rough for currying.

Measured by value, the most important individual class of products at each of the three censuses was oak sole leather, the output of which increased slightly in both quantity and value from 1899 to 1904, but decreased in both respects during the period from 1904 to 1909. The product next in importance was harness leather, which shows a decrease in both quantity and value of output from 1899 to 1904, but an increase in both respects during the next five years. Pronounced increases from 1904 to 1909 are shown for tanned and finished grain calf and kip skins, while decided decreases during the same period are shown for tanned and finished sheepskins and in the value of rough leather sold.

Laundries.—Statistics for steam laundries are not included in the general tables, or in the totals for manufacturing industries. In 1909 there were 321 such establishments in California, 87 of which were in San Francisco, 41 in Oakland, 31 in Los Angeles, and 10 in Sacramento.

The following statement summarizes the statistics:

Number of establishments	321
Persons engaged in the industry	9,060
Proprietors and firm members	308
Salaried employees	714
Wage earners (average number)	8,038
Primary horsepower	8,961
Capital	$6,295,915
Expenses	8,177,759
Services	5,260,743
Materials	1,612,112
Miscellaneous	1,304,904
Amount received for work done	9,541,795

Of the 321 establishments reporting, 146 were operated by individuals, 66 by firms, and 109 by corporations. Sixty-five establishments had receipts for the year's business of less than $5,000; 130, receipts of $5,000 but less than $20,000; 107, receipts of $20,000 but less than $100,000; and 19, receipts of $100,000 but less than $1,000,000.

The number of wage earners employed each month and the percentage which this number represented of the greatest number employed in any month were as shown in the next table.

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January	7,632	91.2	July	8,366	100.0
February	7,560	90.4	August	8,277	98.9
March	7,828	93.6	September	8,350	99.8
April	7,911	94.6	October	8,209	98.1
May	7,985	95.4	November	8,118	97.0
June	8,107	96.9	December	8,116	97.0

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		**8,961**
Owned:		
Steam	202	7,504
Gas	3	15
Water wheels	5	150
Water motor	1	10
Rented:		
Electric	235	1,224
Other		58

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

KIND.	Unit.	Quantity.
Anthracite coal	Tons	222
Bituminous coal	Tons	2,646
Coke	Tons	19
Wood	Cords	3,496
Oil	Barrels	270,910
Gas	1,000 feet	50,267

Custom sawmills and 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. Statistics can not be shown for custom sawmills without disclosing the operations of the one establishment reported.

	Custom gristmills.
Number of establishments	12
Persons engaged in the industry	28
Proprietors and firm members	9
Salaried employees	4
Wage earners (average number)	15
Primary horsepower	518
Capital	$65,411
Expenses	525,697
Services	11,663
Materials	[1] 503,559
Miscellaneous	10,475
Value of products	[1] 572,597

[1] Includes estimate of all grain ground.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—All industries	1909	7,659	141,576	8,077	18,203	115,296	329,100	$537,134	$22,955	$84,142	$325,238	$529,761	$204,523
	1904	6,839	120,040	7,402	12,283	100,355	210,359	282,647	14,399	64,657	215,726	367,218	151,492
	1899	4,997	.....	.....	6,877	77,224	126,953	175,468	7,495	39,890	164,894	257,386	92,492
Agricultural implements	1909	25	749	19	108	622	1,186	2,359	123	451	1,441	2,670	1,229
	1904	25	585	19	87	479	583	2,240	99	349	724	1,484	760
	1899	20	655	12	81	562	689	1,852	75	322	530	1,358	819
Artificial stone	1909	66	434	71	43	320	247	448	36	239	220	643	423
	1904	22	227	19	28	180	87	262	20	122	130	329	199
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Automobiles, including bodies and parts	1909	41	589	50	61	478	305	701	71	368	700	1,470	770
	1904	6	21	4	3	14	32	49	5	10	13	36	23
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Babbitt metal and solder	1909	5	81	.....	29	52	91	547	67	40	847	1,120	273
	1904	4	57	3	17	37	72	256	29	27	590	721	131
	1899	4	46	4	8	34	.....	176	11	23	464	551	87
Boots and shoes, including cut stock and findings.	1909	18	840	76	69	695	309	1,192	89	402	1,120	1,924	804
	1904	24	817	59	50	708	246	1,157	51	389	1,000	1,734	734
	1899	[2] 34	1,151	88	63	1,000	.....	1,262	56	400	1,103	1,862	759
Boxes, fancy and paper	1909	19	703	10	69	624	405	731	86	271	442	965	523
	1904	16	478	12	33	433	105	420	36	152	241	524	283
	1899	13	330	20	14	296	.....	153	11	96	134	329	195
Brass and bronze products	1909	29	259	28	36	195	261	338	42	181	295	679	384
	1904	[2] 22	465	21	56	388	223	780	76	260	321	940	619
	1899	16	301	19	27	345	.....	779	34	219	400	811	411
Bread and other bakery products	1909	864	5,801	1,077	706	4,018	2,517	8,056	663	3,075	10,377	17,710	7,333
	1904	615	3,808	737	293	2,778	898	3,327	214	1,991	5,756	10,619	4,863
	1899	359	2,105	423	194	1,548	.....	1,665	110	836	2,624	4,877	2,253
Brick and tile	1909	78	1,879	35	141	1,703	8,972	9,169	162	1,146	952	2,756	1,804
	1904	69	1,504	46	101	1,357	5,067	3,929	102	825	335	1,916	1,581
	1899	56	825	60	45	720	1,468	1,205	43	333	166	834	668
Butter, cheese, and condensed milk	1909	161	918	119	202	597	2,496	2,829	202	466	11,140	12,761	1,621
	1904	281	997	269	125	603	3,026	2,107	78	414	6,460	7,821	1,361
	1899	178	629	137	90	402	.....	1,157	47	203	2,981	3,583	602
Canning and preserving	1909	196	8,714	148	809	7,757	7,453	18,316	1,080	3,454	24,009	32,915	8,906
	1904	236	8,510	160	611	7,739	4,635	11,187	797	2,800	18,655	26,083	7,428
	1899	183	.....	.....	349	8,200	.....	5,511	344	2,257	10,145	14,941	4,796
Carriages and wagons and materials	1909	155	1,015	185	70	760	957	1,635	74	610	849	2,052	1,203
	1904	198	1,277	248	49	980	782	1,730	51	715	852	2,352	1,500
	1899	193	.....	.....	37	923	.....	1,603	44	502	776	1,976	1,200
Cars and general shop construction and repairs by steam-railroad companies.	1909	42	9,688	.....	346	9,342	7,877	4,721	379	8,394	9,549	18,719	9,170
	1904	28	8,522	.....	271	8,251	4,753	4,047	313	6,068	3,251	9,836	6,585
	1899	29	5,039	.....	119	4,920	3,162	4,430	142	3,507	3,825	7,554	3,729
Cars and general shop construction and repairs by street-railroad companies.	1909	21	2,002	.....	100	1,902	2,055	2,139	97	1,676	1,152	3,009	1,857
	1904	3	943	.....	91	852	235	144	94	672	461	1,228	767
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cement	1909	8	2,521	.....	114	2,407	28,892	24,014	195	1,650	2,182	6,504	4,322
	1904	4	628	.....	32	596	5,351	4,856	89	236	664	1,601	937
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chemicals	1909	13	294	2	48	244	1,308	2,788	66	168	762	1,306	544
	1904	15	303	3	41	259	1,060	1,969	44	189	700	1,124	424
	1899	21	463	11	62	390	984	1,845	70	230	1,406	2,061	655
Clothing, men's, including shirts	1909	74	2,859	272	202	2,385	540	2,258	201	1,050	2,895	5,121	2,226
	1904	98	3,199	287	144	2,768	371	1,540	129	1,146	2,763	5,238	2,475
	1899	108	.....	.....	102	2,938	.....	1,293	97	945	2,710	4,721	2,011
Clothing, women's	1909	64	1,197	313	93	791	137	643	100	350	876	1,672	796
	1904	55	1,275	231	67	977	96	537	58	424	863	1,745	882
	1899	59	1,560	182	67	1,311	.....	692	51	437	1,008	1,981	973
Coffee and spice, roasting and grinding.	1909	44	707	27	328	352	1,123	3,324	532	245	4,617	6,492	1,875
	1904	45	627	42	254	331	816	2,221	343	196	3,251	4,683	1,432
	1899	40	483	48	168	267	.....	1,657	212	158	2,315	3,136	821
Confectionery	1909	89	1,410	102	306	1,002	582	2,123	271	459	2,138	3,624	1,486
	1904	93	1,564	105	225	1,234	567	1,810	216	533	1,647	3,506	1,859
	1899	36	.....	.....	157	711	.....	811	106	220	904	1,790	886
Cooperage and wooden goods, not elsewhere specified.	1909	38	502	40	46	416	1,192	1,547	67	323	1,579	2,167	588
	1904	[2] 31	527	28	32	467	526	798	47	347	1,134	1,718	584
	1899	[2] 33	434	36	13	385	.....	471	15	247	948	1,413	465
Copper, tin, and sheet-iron products	1909	233	2,511	317	256	1,938	1,367	7,180	319	1,659	3,565	6,804	3,239
	1904	123	2,279	147	132	2,000	628	9,657	238	1,299	3,288	5,938	2,650
	1899	[2] 53	.....	.....	78	1,780	.....	2,669	84	876	3,508	5,285	1,777
Electrical machinery, apparatus, and supplies.	1909	27	540	11	94	435	442	779	102	240	928	1,613	685
	1904	24	521	6	112	403	278	716	113	244	434	1,004	570
	1899	11	272	5	29	238	406	181	29	130	359	556	197

[1] Not reported separately.
[2] Excluding statistics for one establishment, to avoid disclosure of individual operations.
[3] Figures can not be shown without disclosing individual operations.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—Continued.													
Fertilizers	1909	15	278	1	51	226	1,579	$2,097	$72	$155	$1,796	$2,313	$517
	1904	14	108	10	35	123	852	904	30	69	519	894	375
	1899	8	89	3	16	70	415	648	20	40	483	671	188
Firearms and ammunition	1909	5	192	.....	36	156	327	2,169	52	83	1,167	1,577	410
	1904	4	141	.....	24	117	235	499	24	58	510	780	270
	1899	[1] 5	142	1	11	130	.....	415	18	61	491	652	161
Flour-mill and gristmill products	1909	125	1,392	82	362	948	11,545	13,424	514	732	21,302	25,188	3,296
	1904	122	1,300	94	317	889	11,004	11,467	443	659	17,132	20,203	3,071
	1899	107	.....	.....	195	857	10,015	6,493	269	525	11,023	13,045	2,022
Food preparations	1909	129	1,108	171	221	716	1,959	3,332	227	406	3,970	5,508	1,538
	1904	75	661	122	110	429	659	846	87	190	938	1,587	649
	1899	58	.....	.....	30	302	.....	469	30	138	678	1,151	473
Foundry and machine-shop products	1909	543	10,218	470	1,371	8,377	17,253	28,693	1,832	7,312	12,901	26,731	13,830
	1904	388	7,770	368	814	6,588	7,849	16,125	1,091	4,913	7,382	17,595	10,213
	1899	298	.....	.....	527	5,173	.....	8,471	602	3,332	5,915	13,023	7,108
Furnishing goods, men's	1909	11	187	14	39	134	16	318	35	67	457	721	264
	1904	6	114	10	12	92	8	60	10	37	167	274	107
	1899	14	.....	.....	53	578	.....	271	38	129	361	656	295
Furniture and refrigerators	1909	129	1,978	124	201	1,653	2,333	3,662	226	1,507	1,858	4,496	2,638
	1904	90	1,381	85	102	1,194	1,748	2,451	114	887	1,290	2,834	1,544
	1899	40	791	50	57	684	.....	543	43	365	584	1,268	684
Gas and electric fixtures and lamps and reflectors.	1909	41	785	31	201	553	540	1,743	232	446	750	1,715	965
	1904	[2] 12	307	11	52	244	156	408	49	169	193	500	307
	1899	14	281	13	51	217	.....	442	61	128	185	499	314
Gas, illuminating and heating	1909	74	2,538	1	871	1,666	7,502	47,075	824	1,408	2,604	8,927	6,323
	1904	53	1,303	1	454	848	3,606	31,286	391	650	1,184	5,412	4,228
	1899	41	910	.....	203	707	.....	20,487	229	497	896	3,162	2,266
Gloves and mittens, leather	1909	23	717	21	126	570	58	1,030	129	267	558	1,231	673
	1904	22	588	21	51	516	43	604	47	223	459	911	452
	1899	23	717	30	65	622	40	433	53	225	437	921	484
Ice, manufactured	1909	77	854	35	153	666	9,971	7,781	212	572	564	2,331	1,767
	1904	54	517	35	67	415	5,788	3,550	71	335	299	1,307	1,008
	1899	20	261	7	64	190	1,983	1,306	63	132	120	511	391
Iron and steel, steel works and rolling mills.	1909	5	1,085	.....	47	1,038	3,945	2,646	81	829	2,348	3,520	1,172
	1904	4	808	.....	35	773	2,618	1,110	53	492	770	1,480	710
	1899	3	573	.....	18	555	2,056	1,499	22	327	507	901	394
Jewelry	1909	58	797	165	58	574	324	462	65	477	664	1,557	893
	1904	49	606	127	34	445	161	331	38	375	682	1,447	765
	1899	21	.....	.....	16	221	.....	186	17	160	400	693	293
Leather goods	1909	88	946	79	157	710	321	1,945	148	458	1,101	2,244	1,143
	1904	[1] 97	973	99	99	775	357	2,075	112	488	1,016	2,125	1,109
	1899	64	.....	.....	87	764	.....	1,256	74	366	915	1,703	788
Leather, tanned, curried, and finished	1909	40	1,547	20	129	1,398	3,534	8,535	215	988	7,039	9,367	2,328
	1904	49	1,670	39	116	1,515	3,201	6,368	184	945	5,912	8,072	2,160
	1899	45	1,577	48	75	1,454	2,152	4,820	106	871	5,809	7,406	1,597
Lime	1909	15	459	12	37	410	558	1,381	55	234	212	609	397
	1904	13	392	4	32	356	95	1,253	43	173	161	572	411
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liquors, distilled	1909	33	264	26	45	193	1,360	2,476	56	128	835	5,353	4,518
	1904	28	131	18	37	76	683	1,028	36	50	375	1,165	790
	1899	8	29	9	.....	20	.....	77	.....	6	191	238	47
Liquors, malt	1909	83	1,626	48	282	1,296	8,867	18,804	545	1,391	2,559	9,319	6,760
	1904	97	1,511	92	214	1,205	5,924	10,925	355	1,145	2,250	7,511	5,261
	1899	99	1,180	105	125	950	3,605	8,183	213	753	1,277	5,085	3,808
Liquors, vinous	1909	181	1,691	157	247	1,287	5,314	20,189	429	682	4,674	8,937	4,263
	1904	273	1,588	240	202	1,146	5,067	10,181	230	656	3,669	6,689	3,020
	1899	187	804	172	106	526	.....	4,659	124	225	2,527	3,938	1,411
Lumber and timber products	1909	644	25,079	547	1,597	22,935	94,914	55,165	2,237	15,651	18,369	45,000	26,631
	1904	582	20,612	545	1,148	18,919	71,011	37,904	1,432	12,789	11,529	34,615	23,086
	1899	435	.....	.....	599	13,285	44,129	19,280	666	6,643	8,092	20,304	12,212
Marble and stone work	1909	128	1,724	155	154	1,415	3,562	3,145	210	1,241	1,183	3,380	2,197
	1904	69	992	84	71	837	1,324	1,814	83	807	1,005	2,395	1,390
	1899	48	.....	.....	39	566	723	1,009	44	413	308	1,122	754
Mattresses and spring beds	1909	35	671	25	118	528	727	1,351	149	361	1,243	2,164	921
	1904	31	520	34	63	423	336	592	65	237	475	1,010	535
	1899	10	.....	.....	16	128	.....	129	20	54	230	414	184
Paint and varnish	1909	35	530	14	120	396	1,387	2,675	158	275	2,652	3,758	1 106
	1904	22	395	13	89	293	614	1,617	86	201	1,678	2,370	692
	1899	14	227	11	39	177	614	1,022	48	108	942	1,259	317

[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] Not reported separately.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—Continued.													
Paper and wood pulp	1909	4	340	2	26	312	7,163	$2,068	$36	$207	$440	$969	$529
	1904	3	273	2	12	259	3,808	1,176	20	181	274	640	366
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Patent medicine and compounds and druggists' preparations.	1909	89	574	56	208	310	347	994	212	148	639	1,549	910
	1904	89	548	64	140	344	124	905	162	175	533	1,445	912
	1899	52	.....	.....	102	364	.....	950	95	168	754	1,562	808
Petroleum, refining	1909	29	1,146	4	212	930	5,630	13,881	367	801	13,898	17,878	3,980
	1904	19	840	.....	162	678	1,283	5,453	212	477	4,131	5,749	1,618
	1899	4	72	.....	19	53	180	478	40	42	490	698	208
Pottery, terra-cotta, and fire-clay products.	1909	26	1,167	12	128	1,027	2,856	3,545	184	641	505	1,797	1,292
	1904	22	941	10	71	860	2,195	3,484	99	555	396	1,761	1,365
	1899	18	448	16	41	391	1,084	1,307	59	246	261	751	490
Printing and publishing	1909	1,240	12,215	1,151	3,508	7,556	7,674	17,198	3,829	6,432	6,327	25,032	18,705
	1904	[2] 1,091	10,444	1,052	2,312	7,080	5,238	11,746	2,315	5,182	4,525	19,127	14,602
	1899	783	.....	.....	1,048	4,957	.....	7,037	1,060	3,001	2,606	10,586	7,980
Salt	1909	19	469	22	45	402	1,228	2,023	56	212	242	746	504
	1904	26	376	25	38	313	756	1,277	34	138	120	429	309
	1899	24	332	28	37	267	.....	758	37	110	117	380	263
Slaughtering and meat packing	1909	94	2,135	111	383	1,641	3,867	11,463	550	1,307	28,448	34,280	5,832
	1904	76	1,659	84	288	1,287	2,093	4,879	351	914	18,752	22,013	3,261
	1899	64	.....	.....	182	939	.....	3,952	255	553	13,616	15,817	2,201
Stoves and furnaces, including gas and oil stoves.	1909	17	266	11	40	215	152	413	43	174	206	514	308
	1904	7	189	7	15	167	138	156	13	90	98	279	181
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sulphuric, nitric, and mixed acids	1909	6	247	.....	30	217	735	2,614	57	173	740	1,161	421
	1904	4	258	.....	21	237	616	1,525	44	158	596	915	319
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco manufactures	1909	332	2,189	613	111	1,465	71	1,622	133	857	1,217	3,360	2,143
	1904	[4] 379	2,552	695	72	1,785	22	1,245	66	823	1,097	3,192	2,095
	1899	[2] 231	1,628	346	47	1,235	.....	756	55	493	741	1,888	1,147
All other industries	1909	976	17,949	995	2,613	14,341	50,707	153,969	3,761	10,603	98,545	131,833	33,288
	1904	932	18,378	965	2,120	15,293	40,220	51,664	2,758	10,008	72,067	97,731	25,664
	1899	813	.....	.....	1,297	13,872	.....	48,720	1,553	7,778	67,563	87,463	19,900

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

LOS ANGELES—All industries.	1909	1,325	21,875	1,181	3,367	17,327	33,166	$59,518	$3,912	$12,588	$38,913	$68,586	$29,673
	1904	814	13,189	761	2,004	10,424	.....	28,181	1,997	7,088	18,689	34,814	16,125
	1899	534	.....	.....	717	5,173	.....	10,045	671	2,600	8,088	15,134	7,046
Artificial stone	1909	8	97	11	6	80	15	70	9	66	31	147	116
	1904	3	78	.....	9	69	.....	100	9	43	52	129	77
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boots and shoes, including cut stock and findings.	1909	4	38	3	4	31	44	62	6	24	35	75	40
	1904	3	10	3	.....	7	.....	4	.....	3	5	14	9
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Brass and bronze products	1909	8	70	7	8	55	99	86	12	46	60	192	132
	1904	[2] 4	58	5	6	47	.....	34	6	28	39	106	67
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bread and other bakery products	1909	159	1,445	176	163	1,106	901	1,887	200	702	2,870	4,670	1,800
	1904	75	558	88	58	412	.....	531	50	272	1,027	1,744	717
	1899	51	307	59	40	208	.....	239	21	111	331	660	329
Brick and tile	1909	8	412	.....	21	391	1,451	1,433	32	215	233	658	425
	1904	7	411	7	21	383	.....	713	23	202	103	477	374
	1899	6	123	5	8	110	.....	169	7	43	21	111	90
Brooms and brushes	1909	8	63	8	3	52	26	116	2	28	86	151	65
	1904	4	46	3	.....	43	.....	43	.....	22	44	84	40
	1899	4	38	3	3	32	.....	25	3	13	34	57	23
Butter, cheese, and condensed milk	1909	4	61	.....	17	44	168	172	20	36	1,307	1,417	110
	1904	[2] 5	66	5	8	53	.....	202	6	42	558	677	119
	1899	3	35	3	8	24	.....	37	6	13	206	250	44
Canning and preserving	1909	21	479	20	50	409	471	963	64	175	771	1,255	484
	1904	14	368	7	47	314	.....	639	51	117	521	821	300
	1899	7	.....	.....	14	370	.....	224	14	88	382	556	174
Carriages and wagons and materials	1909	23	195	24	11	160	102	305	8	119	252	481	229
	1904	16	144	19	5	120	.....	73	3	84	104	305	201
	1899	[2] 10	.....	.....	.....	81	.....	49	.....	36	55	126	71
Cars and general shop construction and repairs by steam-railroad companies.	1909	4	1,938	.....	51	1,887	1,083	741	58	1,632	1,601	3,362	1,761
	1904	3	1,437	.....	33	1,404	.....	957	40	1,159	334	1,550	1,216
	1899	3	558	.....	21	537	.....	349	28	392	280	715	435

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
LOS ANGELES—Continued.													
Clothing, men's, including shirts	1909	15	505	19	34	452	99	$229	$32	$186	$486	$822	$336
	1904	[1] 9	258	12	8	238	.....	29	6	89	165	299	134
	1899	[1] 9	178	17	6	155	.....	20	4	40	215	322	107
Clothing, women's	1909	12	199	15	23	161	42	131	26	72	154	321	167
	1904	4	59	7	10	42	.....	16	7	24	41	88	47
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Coffee and spice, roasting and grinding	1909	11	164	6	68	90	241	700	85	67	802	1,150	348
	1904	9	62	11	10	41	.....	200	12	29	347	497	150
	1899	8	38	9	8	21	.....	112	7	9	181	245	64
Confectionery	1909	11	163	11	32	120	30	158	29	48	204	343	139
	1904	13	394	17	39	338	.....	568	55	150	533	954	421
	1899	13	.....	.....	41	215	.....	290	37	71	361	667	306
Cooperage and wooden goods, not elsewhere specified.	1909	6	44	7	4	33	80	113	6	25	106	139	33
	1904	3	55	1	4	50	.....	64	5	28	171	232	61
	1899	3	36	4	1	31	.....	48	1	10	71	133	62
Copper, tin, and sheet-iron products	1909	53	439	59	28	352	147	688	38	250	611	1,124	513
	1904	[1] 24	243	30	12	201	.....	269	12	150	244	515	271
	1899	[3] 14	.....	.....	12	293	.....	411	15	115	434	707	273
Electrical machinery, apparatus, and supplies.	1909	12	104	4	21	79	104	138	25	52	97	211	114
	1904	6	167	2	44	121	.....	265	43	84	174	400	226
	1899	3	47	1	11	35	.....	56	13	29	16	67	51
Fancy articles, not elsewhere specified	1909	9	36	11	2	23	50	32	1	14	9	43	34
	1904	9	61	14	4	43	.....	39	2	22	17	71	54
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products	1909	7	194	.....	59	135	1,260	2,676	99	95	4,830	5,347	517
	1904	8	165	2	53	110	.....	1,809	75	81	2,364	2,799	435
	1899	10	113	5	29	79	.....	607	41	41	1,022	1,223	201
Food preparations	1909	22	187	26	30	131	236	338	28	63	376	580	204
	1904	10	80	18	7	55	.....	66	6	24	50	118	68
	1899	7	27	10	3	14	.....	31	.....	4	36	56	20
Foundry and machine-shop products	1909	113	2,849	84	343	2,422	3,852	7,263	437	1,897	3,755	7,777	4,022
	1904	58	1,489	56	152	1,281	.....	2,911	188	968	1,606	3,557	1,951
	1899	37	.....	.....	78	560	.....	1,032	71	364	779	1,565	786
Furniture and refrigerators	1909	42	469	42	47	380	584	586	51	310	354	941	587
	1904	28	386	27	34	325	.....	547	41	222	494	880	386
	1899	8	133	9	19	105	.....	106	7	47	126	230	104
Gas and electric fixtures and lamps and reflectors.	1909	15	288	7	85	196	230	510	105	162	267	670	403
	1904	4	21	4	4	13	.....	19	3	9	16	40	24
	1899	5	63	3	8	52	.....	66	10	34	38	123	85
Hand stamps and stencils and brands	1909	3	41	3	16	22	18	55	18	17	22	92	70
	1904	5	29	3	8	18	.....	30	7	9	5	40	35
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ice, manufactured	1909	6	321	.....	49	272	2,206	2,702	81	224	142	765	623
	1904	5	164	.....	20	144	.....	1,272	23	114	91	470	379
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Jewelry	1909	16	112	21	19	72	37	153	21	55	102	246	144
	1904	9	77	10	10	57	.....	55	8	47	44	151	107
	1899	3	.....	.....	2	7	.....	46	2	7	30	61	31
Leather goods	1909	32	322	28	79	215	70	602	70	117	402	757	355
	1904	24	236	19	42	175	.....	371	45	101	296	584	288
	1899	[1] 11	125	13	10	102	.....	66	10	33	32	126	94
Liquors, malt	1909	4	290	.....	48	242	1,682	3,846	97	258	362	1,457	1,095
	1904	3	217	.....	37	180	.....	1,867	64	141	227	798	571
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liquors, vinous	1909	13	40	15	2	23	116	270	1	13	42	136	94
	1904	10	55	10	4	41	.....	391	3	22	80	164	84
	1899	16	67	17	4	46	.....	197	2	18	89	136	47
Lumber and timber products	1909	61	1,816	45	213	1,558	6,207	3,791	226	1,108	3,529	5,684	2,155
	1904	40	1,024	34	102	888	.....	1,756	122	584	1,597	2,700	1,103
	1899	24	416	21	46	349	.....	826	45	173	490	912	422
Marble and stone work	1909	14	108	22	11	75	258	222	9	72	116	257	141
	1904	[1] 6	46	8	4	34	.....	40	6	36	26	96	70
	1899	[3] 6	36	7	3	26	.....	27	4	15	27	62	35
Mattresses and spring beds	1909	11	214	9	37	168	187	399	46	115	495	787	292
	1904	8	100	12	17	71	.....	100	11	47	159	267	108
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Models and patterns, not including paper patterns.	1909	6	20	7	.....	13	33	8	.....	7	6	28	22
	1904	9	26	11	.....	15	.....	9	.....	10	5	31	26
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Paint and varnish	1909	6	67	3	29	35	158	305	33	30	358	494	136
	1904	3	22	3	9	10	.....	116	8	9	81	120	39
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
LOS ANGELES—Continued.													
Patent medicines and compounds and druggists' preparations.	1909	35	144	26	27	91	62	$140	$26	$43	$140	$337	$197
	1904	[1] 25	77	15	23	39	.....	68	17	16	56	153	97
	1899	21	97	27	17	53	.....	79	12	23	54	154	100
Petroleum, refining	1909	10	133	.....	33	100	430	1,312	66	82	1,135	1,406	271
	1904	6	82	.....	23	59	.....	529	34	49	321	461	140
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pottery, terra-cotta, and fire-clay products.	1909	8	122	7	17	98	315	536	26	61	86	235	149
	1904	9	174	4	20	150	.....	940	24	99	128	352	224
	1899	7	72	6	9	57	.....	295	11	32	48	105	57
Printing and publishing	1909	234	2,545	196	812	1,537	1,220	3,036	879	1,188	1,619	5,192	3,573
	1904	154	2,061	136	743	1,182	.....	2,272	591	905	950	3,508	2,558
	1899	93	.....	.....	114	538	.....	1,022	116	286	326	1,353	1,027
Slaughtering and meat packing	1909	6	605	3	95	507	747	3,569	148	324	5,946	7,464	1,518
	1904	[3] 4	407	3	51	353	.....	1,062	69	231	3,668	4,040	372
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Surgical appliances and artificial limbs	1909	6	31	4	6	21	8	18	6	14	15	49	34
	1904	[3] 3	37	4	11	22	.....	61	7	13	14	46	32
	1899	3	.....	.....	.....	7	.....	4	.....	4	2	14	12
Tobacco manufactures	1909	33	225	38	11	176	.....	174	20	91	134	344	210
	1904	32	146	33	8	105	.....	54	9	69	82	208	126
	1899	13	49	13	1	35	.....	24	1	22	18	59	41
All other industries	1909	246	4,280	214	753	3,313	8,088	18,983	766	2,485	4,965	10,980	6,015
	1904	140	1,593	118	304	1,171	.....	7,090	306	734	1,850	4,268	2,418
	1899	136	.....	.....	201	1,031	.....	3,588	183	518	2,384	4,339	1,955
OAKLAND—All industries	**1909**	**441**	**8,538**	**554**	**1,079**	**6,905**	**13,683**	**$19,113**	**$1,300**	**$5,317**	**$11,847**	**$22,343**	**$10,496**
	[4] 1904	**248**	**3,980**	**237**	**390**	**3,353**	.....	**9,126**	**409**	**2,068**	**4,307**	**9,015**	**4,708**
	1899	**195**	.....	.....	**264**	**2,476**	.....	**5,173**	**246**	**1,210**	**2,704**	**5,368**	**2,664**
Bread and other bakery products	1909	57	447	69	66	312	203	599	54	254	835	1,420	585
	1904	36	238	39	23	176	.....	146	11	139	368	668	300
	1899	32	191	39	16	136	.....	111	8	78	197	362	165
Butter, cheese, and condensed milk	1909	4	73	1	19	53	56	166	28	36	637	742	105
	1904	7	36	5	8	23	.....	51	8	18	272	334	62
	1899	4	8	4	.....	4	.....	5	.....	3	42	52	10
Canning and preserving	1909	9	469	11	33	425	166	974	44	173	674	1,040	366
	1904	[3] 5	35	7	6	22	.....	53	5	8	43	67	24
	1899	[3] 3	14	6	1	7	.....	8	1	2	10	18	8
Carriages and wagons and materials	1909	10	65	10	10	45	191	110	9	36	68	168	100
	1904	10	49	11	.....	38	.....	51	.....	27	41	101	60
	1899	10	.....	.....	.....	45	.....	71	.....	27	26	86	60
Confectionery	1909	6	127	6	49	72	8	146	33	36	107	222	115
	1904	7	142	10	15	117	.....	80	13	48	103	214	111
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Copper, tin, and sheet-iron products	1909	12	85	19	11	55	52	98	14	52	81	180	99
	1904	4	70	5	5	60	.....	102	7	62	107	240	133
	1899	3	.....	.....	.....	14	.....	19	.....	12	10	28	18
Flour-mill and gristmill products	1909	3	52	.....	16	36	228	326	20	39	613	691	78
	1904	4	47	1	9	37	.....	293	12	30	376	429	53
	1899	3	36	1	4	31	.....	76	2	23	144	208	64
Food preparations	1909	6	53	8	17	28	41	70	18	19	133	214	81
	1904	5	11	7	.....	4	.....	3	.....	2	13	25	12
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products	1909	44	891	39	105	747	993	2,358	132	681	666	1,824	1,158
	1904	13	265	9	20	236	.....	449	26	148	160	417	257
	1899	16	.....	.....	28	271	.....	491	31	148	248	515	267
Liquors, malt	1909	4	95	1	16	78	652	734	35	84	158	668	510
	1904	3	27	1	3	23	.....	687	4	26	40	170	130
	1899	3	26	3	6	17	.....	133	8	17	36	133	97
Lumber and timber products	1909	31	914	21	85	808	3,421	1,716	126	702	1,198	2,183	985
	1904	[1] 21	700	19	57	624	.....	1,217	69	441	787	1,537	750
	1899	[2] 13	362	19	20	342	.....	561	25	195	424	733	309
Pottery, terra-cotta, and fire-clay products.	1909	3	45	2	6	37	210	172	9	27	17	66	49
	1904	3	63	3	6	54	.....	111	6	34	19	98	79
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing	1909	70	612	65	216	331	540	1,120	229	357	255	1,292	1,037
	1904	[3] 39	377	33	82	262	.....	396	63	174	116	580	464
	1899	26	367	26	67	274	.....	593	51	128	117	550	433
Tobacco manufactures	1909	27	183	78	4	101	2	86	7	50	74	183	109
	1904	17	58	18	1	39	.....	39	2	23	51	101	50
	1899	12	29	13	.....	16	.....	19	.....	9	13	40	27
All other industries	1909	155	4,427	224	426	3,777	6,920	10,438	542	2,771	6,331	11,450	5,119
	1904	74	1,862	69	155	1,638	.....	5,448	183	888	1,811	4,034	2,223
	1899	70	.....	.....	122	1,319	.....	3,086	120	568	1,437	2,643	1,206

[1] Excluding statistics for two establishments, to avoid disclosure of individual operations.
[2] Figures can not be shown without disclosing individual operations.
[3] Excluding statistics for one establishment, to avoid disclosure of individual operations.
[4] 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 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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
SAN FRANCISCO—All industries.	1909	1,796	36,910	2,544	6,122	28,244	49,934	$133,824	$8,086	$22,381	$76,217	$133,041	$56,824
	1904	2,251	46,666	3,047	5,190	38,429	.....	102,362	6,630	25,015	75,946	137,788	61,842
	1899	1,748	.....	.....	3,413	32,555	.....	69,643	3,929	17,259	65,535	107,024	41,489
Artificial stone	1909	10	89	12	9	68	26	78	9	61	50	151	101
	1904	5	31	6	1	24	.....	12	1	23	12	41	29
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baskets, and rattan and willow ware	1909	7	129	7	5	117	23	107	11	49	118	211	93
	1904	7	40	8	1	31	.....	11	1	13	22	37	15
	1899	8	102	7	2	93	.....	81	3	27	70	145	75
Belting and hose, leather	1909	5	52	1	18	33	37	173	26	26	182	291	109
	1904	5	60	4	20	36	.....	190	23	26	121	234	113
	1899	5	.....	.....	12	40	.....	181	11	26	182	288	106
Boots and shoes, including cut stock and findings.	1909	8	425	73	31	321	131	672	36	204	553	976	423
	1904	[2] 15	643	54	41	548	.....	1,002	41	313	731	1,288	557
	1899	26	987	79	48	860	.....	1,181	46	403	949	1,627	678
Boxes, fancy and paper	1909	10	321	6	34	281	225	311	41	141	221	496	275
	1904	12	303	10	27	356	.....	372	20	127	210	448	238
	1899	8	258	13	12	233	.....	132	10	79	114	274	160
Brass and bronze products	1909	13	154	13	20	121	131	183	22	116	164	356	192
	1904	[2] 15	384	14	46	324	.....	725	65	223	275	806	531
	1899	11	364	13	24	327	.....	743	32	210	384	768	384
Bread and other bakery products	1909	167	1,665	263	199	1,203	786	3,513	238	1,003	2,965	5,268	2,303
	1904	184	1,722	233	123	1,366	.....	1,688	100	982	2,548	4,882	2,334
	1899	137	1,048	161	90	797	.....	976	60	417	1,508	2,601	1,093
Brooms and brushes	1909	9	138	45	8	85	18	82	4	46	129	206	77
	1904	11	136	45	3	88	.....	56	2	47	83	169	86
	1899	15	.....	.....	19	144	.....	113	15	71	120	255	135
Butter, cheese, and condensed milk	1909	3	8	3	.....	5	4	11	.....	3	35	47	12
	1904	7	20	7	3	10	.....	79	4	6	333	396	63
	1899	5	18	8	.....	10	.....	31	.....	7	53	67	14
Canning and preserving	1909	17	1,011	7	101	903	666	3,343	171	382	3,482	4,776	1,294
	1904	[3] 33	1,735	33	109	1,593	.....	2,719	177	554	3,080	4,636	1,556
	1899	34	.....	.....	86	1,660	.....	1,080	105	489	2,377	3,513	1,136
Carriages and wagons and materials	1909	37	311	43	31	237	248	457	36	204	191	552	361
	1904	63	502	74	23	405	.....	782	29	304	319	912	593
	1899	47	.....	.....	21	351	.....	574	27	179	263	673	410
Chemicals	1909	4	139	.....	19	120	720	1,425	24	93	628	938	310
	1904	6	150	3	21	126	.....	875	27	86	547	764	217
	1899	10	188	7	37	144	.....	890	41	96	653	955	302
Clothing, men's, including shirts	1909	50	1,905	251	132	1,522	335	1,637	126	727	2,106	3,682	1,576
	1904	84	2,831	271	122	2,438	.....	1,436	115	1,028	2,530	4,804	2,274
	1899	91	.....	.....	72	2,604	.....	1,158	72	853	2,371	4,138	1,767
Clothing, women's	1909	41	835	199	66	570	83	493	71	252	647	1,225	578
	1904	48	1,191	212	57	922	.....	518	52	303	810	1,633	823
	1899	49	1,464	102	46	1,256	.....	659	48	420	982	1,903	921
Coffee and spice, roasting and grinding	1909	19	492	13	254	225	775	2,440	427	153	3,549	4,973	1,424
	1904	25	532	21	236	275	.....	1,941	325	157	2,750	3,980	1,230
	1899	22	412	23	158	231	.....	1,438	204	140	2,050	2,766	716
Coffins, burial cases, and undertakers' goods.	1909	4	78	2	15	61	151	432	16	39	152	272	120
	1904	5	68	1	6	61	.....	182	9	34	106	212	106
	1899	4	66	2	9	55	.....	205	14	24	172	259	87
Confectionery	1909	27	689	36	114	539	299	1,151	138	249	930	1,718	788
	1904	37	761	43	133	585	.....	850	115	241	776	1,778	1,002
	1899	14	.....	.....	92	378	.....	424	61	99	448	845	397
Cooperage and wooden goods, not elsewhere specified.	1909	11	321	8	31	282	861	1,197	53	220	1,194	1,604	410
	1904	[2] 15	416	14	28	374	.....	671	41	287	874	1,340	466
	1899	23	370	23	12	335	.....	386	14	217	823	1,200	377
Copper, tin, and sheet-iron products	1909	71	1,336	130	138	1,068	681	5,191	202	947	1,872	3,645	1,773
	1904	50	1,614	63	85	1,466	.....	8,924	193	901	2,641	4,529	1,888
	1899	27	.....	.....	63	1,420	.....	2,170	66	715	2,987	4,399	1,412
Electrical machinery, apparatus, and supplies.	1909	10	160	7	24	129	114	163	30	77	143	322	179
	1904	13	294	2	59	233	.....	302	59	134	149	420	271
	1899	5	212	2	17	193	.....	59	15	96	274	406	132
Electroplating	1909	5	42	5	10	27	59	34	7	24	23	70	47
	1904	4	38	5	3	30	.....	18	3	25	18	81	63
	[4] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products	1909	9	172	6	59	107	1,225	1,532	84	80	2,403	2,781	378
	1904	9	314	6	97	211	.....	2,409	150	153	2,780	3,423	643
	1899	8	.....	.....	35	171	.....	898	55	107	1,534	1,956	422
Food preparations	1909	31	499	61	108	330	900	1,956	129	192	1,679	2,436	757
	1904	38	379	65	53	261	.....	339	47	114	637	999	362
	1899	28	.....	.....	23	219	.....	312	24	107	409	747	338

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
SAN FRANCISCO—Continued.													
Foundry and machine-shop products	1909	157	3,456	129	504	2,823	6,714	$10,849	$735	$2,690	$4,901	$9,622	$4,721
	1904	172	4,552	153	514	3,885	.....	10,038	731	2,919	4,273	10,525	6,252
	1899	130	.....	.....	360	3,509	.....	5,616	444	2,324	4,107	9,137	5,030
Furnishing goods, men's	1909	3	109	4	28	77	3	242	21	43	368	564	196
	1904	4	85	6	8	71	.....	45	7	31	144	231	87
	1899	14	.....	.....	53	578	.....	271	38	129	361	656	295
Furniture and refrigerators	1909	51	1,223	51	124	1,048	1,237	2,180	142	1,017	1,336	3,057	1,721
	1904	45	890	40	62	788	.....	1,534	68	616	743	1,836	1,093
	1899	22	555	26	33	496	.....	348	33	270	396	880	484
Gas and electric fixtures and lamps and reflectors.	1909	15	428	7	100	321	271	1,129	114	257	430	917	487
	1904	[1] 8	286	7	48	231	.....	389	46	160	177	461	284
	1899	5	190	3	38	149	.....	361	45	86	127	330	203
Gloves and mittens, leather	1909	9	165	10	27	128	16	324	19	79	148	301	153
	1904	15	356	16	28	312	.....	399	26	148	305	613	308
	1899	15	469	19	50	400	.....	298	40	158	319	664	345
Hand stamps and stencils and brands	1909	7	94	8	32	54	55	110	37	52	44	161	117
	1904	8	46	9	7	30	.....	35	6	21	18	90	72
	1899	12	60	10	9	41	.....	48	9	24	24	80	56
Ice, manufactured	1909	3	80	.....	13	67	1,485	1,059	23	69	73	302	229
	1904	4	93	.....	9	84	.....	816	11	76	68	278	210
	1899	3	80	.....	30	50	.....	510	28	40	44	134	90
Jewelry	1909	24	587	125	32	430	248	221	37	367	502	1,121	619
	1904	36	510	113	24	373	.....	260	30	319	630	1,264	634
	1899	18	.....	.....	14	214	.....	141	15	153	370	631	261
Leather goods	1909	20	357	17	50	290	165	725	55	204	348	843	495
	1904	[2] 34	497	38	41	418	.....	1,264	47	272	535	1,103	568
	1899	30	.....	.....	59	468	.....	899	53	243	542	1,055	513
Leather, tanned, curried, and finished	1909	17	619	15	46	558	1,260	2,479	89	415	2,655	3,622	967
	1904	21	667	30	42	595	.....	1,788	70	378	1,910	2,718	808
	1899	21	624	29	25	570	.....	1,232	37	365	2,219	2,795	576
Liquors, malt	1909	20	551	6	108	437	1,701	7,567	220	508	895	3,482	2,587
	1904	22	693	13	106	574	.....	4,946	190	594	1,147	4,106	2,959
	1899	25	530	23	64	443	.....	4,722	128	398	710	2,872	2,162
Liquors, vinous	1909	4	36	5	10	21	31	138	18	14	135	237	102
	1904	5	17	9	.....	8	.....	23	.....	4	15	54	39
	1899	6	13	8	1	4	.....	20	1	2	12	27	15
Lumber and timber products	1909	68	1,667	47	181	1,439	6,435	2,833	275	1,347	2,133	4,378	2,245
	1904	[1] 52	1,584	45	119	1,420	.....	1,787	155	1,105	2,005	3,980	1,975
	1899	[1] 33	1,001	31	74	896	.....	920	86	555	1,126	2,187	1,061
Marble and stone work	1909	18	593	16	94	488	1,227	1,221	133	413	797	1,635	838
	1904	18	628	18	49	561	.....	1,265	62	524	778	1,665	887
	1899	14	.....	.....	17	155	.....	557	21	98	229	452	223
Mattresses and spring beds	1909	12	320	6	58	256	385	783	78	173	576	1,036	460
	1904	16	386	13	44	329	.....	469	52	179	294	686	392
	1899	4	.....	.....	16	80	.....	98	20	39	180	300	120
Millinery and lace goods	1909	12	140	12	22	106	97	212	21	51	148	269	121
	1904	11	193	9	11	173	.....	92	8	63	96	223	127
	1899	8	117	8	7	102	.....	31	6	30	33	103	70
Models and patterns, not including paper patterns.	1909	14	101	20	6	75	131	58	3	66	45	153	108
	1904	13	100	17	8	75	.....	80	8	60	28	139	111
	1899	8	64	10	.....	54	.....	31	.....	31	16	76	60
Musical instruments, pianos and organs and materials.	1909	7	27	8	4	15	6	60	3	18	14	54	40
	1904	9	33	8	4	21	.....	79	4	16	19	53	34
	1899	4	.....	.....	.....	18	.....	40	.....	14	11	47	36
Paint and varnish	1909	13	142	8	49	85	352	729	57	60	456	758	302
	1904	13	355	8	77	270	.....	1,395	75	184	1,564	2,197	633
	1899	9	71	4	31	36	.....	284	34	22	308	448	140
Patent medicines and compounds and druggists' preparations.	1909	28	330	11	151	168	131	641	154	82	380	989	609
	1904	47	420	32	104	284	.....	728	135	148	435	1,170	735
	1899	26	.....	.....	77	279	.....	629	70	131	690	1,346	656
Photo-engraving	1909	9	140	4	41	95	41	108	38	105	34	228	194
	1904	16	162	18	26	118	.....	101	26	103	50	265	215
	1899	8	80	8	8	64	.....	16	10	30	9	76	67
Printing and publishing	1909	307	5,180	260	1,588	3,332	3,386	7,101	1,895	3,094	3,156	12,201	9,045
	1904	[2] 361	4,898	318	977	3,603	.....	5,548	1,237	2,788	2,689	10,847	8,158
	1899	250	.....	.....	634	2,688	.....	3,364	676	1,827	1,769	6,334	4,565

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
SAN FRANCISCO—Continued.													
Show cases	1909	4	27	5	3	19	23	$34	$3	$21	$28	$63	$35
	1904	4	16	6	.....	10	.....	15	.....	10	12	36	24
	1899	3	23	4	.....	19	.....	8	.....	11	10	32	22
Slaughtering and meat packing	1909	31	471	47	83	341	1,083	2,056	135	337	8,904	10,270	1,366
	1904	44	464	58	90	316	.....	1,278	111	272	7,688	9,209	1,521
	1899	30	.....	.....	80	260	.....	1,385	112	211	6,715	7,590	875
Tobacco manufactures	1909	91	1,111	286	75	750	69	855	85	424	614	1,833	1,219
	1904	[1] 172	1,758	459	46	1,253	.....	777	45	481	652	2,028	1,376
	1899	105	1,222	208	37	977	.....	504	49	350	542	1,366	824
All other industries	1909	284	7,980	246	1,267	6,467	14,904	62,926	1,795	5,168	23,681	37,949	14,268
	1904	410	12,723	410	1,449	10,864	.....	41,110	1,872	7,373	27,319	44,199	16,880
	1899	368	.....	.....	818	8,484	.....	33,619	1,051	4,936	25,943	37,621	11,678
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.													
Alameda	1909	51	1,076	50	111	915	1,526	$3,002	$171	$797	$929	$2,554	$1,625
	1904	30	326	32	15	279	.....	541	20	241	233	697	464
	1899	23	.....	.....	23	372	.....	749	43	216	788	1,335	547
Bakersfield	1909	27	844	20	78	746	910	1,791	94	664	1,700	2,819	1,119
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Berkeley	1909	84	1,420	115	221	1,084	2,433	3,465	254	840	2,087	4,435	1,748
	1904	44	453	28	87	338	.....	1,429	86	230	782	1,474	692
	1899	22	.....	.....	19	211	.....	456	14	99	392	651	259
Eureka	1909	48	1,075	30	99	946	3,901	3,306	124	673	1,494	3,012	1,518
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Fresno	1909	76	2,262	43	281	1,938	3,403	4,933	328	1,103	7,992	11,090	3,098
	[3] 1904	80	2,109	51	203	1,915	.....	3,430	264	1,062	6,828	9,754	2,926
	1899	62	.....	.....	87	819	.....	1,435	86	396	1,703	2,752	1,049
Long Beach	1909	51	413	49	87	277	1,450	1,326	87	207	498	927	429
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pasadena	1909	88	708	92	117	499	969	1,347	118	380	853	1,724	871
	1904	46	451	49	84	318	.....	766	80	229	421	967	546
	1899	28	.....	.....	22	177	.....	313	15	77	127	331	204
Pomona	1909	30	285	32	29	224	334	630	22	152	230	560	330
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Redlands	1909	37	260	36	77	147	439	1,104	47	100	239	518	279
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Riverside	1909	53	399	56	76	267	700	1,102	50	214	667	1,178	511
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sacramento	1909	211	5,206	219	533	4,514	8,517	10,097	616	3,918	6,893	13,977	7,084
	[3] 1904	156	4,742	164	375	4,203	.....	7,359	419	2,952	5,144	10,073	4,929
	1899	111	.....	.....	170	3,686	.....	6,856	202	2,519	5,345	9,495	4,150
San Bernardino	1909	41	883	38	116	729	1,411	1,242	94	639	763	1,660	897
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
San Diego	1909	117	1,440	99	270	1,071	3,269	5,326	263	806	2,067	4,741	2,074
	1904	89	703	97	65	541	.....	1,991	60	392	1,136	1,974	838
	1899	57	.....	.....	43	255	.....	990	42	148	281	670	389
San Jose	1909	153	1,828	134	264	1,430	2,078	3,815	249	903	3,243	5,610	2,367
	[3] 1904	153	1,625	145	220	1,260	.....	3,033	190	682	2,512	4,298	1,786
	1899	124	.....	.....	189	1,221	.....	2,980	146	567	1,850	3,292	1,442
Santa Barbara	1909	51	382	43	74	265	491	895	63	197	696	1,169	473
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Santa Cruz	1909	34	388	31	83	274	1,827	2,605	77	211	668	1,161	493
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stockton	1909	144	2,039	141	304	1,594	5,016	8,250	376	1,306	8,320	11,849	3,529
	1904	110	1,582	105	144	1,333	.....	5,220	165	904	5,850	8,029	2,179
	1899	91	.....	.....	137	1,185	.....	4,454	151	650	3,987	5,525	1,538
Vallejo	1909	23	271	22	46	203	1,616	1,559	75	184	1,404	1,896	492
	[2] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[1] Excluding statistics for two establishments, to avoid disclosure of individual operations.
[2] Figures not available.
[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. Total.	Proprietors and firm members.	Salaried officers, supts. and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Number. Maximum month.	Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	7,659	141,576	8,077	5,563	9,872	2,968	115,296	Se 132,280	Fe 94,252	(1)	(1)	(1)	(1)	(1)	328,100
2	Agricultural implements	25	749	19	24	66	18	622	Ap 702	Au 513	668	668	.....	.....	.....	1,186
3	Artificial stone	66	434	71	31	8	4	320	De 347	Ja 2 278	363	361	.....	2	.....	247
4	Automobiles, including bodies and parts.	41	580	50	27	21	13	478	Jy 534	Ja 418	471	451	17	3	.....	305
5	Babbitt metal and solder	5	81	.....	11	11	7	52	My 59	Ja 2 48	52	52	.....	.....	.....	91
6	Baskets, and rattan and willow ware	14	242	11	7	3	2	219	My 297	Au 2 171	203	63	140	.....	.....	104
7	Belting and hose, leather	5	52	1	8	8	2	33	Je 2 35	Ja 2 31	32	31	.....	1	.....	37
8	Bicycles, motorcycles, and parts	5	19	6	1	1	.....	11	No 2 13	Ja 2 10	13	12	1	.....	.....	12
9	Blacking and cleansing and polishing preparations.	9	40	5	6	7	1	21	De 27	Ja 2 18	27	18	6	3	.....	36
10	Boots and shoes, including cut stock and findings.	18	840	76	18	37	14	695	No 754	Jy 542	791	547	199	38	7	369
11	Boxes, cigar	3	57	3	3	1	1	49	Oc 2 52	Jy 2 45	52	29	23	.....	.....	29
12	Boxes, fancy and paper	19	703	10	27	28	14	624	No 707	Ja 532	692	217	437	5	33	405
13	Brass and bronze products	29	259	28	20	13	3	195	De 203	Ap 184	206	202	1	3	.....	261
14	Bread and other bakery products	864	5,801	1,077	150	268	288	4,018	Oc 4,154	Ja 3,903	4,359	3,501	818	22	18	2,517
15	Brick and tile	78	1,879	35	85	46	10	1,703	Jy 2,223	Fe 941	1,801	1,778	1	22	.....	8,972
16	Brooms	16	219	54	4	5	1	155	Ja 2 164	Se 2 147	161	160	1	.....	.....	52
17	Brushes	8	22	9	1	.....	1	11	No 2 17	Jy 2 9	17	16	1	.....	.....	14
18	Butter, cheese, and condensed milk	161	918	119	90	70	42	597	My 632	Ja 525	635	596	39	.....	.....	2,496
19	Buttons	7	21	8	.....	.....	.....	13	Ap 15	Fe 11	13	4	8	1	.....	.....
20	Canning and preserving	196	8,714	148	285	382	142	7,757	Au 16,047	Fe 2,781	15,034	6,231	8,472	117	214	7,463
21	Carpets, rag	17	109	25	3	3	2	76	Oc 87	Ja 64	92	79	13	.....	.....	38
22	Carriages and wagons and materials	155	1,015	185	42	12	16	760	Je 821	Ja 677	741	733	.....	8	.....	957
23	Cars and general shop construction and repairs by steam-railroad companies.	42	9,688	.....	70	271	5	9,342	Oc 10,057	Fe 7,623	9,659	9,657	.....	2	.....	7,877
24	Cars and general shop construction and repairs by street-railroad companies.	21	2,002	.....	35	59	6	1,902	Jy 1,985	Ja 1,835	1,911	1,911	.....	.....	.....	2,055
25	Cars, steam-railroad, not including operations of railroad companies.	5	165	.....	8	10	1	146	Je 172	Au 2 124	140	139	.....	1	.....	493
26	Cement	8	2,521	.....	24	83	7	2,407	No 2,843	Ja 1,481	2,841	2,837	.....	4	.....	28,892
27	Chemicals	13	294	2	22	19	7	244	No 361	Mh 195	360	350	10	.....	.....	1,308
28	Clothing, men's, including shirts	74	2,859	272	51	111	40	2,385	Mh 2,455	Ja 2,268	2,403	418	1,981	1	3	540
29	Clothing, women's	64	1,197	313	27	41	25	791	No 842	Jy 684	862	275	584	3	.....	137
30	Coffee and spice, roasting and grinding.	44	707	27	51	226	51	352	No 373	Fe 339	374	235	137	1	1	1,123
31	Coffins, burial cases, and undertakers' goods.	7	133	2	10	15	4	102	Ap 107	Jy 96	104	74	29	1	.....	221
32	Confectionery	89	1,410	102	60	116	130	1,002	De 1,269	Ja 850	1,285	475	785	9	16	582
33	Cooperage and wooden goods, not elsewhere specified.	38	502	40	21	15	10	416	Oc 490	Fe 2 336	492	489	2	1	.....	1,192
34	Copper, tin, and sheet-iron products	233	2,511	317	111	100	45	1,938	Jy 2,129	Ja 1,712	2,054	1,939	107	8	.....	1,367
35	Cutlery and tools, not elsewhere specified.	16	58	15	1	.....	.....	42	No 52	Fe 35	51	49	.....	2	.....	71
36	Dairymen's, poulterers', and apiarists' supplies.	11	113	10	14	15	11	63	Mh 87	Se 42	87	84	3	.....	.....	76
37	Electrical machinery, apparatus, and supplies.	27	540	11	32	37	25	435	No 487	Se 407	489	366	121	2	.....	442
38	Electroplating	12	66	14	6	5	.....	41	De 45	My 37	45	45	.....	.....	.....	86
39	Fancy articles, not elsewhere specified.	13	54	17	3	3	1	30	My 2 33	Ja 23	36	21	11	3	1	56
40	Fertilizers	15	278	1	19	28	4	226	Mh 263	Au 203	230	229	1	.....	.....	1,579
41	Firearms and ammunition	5	192	.....	19	14	3	156	Je 168	Fe 144	161	120	41	.....	.....	327
42	Flags, banners, regalia, society badges, and emblems.	6	54	3	5	4	2	40	Jy 44	Ja 2 38	43	26	16	1	.....	23
43	Flour-mill and gristmill products	125	1,392	82	125	203	34	948	No 1,069	Ap 889	1,087	1,064	23	.....	.....	11,545
44	Food preparations	129	1,108	171	85	107	29	716	No 894	Ap 594	977	664	310	3	.....	1,959
45	Foundry and machine-shop products	543	10,218	470	536	652	183	8,377	De 8,723	Ja 7,517	8,875	8,817	16	42	.....	17,253
46	Fur goods	8	105	7	3	5	6	84	No 114	My 57	112	41	71	.....	.....	12
47	Furnishing goods, men's	11	187	14	4	22	13	134	De 161	Ja 117	163	26	132	1	4	16
48	Furniture and refrigerators	129	1,978	124	70	110	21	1,653	Mh 1,750	Jy 1,538	1,759	1,717	36	5	1	2,333
49	Gas and electric fixtures and lamps and reflectors.	41	785	31	59	102	40	553	De 665	Ap 485	665	626	15	22	2	540
50	Gas, illuminating and heating	74	2,538	1	169	612	90	1,666	No 1,786	My 1,593	1,783	1,783	.....	.....	.....	7,502
51	Gloves and mittens, leather	23	717	21	29	64	33	570	De 644	Ja 501	652	256	386	6	4	58
52	Hand stamps and stencils and brands.	18	152	18	13	33	4	84	No 2 90	Jy 2 79	90	81	8	1	.....	74
53	Hats and caps, other than felt, straw, and wool.	8	60	11	2	3	1	43	My 2 48	Ja 35	42	26	15	.....	1	7
54	Hosiery and knit goods	6	316	2	11	26	9	268	Au 2 289	My 248	284	40	242	.....	2	44
55	Ice, manufactured	77	854	35	79	60	14	666	Jy 807	Fe 524	645	635	1	9	.....	9,971
56	Iron and steel, steel works and rolling mills.	5	1,085	.....	15	28	4	1,038	No 1,175	Jy 716	1,176	1,173	3	.....	.....	3,945
57	Jewelry	58	797	165	22	25	11	574	De 655	Jy 526	656	600	35	19	2	324
58	Lapidary work	14	103	14	8	9	5	67	Ja 2 94	Au 54	62	54	6	2	.....	53
59	Leather goods	88	940	79	50	89	18	710	No 772	Mh 638	775	635	129	10	1	321
60	Leather, tanned, curried, and finished.	40	1,547	20	70	42	17	1,398	Se 1,457	My 1,352	1,441	1,437	.....	4	.....	3,534
61	Lime	15	459	12	14	17	6	410	Ap 475	De 303	319	319	.....	.....	.....	558
62	Liquors, distilled	33	264	26	21	18	6	193	Oc 273	My 130	305	264	41	.....	.....	1,360
63	Liquors, malt	83	1,626	48	122	138	22	1,296	Jy 1,373	Fe 1,215	1,300	1,300	.....	.....	.....	8,867
64	Liquors, vinous	181	1,691	157	129	80	38	1,287	Oc 2,868	Je 793	1,721	1,701	20	.....	.....	5,314
65	Lumber and timber products	644	25,079	547	647	799	151	22,935	Jy 28,986	Ja 14,401	24,795	24,588	148	59	.....	94,914

[1] No figures given for reasons explained in the Introduction.

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	$537,134,359	$476,154,254	$11,168,478	$11,788,939	$84,141,477	$13,077,882	$312,160,192	$3,651,151	$8,121,203	$2,195,153	$29,851,779	$529,760,528	$204,522,454
2	2,359,158	2,245,031	58,490	64,688	451,083	31,830	1,409,348	870	17,508	3,703	207,511	2,669,651	1,228,473
3	447,025	532,973	31,381	4,252	239,178	2,748	216,768	9,218	1,699	.....	27,729	643,246	423,730
4	700,812	1,247,826	41,647	29,671	368,308	10,070	689,658	35,037	5,410	9,520	57,905	1,470,169	770,441
5	547,052	1,043,329	45,550	21,547	39,778	9,451	837,408	11,462	1,537	.....	76,596	1,120,293	273,434
6	241,702	317,844	13,131	4,183	94,670	2,156	178,188	7,998	1,415	126	15,977	357,375	177,031
7	172,973	253,045	15,000	10,785	26,392	2,916	179,334	4,920	658	.....	13,040	291,449	109,199
8	22,797	25,379	1,525	663	9,208	463	9,613	2,015	95	143	1,654	31,367	21,291
9	26,834	57,124	5,605	6,160	11,916	586	21,125	3,844	109	.....	7,779	90,820	69,109
10	1,192,217	1,718,523	42,450	46,891	402,488	12,422	1,107,402	18,000	3,788	.....	85,082	1,924,278	804,454
11	42,843	81,290	5,400	2,040	20,300	900	46,646	1,440	481	.....	4,083	84,653	37,107
12	730,934	903,560	47,310	39,121	271,420	8,675	433,158	30,863	2,218	1,369	69,426	964,983	523,150
13	338,386	554,362	32,301	10,121	181,242	22,051	273,374	17,382	1,059	100	16,732	679,154	383,729
14	8,055,919	15,381,414	272,597	390,836	3,074,892	323,288	10,054,077	364,498	42,043	185	858,998	17,709,633	7,332,268
15	9,168,834	2,601,355	124,379	37,249	1,145,664	657,368	284,451	29,179	23,803	21,040	268,222	2,756,308	1,804,489
16	211,870	342,823	2,930	2,388	84,133	1,801	228,872	3,932	824	36	17,907	388,117	157,444
17	20,655	29,330	900	360	7,480	251	17,521	1,285	129	72	1,332	35,508	17,736
18	2,829,359	12,198,671	113,755	88,040	466,252	93,542	11,046,158	40,123	12,208	23,031	315,502	12,760,670	1,620,970
19	11,969	16,651	.....	.....	5,564	156	7,174	2,592	100	.....	1,065	27,381	20,051
20	18,316,474	31,003,217	593,052	487,351	3,453,555	251,413	23,757,809	85,565	70,857	59,247	2,244,368	32,914,820	8,905,607
21	58,996	70,166	5,400	3,692	40,772	1,661	9,670	2,866	228	.....	5,877	99,656	88,325
22	1,635,350	1,681,714	57,312	16,592	609,720	45,633	803,433	61,348	9,068	11,303	67,305	2,052,434	1,203,368
23	4,720,924	18,718,805	129,257	249,487	8,393,722	264,301	9,285,026	350	29,890	2,714	363,968	18,718,805	9,169,388
24	2,138,838	3,009,473	50,831	46,553	1,675,985	32,830	1,119,068	900	19,970	200	63,196	3,009,473	1,857,635
25	143,408	269,921	12,540	8,382	97,742	5,233	130,184	2,400	917	.....	12,523	299,967	164,550
26	24,013,715	4,408,806	89,453	106,031	1,649,738	1,511,850	670,021	120	29,843	6,974	344,776	6,504,127	4,322,256
27	2,788,028	1,155,870	40,160	25,505	168,190	71,461	690,124	720	12,873	.....	146,837	1,866,373	544,788
28	2,257,530	4,615,767	83,232	118,113	1,050,366	21,815	2,873,081	80,753	9,980	112,186	266,241	5,120,569	2,225,613
29	642,890	1,457,059	32,482	67,119	350,266	11,223	865,041	44,728	2,076	13,644	70,480	1,672,313	796,049
30	3,323,698	6,035,341	126,094	406,014	244,771	37,308	4,579,856	74,968	14,818	.....	551,512	6,492,091	1,874,927
31	736,204	390,900	15,291	17,148	67,134	3,953	237,399	4,800	3,938	4,170	37,067	436,826	195,474
32	2,122,501	3,245,399	106,654	104,310	459,354	50,140	2,088,307	93,018	9,669	50	272,997	3,624,045	1,485,598
33	1,546,578	2,076,259	41,804	25,478	323,357	8,693	1,570,518	13,548	6,925	2,224	83,712	2,167,222	588,011
34	7,179,573	6,003,265	201,696	117,460	1,658,737	46,165	3,518,691	91,085	25,052	4,964	338,515	6,803,761	3,238,905
35	81,892	72,321	375	.....	34,090	3,165	28,022	3,370	356	.....	2,943	93,647	62,460
36	256,615	380,609	21,408	16,999	45,450	2,300	255,058	3,284	973	.....	35,137	414,519	157,161
37	779,137	1,407,142	54,422	47,810	240,320	13,254	914,862	20,800	2,583	900	112,191	1,612,983	684,867
38	47,387	80,290	4,276	3,857	33,022	5,362	22,852	4,989	210	.....	4,822	97,522	69,308
39	63,740	44,718	2,711	1,680	17,448	1,794	11,035	3,044	312	.....	5,794	64,250	51,421
40	2,096,654	2,167,719	38,066	34,169	154,802	28,746	1,767,032	16,041	10,235	.....	118,628	2,312,555	516,777
41	2,168,686	1,350,874	37,214	14,899	83,409	14,899	1,152,093	.....	1,873	.....	46,487	1,576,798	409,806
42	74,035	102,841	6,900	4,923	27,242	554	49,941	8,655	376	.....	4,250	122,019	71,524
43	13,423,522	23,747,093	253,919	259,678	731,700	179,419	21,712,532	13,835	65,157	7,714	523,139	25,188,133	3,296,182
44	3,332,479	4,988,655	119,344	107,973	405,925	55,356	3,914,942	46,455	10,730	10,814	317,116	5,508,097	1,537,799
45	28,693,493	24,487,555	1,028,734	803,466	7,311,782	600,077	12,299,914	281,159	113,840	216,253	1,831,430	26,730,891	13,830,000
46	91,932	221,205	5,625	6,090	74,890	1,587	115,146	13,625	515	.....	3,727	301,910	185,177
47	318,183	629,180	7,610	27,830	66,908	1,342	455,807	9,051	2,290	619	57,723	721,251	264,102
48	3,061,691	3,953,800	133,806	91,737	1,507,077	50,145	1,807,906	119,840	10,010	34,430	203,789	4,496,007	2,637,956
49	1,742,854	1,552,221	102,226	130,216	446,350	21,707	727,964	28,029	6,281	.....	89,358	1,714,683	904,922
50	47,074,650	6,530,387	311,713	512,005	1,407,704	2,288,476	315,353	6,487	324,840	207	1,363,602	8,926,544	6,322,715
51	1,039,429	1,031,751	68,270	60,871	267,240	3,166	554,764	7,113	2,838	900	66,589	1,230,852	672,922
52	184,504	230,882	21,069	34,936	74,355	1,993	71,180	17,729	384	130	9,136	280,928	207,785
53	36,673	82,949	3,300	1,832	24,822	915	45,253	3,156	99	.....	3,572	103,493	57,325
54	515,170	436,259	30,720	32,703	112,261	1,819	197,813	5,443	903	.....	54,597	451,970	252,338
55	7,781,176	1,724,332	145,324	66,788	572,460	430,375	133,267	7,250	46,466	8,618	313,784	2,331,302	1,767,660
56	2,645,625	[1] 3,467,401	44,691	36,020	828,522	159,207	2,188,571	225	6,072	.....	204,174	3,519,824	1,172,046
57	462,289	1,345,503	37,700	27,175	477,003	12,282	651,239	47,536	1,416	1,660	89,492	1,556,830	893,318
58	249,020	202,717	13,385	8,475	54,152	3,031	165,783	8,266	787	.....	8,838	297,436	128,622
59	1,944,810	1,918,141	63,705	84,418	457,714	7,543	1,093,808	54,439	5,973	176	150,365	2,244,489	1,143,138
60	8,535,102	8,780,949	160,059	55,006	987,550	74,336	6,965,117	2,260	20,397	1,651	514,573	9,366,545	2,327,092
61	1,380,679	553,856	29,000	25,869	233,505	113,843	98,200	667	7,585	95	45,092	609,145	397,102
62	2,476,095	4,996,241	33,872	22,463	128,245	63,985	770,942	34,489	3,796,302	788	145,095	5,352,651	4,517,724
63	18,804,353	7,613,093	337,142	208,305	1,390,880	264,952	2,294,529	15,790	1,278,531	.....	1,822,964	9,319,041	6,759,560
64	20,188,855	7,386,897	211,281	217,422	681,824	131,036	4,542,905	89,760	709,622	43,703	759,344	8,936,848	4,262,907
65	55,165,260	40,609,463	1,343,978	893,347	15,651,040	281,095	18,087,805	211,804	445,890	317,009	3,377,495	45,000,276	26,631,376

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

TABLE II.—DETAIL STATEMENT FOR THE

	INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, supts. and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Number. Maximum month.	Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	Marble and stone work	128	1,724	155	65	75	14	1,415	Ja 1,501	No 1,344	1,442	1,440	.....	2	.....	3,562
2	Mattresses and spring beds	35	671	25	45	45	28	528	No 588	Ap 495	589	517	62	9	1	727
3	Millinery and lace goods	23	227	24	13	16	8	166	De 214	Je 91	238	83	150	.....	5	110
4	Mirrors	6	56	7	1	.....	2	46	Oc[1] 47	Ja 43	45	45	.....	.....	.....	110
5	Models and patterns, not including paper patterns.	26	135	36	.....	5	1	93	No 100	Jy 87	93	74	13	6	.....	198
6	Musical instruments and materials, not specified.	5	14	6	.....	.....	.....	8	Ja[2] 8	Jy[2] 8	9	9	.....	.....	.....	.....
7	Musical instruments, pianos and organs and materials.	11	78	9	8	2	2	57	Ja 74	Se 49	55	55	.....	.....	.....	53
8	Optical goods	6	59	7	4	10	6	32	My[1] 33	Ap[1] 31	32	31	.....	1	.....	14
9	Paint and varnish	35	530	14	54	51	15	396	Jy 440	Ja 357	378	353	21	4	.....	1,387
10	Paper and wood pulp	4	340	2	10	11	5	312	De 330	Oc 285	330	324	6	.....	.....	7,163
11	Paper goods, not elsewhere specified	8	127	3	10	6	7	101	No 112	Se 94	117	52	65	.....	.....	86
12	Patent medicines and compounds and druggists' preparations.	89	574	56	61	55	92	310	My[1] 315	Je 304	329	159	160	6	4	347
13	Petroleum, refining	29	1,146	4	66	119	27	930	No 974	Mh 862	948	947	1	.....	.....	5,630
14	Photo-engraving	20	274	21	25	22	16	190	Fe[1] 199	Jy 150	200	190	5	5	.....	119
15	Pottery, terra-cotta, and fire-clay products.	26	1,167	12	46	71	11	1,027	Au 1,120	Ja 879	1,133	1,124	6	3	.....	2,856
16	Printing and publishing	1,240	12,215	1,151	652	2,209	647	7,556	De 7,925	Ja 7,350	7,967	6,525	1,253	178	11	7,674
17	Pumps, not including steam pumps	6	66	4	5	6	1	50	Se 56	Ja 47	48	48	.....	.....	.....	128
18	Rubber goods, not elsewhere specified	5	103	.....	9	15	5	74	Oc 88	De 61	61	42	19	.....	.....	209
19	Salt	19	469	22	23	18	4	402	No 519	Fe 313	468	464	4	.....	.....	1,228
20	Shipbuilding, including boat building	43	2,006	39	48	67	8	1,844	No. 2,553	My 1,512	2,386	2,378	2	6	.....	3,129
21	Show cases	11	66	15	2	1	1	47	Ja[1] 56	Au 39	54	54	.....	.....	.....	82
22	Signs and advertising novelties	8	67	7	4	9	.....	47	De 56	Oc 44	56	54	2	.....	.....	24
23	Silverware and plated ware	3	16	4	.....	1	.....	11	Ja[2] 11	Jy[2] 11	11	11	.....	.....	.....	9
24	Slaughtering and meat packing	94	2,135	111	105	249	29	1,641	De 1,709	Je 1,586	1,723	1,678	31	13	1	3,867
25	Stereotyping and electrotyping	3	29	6	4	1	2	16	Se[1] 17	Ja[1] 15	16	16	.....	.....	.....	42
26	Stoves and furnaces, including gas and oil stoves.	17	266	11	11	25	4	215	No 248	Je 185	244	242	.....	2	.....	152
27	Sulphuric, nitric, and mixed acids	6	247	.....	11	16	3	217	Fe 230	Au 203	210	210	.....	.....	.....	735
28	Surgical appliances and artificial limbs	13	62	12	4	4	.....	42	Ja[1] 45	Au[1] 39	39	33	5	1	.....	26
29	Tobacco manufactures	332	2,189	613	41	62	8	1,465	Mh 1,499	Au 1,423	1,541	1,189	316	28	8	71
30	Type founding and printing materials	3	21	.....	4	4	1	12	De 14	Ja[1] 10	13	11	1	1	.....	21
31	Umbrellas and canes	4	10	5	.....	.....	.....	5	De 6	Ja[1] 5	6	2	4	.....	.....	2
32	Wall plaster	7	78	1	11	10	2	54	Au 63	Mh 36	68	68	.....	.....	.....	701
33	Whips	3	13	3	.....	1	.....	9	Ja[2] 9	Jy[2] 9	9	9	.....	.....	.....	.....
34	All other industries[3]	554	12,282	551	506	1,080	306	9,839	.....	.....	.....	.....	.....	.....	.....	44,111

[1] Same number reported for one or more other months.
[2] Same number reported throughout the year.
[3] All other industries embrace—

Artificial flowers and feathers and plumes	2
Awnings, tents, and sails	27
Axle grease	1
Bags, other than paper	7
Bags, paper	2
Baking powders and yeast	4
Beet sugar	9
Belting and hose, woven and rubber	1
Bluing	1
Candles	2
Carriages and sleds, children's	1
Cash registers and calculating machines	1
Charcoal	1
Chocolate and cocoa products	2
Clocks and watches, including cases and materials	2
Cordage and twine and jute and linen goods	2
Cordials and sirups	7
Corsets	2
Dyestuffs and extracts	1
Engraving and diesinking	5
Explosives	2
Files	1
Fireworks	1
Flavoring extracts	17
Foundry supplies	2
Fuel, manufactured	3
Galvanizing	2
Glass	3
Glass, cutting, staining, and ornamenting	28
Glucose and starch	1
Glue	3
Gold and silver, leaf and foil	2
Gold and silver, reducing and refining, not from the ore	1
Grease and tallow	7
Hair work	12
Hat and cap materials	1
Hats, fur-felt	2
House-furnishing goods, not elsewhere specified	3
Ink, printing	2
Ink, writing	1
Instruments, professional and scientific	8
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills	1
Iron and steel forgings	3

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.		
1	$3,144,882	$2,890,227	$125,548	$84,740	$1,241,205	$66,234	$1,116,301	$27,376	$15,804	$113,842	$99,177	$3,379,715	$2,197,180
2	1,351,331	2,001,328	82,788	66,034	360,638	16,333	1,227,112	42,396	4,400	135	201,486	2,163,914	920,409
3	268,883	374,585	17,180	10,551	89,916	3,077	215,338	15,025	349	.....	16,540	412,682	194,107
4	133,746	163,710	2,400	635	44,990	4,406	100,057	1,380	2,318	1,020	6,504	185,806	81,343
5	72,426	151,422	.....	3,460	77,876	3,836	48,342	10,597	254	254	6,803	194,805	142,627
6	10,220	10,897	.....	.....	6,534	36	2,005	812	109	.....	441	16,108	13,107
7	189,183	135,099	12,301	1,485	60,403	2,194	36,776	4,076	845	.....	15,019	150,308	109,338
8	79,622	114,354	6,200	12,890	23,846	1,219	59,002	4,776	375	.....	5,056	137,595	77,284
9	2,674,666	3,244,074	104,140	54,041	275,177	35,566	2,016,528	16,188	8,785	267	133,382	3,758,090	1,105,990
10	2,068,048	757,198	25,840	10,410	206,622	99,432	340,963	2,505	6,554	.....	64,872	969,172	528,777
11	185,020	204,860	9,093	5,740	58,176	6,138	94,075	6,193	415	.....	24,121	223,528	122,415
12	993,937	1,254,317	113,832	97,751	147,931	10,066	628,885	36,888	6,954	430	211,580	1,548,977	910,026
13	13,880,760	15,812,573	211,843	155,643	800,504	1,180,787	12,710,934	20,406	62,137	280	664,039	17,878,006	3,980,285
14	224,001	373,661	30,445	27,560	195,560	7,577	55,802	18,835	893	1,970	25,020	444,933	381,464
15	3,545,162	1,534,081	104,303	80,012	641,227	248,443	256,746	2,209	21,144	8,316	171,681	1,707,120	1,201,940
16	17,197,899	21,017,808	1,253,999	2,575,235	6,432,161	249,418	6,077,885	595,771	72,468	807,204	2,053,577	25,031,877	18,704,574
17	171,082	137,019	10,200	5,500	43,407	2,444	39,391	3,512	532	21,080	10,053	167,233	125,308
18	235,320	294,365	15,000	21,441	60,000	4,990	163,975	4,234	812	.....	23,313	322,727	153,762
19	2,022,663	570,661	34,060	20,670	211,672	26,925	215,420	21,675	3,056	950	43,733	746,211	503,866
20	8,320,206	3,948,413	122,450	93,167	1,592,211	73,460	1,163,589	23,062	24,315	273,169	582,390	4,132,170	2,895,127
21	110,155	135,140	2,016	900	46,626	2,707	72,476	3,733	626	.....	5,072	154,418	70,145
22	51,333	103,745	7,278	9,585	46,041	2,698	29,180	3,776	208	600	4,373	118,850	86,966
23	12,830	20,085	.....	1,040	8,200	464	6,145	2,775	20	.....	835	25,190	18,581
24	11,463,407	31,533,926	246,164	303,557	1,306,840	184,764	28,263,203	49,849	41,875	3,743	1,133,835	34,280,003	5,831,946
25	50,981	60,679	5,880	1,952	11,647	2,258	19,699	3,036	114	.....	16,093	72,021	50,004
26	412,835	460,308	15,745	26,026	173,501	9,070	196,806	7,782	1,450	2,605	26,483	514,187	308,311
27	2,614,500	1,112,402	38,020	19,205	172,864	105,811	634,504	.....	8,889	.....	133,109	1,160,937	420,622
28	40,241	94,082	3,015	3,060	31,541	995	34,236	6,370	360	.....	16,653	114,251	82,026
29	1,622,147	2,820,358	65,069	67,005	857,260	4,026	1,212,023	77,755	280,405	10,107	245,148	3,360,495	2,143,540
30	43,698	40,450	3,120	1,070	9,769	619	20,243	2,080	137	.....	3,412	44,695	23,833
31	5,560	8,980	.....	.....	2,974	27	3,151	2,524	28	.....	276	12,174	8,996
32	342,301	212,544	16,002	6,670	57,533	13,642	95,013	1,506	1,100	.....	19,470	186,655	77,400
33	55,025	13,343	.....	576	5,504	43	5,215	300	187	.....	1,518	18,850	13,592
34	140,057,235	108,682,968	1,357,803	1,556,600	7,106,537	2,334,923	91,740,404	309,922	317,510	26,423	3,782,837	120,325,916	26,250,589

[a] All other industries embrace—Continued.

Iron and steel pipe, wrought	4
Jewelry and instrument cases	3
Kaolin and ground earths	2
Labels and tags	5
Lead, bar, pipe, and sheet	1
Looking-glass and picture frames	16
Malt	4
Matches	4
Mineral and soda waters	154
Mucilage and paste	3
Oakum	2
Oil, essential	1
Oil, not elsewhere specified	8
Paving materials	1
Pens, fountain, stylographic, and gold	1
Photographic apparatus and materials	4
Pipes, tobacco	1
Roofing materials	6
Safes and vaults	2
Saws	1
Scales and balances	1
Shoddy	1
Silk and silk goods, including throwsters	9
Smelting and refining, copper	3
Smelting and refining, lead	2
Smelting and refining, not from the ore	1
Soap	23
Soda-water apparatus	2
Sporting and athletic goods	3
Springs, steel, car and carriage	1
Stationery goods, not elsewhere specified	1
Statuary and art goods	17
Steam packing	2
Sugar, refining, not including beet sugar	2
Typewriters and supplies	2
Upholstering materials	5
Vault lights and ventilators	1
Vinegar and cider	14
Washing machines and clothes wringers	2
Window shades and fixtures	16
Wirework, including wire rope and cable	20
Wood, turned and carved	15
Wool pulling	1
Wool scouring	3
Woolen, worsted, and felt goods, and wool hats	5

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

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

LOS ANGELES.

	INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	16 and over. Male.	16 and over. Female.	Under 16.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	1,325	21,875	1,181	919	1,990	458	17,327	15,065	2,075	187	19,326	16,686	2,428	170	42	33,166
2	Artificial stone	8	97	11	4	2	.....	80	80	.....	.....	90	90	.....	.....	.....	15
3	Boots and shoes, including cut stock and findings.	4	38	3	1	2	1	31	23	8	.....	30	22	8	.....	.....	44
4	Brass and bronze products	8	70	7	5	3	.....	55	55	.....	.....	60	60	.....	.....	.....	99
5	Bread and other bakery products	159	1,445	176	35	95	33	1,106	787	305	14	1,220	868	336	5	11	901
6	Brick and tile	8	412	.....	14	5	2	391	374	.....	17	425	407	.....	18	.....	1,451
7	Brooms	4	52	4	.....	.....	1	47	47	.....	.....	49	49	.....	.....	.....	16
8	Brushes	4	11	4	1	.....	1	5	4	1	.....	11	10	1	.....	.....	10
9	Butter, cheese, and condensed milk	4	61	.....	7	8	2	44	44	.....	.....	45	45	.....	.....	.....	168
10	Canning and preserving	21	479	20	17	26	7	409	205	196	8	800	402	383	13	2	471
11	Carriages and wagons and materials	23	195	24	5	1	5	160	158	.....	2	164	162	.....	2	.....	102
12	Cars and general shop construction and repairs by steam-railroad companies.	4	1,938	.....	17	33	1	1,887	1,887	.....	.....	1,957	1,957	.....	.....	.....	1,083
13	Clothing, men's, including shirts	15	505	19	7	16	11	452	48	401	3	453	48	402	.....	3	99
14	Clothing, women's	12	199	15	8	11	4	161	39	122	.....	161	39	122	.....	.....	42
15	Coffee and spice, roasting and grinding	11	164	6	12	49	7	90	61	29	.....	91	62	29	.....	.....	241
16	Confectionery	11	163	11	8	14	10	120	45	75	.....	151	57	94	.....	.....	30
17	Cooperage and wooden goods, not elsewhere specified.	6	44	7	1	2	1	33	33	.....	.....	39	39	.....	.....	.....	89
18	Copper, tin, and sheet-iron products	53	439	59	19	5	4	352	334	15	3	389	368	17	4	.....	147
19	Electrical machinery, apparatus, and supplies.	12	104	4	13	4	4	79	75	3	1	94	89	4	1	.....	104
20	Fancy articles, not elsewhere specified	9	36	11	2	.....	.....	23	15	7	1	27	18	8	.....	1	50
21	Flour-mill and gristmill products	7	194	.....	16	40	3	135	131	4	.....	140	136	4	.....	.....	1,260
22	Food preparations	22	187	26	10	16	4	131	65	66	.....	178	88	90	.....	.....	236
23	Foundry and machine-shop products	113	2,849	84	118	180	45	2,422	2,412	2	8	2,802	2,790	3	9	.....	3,852
24	Furniture and refrigerators	42	469	42	20	19	8	380	362	16	2	431	411	18	2	.....	584
25	Gas and electric fixtures and lamps and reflectors.	15	288	7	20	53	12	196	193	1	2	211	208	1	2	.....	230
26	Hand stamps and stencils and brands	3	41	3	4	11	1	22	20	1	1	23	21	1	1	.....	18
27	Ice, manufactured	6	321	.....	14	29	6	272	271	1	.....	270	269	1	.....	.....	2,200
28	Jewelry	16	112	21	5	9	5	72	70	.....	2	94	91	.....	2	1	37
29	Leather goods	32	322	28	16	55	8	215	162	47	6	258	194	57	7	.....	70
30	Liquors, malt	4	290	.....	20	24	4	242	242	.....	.....	248	248	.....	.....	.....	1,682
31	Liquors, vinous	13	40	15	1	1	.....	23	23	.....	.....	39	39	.....	.....	.....	116
32	Lumber and timber products	61	1,816	45	66	129	18	1,558	1,542	5	11	1,706	1,689	5	12	.....	6,207
33	Marble and stone work	14	108	22	1	8	2	75	75	.....	.....	75	75	.....	.....	.....	258
34	Mattresses and spring beds	11	214	9	11	16	10	168	149	19	.....	197	175	22	.....	.....	187
35	Models and patterns, not including paper patterns.	6	20	7	.....	.....	.....	13	7	6	.....	14	8	6	.....	.....	33
36	Paint and varnish	6	67	3	11	15	3	35	35	.....	.....	35	35	.....	.....	.....	158
37	Patent medicines and compounds and druggists' preparations.	35	144	26	14	8	5	91	36	47	8	108	43	56	5	4	62
38	Petroleum, refining	10	133	.....	16	11	6	100	100	.....	.....	105	105	.....	.....	.....	430
39	Pottery, terra-cotta, and fire-clay products	8	122	7	10	7	.....	98	98	.....	.....	94	94	.....	.....	.....	315
40	Printing and publishing	234	2,545	196	138	538	136	1,537	1,215	267	55	1,681	1,329	292	54	6	1,220
41	Slaughtering and meat packing	6	605	3	14	75	6	507	484	14	9	540	515	15	9	1	747
42	Surgical appliances and artificial limbs	6	31	4	3	3	.....	21	15	6	.....	19	14	5	.....	.....	8
43	Tobacco manufactures	33	225	38	7	4	.....	176	129	38	9	193	141	42	2	8	.....
44	All other industries [1]	246	4,280	214	208	463	82	3,313	2,915	373	25	3,609	3,175	406	22	5	8,088

[1] All other industries embrace: Agricultural implements, 2; automobiles, including bodies and parts, 26; awnings, tents, and sails, 6; babbitt metal and solder, 1; baking powders and yeast 1; bicycles, motorcycles, and parts, 2; blacking and cleansing and polishing preparations, 3; boxes, cigar, 1; boxes, fancy and paper, 5; buttons, 5; candles, 1; carpets, rag, 3; cars and general shop construction and repairs by street-railroad companies, 2; cars, steam-railroad, not including operations of railroad companies, 1; cash registers and calculating machines, 1; chemicals, 1; coffins, burial cases, and undertakers' goods, 2; cordials and sirups, 1; corsets, 1; cutlery and tools, not elsewhere specified, 7; dairymen's, poulterers', and apiarists' supplies, 3; electroplating, 3; engraving and diesinking, 3; fertilizers, 4; flags, banners, regalia, society badges, and emblems, 2; flavoring extracts, 3; fuel, manufactured, 2; fur goods, 1; furnishing goods, men's, 4; gas, illuminating and heating, 5; glass, 1; glass, cutting, staining, and ornamenting, 9; gloves and mittens, leather, 1; hair work, 3; hats and caps, other than felt, straw, and wool, 3; hosiery and knit goods, 2; house-furnishing goods, not elsewhere specified, 1; ink, writing, 1; instruments, professional and scientific, 3; iron and steel, steel works and rolling mills, 1; iron and steel pipe, wrought, 3; jewelry

OAKLAND.

1	**All industries**	441	8,538	554	347	533	199	6,905	5,601	1,064	240	7,987	6,162	1,561	160	104	13,683
2	Bread and other bakery products	57	447	69	12	23	31	312	239	70	3	395	303	89	3	.....	203
3	Butter, cheese, and condensed milk	4	73	1	5	10	4	53	39	14	.....	53	39	14	.....	.....	56
4	Canning and preserving	9	469	11	17	11	5	425	134	283	8	1,087	343	724	7	13	166
5	Carriages and wagons and materials	10	65	10	7	2	1	45	45	.....	.....	44	44	.....	.....	.....	191
6	Confectionery	6	127	6	3	12	34	72	24	48	.....	74	25	49	.....	.....	8
7	Copper, tin, and sheet-iron products	12	85	19	5	5	1	55	55	.....	.....	68	68	.....	.....	.....	52
8	Flour-mill and gristmill products	3	52	.....	6	8	2	36	35	1	.....	37	36	1	.....	.....	228
9	Food preparations	6	53	8	5	10	2	28	24	4	.....	28	24	4	.....	.....	41
10	Foundry and machine-shop products	44	891	39	44	44	17	747	737	1	9	823	812	1	10	.....	993
11	Liquors, malt	4	95	1	10	6	.....	78	78	.....	.....	78	78	.....	.....	.....	652
12	Lumber and timber products	31	914	21	35	43	7	808	803	.....	5	814	809	.....	5	.....	3,421
13	Pottery, terra-cotta, and fire-clay products	3	45	2	2	4	.....	37	37	.....	.....	40	40	.....	.....	.....	210
14	Printing and publishing	70	612	65	41	134	41	331	272	39	20	343	283	40	19	1	540
15	Tobacco manufactures	27	183	78	2	1	1	101	84	15	2	107	89	16	2	.....	2
16	All other industries [2]	155	4,427	224	153	220	53	3,777	2,995	589	193	3,996	3,169	623	114	90	6,920

[2] All other industries embrace: Artificial stone, 3; automobiles, including bodies and parts, 3; awnings, tents, and sails, 1; babbitt metal and solder, 1; baking powders and yeast, 1; baskets, and rattan and willow ware, 2; bicycles, motorcycles, and parts, 1; blacking and cleansing and polishing preparations, 3; boots and shoes, including cut stock and findings, 1; boxes, fancy and paper, 1; brass and bronze products, 5; brooms, 2; brushes, 2; carpets, rag, 1; cars and general shop construction and repairs by street-railroad companies, 1; cars and general shop construction and repairs by steam-railroad companies, 1; chemicals, 2; clothing, men's, including shirts, 4; clothing, women's, 10; coffee and spice, roasting and grinding, 1; coffins, burial cases, and undertakers' goods, 1; cooperage and wooden goods, not elsewhere specified, 1; cordage and twine and jute and linen goods, 1; cordials and sirups, 1; cutlery and tools, not elsewhere specified, 1; electrical machinery, apparatus, and supplies, 2; electroplating, 1; fancy articles, not elsewhere specified, 1; flags, banners, regalia, society badges, and emblems, 1; flavoring extracts, 2; furnishing goods, men's, 1; furniture and refrigerators, 4; gas and electric fixtures and lamps and reflectors, 1; gas, illuminating and heating, 2; glass, cutting, staining, and ornamenting, 2; gloves and mittens, leather, 4; grease

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.

LOS ANGELES.

	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	$59,518,398	$61,061,311	$1,726,739	$2,183,429	$12,587,617	$1,529,959	$37,382,649	$663,455	$611,837	$378,450	$3,995,176	$68,586,274	$20,073,666
2	69,648	115,394	7,440	1,710	65,614	1,216	29,801	1,078	395	.....	7,240	146,961	115,944
3	61,880	70,575	1,300	5,148	23,930	1,229	34,102	3,600	101	.....	1,765	75,017	39,686
4	85,560	124,900	10,500	1,920	46,135	6,538	53,261	3,714	194	.....	2,638	192,086	132,287
5	1,886,925	4,170,998	67,106	132,466	701,608	66,810	2,803,474	83,757	11,492	185	304,100	4,670,076	1,799,792
6	1,432,931	526,765	21,800	6,938	215,399	125,072	107,703	1,165	5,720	.....	39,902	658,070	425,235
7	105,009	118,728	.....	300	24,597	614	78,559	120	367	36	14,135	135,444	56,271
8	10,860	12,660	900	300	3,378	124	6,531	625	86	72	584	15,400	8,745
9	172,492	1,375,790	12,400	7,437	35,520	2,850	1,303,710	6,115	530	.....	7,229	1,417,232	110,672
10	963,222	1,099,344	33,682	30,036	174,530	13,378	757,597	3,904	5,370	1,302	79,435	1,254,724	483,749
11	304,762	406,529	5,522	2,022	119,084	7,275	244,749	12,435	1,418	.....	8,024	481,395	229,371
12	740,904	3,362,118	27,305	31,187	1,632,371	53,815	1,547,591	.....	2,076	.....	67,773	3,362,118	1,700,712
13	228,799	744,746	9,400	22,701	185,701	4,189	482,202	18,187	2,608	700	18,098	821,704	335,253
14	131,005	205,848	10,672	15,211	71,819	2,080	152,345	9,205	446	.....	4,070	321,034	168,609
15	699,503	1,056,455	23,810	61,243	66,888	8,299	703,435	10,830	5,650	.....	86,300	1,150,331	348,600
16	158,182	300,418	9,350	19,020	48,157	4,099	199,610	4,590	1,316	.....	13,370	342,878	139,160
17	113,136	145,128	3,600	2,600	24,685	1,815	104,341	2,070	773	261	4,083	139,040	32,800
18	688,045	970,467	32,024	5,725	240,541	6,629	604,538	13,876	5,514	82	52,538	1,124,394	513,227
19	138,124	198,451	20,045	4,663	51,762	2,321	94,073	8,150	390	.....	16,147	211,188	113,894
20	31,787	31,838	1,451	.....	14,218	1,404	7,045	2,804	209	.....	3,807	43,000	33,051
21	2,676,229	5,068,021	50,270	48,257	91,881	21,426	4,808,319	.....	9,156	6,675	29,037	5,347,173	517,428
22	337,896	518,269	12,150	15,560	63,140	7,020	308,947	10,914	1,808	1,144	37,526	580,951	204,384
23	7,263,185	6,994,154	219,019	218,288	1,896,622	178,398	3,576,409	53,005	33,605	138,153	680,535	7,776,790	4,021,989
24	586,244	784,767	29,504	21,298	309,583	6,251	344,923	18,438	2,828	2,300	46,572	941,439	587,235
25	510,401	601,838	43,309	61,976	161,619	7,850	258,763	10,780	3,297	.....	54,244	670,025	403,412
26	54,569	66,082	6,396	11,214	17,063	385	21,132	3,722	165	.....	6,005	91,510	69,993
27	2,701,827	633,294	47,735	33,082	223,825	112,494	29,568	1,200	17,065	.....	168,235	764,950	622,888
28	152,899	202,188	10,680	10,230	55,456	1,994	100,414	6,057	556	1,660	14,241	215,904	143,496
29	601,963	668,321	22,967	46,788	116,824	1,002	400,416	19,729	1,310	.....	58,425	757,174	354,850
30	3,846,167	1,238,557	66,780	30,425	257,864	35,836	325,079	150	228,324	.....	293,199	1,456,990	1,095,175
31	270,157	85,289	921	175	13,481	1,429	40,298	6,336	15,334	.....	7,315	136,206	94,479
32	3,700,075	5,143,748	111,966	114,426	1,108,483	23,699	3,565,470	30,655	22,831	1,607	224,602	5,683,649	2,154,471
33	221,551	203,561	1,330	7,732	71,552	4,167	111,013	1,879	992	.....	4,319	250,527	140,747
34	398,576	712,405	19,620	26,393	114,610	3,842	490,825	13,003	1,591	135	42,413	786,005	291,938
35	7,925	15,661	.....	.....	7,330	170	5,347	2,568	26	.....	220	28,150	22,633
36	305,004	445,362	13,800	18,891	29,893	2,905	355,348	5,170	1,900	.....	17,305	494,288	130,035
37	140,072	236,642	16,285	9,509	42,973	1,671	138,725	9,591	760	90	17,128	337,042	196,046
38	1,311,746	1,344,246	49,520	16,422	82,493	84,630	1,050,076	1,800	4,751	280	54,274	1,406,045	271,339
39	535,983	108,152	20,160	6,262	61,240	38,518	47,480	2,149	5,757	1,432	15,214	234,582	148,584
40	3,035,893	4,473,567	266,422	612,355	1,188,470	42,148	1,576,436	126,528	15,528	104,459	451,221	5,191,709	3,573,185
41	3,569,171	6,844,428	57,695	90,120	324,081	60,574	5,885,046	1,140	14,149	.....	411,623	7,404,205	1,518,675
42	18,425	51,376	3,315	2,700	13,977	416	14,230	3,880	184	.....	12,668	48,850	34,198
43	173,695	294,208	12,900	7,200	91,459	29	133,974	6,474	18,024	.....	24,148	344,421	210,418
44	18,984,981	9,146,623	345,282	422,559	2,485,781	570,448	4,386,290	139,845	167,113	27,817	501,879	10,979,432	6,013,685

and instrument cases, 1; labels and tags, 1; lapidary work, 10; looking-glass and picture frames, 6; millinery and lace goods, 6; mineral and soda waters, 6; mirrors, 2; mucilage and paste, 2; musical instruments and materials, not specified, 3; musical instruments, pianos and organs and materials, 2; oil, not elsewhere specified, 1; optical goods, 1; paper and wood pulp, 1; pens, fountain, stylographic, and gold, 1; photographic apparatus and materials, 2; photo-engraving, 7; pipes, tobacco, 1; pumps, not including steam pumps, 2; rubber goods, not elsewhere specified, 1; scales and balances, 1; shipbuilding, including boat building, 5; show cases, 3; signs and advertising novelties, 3; soap, 6; soda-water apparatus, 2; statuary and art goods, 5; stereotyping and electrotyping, 1; stoves and furnaces, including gas and oil stoves, 7; sulphuric, nitric, and mixed acids, 1; type founding and printing materials, 1; umbrellas and canes, 3; upholstering materials, 1; vinegar and cider, 1; wall plaster, 2; whips, 2; window shades and fixtures, 3; wirework, including wire rope and cable, 5; wood, turned and carved, 6; woolen, worsted, and felt goods, and wool hats, 2.

OAKLAND.

1	$10,113,246	$20,559,203	$670,153	$630,144	$5,317,241	$769,818	$11,077,415	$224,282	$180,415	$39,063	$1,650,072	$22,342,926	$10,495,693
2	599,044	1,252,247	18,360	35,287	254,054	28,500	806,042	41,071	4,261	.....	64,072	1,420,288	585,146
3	166,449	713,814	13,320	15,060	35,889	2,803	634,216	1,560	871	.....	10,095	741,711	104,692
4	974,432	946,704	28,939	15,261	173,068	14,108	659,825	5,581	3,695	.....	46,827	1,039,540	365,607
5	109,806	137,674	7,570	1,904	36,373	3,703	63,977	8,310	655	4,844	10,338	168,302	100,712
6	145,921	199,045	5,960	26,545	35,642	4,370	102,205	5,332	341	.....	18,580	222,495	115,860
7	98,125	156,543	10,036	3,637	51,877	1,004	79,732	3,312	947	.....	5,998	170,633	98,897
8	326,049	689,107	11,344	8,870	39,194	3,253	609,882	.....	2,280	.....	14,284	690,960	77,825
9	70,500	196,912	6,060	11,450	19,314	3,506	129,298	3,060	356	.....	23,268	213,783	80,970
10	2,357,992	1,683,761	78,818	53,103	691,370	94,307	621,904	20,508	12,593	8,097	103,061	1,823,663	1,157,452
11	734,342	506,861	26,100	8,860	83,684	14,174	143,610	.....	91,439	.....	138,994	667,530	509,746
12	1,715,826	2,143,007	74,258	51,344	702,479	16,484	1,181,155	18,770	9,190	2,010	87,317	2,183,236	985,597
13	172,367	62,520	4,513	4,870	27,499	11,258	5,842	.....	139	.....	8,399	65,590	48,490
14	1,119,675	1,011,395	74,841	154,234	356,727	14,651	240,745	38,240	5,371	21,591	104,995	1,291,993	1,036,597
15	86,173	160,142	2,400	4,141	59,432	994	73,543	6,088	15,700	.....	6,034	182,637	108,190
16	10,436,545	10,699,471	307,634	235,578	2,769,639	606,793	5,724,779	70,950	33,177	2,521	948,400	11,451,475	5,119,903

and tallow, 1; hand stamps and stencils and brands, 2; ice, manufactured, 3; iron and steel, steel works and rolling mills, 1; jewelry, 3; leather goods, 3; leather, tanned, curried, and finished, 1; liquors, vinous, 1; marble and stone work, 2; mattresses and spring beds, 6; millinery and lace goods, 3; mineral and soda waters, 4; mirrors, 1; models and patterns, not including paper patterns, 3; optical goods, 1; paint and varnish, 5; paper goods, not elsewhere specified, 1; patent medicines and compounds and druggists' preparations, 4; photo-engraving, 1; safes and vaults, 1; slaughtering and meat packing, 7; shipbuilding, including boat building, 5; show cases, 2; silverware and plated ware, 2; smelting and refining, not from the ore, 1; statuary and art goods, 1; stoves and furnaces, including gas and oil stoves, 3; sulphuric, nitric, and mixed acids, 1; surgical appliances and artificial limbs, 2; upholstering materials, 1; washing machines and clothes wringers, 1; window shades and fixtures, 4; wirework, including wire rope and cable, 4; wood, turned and carved, 2.

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.

SAN FRANCISCO.

	INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	Wage earners. 16 and over. Male.	Wage earners. 16 and over. Female.	Wage earners. Under 16.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	All industries	1,796	36,910	2,544	1,653	3,377	1,092	28,244	22,852	5,173	219	29,596	23,917	5,440	174	65	49,934
2	Artificial stone	10	89	12	6	1	2	68	67	.....	1	71	70	.....	1	.....	26
3	Baskets, and rattan and willow ware	7	129	7	2	2	1	117	40	77	.....	110	38	72	.....	.....	23
4	Belting and hose, leather	5	52	1	8	8	2	33	32	.....	1	32	31	.....	1	.....	37
5	Boots and shoes, including cut stock and findings.	8	425	73	9	16	6	321	224	83	14	378	264	98	11	5	131
6	Boxes, fancy and paper	10	321	6	15	13	6	281	99	163	19	299	105	174	2	18	225
7	Brass and bronze products	13	154	13	10	8	2	121	117	1	3	123	119	1	3	.....	131
8	Bread and other bakery products	167	1,665	263	39	82	78	1,203	961	234	8	1,269	1,014	247	1	7	786
9	Butter, cheese, and condensed milk	3	8	3	.....	.....	.....	5	4	1	.....	5	4	1	.....	.....	4
10	Canning and preserving	17	1,011	7	36	53	12	903	481	422	.....	844	450	394	.....	.....	666
11	Carriages and wagons and materials	37	311	43	17	6	8	237	233	.....	4	231	227	.....	4	.....	248
12	Chemicals	4	139	.....	8	8	3	120	120	.....	.....	118	118	.....	.....	.....	720
13	Clothing, men's, including shirts	50	1,905	251	30	80	22	1,522	342	1,179	1	1,446	325	1,120	1	.....	335
14	Clothing, women's	41	835	199	16	30	20	570	161	406	3	639	181	455	3	.....	83
15	Coffee and spice, roasting and grinding	19	492	13	35	180	39	225	134	91	.....	245	146	99	.....	.....	775
16	Coffins, burial cases, and undertakers' goods	4	78	2	6	6	3	61	35	25	1	62	36	25	1	.....	151
17	Confectionery	27	689	36	27	51	36	539	171	353	15	702	223	459	4	16	299
18	Cooperage and wooden goods, not elsewhere specified.	11	321	8	13	9	9	282	281	.....	1	304	303	.....	1	.....	861
19	Copper, tin, and sheet-iron products	71	1,336	130	55	60	23	1,068	991	74	3	1,043	968	72	3	.....	681
20	Electrical machinery, apparatus, and supplies.	10	160	7	9	10	5	129	105	23	1	141	115	25	1	.....	114
21	Electroplating	5	42	5	5	5	.....	27	27	.....	.....	30	30	.....	.....	.....	59
22	Flour-mill and gristmill products	9	172	6	12	45	2	107	101	6	.....	105	99	6	.....	.....	1,225
23	Food preparations	31	499	61	32	63	13	330	243	85	2	322	237	83	2	.....	900
24	Foundry and machine-shop products	157	3,456	129	204	228	72	2,823	2,803	4	16	2,789	2,769	4	16	.....	6,714
25	Furnishing goods, men's	3	109	4	2	15	11	77	15	62	.....	88	17	71	.....	.....	3
26	Furniture and refrigerators	51	1,223	51	37	79	8	1,048	1,031	13	4	1,057	1,040	13	3	1	1,237
27	Gas and electric fixtures and lamps and reflectors.	15	428	7	33	42	25	321	294	10	17	412	377	13	20	2	271
28	Gloves and mittens, leather	9	165	10	5	18	4	128	48	80	.....	128	48	80	.....	.....	16
29	Hand stamps and stencils and brands	7	94	8	8	22	2	54	49	5	.....	58	53	5	.....	.....	55
30	Ice, manufactured	3	80	.....	7	4	2	67	67	.....	.....	66	66	.....	.....	.....	1,485
31	Jewelry	24	587	125	13	16	3	430	395	24	11	477	438	27	11	1	248
32	Leather goods	20	357	17	16	27	7	290	241	48	1	301	250	50	1	.....	165
33	Leather, tanned, curried, and finished	17	619	15	27	14	5	558	558	.....	.....	592	592	.....	.....	.....	1,260
34	Liquors, malt	20	551	6	46	54	8	437	437	.....	.....	448	448	.....	.....	.....	1,701
35	Liquors, vinous	4	36	5	3	7	.....	21	21	.....	.....	20	20	.....	.....	.....	31
36	Lumber and timber products	68	1,667	47	97	63	21	1,439	1,433	1	5	1,426	1,420	1	5	.....	6,435
37	Marble and stone work	18	598	16	28	57	9	488	487	.....	1	440	439	.....	1	.....	1,227
38	Mattresses and spring beds	12	320	6	22	24	12	256	223	28	5	283	247	31	4	1	365
39	Millinery and lace goods	12	140	12	7	11	4	106	41	61	4	159	62	92	.....	5	97
40	Models and patterns, not including paper patterns.	14	101	20	.....	5	1	75	62	7	6	72	59	7	6	.....	131
41	Musical instruments, pianos and organs and materials.	7	27	8	2	1	1	15	15	.....	.....	17	17	.....	.....	.....	6
42	Paint and varnish	13	142	8	19	25	5	85	79	4	2	85	79	4	2	.....	352
43	Patent medicines and compounds and druggists' preparations.	28	330	11	33	34	84	168	79	89	.....	162	76	86	.....	.....	131
44	Photo-engraving	9	140	4	13	16	12	95	92	3	.....	98	95	3	.....	.....	41
45	Printing and publishing	307	5,180	260	271	1,057	260	3,332	2,747	543	42	3,488	2,875	569	43	1	3,386
46	Show cases	4	27	5	1	1	1	19	19	.....	.....	18	18	.....	.....	.....	23
47	Slaughtering and meat packing	31	471	47	31	50	2	341	340	.....	1	369	368	.....	1	.....	1,083
48	Tobacco manufactures	91	1,111	286	17	51	7	750	551	199	.....	748	550	198	.....	.....	69
49	All other industries [1]	293	8,118	291	321	720	234	6,552	5,756	769	27	7,276	6,391	835	22	8	14,922

[1] All other industries embrace: Automobiles, including bodies and parts, 5; awnings, tents, and sails, 4; axle grease, 1; babbitt metal and solder, 3; bags, other than paper, 5; bags, paper, 1; baking powders and yeast, 2; blacking and cleansing and polishing preparations, 3; bluing, 1; boxes, cigar, 1; brick and tile, 2; brooms, 7; brushes, 2; buttons, 2; candles, 1; carpets, rag, 4; carriages and sleds, children's, 1; cars and general shop construction and repairs by steam-railroad companies, 2; cars and general shop construction and repairs by street-railroad companies, 4; cars, steam-railroad, not including operations of railroad companies, 1; cement, 1; chocolate and cocoa products, 2; clocks and watches, including cases and materials, 2; cordage and twine and jute and linen goods, 1; cordials and sirups, 4; corsets, 1; cutlery and tools, not elsewhere specified, 3; dairymen's, poulterers', and apiarists' supplies, 2; engraving and diesinking, 2; fancy articles, not elsewhere specified, 1; fertilizers, 2; files, 1; fireworks, 1; flags, banners, regalia, society badges, and emblems, 3; flavoring extracts, 9; foundry supplies, 2; fur goods, 7; galvanizing, 2; gas, illuminating and heating, 3; glass, 2; glass, cutting, staining, and ornamenting, 12; glue, 3; gold and silver, reducing and refining, not from the ore, 1; grease and tallow, 4; hair work, 4; hats and caps, other than felt, straw, and wool, 4; hats, fur-felt, 2; hosiery and knit goods, 3; house-furnishing goods, not elsewhere specified, 2; ink, printing, 1; instruments, professional and scientific, 4; iron and steel, steel works and rolling mills, 1; iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills, 1; iron and steel forgings, 2; jewelry

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

1	ALAMEDA	51	1,076	50	36	48	27	915	896	17	2	1,098	1,075	20	3	.....	1,526
2	BAKERSFIELD	27	844	20	19	50	9	746	742	2	2	849	844	3	2	.....	910
3	BERKELEY	84	1,420	115	61	123	37	1,084	924	145	15	993	846	133	12	2	2,433
4	EUREKA	48	1,075	30	35	44	20	946	897	46	3	868	823	42	3	.....	3,901
5	FRESNO	76	2,262	43	104	135	42	1,938	1,168	745	25	2,603	1,568	1,001	15	19	3,403
6	LONG BEACH	51	413	49	25	47	15	277	262	14	1	320	303	16	1	.....	1,450
7	PASADENA	88	708	92	27	56	34	499	355	121	23	704	501	170	3	30	969
8	POMONA	30	285	32	5	14	10	224	111	113	.....	510	253	257	.....	.....	334
9	REDLANDS	37	260	36	18	50	9	147	123	23	1	200	167	31	2	.....	439
10	RIVERSIDE	53	399	56	26	21	29	267	253	12	2	317	301	14	2	.....	700
11	SACRAMENTO	211	5,266	219	217	233	83	4,514	4,032	464	18	4,760	4,252	489	19	.....	8,517
12	SAN BERNARDINO	41	883	38	19	87	10	729	714	10	5	773	757	11	5	.....	1,411
13	SAN DIEGO	117	1,440	99	84	138	48	1,071	955	102	14	1,230	1,097	117	14	2	3,269
14	SAN JOSE	153	1,828	134	73	126	65	1,430	869	540	21	1,959	1,191	740	25	3	2,078
15	SANTA BARBARA	51	382	43	24	30	20	265	246	16	3	297	276	18	1	2	491
16	SANTA CRUZ	34	388	31	33	36	14	274	269	5	.....	275	270	5	.....	.....	1,827
17	STOCKTON	144	2,039	141	90	155	59	1,594	1,407	186	1	1,809	1,597	211	1	.....	5,016
18	VALLEJO	23	271	22	14	29	3	203	189	14	.....	222	207	15	.....	.....	1,616

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.

SAN FRANCISCO.

	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	$133,823,673	$119,782,203	$3,588,131	$4,497,432	$22,381,452	$2,275,306	$73,942,015	$1,779,773	$1,139,283	$1,124,547	$9,054,264	$133,041,069	$56,823,748
2	77,670	128,474	8,425	965	60,630	488	49,843	4,011	170	.....	3,936	151,227	100,896
3	107,397	191,241	8,400	2,800	49,687	742	117,650	7,340	397	.....	4,825	210,617	92,225
4	172,973	253,045	15,000	10,785	26,302	2,916	170,334	4,920	658	.....	13,040	291,449	109,199
5	672,102	857,500	21,800	13,832	203,853	5,430	547,546	12,440	2,136	.....	50,463	976,361	423,385
6	310,858	469,289	26,026	15,001	141,027	4,392	216,227	19,853	567	1,369	44,827	496,026	275,407
7	182,643	322,630	14,561	7,091	115,965	13,234	151,059	11,748	739	100	8,133	355,076	191,683
8	3,512,789	4,556,077	109,825	128,612	1,002,810	88,592	2,876,703	95,802	10,800	.....	242,873	5,268,132	2,392,867
9	10,725	41,662	.....	.....	3,425	72	35,087	1,860	7	.....	1,211	46,600	11,441
10	3,342,797	4,324,425	95,746	75,385	380,939	30,308	3,451,850	25,535	11,296	24,701	228,575	4,775,955	1,293,797
11	450,930	486,463	25,840	10,156	204,398	14,745	176,732	26,815	1,599	3,389	22,789	552,212	360,735
12	1,425,269	846,831	13,200	10,980	92,886	43,966	583,733	.....	5,602	.....	96,464	938,462	310,763
13	1,637,274	3,382,178	52,070	73,707	727,453	13,717	2,092,461	60,381	5,526	107,999	198,864	3,682,468	1,576,290
14	493,342	1,077,201	19,560	51,585	252,131	7,741	639,652	28,143	1,349	13,044	63,396	1,224,563	577,170
15	2,440,324	4,649,744	92,084	334,987	152,697	24,566	3,524,402	57,338	8,318	.....	455,502	4,972,730	1,423,831
16	432,292	229,441	9,576	6,108	39,132	2,790	149,497	1,200	2,465	4,170	14,503	271,526	119,239
17	1,151,450	1,532,208	76,572	67,107	249,427	25,479	994,648	58,049	3,044	.....	154,482	1,717,598	788,071
18	1,196,560	1,546,173	32,474	20,772	219,538	3,585	1,190,793	9,048	5,256	.....	63,807	1,603,925	409,547
19	5,190,542	3,322,038	123,387	78,141	947,381	29,725	1,842,007	58,716	8,545	4,782	220,954	3,644,658	1,772,926
20	163,140	284,543	17,575	12,820	77,311	3,239	139,482	9,566	360	900	23,290	322,040	179,319
21	34,215	62,298	3,076	3,857	24,404	3,672	10,717	3,512	147	.....	3,913	69,873	46,484
22	1,532,348	2,650,901	25,932	58,191	88,651	21,917	2,380,815	4,800	2,969	.....	67,626	2,781,354	378,622
23	1,956,210	2,188,807	68,689	59,907	191,664	23,217	1,655,517	19,480	3,791	.....	166,542	2,435,567	756,833
24	10,849,081	9,150,014	437,633	296,967	2,680,886	175,278	4,725,995	149,974	32,713	66,860	574,708	9,622,401	4,721,128
25	241,904	488,335	5,400	15,110	42,650	669	367,717	6,023	979	.....	49,787	564,368	195,982
26	2,180,051	2,750,576	84,562	56,988	1,016,633	34,618	1,301,044	88,795	6,024	31,138	130,774	3,057,400	1,721,738
27	1,129,061	846,788	52,837	60,810	256,813	12,196	417,610	14,939	2,462	.....	29,115	917,325	487,513
28	323,662	265,071	6,170	13,030	79,493	1,118	147,224	2,896	327	900	13,913	300,640	152,298
29	109,963	147,611	13,773	23,492	52,447	1,371	42,250	12,303	125	.....	1,850	161,301	117,680
30	1,659,395	211,117	15,680	7,056	69,140	59,062	13,944	.....	5,379	8,618	32,238	302,283	229,277
31	221,460	1,013,230	21,120	15,817	366,894	8,231	493,601	.....	34,520	561	72,396	1,121,151	619,220
32	724,691	696,003	22,793	32,691	203,539	3,639	344,754	18,520	1,897	.....	68,120	842,776	494,333
33	2,479,329	3,287,725	70,102	18,806	415,217	30,666	2,624,639	1,860	4,670	.....	122,425	3,622,171	967,520
34	7,567,270	2,971,499	120,150	91,187	508,241	81,183	814,106	12,810	496,327	.....	838,495	3,482,492	2,587,203
35	137,776	219,554	5,700	11,900	14,320	540	134,041	6,120	8,798	.....	38,135	236,821	102,240
36	2,832,701	4,081,117	179,353	95,310	1,346,671	40,941	2,092,442	115,684	11,721	2,910	196,085	4,377,645	2,244,262
37	1,221,483	1,520,253	68,258	64,312	413,111	24,839	772,530	17,636	6,357	109,079	52,231	1,634,982	837,013
38	782,699	985,054	43,733	33,932	172,549	8,038	568,358	22,598	2,133	.....	133,713	1,036,296	459,900
39	212,443	254,219	10,800	9,910	60,639	2,152	146,102	11,070	191	.....	13,355	268,861	120,607
40	57,890	127,558	.....	3,460	66,073	3,250	41,260	6,989	170	254	6,102	153,149	108,639
41	60,223	39,320	2,800	530	17,869	681	13,182	1,170	351	.....	2,743	53,556	39,693
42	728,875	622,960	38,660	18,222	60,459	10,819	445,077	8,220	2,453	.....	39,050	757,934	302,038
43	644,029	838,154	82,285	71,658	82,223	6,381	373,677	21,904	4,303	340	195,383	989,092	609,004
44	108,302	209,437	20,380	17,704	105,201	4,093	29,872	10,150	273	.....	21,758	228,051	194,086
45	7,100,659	10,650,236	577,082	1,317,569	3,094,155	99,665	3,056,810	270,649	17,519	506,884	1,709,903	12,201,232	9,044,757
46	34,135	57,900	1,716	900	20,897	564	27,864	2,100	122	.....	3,737	63,303	34,875
47	2,056,492	9,742,956	67,935	67,439	337,397	39,982	8,863,686	31,920	7,228	.....	327,369	10,269,912	1,366,244
48	855,225	1,524,946	35,681	49,632	423,750	2,111	612,261	35,465	181,835	10,662	174,143	1,833,203	1,218,831
49	63,004,964	33,717,795	740,704	1,060,211	5,214,062	1,258,786	22,548,318	388,431	234,665	224,897	2,047,721	38,153,426	14,346,322

and instrument cases, 2; kaolin and ground earths, 1; labels and tags, 3; lapidary work, 3; lead, bar, pipe, and sheet, 1; looking-glass and picture frames, 8; malt, 3; mineral and soda waters, 14; mirrors, 3; musical instruments and materials, not specified, 2; oakum, 2; oil, not elsewhere specified, 4; optical goods, 2; paper goods, not elsewhere specified, 6; photographic apparatus and materials, 2; pumps, not including steam pumps, 2; roofing materials, 1; rubber goods, not elsewhere specified, 3; safes and vaults, 1; saws, 1; shipbuilding, including boat building, 10; shoddy, 1; signs and advertising novelties, 4; silk and silk goods, including throwsters, 1; silverware and plated ware, 1; soap, 8; sporting and athletic goods, 3; springs, steel, car, and carriage, 1; stationery goods, not elsewhere specified, 1; statuary and art goods, 9; steam packing, 2; stereotyping and electrotyping, 2; stoves and furnaces, including gas and oil stoves, 4; sugar, refining, not including beet sugar, 1; sulphuric, nitric, and mixed acids, 1; surgical appliances and artificial limbs, 4; type founding and printing materials, 2; typewriters and supplies, 1; upholstering materials, 3; vault lights and ventilators, 1; vinegar and cider, 2; wall plaster, 3; whips, 1; window shades and fixtures, 6; wirework, including wire rope and cable, 5; wood, turned and carved, 4; wool scouring, 1.

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

1	$3,002,220	$2,307,413	$105,410	$65,482	$796,947	$57,775	$871,578	$16,902	$24,747	$8,226	$360,346	$2,554,417	$1,625,664
2	1,791,474	2,585,056	42,180	51,943	664,325	58,399	1,041,202	6,981	12,585	680	106,671	2,818,744	1,119,053
3	3,464,693	4,134,822	117,995	136,297	839,963	94,818	2,592,060	30,445	27,053	2,050	294,141	4,435,374	1,748,496
4	3,306,220	2,710,000	67,009	56,976	673,243	42,181	1,451,804	12,632	45,044	133,326	227,785	3,011,682	1,517,607
5	4,933,094	10,377,223	191,501	136,679	1,102,582	148,865	7,843,425	46,384	170,380	12,954	724,453	11,090,195	3,097,905
6	1,325,876	847,008	34,386	52,763	206,975	54,355	444,015	11,638	11,755	838	30,283	927,180	428,810
7	1,346,992	1,474,303	50,045	67,486	379,875	42,276	811,128	31,860	11,355	15,816	64,462	1,724,364	870,960
8	629,860	447,841	6,520	15,412	152,413	25,077	205,269	6,360	4,914	.....	31,876	559,061	329,315
9	1,104,473	427,272	21,648	25,349	100,327	29,565	209,040	6,319	6,239	207	28,578	518,320	279,715
10	1,101,927	1,000,010	18,429	31,112	213,594	43,016	624,222	8,608	7,036	2,095	51,898	1,177,962	510,724
11	10,097,168	12,783,480	345,551	270,664	3,917,667	334,236	6,559,262	75,591	226,333	22,734	1,031,442	13,976,911	7,083,413
12	1,242,110	1,559,669	25,763	68,707	639,079	68,841	694,443	6,800	16,104	.....	39,932	1,659,705	896,421
13	5,325,551	4,090,192	127,845	135,097	806,307	101,464	2,565,396	56,890	65,391	6,422	225,380	4,740,990	2,074,130
14	3,815,492	5,058,338	126,621	122,265	903,248	136,898	3,106,181	51,453	226,791	12,534	372,347	5,610,427	2,367,348
15	894,508	1,034,458	34,027	29,103	196,864	30,164	666,125	13,339	6,805	1,282	56,749	1,169,195	472,966
16	2,605,342	1,057,828	50,001	27,301	210,874	23,228	644,647	9,053	25,196	16,509	51,028	1,161,269	493,394
17	8,249,970	10,673,035	194,951	180,919	1,305,544	125,018	8,195,150	28,431	83,773	6,569	552,680	11,849,252	3,529,084
18	1,559,454	1,760,811	33,600	41,666	183,634	36,084	1,367,609	7,106	17,148	.....	73,664	1,895,562	491,569

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COLORADO.

INDUSTRIES IN GENERAL.

General character of the state.—Colorado, situated partly within the Great Western Plain and partly in the wooded region of the Rocky Mountain section, with a land area of 103,658 square miles, is seventh in size among the states and territories of continental United States. Its population in 1910 was 799,024, as compared with 539,700 in 1900 and 413,249 in 1890. It ranked thirty-second among the 49 states and territories as regards population in 1910, which position it also held in 1900. The density of population for the state in 1910 was 7.7 persons per square mile, the corresponding figures for 1900 and 1890 being 5.2 and 4, respectively. Of the entire population of the state, 50.7 per cent resided in incorporated cities and towns having a population of 2,500 inhabitants or over, as against 48.3 per cent in 1900.

Denver, with a population of 213,381, was the only city in the state having over 50,000 inhabitants. There were three cities—Pueblo, Colorado Springs, and Trinidad—each having a population of less than 50,000 but exceeding 10,000. Eliminating the four cities mentioned, only 13.5 per cent of the population resided in incorporated places of 2,500 and over in 1910, and only 10.5 per cent in 1900. The transportation facilities of the state are good, Denver being a terminal and radial point for most of the main lines of the Rocky Mountain region.

Importance and growth of manufactures.—Colorado is preeminently a mining state, but at each census from 1869 to 1899 the proportion which the value of its manufactures formed of the total value of the manufactures of the United States increased steadily. Since 1899, however, this proportion has decreased, being eight-tenths of 1 per cent in that year, seven-tenths of 1 per cent in 1904, and six-tenths of 1 per cent in 1909. During this period of 40 years the gross value of products per capita of the entire population of the state increased from $72 in 1869 to $163 in 1909.

Much of the manufacturing activity of the state, such as smelting, iron and steel operations, cement manufacture, and marble and stone work, is dependent upon the development of its extensive mineral resources. Furthermore, many manufacturing establishments owe their existence to the needs of the mining industry.

Irrigation of the fertile valleys of the Platte and Arkansas Rivers and other streams has made the beet-sugar production of Colorado greater than that of any other state. The canning industry is also the outgrowth of the development of irrigation in the state. Coal and timber as fuel for industrial consumption and timber as manufacturing material are abundant, and in general accessible.

The fact that Colorado is a natural grazing country has been responsible for the development of such industries as slaughtering and meat packing, the manufacture of butter, cheese, and condensed milk, the rendering of grease and tallow, and wool scouring.

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.	
	1909	1904	1899	1904-1909	1899-1904
Number of establishments	2,034	1,606	1,323	26.6	21.4
Persons engaged in manufactures	34,115	25,888	(1)	31.8	.....
Proprietors and firm members	1,722	1,398	(1)	23.2	.....
Salaried employees	4,326	2,677	1,870	61.6	43.2
Wage earners (average number)	28,067	21,813	19,498	28.7	11.9
Primary horsepower	154,615	124,907	43,434	23.8	187.6
Capital	$162,668,000	$107,664,000	$58,173,000	51.1	85.1
Expenses	114,690,000	88,282,000	77,748,000	29.9	13.5
Services	25,560,000	18,649,000	13,767,000	37.1	35.5
Salaries	5,648,000	3,549,000	2,059,000	59.1	72.4
Wages	19,912,000	15,100,000	11,708,000	31.9	29.0
Materials	80,491,000	63,114,000	60,751,000	27.5	3.9
Miscellaneous	8,639,000	6,519,000	3,230,000	32.5	101.8
Value of products	130,044,000	100,144,000	89,068,000	29.9	12.4
Value added by manufacture (value of products less cost of materials)	49,553,000	37,030,000	28,317,000	33.8	30.8

[1] Figures not available.

In 1909 the state of Colorado had 2,034 manufacturing establishments, which gave employment to an average of 34,115 persons during the year and paid out $25,560,000 in salaries and wages. Of the persons employed, 28,067 were wage earners. These establishments turned out products to the value of

$130,044,000, to produce which materials costing $80,491,000 were utilized. The value added by manufacture was thus $49,553,000, 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 Colorado as a whole showed a greater development during the more recent five-year period, 1904–1909, than during the preceding five-year period, 1899–1904. During the later period the number of establishments increased 26.7 per cent and the average number of wage earners 28.6 per cent, while the value of products increased 29.9 per cent and the value added by manufacture 33.8 per cent. It is interesting to note that the percentage of increase for total expenses from 1904 to 1909, 29.9, is exactly the same as that shown for value of products and that the percentages of increase for number of establishments, average number of wage earners, and cost of materials vary but little from that percentage. No decreases are shown for either five-year period.

The relative importance and growth of a number 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	**2,034**	**28,067**	**100.0**	**$130,044,000**	**100.0**	**$49,553,000**	**100.0**	**29.9**	**12.4**	**33.8**	**30.8**
Slaughtering and meat packing	13	659	2.3	9,657,000	7.4	1,362,000	2.7	190.5	−23.5	151.3	−12.9
Flour-mill and gristmill products	77	282	1.0	7,868,000	6.1	1,196,000	2.4	36.1	30.2	21.3	46.7
Printing and publishing	439	2,366	8.4	6,962,000	5.4	5,156,000	10.4	27.3	47.9	24.1	44.6
Cars and general shop construction and repairs by steam-railroad companies	29	3,993	14.2	6,559,000	5.0	3,955,000	8.0	24.7	67.4	52.3	39.3
Foundry and machine-shop products	111	1,813	6.5	5,907,000	4.5	3,103,000	6.3	.....	.....	.....	.....
Lumber and timber products	263	2,190	7.8	4,185,000	3.2	2,789,000	5.6	67.6	−5.3	64.9	9.9
Bread and other bakery products	250	889	3.2	3,969,000	3.1	1,672,000	3.4	49.4	65.3	42.9	57.7
Liquors, malt	11	424	1.5	3,311,000	2.5	2,404,000	4.9	56.2	3.8	44.6	−0.3
Butter, cheese, and condensed milk	39	210	0.7	2,340,000	1.8	416,000	0.8	.....	.....	.....	.....
Brick and tile	69	922	3.3	1,670,000	1.3	1,159,000	2.3	104.4	64.4	77.5	58.9
Canning and preserving	30	518	1.8	1,528,000	1.2	856,000	1.7	86.1	102.2	118.4	151.3
Leather goods	30	269	1.0	1,054,000	0.8	515,000	1.0	82.7	30.5	61.4	57.1
Confectionery	35	349	1.2	1,023,000	0.8	492,000	1.0	49.3	63.1	25.8	100.5
Tobacco manufactures	99	427	1.5	1,021,000	0.8	663,000	1.3	4.3	44.0	3.1	44.2
Marble and stone work	44	267	1.0	626,000	0.5	406,000	0.8	.....	−10.1	2.8	−16.3
Ice, manufactured	30	251	0.9	570,000	0.4	444,000	0.9	51.6	84.3	45.6	76.3
Furniture and refrigerators	14	176	0.6	542,000	0.4	285,000	0.6	25.5	.....	12.2	.....
Pottery, terra-cotta and fire-clay products	6	214	0.8	436,000	0.3	328,000	0.7	−44.6	37.1	−33.2	18.9
All other industries	445	11,848	42.2	70,816,000	54.5	22,352,000	45.1	.....	.....	.....	.....

[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.

In addition to the 18 industries presented separately, there are 18 others which had a value of products in 1909 in excess of $400,000. They are included under the head of "All other industries" in the table, because in some cases the operations of individual establishments would be disclosed if they were shown separately; in others, the returns do not present properly 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: Awnings, tents, and sails; beet sugar; cars, steam-railroad, not including operations of railroad companies; cement; clothing, men's, including shirts; coffee and spice, roasting and grinding; coke; explosives; food preparations; iron and steel, blast furnaces; iron and steel, steel works and rolling mills; mineral and soda waters; paint and varnish; petroleum, refining; smelting and refining, copper; smelting and refining, lead; smelting and refining, zinc; and sulphuric, nitric, and mixed acids.

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

Slaughtering and meat packing.—This industry is the most important for which figures can be shown separately. It includes wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage only. In 1904 it was fifth and

in 1909 fourth in importance among the industries of the state when measured by value of products. In view of the fact that this industry showed a decrease of 23.5 per cent in value of products from 1899 to 1904, its growth from 1904 to 1909, 190.5 per cent, has been remarkable. In 1909 the industry gave employment to an average of 659 wage earners, or 2.3 per cent of the total for all manufacturing industries, and the value of products, $9,657,000, was 7.4 per cent of the total value of manufactured products for the state. The industry is confined largely to Denver and Colorado Springs.

Flour-mill and gristmill products.—In 1909 there were 77 establishments, an increase since 1904 of 25, or 48.1 per cent; and the increase in value of products was $2,085,000, or 36.1 per cent. From 1899 to 1904 the number of establishments increased 3, or 6.1 per cent, and the value of products, $1,342,000, or 30.2 per cent. Although these two periods show great variation in percentage of increase in the number of establishments, the increases in value of products are nearly the same. As a rule, the mills are small and located in the rural districts. 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 not commensurate with the gross value of products.

Printing and publishing.—This classification includes bookbinding and blank-book making; engraving, steel and copper plate; lithographing; printing and publishing, book and job or music; and the printing and publishing of newspapers and periodicals. In 1909 there were 439 establishments reported under the combined classification, with a value of products of $6,962,000, most of which was reported from the cities of over 10,000 inhabitants. Among the industries shown separately in the table, printing and publishing, measured by value of products, was third in importance in 1909, second in 1904, and fourth in 1899. Exclusive of 2 small establishments in 1904, the statistics for which can not be shown without divulging individual operations, the number of establishments increased 20, or 4.8 per cent, and the value of products $1,495,000, or 27.3 per cent, from 1904 to 1909.

Cars and general shop construction and repairs by steam-railroad companies.—In 1909 there were 29 establishments reported, which gave employment to an average of 3,993 wage earners, or 14.2 per cent of the total for the manufacturing establishments of the state, the largest average number of wage earners reported for any of the industries shown separately. Although there was a decrease of 5, or 14.7 per cent, in the number of establishments from 1904 to 1909, there was an increase of 941, or 30.8 per cent, in the average number of wage earners and of $1,300,000, or 24.7 per cent, in the value of products. The development of railroad repair shops in Colorado is the result of the heavy upkeep of rolling stock in mountainous sections and of the establishment of many terminals within the state. The statistics do not include minor repairs made in roundhouses.

Foundry and machine-shop products.—The fact that the number of establishments in this industry increased from 84 to 111 and the value of products from $4,159,000 to $5,907,000 during the decade, while the average number of wage earners decreased from 1,875 to 1,813 during that time, indicates to some extent the growth of this industry in the state. The industry was really of greater importance in the state than is indicated by the statistics, as some machine shops manufactured a distinctive product and were assigned to other classifications.

Lumber and timber products.—Under this head are included statistics for logging and sawmill operations, for planing mills, and for establishments engaged in the manufacture of wooden packing boxes. The eastern part of the state is practically devoid of saw timber, so that the mills, which are generally small, are confined to the mountain districts. The number of establishments increased from 110 in 1904 to 263 in 1909, an increase of 153, or 139.1 per cent, and gave employment in 1909 to an average of 2,190 wage earners. The value of products increased $1,688,000, or 67.6 per cent.

When measured by value added by manufacture, printing and publishing is of first importance among the industries listed in the table. Railroad repair shops and foundry and machine shops rank second and third, respectively, and are followed by the lumber and timber industry, the breweries, and the bakeries, in the order named. Slaughtering and meat-packing plants and the flour mills and gristmills, which occupied first and second places in value of products, ranked below the industries just mentioned in value added by manufacture.

The table shows also the percentages of increase for these leading industries in respect to value of products and value added by manufacture. Slaughtering and meat packing showed a greater rate of increase from 1904 to 1909 in value added by manufacture than any other of the specified industries, namely, 151.3 per cent. The same industry showed also the greatest increase in value of products, 190.5 per cent. The brick and tile, canning and preserving, and leather-goods industries also showed remarkable increases both in gross value of products and in value added by manufacture.

Several industries show marked fluctuations in respect to relative increases for the later five-year period, as compared with the earlier five years. None of the industries shown separately reports a decrease for both five-year periods. From 1904 to 1909 the manufacture of pottery, terra-cotta, and fire-clay products showed decreases in both value of products and value added by manufacture, this being the only

industry showing a decrease in either item during this period. During the earlier five-year period, however, slaughtering and meat packing, and marble and stone work decreased in both items, the lumber and timber industry showed a decrease in value of products, and the malt-liquor industry a decrease 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	**34,115**	**31,381**	**2,734**
Proprietors and officials	3,009	2,906	103
Proprietors and firm members	1,722	1,634	88
Salaried officers of corporations	422	413	9
Superintendents and managers	865	859	6
Clerks	3,039	2,518	521
Wage earners (average number)	28,067	25,957	2,110
16 years of age and over	27,902	25,808	2,094
Under 16 years of age	165	149	16

The average number of persons engaged in manufactures during 1909 was 34,115, of whom 28,067 were wage earners. Of the remainder, 3,009 were proprietors and officials, and 3,039 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 gives the returns for all industries combined and for 10 important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries	**34,115**	**8.8**	**8.9**	**82.3**
Bread and other bakery products	1,325	22.1	10.8	67.1
Brick and tile	1,036	9.0	2.0	89.0
Butter, cheese, and condensed milk	304	14.8	16.1	69.1
Cars and general shop construction and repairs by steam-railroad companies	4,300	2.9	4.2	92.9
Flour-mill and gristmill products	429	20.5	13.8	65.7
Foundry and machine-shop products	2,250	9.2	10.3	80.6
Liquors, malt	514	7.2	10.3	82.5
Lumber and timber products	2,614	13.1	3.1	83.8
Printing and publishing	3,747	15.7	21.1	63.1
Slaughtering and meat packing	834	3.5	17.5	79.0
All other industries	16,762	6.9	7.6	85.4

Of the total number of persons engaged in all manufacturing industries, 8.8 per cent were proprietors and officials, 8.9 per cent clerks, and 82.3 per cent wage earners. In industries where the majority of the establishments are small and the work is to a large extent done by the proprietors or their immediate representatives, the proportion of persons engaged in the industries falling into the class of proprietors and officials is necessarily high. This condition is found in the bakeries, the flour mills and gristmills, and in the printing and publishing establishments, for which the ratios of the proprietors and officials to the total number employed in the industries are 22.1 per cent, 20.5 per cent, and 15.7 per cent, respectively. Similar conditions prevail to some extent in the lumber and timber and the butter, cheese, and condensed-milk industries. The smallest proportion for this class, 2.9 per cent, is shown for railroad repair shops, and is due partly to the fact that the establishments in this industry are under corporate ownership, and so reported no proprietors; and partly to the fact that the highest officials of railroad companies, who exercise general supervision over them, are not, as a rule, assigned to this particular branch of the work.

The following table 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 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	**28,067**	**92.0**	**7.5**	**0.6**
Bread and other bakery products	889	71.2	27.1	1.7
Brick and tile	922	98.4	0.1	1.5
Butter, cheese, and condensed milk	210	77.6	22.4	.....
Cars and general shop construction and repairs by steam-railroad companies	3,993	99.9	0.1	.....
Flour-mill and gristmill products	282	99.6	.....	0.4
Foundry and machine-shop products	1,813	99.1	0.2	0.7
Liquors, malt	424	99.3	.....	0.7
Lumber and timber products	2,190	98.9	1.0	0.1
Printing and publishing	2,366	81.7	16.0	2.4
Slaughtering and meat packing	659	95.9	2.1	2.0
All other industries	14,319	90.0	9.7	0.3

[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, 92 per cent of the average number of wage earners were males 16 years of age and over; 7.5 per cent females 16 years of age and over; and six-tenths of 1 per cent persons under

the age of 16. In general, the table shows a very limited employment of women and children. The largest proportions of women employees were in the bakeries, creameries, and the printing and publishing establishments, and the largest proportions of children, in the printing and publishing and the slaughtering and meat-packing establishments. Of the total of 2,094 female wage earners in all industries combined, about one-ninth were employed in bakeries. Of the total number of wage earners in all industries under 16 years of age, over one-third were in printing and publishing establishments. With these two industries omitted, the females 16 years of age and over in all industries combined would represent 5.3 per cent of the total number of wage earners, and children under 16 years of age, but four-tenths of 1 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.				
	1909		1904		Per cent of increase, 1904–1909.
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total	34,115	100.0	25,888	100.0	31.8
Proprietors and firm members	1,722	5.0	1,398	5.4	23.2
Salaried employees	4,326	12.7	2,677	10.3	61.6
Wage earners (average number)	28,067	82.3	21,813	84.3	28.7

Comparable figures are not obtainable for 1899. The table shows a much greater percentage of increase in the salaried employees than in the other two classes. There was, however, no very great change from 1904 to 1909 in the proportion of persons engaged in manufactures who were in each class.

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	28,067	100.0	21,813	100.0	19,498	100.0
16 years of age and over	27,902	99.4	21,507	98.6	19,295	99.0
Male	25,808	92.0	20,164	92.4	18,214	93.4
Female	2,094	7.5	1,343	6.2	1,081	5.5
Under 16 years of age	165	0.6	306	1.4	203	1.0

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, although from 1899 to 1904 the total number of children employed increased. The number of female wage earners 16 years of age and over more than doubled between 1899 and 1909 and their proportion of the total number of wage earners increased. In 1909 males 16 years of age and over formed 92 per cent of all wage earners, as compared with 93.4 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 beet-sugar 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 124, are shown, for practically all of the important industries of 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.		Beet sugar.		All other industries.	
	Number.	Per cent of maximum.	Number.	Per cent of maximum.	Number.	Per cent of maximum.
January	27,902	87.2	3,113	60.7	24,849	91.3
February	25,181	78.6	615	12.0	24,566	90.3
March	25,374	79.2	727	14.2	24,647	90.6
April	25,531	79.7	765	14.9	24,766	91.0
May	25,835	80.6	729	14.2	25,106	92.3
June	27,059	84.4	763	14.9	26,296	96.6
July	28,099	87.7	886	17.3	27,213	100.0
August	28,238	88.1	1,160	22.6	27,078	99.5
September	28,415	88.7	1,272	24.8	27,143	99.7
October	31,026	96.8	4,127	80.5	26,899	98.8
November	32,050	100.0	5,125	100.0	26,925	98.9
December	32,034	99.9	4,963	96.8	27,071	99.5

The beet-sugar industry is the only seasonal industry of importance in the state. The usual period during which the factories run continuously is from 60 to 100 days, during which time the industry employs a sufficiently large number of wage earners to affect considerably the total movement of employment in the state during the year. In this industry the smallest number, 615, was employed in February and the largest number, 5,125, in November. During each month from February through September the number employed represented only from 12 to 24.8 per cent of the number employed in November. Several other industries are slightly seasonal, but fluctuations in employment are not sufficient to influence greatly the steadiness of total employment for all industries. For all industries combined the number of wage earners employed changed considerably, there being a gradual increase from February until November, when the sugar factories were at the height of their production.

Prevailing hours of labor.—In the following table 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.

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	**28,067**	**4,587**	**1,787**	**3,463**	**3,588**	**8,211**	**3,213**	**2,198**	**1,020**
Bread and other bakery products	889	88	1	83	178	505	21	11	2
Brick and tile	922	328	.....	30	40	524	.....	.....	.....
Butter, cheese, and condensed milk	210	6	.....	60	2	39	102	.....	1
Canning and preserving	518	48	.....	24	3	436	7	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	3,993	.....	682	263	100	726	2,222	.....	.....
Confectionery	349	15	.....	19	144	160	9	.....	2
Flour-mill and gristmill products	282	11	.....	10	16	172	71	2	.....
Foundry and machine-shop products	1,813	171	353	909	8	349	23	.....	.....
Furniture and refrigerators	176	121	.....	35	.....	20	.....	.....	.....
Ice, manufactured	251	4	.....	6	68	2	2	29	140
Leather goods	269	22	4	165	20	58	.....	.....	.....
Liquors, malt	424	259	.....	47	59	59	.....	.....	.....
Lumber and timber products	2,190	218	306	161	27	1,437	41	.....	.....
Marble and stone work	267	202	14	1	.....	50	.....	.....	.....
Pottery, terra-cotta, and fire-clay products	214	11	.....	72	.....	131	.....	.....	.....
Printing and publishing	2,366	1,759	77	173	308	39	10	.....	.....
Slaughtering and meat packing	659	.....	.....	287	.....	372	.....	.....	.....
Tobacco manufactures	427	400	.....	3	.....	24	.....	.....	.....
All other industries	11,848	924	350	1,115	2,615	3,108	705	2,156	875

It is evident from these figures that for more than one-half of the wage earners employed in the manufacturing industries of Colorado the prevailing hours of labor ranged from 54 to 60 a week. Of the total number of wage earners, 22.7 per cent are employed in establishments where the prevailing hours are less than 54 a week and 22.9 per cent are employed in establishments where the prevailing hours are more than 60 a week. It will be noticed that in the case of railroad repair shops, which report a larger number of employees than any of the other industries shown separately, most of the wage earners work where the prevailing hours ranged from 60 to 72 a week. In the printing and publishing industry the greater number of wage earners work 48 hours per week or less.

Location of establishments.—The next table shows the extent to which the manufactures of Colorado 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, and it was impossible to determine the cities that came within the group having over 10,000 inhabitants.

In 1909, 44.2 per cent of the total value of products was reported from the cities having over 10,000 inhabitants and 55.8 per cent from the remainder of the state. The addition of Trinidad to the group of cities in 1909, and the marked growth of the establishments located in Denver, were not sufficient to overcome the loss of Cripple Creek and Leadville, which two cities, from a population of over 10,000 each in 1900 had less than that number in 1910, thus placing their statistics with the districts outside the cities in 1909. This change has caused the city group to be overtaken by the outside districts in respect to the relative importance of their manufacturing industries, as judged by value of products, and value added by manufacture. In number of wage earners alone do the industries of the cities remain the more important; although the cities contain only 37.2 per cent of the population of the state, they employ 50.3 per cent of the wage earners. Even in this respect, however, the importance of their industries has declined, as in 1899 the percentage of wage earners in cities having more than 10,000 inhabitants was 56.9. That the manufacturing industries outside of these cities show a more rapid growth than do those of the cities is also due in part to the development of the beet-sugar industry, in which all the establishments reported are located outside of the cities in question, and in part to the growth of various industries in the mining districts.

The four cities in Colorado having a population of 10,000 and over in 1910 were Denver, Pueblo, Colorado Springs, and Trinidad. Prior to 1910 Trinidad had less than 10,000 inhabitants, and so was not included in the city group for 1900.

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	799,024	297,058	501,966	37.2	62.8
	1900	539,700	205,703	333,997	38.1	61.9
Number of establishments.	1909	2,034	949	1,085	46.7	53.3
	1899	1,323	746	577	56.4	43.6
Average number of wage earners.	1909	28,067	14,114	13,953	50.3	49.7
	1899	19,498	11,093	8,405	56.9	43.1
Value of products	1909	$130,044,312	$57,430,448	$72,613,864	44.2	55.8
	1899	89,067,879	46,514,613	42,553,266	52.2	47.8
Value added by manufacture.	1909	49,553,408	23,872,383	25,681,025	48.2	51.8
	1899	28,317,095	15,989,943	12,327,152	56.5	43.5

The following statement shows general statistics for 1909 and 1899 for Cripple Creek and Leadville, which had a population in 1900 in excess of 10,000 but which fell below this figure in 1910 and therefore are not included in the city group but in the districts outside for 1909 in the preceding table.

ITEM.	Year.	Leadville.	Cripple Creek.
Population	1910	7,508	6,206
	1900	12,455	10,147
Number of establishments	1909	20	9
	1899	34	35
Average number of wage earners	1909	650	40
	1899	1,227	167
Value of products	1909	$4,477,746	$117,723
	1899	5,882,949	440,659
Value added by manufacture	1909	1,065,526	74,267
	1899	1,042,783	265,491

The manufactures of both of the cities shown in this table are largely dependent upon the mining interests. In Cripple Creek each of the industries reported in 1899 and in 1909 shows a decrease at the later census, and several industries, among which are the foundries and machine shops, disappeared altogether. During the decade the total number of establishments decreased from 35 to 9, the average number of wage earners from 167 to 40, the value of products from $440,659 to $117,723, and the value added by manufacture from $265,491 to $74,267. In Leadville the decreases in number of establishments, value of products, and average number of wage earners, although large, were less pronounced. The number of establishments decreased from 34 to 20, the average number of wage earners from 1,227 to 650, the value of products from $5,882,949 to $4,477,746. The value added by manufacture, however, shows a slight increase, from $1,042,783 to $1,065,526. The smelting and refining of lead is the chief manufacturing industry in the city.

The population in 1910 and 1900 of the four cities which had 10,000 inhabitants or over in 1910, and of the two cities which had 10,000 or over in 1900 but less than 10,000 in 1910, is given in the following tabular statement:

CITY.	1910	1900
Denver	213,381	133,859
Pueblo	44,395	28,157
Colorado Springs	29,078	21,085
Trinidad	10,204	[1] 5,345
Leadville	[2] 7,508	12,455
Cripple Creek	[2] 6,206	10,147

[1] Population less than 10,000 in 1900, therefore, in the first table on this page, the statistics for 1899 are included with those for the districts outside cities.
[2] Population less than 10,000 in 1910, therefore, in the first table on this page, the statistics for 1909 are included with those for the districts outside cities.

The relative importance 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 average number of wage earners are shown separately for Denver, Pueblo, and Colorado Springs for 1909, 1904, and 1899, and for Trinidad for 1909:

CITY.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
Denver	12,058	9,672	8,500	$51,538,547	$36,660,410	$37,906,171
Pueblo	1,320	941	790	3,344,789	2,197,293	1,430,609
Colorado Springs	516	410	400	1,732,759	1,100,771	845,225
Trinidad	220	(1)	(1)	814,353	(1)	(1)

[1] Figures not available.

Denver, Pueblo, and Colorado Springs all show increases in the average number of wage earners and in the value of products both from 1899 to 1904 and from 1904 to 1909, except that the value of products manufactured in Denver decreased from 1899 to 1904. The increases were generally greater from 1904 to 1909 than during the earlier period.

Denver, the largest and most important city in the state, shows an increase in 1909, as compared with 1904, of $14,878,137, or 40.6 per cent, in the value of products, and of 2,386, or 24.7 per cent, in the average number of wage earners. Forty-three per cent of all wage earners reported for the state were employed in this city in 1909.

The leading industries in Denver in 1909 were slaughtering and meat packing, the smelting and refining of lead and of copper, printing and publishing, foundries and machine shops, steam-railroad repair shops, bakeries, breweries, the manufacture of butter, cheese, and condensed milk, flour mills and gristmills, lumber and timber products, brick and tile, and gas—each of which had a value of products in excess of $1,000,000. For many of the minor industries of the state, Denver reported all of the establishments.

The most important industries within the city limits of Pueblo are the railroad repair shops and printing and publishing; those of Colorado Springs are printing and publishing and butter making; and those of Trinidad, breweries.

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	2,034	28,067	$130,044,312	$49,553,408
1904	1,606	21,813	100,143,989	37,029,602
Individual:				
1909	987	2,539	8,104,923	4,499,519
1904	886	2,586	7,794,408	4,542,091
Firm:				
1909	333	1,355	4,772,280	2,828,216
1904	236	1,045	2,896,013	1,751,143
Corporation:				
1909	698	24,152	116,991,543	42,158,021
1904	478	18,166	89,377,091	30,677,368
Other:				
1909	16	21	175,566	67,652
1904	6	13	76,487	59,000
Per cent of total:				
1909	100.0	100.0	100.0	100.0
1904	100.0	100.0	100.0	100.0
Individual:				
1909	48.5	9.0	6.2	9.1
1904	55.2	11.9	7.8	12.3
Firm:				
1909	16.4	4.8	3.7	5.7
1904	14.7	4.8	2.9	4.7
Corporation:				
1909	34.3	86.1	90.0	85.1
1904	29.8	83.3	89.2	82.8
Other:				
1909	0.8	0.1	0.1	0.1
1904	0.4	0.1	0.1	0.2
Bread and other bakery products, 1909	250	889	$3,968,760	$1,671,752
Individual	188	313	1,521,651	680,734
Firm	40	61	355,002	148,756
Corporation	22	515	2,092,107	842,262
Per cent of total	100.0	100.0	100.0	100.0
Individual	75.2	35.2	38.3	40.7
Firm	16.0	6.9	8.9	8.9
Corporation	8.8	57.9	52.7	50.4
Brick and tile, 1909	69	922	$1,670,042	$1,158,639
Individual	26	126	177,726	142,586
Firm	10	57	70,470	56,279
Corporation	33	739	1,421,846	959,774
Per cent of total	100.0	100.0	100.0	100.0
Individual	37.7	13.7	10.6	12.3
Firm	14.5	6.2	4.2	4.9
Corporation	47.8	80.2	85.1	82.8
Butter, cheese, and condensed milk, 1909	39	210	$2,339,765	$416,163
Individual	15	48	649,221	90,724
Firm	5	13	81,154	17,761
Corporation	10	138	1,514,069	292,191
Other	9	11	95,321	15,487
Per cent of total	100.0	100.0	100.0	100.0
Individual	38.5	22.9	27.7	21.8
Firm	12.8	6.2	3.5	4.3
Corporation	25.6	65.7	64.7	70.2
Other	23.1	5.2	4.1	3.7
Flour-mill and gristmill products, 1909	77	282	$7,867,706	$1,195,392
Individual	15	12	303,675	53,129
Firm	14	15	357,286	85,114
Corporation	48	255	7,206,745	1,057,149
Per cent of total	100.0	100.0	100.0	100.0
Individual	19.5	4.3	3.9	4.4
Firm	18.2	5.3	4.5	7.1
Corporation	62.3	90.4	91.6	88.4
Foundry and machine-shop products, 1909	111	1,813	$5,906,595	$3,102,635
Individual	38	173	641,931	300,777
Firm	17	111	303,695	176,551
Corporation	56	1,529	4,960,969	2,625,307
Per cent of total	100.0	100.0	100.0	100.0
Individual	34.2	9.5	10.9	9.7
Firm	15.3	6.1	5.1	5.7
Corporation	50.5	84.3	84.0	84.6
Lumber and timber products, 1909	263	2,190	$4,184,864	$2,788,905
Individual	133	535	1,067,967	756,654
Firm	59	264	434,529	334,208
Corporation	71	1,391	2,682,368	1,698,043
Per cent of total	100.0	100.0	100.0	100.0
Individual	50.6	24.4	25.5	27.1
Firm	22.4	12.1	10.4	12.0
Corporation	27.0	63.5	64.1	60.9
Printing and publishing, 1909	439	2,366	$6,961,721	$5,155,609
Individual	253	480	1,275,015	1,023,225
Firm	64	171	396,552	312,011
Corporation	116	1,715	5,244,351	3,774,970
Other	6	.....	45,803	45,403
Per cent of total	100.0	100.0	100.0	100.0
Individual	57.6	20.3	18.3	19.8
Firm	14.6	7.2	5.7	6.1
Corporation	26.4	72.5	75.3	73.2
Other	1.4	.....	0.7	0.9

The most important distinction shown is that between corporate and all other forms of ownership. In 1909, for all industries combined, 34.3 per cent of the total number of establishments were under corporate ownership, as against 65.7 per cent for all other forms. The corresponding figures for 1904 were 29.8 per cent and 70.3 per cent, respectively. In respect to value of products the corresponding proportions are reversed. In 1909 the establishments operated by corporations reported 90 per cent of the total value of products, as against 10 per cent for those under all other forms of ownership, while in 1904 the corresponding figures were 89.2 per cent and 10.8 per cent, respectively. Establishments under individual ownership decreased for all items in percentages of distribution, while those under firm ownership increased in percentages of distribution in number of establishments, value of products, and value added by manufacture.

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 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	2,034	28,067	$130,044,312	$49,553,408
1904	1,606	21,813	100,143,999	37,029,602
Less than $5,000:				
1909	760	731	1,862,031	1,257,050
1904	627	644	1,629,067	1,137,197
$5,000 and less than $20,000:				
1909	748	2,885	7,504,776	4,692,917
1904	575	2,294	5,712,975	3,730,117
$20,000 and less than $100,000:				
1909	351	4,632	14,497,582	7,938,415
1904	272	3,970	11,250,852	6,322,999
$100,000 and less than $1,000,000:				
1909	155	11,014	47,533,323	20,433,582
1904	116	9,309	30,880,642	14,811,848
$1,000,000 and over:				
1909	20	7,905	58,645,700	15,231,444
1904	16	5,596	50,670,463	11,027,441
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	37.4	2.6	1.4	2.5
1904	39.0	3.0	1.6	3.1
$5,000 and less than $20,000:				
1909	36.8	10.3	5.8	9.5
1904	35.8	10.5	5.7	10.1
$20,000 and less than $100,000:				
1909	17.3	16.5	11.1	16.0
1904	16.9	18.2	11.2	17.1
$100,000 and less than $1,000,000:				
1909	7.6	42.4	36.6	41.2
1904	7.2	42.7	30.8	40.0
$1,000,000 and over:				
1909	1.0	28.2	45.1	30.7
1904	1.0	25.7	50.6	29.8
Average per establishment:				
1909	.....	14	$63,935	$24,363
1904	.....	14	62,356	23,057
Bread and other bakery products, 1909	250	889	$3,968,760	$1,671,752
Less than $5,000	103	43	280,748	126,509
$5,000 and less than $20,000	117	233	1,115,805	505,074
$20,000 and less than $100,000	25	201	919,409	396,224
$100,000 and less than $1,000,000	5	412	1,646,708	643,945
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	41.2	4.8	7.2	7.6
$5,000 and less than $20,000	46.8	26.2	28.1	30.2
$20,000 and less than $100,000	10.0	22.6	23.2	23.7
$100,000 and less than $1,000,000	2.0	46.3	41.5	38.5
Average per establishment	.....	4	$15,875	$6,687
Brick and tile, 1909	69	922	$1,670,042	$1,158,639
Less than $5,000	26	50	61,229	49,556
$5,000 and less than $20,000	30	207	305,851	239,287
$20,000 and less than $100,000 [1]	10	665	1,302,962	869,796
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	29.0	5.4	3.7	4.3
$5,000 and less than $20,000	43.5	22.5	18.3	20.7
$20,000 and less than $100,000 [1]	27.5	72.1	78.0	75.1
Average per establishment	.....	13	$24,204	$16,792
Butter, cheese, and condensed milk, 1909	39	210	$2,339,765	$416,163
Less than $5,000	11	7	20,565	7,564
$5,000 and less than $20,000	13	20	143,860	30,151
$20,000 and less than $100,000	9	24	292,778	57,231
$100,000 and less than $1,000,000	6	159	1,873,562	321,217
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	28.2	3.3	1.3	1.8
$5,000 and less than $20,000	33.3	9.5	6.1	7.2
$20,000 and less than $100,000	23.1	11.4	12.5	13.8
$100,000 and less than $1,000,000	15.4	75.7	80.1	77.2
Average per establishment	.....	5	$59,994	$10,671
Flour-mill and gristmill products, 1909	77	282	$7,867,706	$1,195,392
Less than $5,000	14	8	39,952	8,171
$5,000 and less than $20,000	21	18	239,572	46,308
$20,000 and less than $100,000	24	66	1,136,356	224,601
$100,000 and less than $1,000,000	18	190	6,451,826	916,252
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	18.2	2.8	0.5	0.7
$5,000 and less than $20,000	27.3	6.4	3.0	3.9
$20,000 and less than $100,000	31.2	23.4	14.4	18.8
$100,000 and less than $1,000,000	23.4	67.4	82.0	76.6
Average per establishment	.....	4	$102,178	$15,525
Foundry and machine-shop products, 1909	111	1,813	$5,906,595	$3,102,635
Less than $5,000	21	23	63,185	43,030
$5,000 and less than $20,000	37	146	351,719	236,204
$20,000 and less than $100,000	36	569	1,690,993	922,924
$100,000 and less than $1,000,000	17	1,075	3,800,698	1,899,871
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	18.9	1.3	1.1	1.4
$5,000 and less than $20,000	33.3	8.1	6.0	7.6
$20,000 and less than $100,000	32.4	31.4	28.6	29.7
$100,000 and less than $1,000,000	15.3	59.3	64.3	61.2
Average per establishment	.....	16	$53,213	$27,952
Lumber and timber products, 1909	263	2,190	$4,184,864	$2,788,905
Less than $5,000	107	155	224,862	176,638
$5,000 and less than $20,000	111	669	1,219,195	850,501
$20,000 and less than $100,000	37	530	1,332,738	864,428
$100,000 and less than $1,000,000	8	836	1,408,069	897,248
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	40.7	7.1	5.4	6.3
$5,000 and less than $20,000	42.2	30.5	29.1	30.5
$20,000 and less than $100,000	14.1	24.2	31.8	31.0
$100,000 and less than $1,000,000	3.0	38.2	33.6	32.2
Average per establishment	.....	8	$15,912	$10,604
Printing and publishing, 1909	439	2,366	$6,961,721	$5,155,809
Less than $5,000	242	245	607,125	490,769
$5,000 and less than $20,000	140	498	1,295,515	1,051,127
$20,000 and less than $100,000	44	541	1,664,825	1,302,328
$100,000 and less than $1,000,000	13	1,082	3,394,256	2,311,385
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	55.1	10.4	8.7	9.5
$5,000 and less than $20,000	31.9	21.0	18.6	20.4
$20,000 and less than $100,000	10.0	22.9	23.9	25.3
$100,000 and less than $1,000,000	3.0	45.7	48.8	44.8
Average per establishment	.....	5	$15,858	$11,744

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

This table shows that, in 1909, of the 2,034 establishments only 20, or 1 per cent, had a value of products exceeding $1,000,000. These 20 establishments, however, employed 7,905 wage earners, or 28.2 per cent of the total for all establishments, and reported 45.1 per cent of the total value of products and 30.7 per cent of the total value added by manufacture. The corresponding percentages for 1904 were 25.7, 50.6, and 29.8, respectively. It is interesting to note that this group, which showed increased percentages in average number of wage earners and value added by manufacture for 1909, as compared with 1904, showed a decrease in its percentage of the total value of products.

On the other hand, the very small establishments—that is, those having a value of products of less than $5,000—constituted in 1909 a large proportion (37.4 per cent) of the total number of establishments, but the value of their products amounted to only 1.4 per cent of the total. There has been a decrease in the relative importance of this group since 1904. Approximately 82 per cent of the total value of products was reported from establishments having products valued at not less than $100,000.

While the average number of wage earners per establishment remained constant during the five-year period, the average value of products per establishment increased from $62,356 in 1904 to $63,935 in 1909, and the average value added by manufacture from $23,057 to $24,363. The increased values shown may be, and probably are, due wholly or in part to the increase that has taken place in the prices of com-

modities. Of the industries shown separately only the flour mills and gristmills show an average value of products per establishment 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 10 important industries individually, and gives not only the number of establishments falling into each group but also the average number of wage earners employed.

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	**2,034**	**325**	**1,113**	**398**	**84**	**63**	**32**	**16**	**2**	**1**
Bread and other bakery products	250	67	161	16	2	2	2	.....	.....	.....
Brick and tile	69	.....	34	26	7	1	1	.....	.....	.....
Butter, cheese, and condensed milk	39	4	28	5	1	1	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	29	.....	5	5	5	3	5	5	1	.....
Flour-mill and gristmill products	77	12	50	15	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products	111	6	47	34	12	10	2	.....	.....	.....
Liquors, malt	11	.....	2	3	1	5	.....	.....	.....	.....
Lumber and timber products	263	15	149	85	8	3	2	1	.....	.....
Printing and publishing	439	118	246	57	9	5	4	.....	.....	.....
Slaughtering and meat packing	13	2	3	3	1	2	1	1	.....	.....
All other industries	733	101	388	149	38	31	15	9	1	1
	AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**28,067**	.....	**2,525**	**4,334**	**2,573**	**4,369**	**5,105**	**5,782**	**1,227**	**2,152**
Bread and other bakery products	889	.....	308	148	66	160	207	.....	.....	.....
Brick and tile	922	.....	108	302	214	62	236	.....	.....	.....
Butter, cheese, and condensed milk	210	.....	44	68	22	76	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	3,993	.....	12	66	165	234	848	2,001	667	.....
Flour-mill and gristmill products	282	.....	101	181	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products	1,813	.....	135	385	342	644	307	.....	.....	.....
Liquors, malt	424	.....	3	45	47	329	.....	.....	.....	.....
Lumber and timber products	2,190	.....	349	837	222	220	231	331	.....	.....
Printing and publishing	2,366	.....	540	595	296	326	609	.....	.....	.....
Slaughtering and meat packing	659	.....	10	40	23	120	184	282	.....	.....
All other industries	14,319	.....	915	1,667	1,176	2,198	2,483	3,168	560	2,152
	PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**100.0**	.....	**9.0**	**15.4**	**9.2**	**15.6**	**18.2**	**20.6**	**4.4**	**7.7**
Bread and other bakery products	100.0	.....	34.6	16.6	7.4	18.0	23.3	.....	.....	.....
Brick and tile	100.0	.....	11.7	32.8	23.2	6.7	25.6	.....	.....	.....
Butter, cheese, and condensed milk	100.0	.....	21.0	32.4	10.5	36.2	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	100.0	.....	0.3	1.7	4.1	5.9	21.2	50.1	16.7	.....
Flour-mill and gristmill products	100.0	.....	35.8	64.2	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products	100.0	.....	7.4	21.2	18.9	35.5	16.9	.....	.....	.....
Liquors, malt	100.0	.....	0.7	10.6	11.1	77.6	.....	.....	.....	.....
Lumber and timber products	100.0	.....	15.9	38.2	10.1	10.0	10.6	15.1	.....	.....
Printing and publishing	100.0	.....	22.8	25.1	12.5	13.8	25.7	.....	.....	.....
Slaughtering and meat packing	100.0	.....	1.5	6.1	3.5	18.2	27.9	42.8	.....	.....
All other industries	100.0	.....	6.4	11.6	8.2	15.4	17.3	22.1	3.9	15.0

The per cent distribution of the number of establishments is not shown in this table; of the 2,034 establishments reported for all industries, 16 per cent employed no wage earners; 54.7 per cent, 1 to 5; 19.6 per cent, 6 to 20; and 4.1 per cent, 21 to 50. The largest single group consists of the 1,113 establishments employing from 1 to 5 wage earners, and the next of the 398 establishments employing from 6 to 20 wage earners, the two groups representing 74.3 per cent of all establishments. Only 1 establishment employed over 1,000 wage earners, and only 2 reported between 501 and 1,000.

Of the total number of wage earners, 32.6 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 5,782 wage earners, or 20.6 per cent of the total. The group employing from 101 to 250 reported 5,105 wage earners, or 18.2 per cent of the total, and the group employing from 51 to 100 reported 4,369, or 15.6 per cent. In the railroad repair shops 2,668, or 66.8 per cent of the total average number of wage earners, and in the slaughtering and meat-packing plants, 282, or 42.8 per cent, were employed in establishments having over 250 wage earners. None of the flour mills and gristmills employed over 20 wage earners.

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	4.9	17.4	70.2	7.5
Bread and other bakery products	4.8	16.6	68.2	10.4
Brick and tile	5.8	46.9	37.6	9.6
Butter, cheese, and condensed milk	3.0	5.8	85.9	5.2
Cars and general shop construction and repairs by steam-railroad companies	5.6	52.0	39.9	2.6
Flour-mill and gristmill products	1.8	3.0	91.5	3.6
Foundry and machine-shop products	10.4	24.6	54.0	11.0
Liquors, malt	7.2	12.9	33.6	46.3
Lumber and timber products	4.9	41.9	40.2	12.9
Printing and publishing	18.5	30.6	30.3	20.6
Slaughtering and meat packing	2.3	4.2	89.7	3.8
All other products	3.9	14.4	76.2	5.6

This table shows that, for all industries combined, 70.2 per cent of the total expense was incurred for materials, 22.3 per cent for services—that is, salaries and wages—and but 7.5 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries. The very large miscellaneous expense shown for the malt-liquor industry is due to the inclusion of internal-revenue taxes. The labor cost in the industries manufacturing food products is relatively low.

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 owned primary power was in that generated by steam and gas engines, that generated by water wheels, water motors, and the forms of owned power included under the head of "Other" showing decreases. During the five years 1904–1909 the number of steam engines increased from 873 to 1,207, the number of gas engines from 78 to 141, and the number of water wheels from 25 to 28. In 1909, 87.7 per cent of the total primary power was generated by steam engines, a somewhat smaller proportion than is shown for either 1904 or 1899. As will be seen, the practice of renting power is increasing, 10.3 per cent of the total power reported being rented in 1909, as compared with 3.1 per cent and 3.5 per cent in 1904 and 1899, respectively. The use of electric motors for the purpose of applying the power generated within the establishments is also becoming more common, the horsepower of such motors increasing from 709 in 1899 to 11,965 in 1904 and 20,070 in 1909. The horsepower of electric motors run by rented power increased from 1,187 in 1899 to 3,765 in 1904 and 15,874 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	3,239	1,059	919	154,615	134,907	43,434	100.0	100.0	100.0
Owned	1,387	1,059	919	138,640	121,071	41,895	89.7	9.96	96.5
Steam	1,207	873	783	135,645	117,539	39,400	87.7	94.1	90.7
Gas	141	78	81	1,464	317	519	0.9	0.3	1.2
Water wheels	28	25	55	1,377	1,751	1,493	0.9	1.4	3.4
Water motors	11	33	(2)	49	343	(2)	(3)	0.3	.....
Other	.....	.....	.....	105	1,121	483	0.1	0.9	1.1
Rented	1,852	(2)	(2)	15,975	3,836	1,539	10.3	3.1	3.5
Electric	1,852	(2)	(2)	15,874	3,765	1,187	10.3	3.0	2.7
Other	.....	.....	.....	101	71	352	0.1	0.1	0.8
Electric motors	2,927	550	40	35,944	15,730	1,896	100.0	100.0	100.0
Run by current generated by establishment	1,075	550	40	20,070	11,965	709	55.8	76.1	37.4
Run by rented power	1,852	(2)	(2)	15,874	3,765	1,187	44.2	23.9	62.6

[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 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	9,616	3,325,135	691,837	10,103	91,275	342,577
Beet sugar	.....	230,221	9,300	.....	30	.....
Brick and tile	2,732	110,420	195	1,682	1	.....
Cars and general shop construction and repairs by steam-railroad companies	77	147,291	446	3	1,184	2,033
Cement	.....	123,765	.....	.....	.....	.....
Foundry and machine-shop products	16	15,026	11,724	660	774	1,674
Gas, illuminating and heating	.....	99,516	223	.....	29,136	.....
Iron and steel, blast furnaces	.....	35,263	529,493	.....	.....	.....
Iron and steel, steel works and rolling mills	.....	308,968	26,007	4,539	23,341	314,313
Petroleum, refining	.....	17,383	.....	.....	33,350	.....
Smelting and refining, lead	.....	102,152	109,020	96	.....	.....
All other industries	6,791	2,075,130	5,429	3,123	3,459	24,557

NOTE.—In addition, there were 334 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. Certain data of this character for four important industries in Colorado are here presented.

Slaughtering and meat packing.—The following table includes, for 1909, two establishments reporting sausage as the chief product, while for previous years no establishments of this character were reported; it also shows the quantities and values of the different products for the last three census years.

PRODUCT.	1909	1904	1899
Total value	$9,656,810	$3,323,503	$4,343,983
Beef, fresh:			
Pounds	33,521,352	15,589,690	20,789,680
Value	$2,548,947	$1,091,076	$1,501,233
Veal, fresh:			
Pounds	1,369,852	498,089	417,000
Value	$128,314	$41,583	$39,940
Mutton, fresh:			
Pounds	2,405,106	2,790,676	3,138,745
Value	$237,668	$256,377	$270,729
Pork, fresh:			
Pounds	12,191,600	3,337,911	10,454,600
Value	$1,198,459	$313,799	$663,687
Pork, salted or cured:			
Pounds	20,530,615	11,087,849	17,377,000
Value	$2,648,836	$982,129	$1,044,050
Sausage, fresh or cured	$289,058	$117,444	$153,866
Lard:			
Pounds	12,633,806	2,613,183	7,678,000
Value	$1,418,794	$181,197	$417,960
Fertilizers and fertilizer materials:			
Tons	2,024	707	190
Value	$54,413	$8,303	$2,030
Hides:			
Number	67,946	30,807	38,284
Pounds	4,071,771	1,784,820	2,128,330
Value	$480,589	$153,521	$162,397
Pelts:			
Number	55,085	63,822	(1)
Value	$54,505	$52,871	.....
All other products	$597,227	$125,203	$88,091

[1] Figures not available.

In general, the industry shows a remarkable increase in value of products from 1904 to 1909. The increases in the quantities and values of beef and pork products are very large without exception, but mutton shows decreases in both quantity and value. During the five years the production of fresh beef, veal, sausage, and hides more than doubled, that of fresh pork increased over twofold, and that of lard nearly fourfold. The output of fertilizers and the value of "All other products," which includes the amount received for custom and contract work and for a number of by-products, show marked increases.

Flour-mill and gristmill products.—Colorado is not an important agricultural state, but the development of dry farming has in general brought about an increase in the production of wheat, corn, oats, and barley. The next table gives the quantities and values of the different flour-mill and gristmill products reported for the census years 1909 and 1904.

PRODUCT.	QUANTITY.		VALUE.	
	1909	1904	1909	1904
Total value	.....	.....	$7,867,706	$5,783,421
Wheat flour:				
White.....barrels	970,448	962,862	5,136,352	4,348,518
Graham.....barrels	7,331	7,226	36,286	28,959
Corn meal and corn flour.barrels	21,958	18,419	74,764	47,058
Rye flour.....barrels	1,726	2,246	7,176	7,657
Buckwheat flour.....pounds	.....	2,500	.....	75
Barley meal.....pounds	367,800	114,000	8,190	912
Hominy and grits.....pounds	.....	8,038	.....	286
Feed.....tons	54,350	25,411	1,567,745	539,460
Offal.....tons	41,770	44,349	978,663	776,310
All other products	.....	.....	58,530	33,586

A comparison of quantities rather than values best indicates the growth of the industry. Wheat flour, of which 99.3 per cent is white flour, is by far the most important product of this industry. Only slight gains are shown, however, for the five years in the quantities of white and Graham flour produced. Corn meal and corn flour shows a gain of 3,539 in the number of barrels produced since 1904. The amount of barley meal produced in 1909 was more than three times the amount produced in 1904. Feed shows an increase in tonnage of 113.9 per cent, the largest increase in quantity shown in the table. The by-product, offal, decreased in quantity, and rye flour, relatively unimportant, decreased in both quantity and value. In 1909, 644 pairs of rolls and 25 runs of stone were reported as the equipment of the mills of the state. In the same year eight establishments manufactured sacks.

Printing and publishing.—The best index of the development of this industry is the growth in the number of publications and their aggregate circulation per issue. The following table gives these details for the different classes of publications for the years 1909, 1904, and 1899:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total	352	381	265	1,133,364	1,092,697	521,213
Daily	53	42	42	335,147	209,185	[1] 157,016
Sunday	13	14	17	223,008	222,854	(1)
Semiweekly	6	[2] 7	[2] 4	5,609	5,301	2,500
Weekly	278	274	179	338,092	294,242	285,425
Monthly	31	38	19	230,308	348,815	72,947
All other classes	1	6	4	1,200	12,300	3,325

[1] Sunday issues included with dailies. [2] Includes one triweekly.

As shown in the table, the aggregate circulation per issue more than doubled from 1899 to 1904, while the increase was slight from 1904 to 1909. This irregular development of the state's newspapers and periodicals as a whole is due almost entirely to the fluctuations in the circulation of the monthlies, which increased nearly

fourfold from 1899 to 1904 and fell off decidedly during the succeeding five-year period. From 1904 to 1909 the dailies and weeklies increased in number and in circulation, while Sunday publications, semiweeklies, monthlies, and "All other classes" decreased in number, and monthlies and "All other classes" in circulation.

There were published in the state, in 1909, four Italian weeklies and two semiweeklies; three Spanish weeklies; two Spanish-English weeklies; one German daily and two weeklies; one Servian, one Slavonian, and one Swedish weekly; and one Japanese semiweekly.

Lumber and timber products.—The state has a very extensive and largely undeveloped timber area. The following statement shows the quantities of the principal products of the sawmills of the state for 1909 and 1899:

PRODUCT.	1909	1899
Rough lumber.....M feet b. m..	141,710	133,746
Shingles.....thousands..	657	5,165
Lath.....thousands..	11,494	5,558

Laundries.—Statistics for steam laundries are not included in the general tables, or in the totals for manufacturing industries. In 1909 there were 99 such establishments in the state of Colorado, 36 of which were in Denver, 5 in Pueblo, 4 in Colorado Springs, and 2 in Trinidad.

The following statement summarizes the statistics:

Number of establishments	99
Persons engaged in the industry	2,076
Proprietors and firm members	103
Salaried employees	140
Wage earners (average number)	1,833
Primary horsepower	1,895
Capital	$1,270,656
Expenses	1,595,638
Services	1,055,461
Materials	290,314
Miscellaneous	249,863
Amount received for work done	1,980,693

Forty-five out of the 99 establishments reported were under individual ownership, 28 under firm, and 26 under corporate ownership. Three establishments had receipts for the year's business amounting to between $100,000 and $1,000,000, 27 had receipts of between $20,000 and $100,000, and 69 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	1,696	82.9	July	1,996	97.6
February	1,684	82.3	August	2,046	100.0
March	1,707	83.4	September	1,962	95.9
April	1,756	85.8	October	1,855	90.7
May	1,763	86.2	November	1,850	90.4
June	1,844	90.1	December	1,835	89.7

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		**1,895**
Owned		1,443
Steam	67	1,428
Water motors	1	15
Rented		452
Electric	42	272
Other		180

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

KIND.	Unit.	Quantity.
Coal:		
Anthracite	Tons	428
Bituminous	Tons	25,685
Wood	Cords	20
Oil	Barrels	65
Gas	1,000 feet	7,433

Custom sawmills and gristmills.—Statistics for custom sawmills and gristmills are not included in the general tables or in the totals for manufacturing industries and can not be presented separately here without divulging individual operations.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—All industries	1909	2,034	34,115	1,722	4,326	28,067	154,615	$162,668	$5,648	$19,912	$80,491	$130,044	$49,553
	1904	1,606	25,888	1,398	2,677	21,813	124,907	107,664	3,549	15,100	63,114	100,144	37,030
	1899	1,323	.....	.....	1,870	19,498	43,434	58,173	2,059	11,708	60,751	89,068	28,317
Bread and other bakery products	1909	250	1,325	272	164	889	613	1,676	163	559	2,297	3,969	1,672
	1904	186	934	200	64	670	231	943	77	411	1,487	2,657	1,170
	1899	132	621	135	66	420	.....	552	48	236	865	1,607	742
Brick and tile	1909	69	1,036	46	68	922	3,923	2,421	79	637	511	1,670	1,159
	1904	63	580	52	33	495	2,192	1,036	39	322	164	817	653
	1899	65	532	76	18	438	1,083	526	18	237	86	497	411
Butter, cheese, and condensed milk	1909	39	304	26	68	210	657	1,221	68	130	1,924	2,340	416
	1904	[1] 20	141	16	28	97	476	593	31	59	1,081	1,290	209
	1899	38	133	35	18	80	403	204	11	40	471	618	147
Canning and preserving	1909	30	630	15	97	518	1,349	1,486	107	250	672	1,528	856
	1904	15	358	14	29	315	541	554	39	136	429	821	392
	1899	12	.....	.....	27	237	.....	312	29	76	250	406	156
Cars and general shop construction and repairs by steam-railroad companies.	1909	29	4,300	.....	307	3,993	3,947	4,708	363	3,393	2,604	6,559	3,955
	1904	34	3,267	.....	215	3,052	2,422	1,646	253	2,265	2,663	5,259	2,596
	1899	29	2,824	.....	137	2,687	1,152	1,682	148	1,677	1,278	3,142	1,864
Confectionery	1909	35	483	32	102	349	145	580	92	136	531	1,023	492
	1904	19	296	14	43	239	99	341	44	105	294	685	391
	1899	10	.....	.....	70	153	.....	277	46	62	225	420	195
Flour-mill and gristmill products	1909	77	429	47	100	282	6,810	4,835	134	220	6,672	7,868	1,196
	1904	52	362	26	92	244	5,927	2,326	104	203	4,797	5,783	986
	1899	49	.....	.....	87	272	4,701	1,977	76	167	3,769	4,441	672
Foundry and machine-shop products	1909	111	2,250	75	362	1,813	4,325	7,056	539	1,280	2,804	5,907	3,103
	1904	[2] 88	1,677	80	146	1,451	2,530	3,241	211	1,062	1,933	4,108	2,175
	1899	84	.....	.....	122	1,875	.....	2,909	153	1,162	1,720	4,159	2,439
Furniture and refrigerators	1909	14	224	7	41	176	258	494	45	146	257	542	285
	1904	11	186	10	19	157	164	167	22	137	178	432	254
	1899	[3] 4	60	2	7	51	24	77	8	34	90	170	80
Ice, manufactured	1909	30	315	11	53	251	4,361	2,415	65	190	126	570	444
	1904	16	182	9	35	138	2,187	1,240	35	93	71	376	305
	1899	6	117	6	18	93	292	664	21	54	31	204	173
Leather goods	1909	30	303	29	65	209	109	585	68	172	539	1,054	515
	1904	22	230	19	36	175	38	364	36	125	258	577	319
	1899	[1] 16	.....	.....	97	154	.....	230	22	100	239	442	203
Liquors, malt	1909	11	514	5	85	424	2,434	7,327	193	349	907	3,311	2,404
	1904	11	367	7	60	300	3,001	4,702	137	243	458	2,120	1,662
	1899	14	371	9	39	323	1,050	5,682	78	257	376	2,043	1,667
Lumber and timber products	1909	263	2,614	261	163	2,190	11,177	3,472	172	1,458	1,396	4,185	2,789
	1904	110	1,631	109	92	1,430	6,659	1,892	83	896	806	2,497	1,691
	1899	[1] 148	.....	.....	90	1,507	5,789	1,605	80	799	1,099	2,638	1,539
Marble and stone work	1909	44	346	52	27	267	694	967	32	208	220	626	406
	1904	33	276	36	28	212	359	288	33	200	231	626	395
	1899	39	.....	.....	12	399	.....	410	14	279	224	696	472
Pottery, terra-cotta, and fire-clay products	1909	6	231	3	14	214	450	1,079	26	143	108	436	328
	1904	11	511	4	31	476	2,108	832	51	208	296	787	491
	1899	10	423	7	42	374	1,005	856	60	216	161	574	413
Printing and publishing	1909	439	3,747	406	975	2,366	2,045	4,941	1,104	1,823	1,806	6,962	5,156
	1904	[3] 419	2,916	399	615	1,902	1,531	3,604	701	1,343	1,311	5,467	4,156
	1899	286	.....	.....	372	1,896	.....	2,670	353	1,130	823	3,697	2,874
Slaughtering and meat packing	1909	13	834	5	170	659	2,450	3,653	210	389	8,295	9,657	1,362
	1904	11	303	4	52	247	888	1,107	55	175	2,782	3,324	542
	1899	14	316	7	48	261	.....	1,381	61	171	3,722	4,344	622
Tobacco manufactures	1909	99	563	104	32	427	.....	427	59	306	358	1,021	663
	1904	[3] 117	632	128	23	481	.....	299	28	308	336	979	643
	1899	[3] 86	457	97	23	337	.....	200	20	223	234	680	446
All other industries	1909	445	13,607	326	1,433	11,848	108,868	113,325	2,129	8,123	48,464	70,816	22,352
	1904	368	11,039	271	1,036	9,732	93,554	82,489	1,570	6,749	43,539	61,539	18,000
	1899	281	.....	.....	577	7,941	.....	35,959	813	4,788	45,088	58,290	13,202

[1] Excluding statistics for one establishment, to avoid disclosure of individual operations.
[2] Excluding statistics for six establishments, to avoid disclosure of individual operations.
[3] Excluding statistics for two establishments, to avoid disclosure of individual operations.

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

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

INDUSTRY AND CITY.	Census.	Number of establishments.	Persons engaged in industry. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
DENVER—All industries	1909	766	15,037	586	2,393	12,058	25,165	$47,534	$3,019	$8,405	$30,927	$51,539	$20,612
	1904	722	11,752	596	1,484	9,672	.....	27,434	1,818	6,711	21,000	36,660	15,660
	1899	574	.....	.....	1,036	8,500	.....	31,271	1,181	5,236	24,472	37,906	13,434
Brass and bronze products	1909	5	51	5	4	42	52	45	5	36	75	145	70
	1904	[1] 4	35	2	1	32	.....	58	1	22	48	92	44
	1899	[1] 3	22	2	1	19	.....	30	2	12	38	65	27
Bread and other bakery products	1909	91	797	86	117	594	487	1,177	134	339	1,515	2,546	1,031
	1904	75	566	72	52	442	.....	669	68	250	931	1,656	725
	1899	79	446	76	59	311	.....	405	44	163	596	1,132	536
Brick and tile	1909	26	627	17	34	576	1,367	908	44	376	357	1,041	684
	1904	29	345	31	11	303	.....	422	12	208	88	474	386
	1899	20	237	22	7	208	.....	295	9	128	41	262	221
Canning and preserving	1909	9	152	8	30	114	300	363	37	65	202	505	303
	1904	[1] 8	128	10	15	103	.....	251	26	57	178	347	169
	1899	[1] 5	.....	.....	9	31	.....	35	5	13	27	63	36
Carriages and wagons and materials	1909	12	105	15	6	84	64	96	6	55	45	160	115
	1904	[1] 25	152	27	4	121	.....	195	4	89	85	251	166
	1899	[2] 14	99	18	4	77	.....	112	3	55	45	142	97
Cars and general shop construction and repairs by steam-railroad companies.	1909	5	1,845	.....	139	1,706	1,485	2,473	154	1,477	1,226	2,966	1,740
	1904	5	1,368	.....	97	1,271	.....	621	112	954	956	2,072	1,116
	1899	5	1,075	.....	69	1,006	.....	905	66	623	579	1,295	716
Confectionery	1909	21	338	19	65	254	97	403	65	94	407	760	353
	1904	14	230	10	36	184	.....	262	37	83	241	560	319
	1899	6	.....	.....	49	96	.....	169	28	39	159	290	131
Foundry and machine-shop products	1909	67	1,573	38	267	1,268	3,040	5,234	403	875	2,300	4,598	2,298
	1904	[3] 50	1,244	38	109	1,097	.....	2,373	170	802	1,551	3,275	1,724
	1899	51	.....	.....	85	1,221	.....	1,971	117	759	1,134	2,534	1,400
Leather goods	1909	17	254	18	59	177	70	382	60	108	318	651	333
	1904	16	165	15	29	121	.....	278	28	84	158	369	231
	1899	[1] 9	.....	.....	19	95	.....	156	16	60	158	281	123
Liquors, malt	1909	4	261	.....	51	210	1,283	4,894	126	176	432	1,675	1,243
	1904	3	191	.....	35	156	.....	3,159	95	121	238	1,226	988
	1899	4	230	3	21	206	.....	4,954	50	168	225	1,440	1,215
Lumber and timber products	1909	22	578	17	46	515	1,509	821	48	354	577	1,177	600
	1904	[1] 9	331	7	17	307	.....	321	20	229	255	603	348
	1899	[1] 10	332	6	25	301	.....	649	31	222	378	734	356
Marble and stone work	1909	26	195	30	14	151	380	303	16	133	169	426	257
	1904	30	263	32	25	206	.....	273	31	191	214	589	375
	1899	25	.....	.....	6	282	.....	221	10	230	203	580	377
Printing and publishing	1909	150	2,354	111	707	1,536	1,036	2,759	845	1,215	1,350	4,833	3,483
	1904	155	1,818	125	440	1,253	.....	2,018	517	896	1,018	4,836	3,818
	1899	124	.....	.....	263	1,131	.....	1,583	262	733	537	2,459	1,922
Tobacco manufactures	1909	51	441	51	32	358	.....	347	59	246	265	792	527
	1904	[2] 56	435	56	19	360	.....	212	26	232	234	711	477
	1899	[2] 41	.....	.....	28	241	.....	129	20	164	160	485	325
All other industries	1909	260	5,466	171	822	4,473	13,986	27,329	1,017	2,856	21,689	29,264	7,575
	1904	243	4,481	171	594	3,716	.....	16,322	671	2,493	14,805	19,579	4,774
	1899	178	.....	.....	396	3,275	.....	19,657	518	1,867	20,192	26,144	5,952

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

Colorado Springs	1909	59	694	40	138	516	907	$2,023	$144	$413	$823	$1,733	$910
	1904	49	547	45	92	410	.....	1,611	84	284	412	1,101	689
	1899	34	.....	.....	78	409	.....	1,127	50	225	365	845	480
Pueblo	1909	94	1,637	73	244	1,320	2,276	4,137	264	957	1,497	3,345	1,848
	1904	80	1,120	65	114	941	.....	2,040	129	661	941	2,197	1,256
	1899	69	.....	.....	70	790	.....	1,184	70	458	672	1,440	768
Trinidad	1909	30	279	20	39	220	851	869	37	170	310	814	504
	[4] 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	[4] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

[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] Excluding statistics for five establishments, to avoid disclosure of individual operations.
[4] Figures not available.

TABLE II.—DETAIL STATEMENT FOR

	INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Wage earners. Number. Maximum month.	Wage earners. Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	**2,034**	**34,115**	**1,722**	**1,287**	**2,518**	**521**	**28,067**	**No 32,050**	**Fe 25,181**	(1)	(1)	(1)	(1)	(1)	**154,615**
2	Artificial stone	33	112	31	8	5	.....	68	My 95	Ja 33	85	85	.....	.....	.....	36
3	Boxes, cigar	3	26	4	.....	1	.....	21	Je [2] 22	Fe [2] 20	21	9	12	.....	.....	14
4	Brass and bronze products	5	51	5	2	2	.....	42	No 48	Mh 35	43	41	.....	2	.....	52
5	Bread and other bakery products	250	1,325	272	21	85	58	889	Au 939	Ja 840	899	640	244	14	1	613
6	Brick and tile	69	1,036	46	47	18	3	922	Jy 1,308	Ja 575	1,213	1,194	1	18	.....	3,923
7	Brooms	6	57	6	2	2	.....	47	Au [2] 49	Ap [2] 46	48	44	4	.....	.....	32
8	Brushes	4	10	4	.....	.....	1	5	No [2] 6	My [2] 5	6	5	1	.....	.....	11
9	Butter, cheese, and condensed milk	39	304	26	19	27	22	210	Jy 247	Ja [2] 187	200	155	45	.....	.....	657
10	Canning and preserving	30	630	15	37	42	18	518	Au 1,161	Ap [2] 157	1,314	436	867	5	6	1,349
11	Carriages and wagons and materials	21	158	25	6	3	.....	124	Jy 142	Ja [2] 108	108	108	.....	.....	.....	125
12	Cars and general shop construction and repairs by steam-railroad companies.	29	4,300	.....	125	180	2	3,993	De 4,373	Jy 3,572	4,239	4,237	2	.....	.....	3,047
13	Cars and general shop construction and repairs by street-railroad companies.	6	234	.....	5	4	.....	225	Jy 246	Mh 212	218	217	.....	1	.....	454
14	Confectionery	35	483	32	21	47	34	349	De 419	Fe 310	423	169	254	.....	.....	145
15	Copper, tin, and sheet-iron products	21	137	23	7	2	1	104	De 122	Ja 82	132	130	.....	2	.....	44
16	Fancy articles, not elsewhere specified	3	16	3	.....	.....	3	10	Au [2] 14	Ja [2] 7	10	3	7	.....	.....	.....
17	Flour-mill and gristmill products	77	429	47	41	58	1	282	Oc 320	Jy 253	289	288	.....	1	.....	6,810
18	Foundry and machine-shop products	111	2,250	75	131	201	30	1,813	Se 2,001	Ja 1,672	1,818	1,802	3	13	.....	4,325
19	Furniture and refrigerators	14	224	7	12	23	6	176	De 195	Ja 159	195	189	3	3	.....	253
20	Ice, manufactured	30	315	11	24	28	1	251	Au 416	De 165	181	180	.....	1	.....	4,361
21	Jewelry	11	98	13	3	4	5	73	De 77	Fe 70	79	74	3	2	.....	33
22	Leather goods	30	363	29	19	37	9	269	No 286	Ja 254	284	243	41	.....	.....	109
23	Liquors, malt	11	514	5	32	53	.....	424	Jy 478	Ja 384	423	420	.....	3	.....	2,434
24	Lumber and timber products	263	2,614	261	81	77	5	2,190	Au [2] 2,577	Ap 1,793	2,909	2,877	28	4	.....	11,177
25	Marble and stone work	44	346	52	15	11	1	267	Je 297	Ja 224	278	278	.....	.....	.....	694
26	Mattresses and spring beds	6	141	1	11	9	2	118	Oc 138	Fe 71	124	82	39	3	.....	274
27	Models and patterns, not including paper patterns.	4	15	5	.....	.....	.....	10	Ap 13	No [2] 8	8	8	.....	.....	.....	29
28	Patent medicines and compounds and druggists' preparations.	23	72	8	11	3	.....	50	Mh 59	Ja 43	64	41	23	.....	.....	90
29	Photo-engraving	4	28	2	3	.....	1	22	De 24	Fe [2] 20	24	23	1	.....	.....	49
30	Pottery, terra-cotta, and fire-clay products.	6	231	3	7	2	5	214	Jy 267	Ja 181	228	222	4	2	.....	450
31	Printing and publishing	439	3,747	406	184	625	166	2,366	De 2,483	My 2,307	2,508	2,048	401	54	5	2,045
32	Slaughtering and meat packing	13	834	5	24	136	10	659	Je 692	No [2] 634	647	620	14	13	.....	2,450
33	Stoves and furnaces, including gas and oil stoves.	6	45	3	5	5	2	30	No [2] 31	Ap [2] 28	30	30	.....	.....	.....	15
34	Tobacco manufactures	99	563	104	12	15	5	427	De 445	Mh 385	434	351	79	4	.....	.....
35	Wall plaster	4	70	.....	5	1	.....	64	Oc 68	Ja [2] 52	61	61	.....	.....	.....	410
36	All other industries [3]	285	12,337	193	367	812	130	10,835	.....	.....	.....	.....	.....	.....	.....	107,200

[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	3
Artificial limbs	2
Automobiles, including bodies and parts	4
Awnings, tents, and sails	7
Babbitt metal and solder	3
Baking powders and yeast	2
Beet sugar	15
Bicycles, motorcycles, and parts	4
Blacking and cleansing and polishing preparations	2
Boots and shoes, including cut stock and findings	1
Boxes, fancy and paper	3
Butter, reworking	1
Carpets, rag	2
Cars, steam-railroad, not including operations of railroad companies	2
Cars, street-railroad, not including operations of railroad companies	1
Cement	2
Charcoal	1
Clothing, men's, including shirts	4
Clothing, women's	2
Coffee and spice, roasting and grinding	10
Coffins, burial cases, and undertakers' goods	2
Coke	12
Cooperage and wooden goods, not elsewhere specified	2
Cutlery and tools, not elsewhere specified	1
Dairymen's, poulterers', and apiarists' supplies	1
Electrical machinery, apparatus, and supplies	4
Electroplating	1
Explosives	1
Firearms and ammunition	2
Fireworks	1
Flags, banners, regalia, society badges, and emblems	1
Flavoring extracts	1
Food preparations	22
Fur goods	2
Furnishing goods, men's	3
Furs, dressed	3
Gas and electric fixtures and lamps and reflectors	2
Gas, illuminating and heating	10
Glass, cutting, staining, and ornamenting	8
Gloves and mittens, leather	1
Gold and silver, reducing and refining, not from the ore	1

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	$162,667,801	$114,689,902	$2,827,671	$2,820,013	$19,912,342	$8,528,516	$71,962,368	$644,057	$1,359,224	$308,002	$6,327,689	$130,044,312	$49,553,408
2	146,662	119,760	7,632	3,350	44,537	681	53,134	1,130	760	1,684	6,852	152,873	99,058
3	30,415	31,465	.....	832	8,864	408	19,406	320	315	.....	1,320	41,805	22,081
4	45,267	122,394	2,800	2,144	36,116	4,463	70,585	3,660	440	.....	2,186	145,092	70,044
5	1,676,433	3,368,683	48,985	113,870	559,172	72,320	2,224,688	71,810	14,996	431	262,411	3,968,760	1,671,752
6	2,420,670	1,358,835	63,056	10,165	637,220	294,161	217,242	2,125	13,904	.....	114,962	1,670,042	1,158,639
7	70,113	99,816	1,800	1,880	26,368	1,294	65,378	1,367	543	.....	1,186	118,758	52,086
8	14,595	15,951	.....	750	3,670	380	9,400	1,176	90	.....	476	19,160	9,371
9	1,220,524	2,238,279	30,000	38,097	129,712	16,225	1,907,377	5,664	6,464	224	104,516	2,339,765	416,163
10	1,486,325	1,219,959	63,835	43,385	250,241	19,978	652,449	11,277	6,561	.....	172,233	1,527,779	855,352
11	160,264	196,393	6,080	2,016	87,391	3,935	81,515	7,155	1,743	166	6,392	260,295	174,845
12	4,707,532	6,529,442	216,403	146,279	3,393,142	130,147	2,473,923	100	62,524	5,814	101,110	6,558,920	3,954,850
13	231,482	273,635	6,893	3,406	140,346	1,624	113,411	.....	5,039	.....	2,916	273,635	158,600
14	579,826	894,850	20,782	62,138	135,701	10,081	521,082	34,871	3,940	.....	97,255	1,023,073	491,910
15	201,965	249,941	8,333	2,938	88,720	1,563	131,523	6,741	818	791	8,514	283,673	150,587
16	35,500	15,395	.....	3,058	4,319	115	5,348	930	35	.....	1,590	24,000	18,537
17	4,835,438	7,292,244	73,928	60,400	219,908	53,085	6,619,229	2,122	29,646	150	233,776	7,867,706	1,195,392
18	7,056,055	5,195,417	344,314	194,495	1,280,148	147,637	2,656,323	40,917	37,355	44,266	449,962	5,906,505	3,102,635
19	493,564	496,939	17,915	27,511	145,891	3,871	253,288	14,415	2,563	903	30,582	542,122	284,963
20	2,415,090	445,382	36,830	28,209	189,803	93,163	32,942	1,510	15,270	.....	47,655	569,839	443,734
21	144,475	205,572	5,460	11,100	72,295	1,399	81,687	13,271	1,142	.....	19,218	278,883	195,797
22	584,788	883,170	29,260	38,495	172,319	2,710	535,791	18,446	4,648	.....	81,501	1,054,338	515,837
23	7,326,513	2,608,504	103,652	89,350	348,926	64,325	842,655	1,500	489,119	.....	758,977	3,310,755	2,403,775
24	3,472,112	3,475,466	112,826	58,937	1,457,889	37,977	1,357,982	9,338	32,123	3,266	405,128	4,184,864	2,788,905
25	966,612	516,957	21,320	10,381	208,465	12,855	207,039	2,989	3,450	12,848	37,610	625,681	405,787
26	176,187	337,770	14,480	7,533	44,839	4,916	237,842	10,410	1,117	.....	16,633	369,371	126,613
27	7,402	12,626	.....	.....	8,055	305	2,389	1,344	68	.....	465	19,677	16,983
28	115,450	122,013	10,073	1,975	23,821	1,080	62,689	3,036	911	100	17,428	168,433	104,664
29	25,039	41,030	2,850	650	23,204	2,161	6,813	2,380	97	.....	2,875	50,180	41,206
30	1,078,694	330,267	15,545	10,550	142,741	38,941	69,330	96	4,347	.....	48,717	435,822	327,551
31	4,941,071	5,959,377	427,678	676,743	1,823,196	76,125	1,729,987	146,941	35,881	224,556	818,270	6,961,721	5,155,609
32	3,653,300	9,243,976	61,054	148,519	389,133	67,007	8,226,872	1,970	19,141	.....	329,380	9,656,810	1,362,031
33	44,545	90,072	4,840	5,825	27,011	1,158	38,740	3,310	263	4,800	4,125	98,285	58,387
34	426,817	894,727	32,840	25,759	305,661	1,440	356,683	16,958	69,819	100	85,467	1,021,241	633,118
35	152,500	109,322	5,400	1,080	36,523	11,016	44,412	.....	1,116	.....	9,775	162,469	107,041
36	111,724,576	59,604,273	1,021,807	982,193	7,446,995	7,349,061	40,053,234	203,878	492,976	7,903	2,046,226	68,351,800	20,949,505

[1] All other industries embrace—Continued.

Grease and tallow	2
Hair work	1
Hand stamps and stencils and brands	3
Hats and caps, other than felt, straw, and wool	1
Hosiery and knit goods	1
House-furnishing goods, not elsewhere specified	1
Ink, printing	1
Ink, writing	2
Instruments, professional and scientific	4
Iron and steel, blast furnaces	1
Iron and steel, steel works and rolling mills	1
Iron and steel forgings	1
Jewelry and instrument cases	1
Kaolin and ground earths	1
Lapidary work	1
Lead, bar, pipe, and sheet	1
Leather, tanned, curried, and finished	1
Lime	3
Looking-glass and picture frames	1
Malt	1
Mineral and soda waters	55
Mirrors	1
Mucilage and paste	1
Musical instruments and materials, not specified	1
Musical instruments, pianos and organs and materials	1
Optical goods	2
Paint and varnish	4
Paper goods, not elsewhere specified	1
Petroleum, refining	4
Photographic apparatus and materials	2
Roofing materials	1
Safes and vaults	1
Scales and balances	2
Show cases	1
Signs and advertising novelties	1
Silverware and plated ware	2
Smelting and refining, copper	1
Smelting and refining, lead	5
Smelting and refining, zinc	1
Soap	3
Soda-water apparatus	1
Starch	1
Statuary and art goods	3
Steam packing	4
Sulphuric, nitric, and mixed acids	1
Vinegar and cider	3
Window shades and fixtures	1
Wirework, including wire rope and cable	4
Wool scouring	1

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

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

DENVER.

	INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	Wage earners. 16 and over. Male.	Wage earners. 16 and over. Female.	Wage earners. Under 16.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	**766**	**15,037**	**586**	**616**	**1,436**	**341**	**12,058**	**10,521**	**1,430**	**107**	**12,576**	**10,963**	**1,500**	**103**	**10**	**25,165**
2	Brass and bronze products	5	51	5	2	2	.....	42	40	.....	2	43	41	.....	2	.....	52
3	Bread and other bakery products	91	797	86	17	69	31	594	379	206	9	599	382	208	9	.....	487
4	Brick and tile	26	627	17	23	11	.....	576	564	.....	12	711	696	.....	15	.....	1,367
5	Canning and preserving	9	152	8	9	13	8	114	50	64	.....	124	54	70	.....	.....	300
6	Carriages and wagons and materials	12	105	15	4	2	.....	84	84	.....	.....	71	71	.....	.....	.....	64
7	Cars and general shop construction and repairs by steam-railroad companies	5	1,845	.....	48	89	2	1,706	1,704	2	.....	1,751	1,749	2	.....	.....	1,485
8	Confectionery	21	338	19	16	23	26	254	99	155	.....	299	116	183	.....	.....	97
9	Foundry and machine-shop products	67	1,573	38	92	152	23	1,268	1,253	2	13	1,296	1,281	2	13	.....	3,040
10	Leather goods	17	254	18	18	34	7	177	145	32	.....	188	154	34	.....	.....	70
11	Liquors, malt	4	261	.....	12	39	.....	210	210	.....	.....	214	214	.....	.....	.....	1,283
12	Lumber and timber products	22	578	17	25	20	1	515	511	.....	4	558	554	.....	4	.....	1,509
13	Marble and stone work	26	195	30	7	6	1	151	151	.....	.....	143	143	.....	.....	.....	389
14	Printing and publishing	150	2,354	111	111	473	123	1,536	1,280	230	26	1,624	1,352	244	26	2	1,036
15	Tobacco manufactures	51	441	51	12	15	5	358	284	73	1	348	276	71	1	.....	.....
16	All other industries [1]	260	5,466	171	220	488	114	4,473	3,767	666	40	4,607	3,880	686	33	8	13,986

[1] All other industries embrace: Agricultural implements, 1; artificial stone, 5; automobiles, including bodies and parts, 3; awnings, tents, and sails, 5; babbitt metal and solder, 3; baking powders and yeast, 1; bicycles, motorcycles, and parts, 4; blacking and cleansing and polishing preparations, 2; boots and shoes, including cut stock and findings, 1; boxes, cigar, 3; boxes, fancy and paper, 2; brooms, 2; brushes, 4; butter, cheese, and condensed milk, 5; butter, reworking, 1; carpets, rag, 2; cars and general shop construction and repairs by street-railroad companies, 2; cars, steam-railroad, not including operations of railroad companies, 1; cars, street-railroad, not including operations of railroad companies, 1; clothing, men's, including shirts, 4; clothing, women's, 2; coffee and spice, roasting and grinding, 6; coffins, burial cases, and undertakers' goods, 2; cooperage and wooden goods, not elsewhere specified, 1; copper, tin, and sheet-iron products, 14; cutlery and tools, not elsewhere specified, 1; electrical machinery, apparatus, and supplies, 4; electroplating, 1; fancy articles, not elsewhere specified, 3; firearms and ammunition, 2; fireworks, 1; flags, banners, regalia, society badges, and emblems, 1; flavoring extracts, 1; flour-mill and gristmill products, 7; food preparations, 9; fur goods, 1; furnishing goods, men's, 2; furniture and refrigerators, 14; furs, dressed, 1; gas and electric fixtures and lamps and reflectors, 2; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 3; gloves and mittens, leather, 1; gold and silver, reducing and refining, not from the ore, 1; grease and tallow, 1; hair work, 1; hand

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

1	COLORADO SPRINGS	59	694	40	40	77	21	516	459	55	2	542	482	58	2	.....	907
2	PUEBLO	94	1,637	73	70	144	30	1,320	1,208	111	1	1,405	1,285	118	2	.....	2,276
3	TRINIDAD	30	279	20	16	13	10	220	206	14	.....	220	206	14	.....	.....	851

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.

DENVER.

	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	$47,533,994	$46,942,303	$1,400,088	$1,618,670	$8,405,217	$1,078,773	$29,848,532	$411,343	$609,666	$220,219	$3,349,795		$51,538,547	$20,611,242
2	45,267	122,394	2,800	2,144	36,116	4,463	70,585	3,660	440	.....	2,186		145,092	70,044
3	1,176,527	2,241,944	44,585	89,178	338,540	41,783	1,473,406	34,092	9,672	.....	210,688		2,546,015	1,030,826
4	907,822	838,658	32,818	11,420	376,168	177,447	179,242	1,925	8,640	.....	50,998		1,041,089	684,400
5	363,384	409,837	20,875	16,567	64,934	5,934	196,439	4,920	2,104	.....	98,064		505,060	302,687
6	95,635	112,595	4,080	1,441	54,734	2,391	42,474	4,110	984	166	2,215		160,207	115,342
7	2,472,549	2,966,480	80,855	72,842	1,477,251	64,704	1,161,345	100	36,526	.....	72,797		2,966,480	1,740,371
8	403,488	668,643	23,952	40,634	93,977	6,724	400,711	29,351	2,950	.....	70,344		759,007	352,172
9	5,233,977	4,033,149	257,784	145,001	874,661	115,741	2,184,697	39,781	26,674	2,494	386,316		4,597,727	2,297,289
10	382,209	574,815	26,200	33,775	107,932	1,829	316,077	12,837	3,346	.....	72,759		651,001	333,095
11	4,894,063	1,447,997	55,838	69,820	175,638	31,797	400,664	.....	275,245	.....	438,995		1,675,287	1,242,826
12	820,534	1,073,730	32,270	16,140	354,394	11,128	566,302	6,958	4,681	366	81,491		1,177,257	599,827
13	303,034	352,514	10,100	5,881	132,905	5,907	163,069	2,623	2,271	10,648	19,110		426,292	257,316
14	2,758,639	4,317,386	319,670	525,434	1,215,104	43,158	1,306,889	94,035	18,199	198,278	596,619		4,833,661	3,482,954
15	346,926	712,577	32,840	25,759	246,305	1,156	263,966	8,921	55,871	.....	77,759		792,090	526,968
16	27,329,940	27,069,584	455,301	502,634	2,856,558	564,551	21,122,666	168,030	162,063	8,267	1,169,454		29,262,342	7,575,125

stamps and stencils and brands, 2; hats and caps, other than felt, straw, and wool, 1; hosiery and knit goods, 1; house-furnishing goods, not elsewhere specified, 1; ice, manufactured, 2; ink, printing, 1; ink, writing, 2; instruments, professional and scientific, 4; iron and steel forgings, 1; jewelry, 9; jewelry and instrument cases, 1; kaolin and ground earths, 1; lapidary work, 1; lead, bar, pipe, and sheet, 1; leather, tanned, curried, and finished, 1; looking-glass and picture frames, 1; mattresses and spring beds, 4; mineral and soda waters, 9; mirrors, 1; models and patterns, not including paper patterns, 4; mucilage and paste, 1; musical instruments and materials, not specified, 1; musical instruments, pianos and organs and materials, 1; optical goods, 2; paint and varnish, 4; paper goods, not elsewhere specified, 1; patent medicines and compounds and druggists' preparations, 20; photographic apparatus and materials, 2; photo-engraving, 2; pottery, terra-cotta, and fire-clay products, 4; roofing materials, 1; safes and vaults, 1; scales and balances, 2; signs and advertising novelties, 1; silverware and plated ware, 2; slaughtering and meat packing, 7; smelting and refining, copper, 1; smelting and refining, lead, 1; soap, 2; soda-water apparatus, 1; statuary and art goods, 3; steam packing, 4; stoves and furnaces, including gas and oil stoves, 4; sulphuric, nitric, and mixed acids, 1; surgical appliances and artificial limbs, 2; vinegar and cider, 2; wall plaster, 1; window shades and fixtures, 1; wirework, including wire rope and cable, 1; wool scouring, 1.

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

1	$2,023,418	$1,554,071	$69,320	$75,035	$412,576	$50,754	$772,240	$18,312	$12,900	$17,001	$125,933	$1,732,759	$909,765
2	4,137,029	2,994,601	110,444	153,076	957,398	112,750	1,384,553	28,305	31,560	4,239	211,076	3,344,789	1,847,486
3	869,471	649,107	21,204	16,234	170,460	17,420	293,043	12,960	52,838	592	64,356	814,353	503,890

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CONNECTICUT.

INDUSTRIES IN GENERAL.

General character of the state.—Connecticut, with a gross area of 4,965 square miles, of which 145 represent water surface, is one of the smallest of the states and territories of continental United States—only two states, Delaware and Rhode Island, having a less area. Its population in 1910 was 1,114,756, as compared with 908,420 in 1900 and 746,258 in 1890. In 1910 the density of population for the state was 231.3 per square mile, the corresponding figure for 1900 being 188.5. Only three states had a greater average number of inhabitants per square mile. It ranked thirty-first among the 49 states and territories as regards population in 1910 and twenty-ninth in 1900. Eighty-nine and seven-tenths per cent of the entire population of the state resided in places having a population of 2,500 inhabitants or over, as against 87.2 per cent in 1900.

The state has four cities having a population of over 50,000—Bridgeport, Hartford, New Haven, and Waterbury. There are also 11 cities and boroughs having a population of over 10,000 but less than 50,000—Ansonia, Danbury, Meriden, Middletown, Naugatuck, New Britain, New London, Norwich, Stamford, Torrington, and Willimantic. These 15 cities and boroughs contained 56.6 per cent of the total population of the state and were credited with 68.2 per cent of the total value of its manufactures. Apart from the cities and boroughs named, 33.1 per cent of the population of the state resided in places of 2,500 inhabitants or over.

The prominence of Connecticut as a manufacturing state is due to several causes, chief of which are the early establishment of a number of important industries in the state and the unusually large amount of capital available for investment in manufacturing industries. Additional causes are the comparatively abundant water power in the state and its geographic location near New York City, with which many of the manufacturing centers of Connecticut have direct water transportation facilities. Bridgeport, New Haven, and New London are seaports of considerable prominence, and afford ample opportunities for domestic coastwise commerce. In addition, the main line of the most important railroad system in New England traverses Connecticut and gives direct and adequate connection with all parts of the country.

Importance and growth of manufactures.—Connecticut is preeminently a manufacturing state, and the growth and concentration of its population have been closely related to the increase in the importance of its manufacturing industries. During 1849 an average of 50,731 wage earners, representing 13.7 per cent of the total population, were employed in manufactures, while in 1909 an average of 210,792 wage earners, or 18.9 per cent of the total population, were so engaged. In 1849 the total value of the manufactures of the state, including the products of the neighborhood and hand industries, amounted to $47,115,000, while in 1909, exclusive of the value of products of the neighborhood and hand industries, it reached $490,272,000. These figures represent increases of 315.5 per cent in number of wage earners and 940.6 per cent in value of products. During this period the gross value of products per capita of the total population of the state increased from $127 to $440. Nevertheless the state's proportion of the total value of products manufactured in the United States fell from 4.6 per cent in 1849 to 2.8 per cent in 1899 and 2.4 per cent in 1909.

The rank of Connecticut among the states in regard to the value of its manufactured products was twelfth in 1909, as compared with eleventh in 1899, and fifth in 1849.

The next 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.

In 1909 the state of Connecticut had 4,251 manufacturing establishments, which gave employment to an average of 233,871 persons during the year and paid out $135,756,000 in salaries and wages. Of the persons employed, 210,792 were wage earners.

These establishments turned out products to the value of $490,272,000, to produce which materials costing $257,259,000 were used. The value added by manufacture was thus $233,013,000, 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 Connecticut as a whole showed greater development during the more recent five-year period, 1904–1909, than during the preceding five-year period, 1899–1904, although a marked increase is shown for both periods in all items, except in the number of establishments from 1899 to 1904. During the later period the number of establishments increased 22.3 per cent, the average number of wage earners 16.1 per cent, the value of products 32.8 per cent, and the value added by manufacture 31.1 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 the figures representing values, since the increase shown is certainly due, in part, to the increase that has taken place in the price of commodities.

	NUMBER OR AMOUNT.			PER CENT OF INCREASE.	
	1909	1904	1899	1904–1909	1899–1904
Number of establishments	4,251	3,477	3,382	22.3	2.8
Persons engaged in manufactures	233,871	198,046	(1)	18.1	.....
Proprietors and firm members	3,468	2,918	(1)	18.8	.....
Salaried employees	19,611	13,523	9,258	45.0	46.1
Wage earners (average number)	210,792	181,605	159,733	16.1	13.7
Primary horsepower	400,275	304,204	256,331	31.6	18.7
Capital	$517,547,000	$373,284,000	$299,207,000	38.6	24.8
Expenses	429,904,000	328,610,000	274,170,000	30.8	19.9
Services	135,756,000	104,983,000	85,149,000	29.3	23.3
Salaries	25,637,000	17,040,000	11,755,000	50.5	45.0
Wages	110,119,000	87,943,000	73,394,000	25.2	19.8
Materials	257,259,000	191,302,000	169,672,000	34.5	12.7
Miscellaneous	36,889,000	32,325,000	19,349,000	14.1	67.1
Value of products	490,272,000	369,082,000	315,106,000	32.8	17.1
Value added by manufacture (value of products less cost of materials)	233,013,000	177,780,000	145,434,000	31.1	22.2

[1] Figures not available.

The relative importance and growth of the leading manufacturing industries of the state are shown in the table on page 131.

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.

In addition to the industries presented separately in the following table there are 20 other important industries, each of which had a value of products in 1909 in excess of $1,000,000. They are included under "All other industries" in the table in some cases because the operations of individual establishments would be disclosed if they were shown separately; in others, because 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 other industries, or because comparable statistics for the different census years can not be presented on account of changes in classification. These industries are as follows: Belting and hose, leather; bicycles, motorcycles, and parts; boots and shoes, rubber; brick and tile; carpets and rugs, other than rag; dentists' materials; furnishing goods, men's; gas and electric fixtures and lamps and reflectors; gold and silver, reducing and refining, not from the ore; house-furnishing goods, not elsewhere specified; iron and steel, steel works and rolling mills; iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills; iron and steel, nails and spikes, cut and wrought, not made in steel works or rolling mills; phonographs and graphophones; rubber goods, not elsewhere specified; screws, machine; screws, wood; sewing machines, cases, and attachments; soap; and wire. Statistics, however, for the manufacture of men's furnishing goods, gas and electric fixtures and lamps and reflectors, of rubber goods, "not elsewhere specified," and of sewing machines, cases, and attachments are presented in Table II for 1909.

Connecticut ranked second among the states in the production of rubber boots and shoes, measured by value of products, and the three gold and silver refineries of Connecticut reported a greater value of products than did those of any other state.

Although a few industries predominate in importance, it will be seen from Table II that there is, on the whole, a wide 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, are briefly considered, by classification, in the paragraphs following the table.

INDUSTRY.	Number of establishments.	WAGE EARNERS. Average number.	WAGE EARNERS. Per cent distribution.	VALUE OF PRODUCTS. Amount.	VALUE OF PRODUCTS. Per cent distribution.	VALUE ADDED BY MANUFACTURE. Amount.	VALUE ADDED BY MANUFACTURE. Per cent distribution.	PER CENT OF INCREASE.[1] Value of products. 1904–1909	Value of products. 1899–1904	Value added by manufacture. 1904–1909	Value added by manufacture. 1899–1904
All industries	**4,251**	**210,792**	**100.0**	**$490,272,000**	**100.0**	**$233,013,000**	**100.0**	**32.8**	**17.1**	**31.1**	**22.2**
Brass and bronze products	80	16,817	8.0	66,933,000	13.7	19,069,000	8.2	24.1	9.9	19.2	28.5
Foundry and machine-shop products	403	37,736	17.9	65,535,000	13.4	40,715,000	17.5	46.2	12.0	38.2	21.1
Cotton goods, including cotton small wares	52	14,360	6.8	24,232,000	4.9	12,272,000	5.3	31.5	19.0	49.3	3.4
Silk and silk goods, including throwsters	47	8,703	4.1	21,063,000	4.3	9,220,000	3.9	34.8	26.2	41.4	26.0
Firearms and ammunition	10	8,533	4.0	19,948,000	4.1	9,882,000	4.2	12.3	57.2	4.6	63.2
Woolen, worsted, and felt goods, and wool hats	56	7,789	3.7	19,363,000	3.9	6,525,000	2.8	25.1	22.5	20.6	14.8
Silverware and plated ware	31	6,223	3.0	15,837,000	3.2	8,605,000	3.7	94.9	−14.8	91.8	−7.7
Corsets	17	6,643	3.2	12,815,000	2.6	6,139,000	2.6	129.2	−18.3	111.2	−20.7
Automobiles, including bodies and parts	28	3,815	1.8	11,668,000	2.4	6,812,000	2.9	341.3	.....	360.0	.....
Cutlery and tools, not elsewhere specified	82	7,547	3.6	10,717,000	2.2	7,407,000	3.2	28.6	39.5	34.5	41.5
Hats, fur-felt	80	5,217	2.5	10,400,000	2.1	5,551,000	2.4	20.0	14.8	17.9	22.0
Electrical machinery, apparatus, and supplies	41	3,505	1.7	9,824,000	2.0	4,613,000	2.0	98.9	55.9	111.0	83.1
Lumber and timber products	393	3,495	1.7	7,846,000	1.6	3,928,000	1.7	63.7	13.2	69.8	12.0
Clocks and watches, including cases and materials	16	5,851	2.8	7,390,000	1.5	5,292,000	2.3	4.7	53.6	7.0	79.1
Bread and other bakery products	431	1,859	0.9	7,310,000	1.5	2,847,000	1.2	23.9	13.2	16.1	6.9
Printing and publishing	363	2,878	1.4	6,370,000	1.3	4,601,000	2.0	25.7	23.1	21.4	23.2
Hosiery and knit goods	21	3,340	1.6	5,801,000	1.2	2,752,000	1.2	8.0	32.8	8.1	38.3
Musical instruments, pianos and organs and materials	17	2,304	1.1	5,538,000	1.1	2,516,000	1.1	5.0	55.3	−12.4	57.2
Paper and wood pulp	51	1,720	0.8	5,527,000	1.1	2,224,000	1.0	9.7	41.3	−3.3	45.4
Slaughtering and meat packing	28	432	0.2	4,572,000	0.9	623,000	0.3	42.1	−16.1	52.3	−29.0
Liquors, malt	19	475	0.2	4,426,000	0.9	3,051,000	1.3	51.2	10.3	44.7	4.8
Needles, pins, and hooks and eyes	8	2,648	1.2	4,236,000	0.9	2,530,000	1.1	38.3	68.7	35.1	74.9
Typewriters and supplies	8	2,934	1.4	4,016,000	0.8	2,975,000	1.3	145.3	108.8	132.1	106.4
Copper, tin, and sheet-iron products	48	2,475	1.2	3,604,000	0.7	2,039,000	0.9	33.1	36.5	23.1	51.8
Dyeing and finishing textiles	10	1,719	0.8	3,562,000	0.7	2,082,000	0.9	60.8	−2.4	61.6	−5.5
Gas, illuminating and heating	28	926	0.4	3,446,000	0.7	2,441,000	1.0	34.7	80.0	40.9	63.6
Wirework, including wire rope and cable	28	1,420	0.7	3,345,000	0.7	1,697,000	0.7	28.7	108.7	25.6	97.8
Boxes, fancy and paper	38	1,849	0.9	2,911,000	0.6	1,525,000	0.7	5.2	34.6	14.1	17.7
Tobacco manufactures	265	1,513	0.7	2,738,000	0.6	1,674,000	0.7	16.5	32.3	11.7	35.7
Flour-mill and gristmill products	98	145	0.1	2,024,000	0.4	293,000	0.1	2.1	16.6	0.3	−3.0
Clothing, women's	17	1,382	0.7	1,716,000	0.4	918,000	0.4	56.3	78.5	62.8	44.6
Boots and shoes, including cut stock and findings	10	520	0.2	1,658,000	0.3	570,000	0.2	25.7	−13.1	14.2	−5.8
Buttons	20	1,057	0.5	1,635,000	0.3	900,000	0.4	13.1	33.0	6.3	28.9
Cars and general shop construction and repairs by steam-railroad companies	5	1,226	0.6	1,580,000	0.3	820,000	0.3	−26.7	−11.3	−33.4	15.8
Fertilizers	12	295	0.1	1,573,000	0.3	482,000	0.2	66.8	141.2	15.3	156.4
Paint and varnish	17	236	0.1	1,543,000	0.3	718,000	0.3	199.6	28.8	237.1	28.3
Paper goods, not elsewhere specified	10	632	0.3	1,521,000	0.3	638,000	0.3	−27.1	40.8	−1.7	17.6
Hat and cap materials	14	478	0.2	1,508,000	0.3	806,000	0.3	82.6	40.5	107.2	75.2
Clothing, men's, including shirts	28	751	0.4	1,362,000	0.3	636,000	0.3	−5.6	56.8	−10.4	45.8
Patent medicines and compounds and druggists' preparations	64	237	0.1	1,342,000	0.3	854,000	0.4	31.2	−27.0	16.5	−24.2
Marble and stone work	86	782	0.4	1,237,000	0.3	867,000	0.4	−17.4	76.7	−20.8	83.7
Confectionery	22	233	0.1	1,233,000	0.3	344,000	0.1	93.9	45.9	22.4	26.6
Carriages and wagons and materials	92	578	0.3	1,077,000	0.2	694,000	0.3	−51.0	−30.6	−50.5	−27.0
Leather, tanned, curried, and finished	8	150	0.1	1,047,000	0.2	242,000	0.1	40.0	−16.0	18.0	−2.4
Furniture and refrigerators	25	298	0.1	786,000	0.2	418,000	0.2	41.1	13.9	31.0	35.7
Butter, cheese, and condensed milk	30	105	(2)	745,000	0.2	122,000	0.1	−8.6	−25.5	−15.9	−31.6
Fancy articles, not elsewhere specified	8	397	0.2	730,000	0.1	307,000	0.1	53.0	32.1	26.3	24.6
Leather goods	18	272	0.1	588,000	0.1	258,000	0.1	8.5	−60.3	4.9	−41.8
Cordage and twine and jute and linen goods	8	286	0.1	561,000	0.1	130,000	0.1	55.4	26.7	26.2	−2.8
Lime	10	325	0.2	553,000	0.1	278,000	0.1	86.8	3.1	87.8	7.2
All other industries	950	35,671	16.9	93,280,000	19.0	40,093,000	17.2	.....	.....	.....	.....

[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.

Textiles.—The textile manufactures of the state, consisting of cotton goods, including cotton small wares; silk and silk goods, including throwsters; woolen, worsted, and felt goods; and hosiery and knit goods, but exclusive of cordage and twine, and shoddy, form its leading manufacturing industry. Combined, these four branches gave employment to an average of 34,192 wage earners during 1909, or 16.2 per cent of the total for all manufacturing industries in the state, and the value of their products amounted to $70,459,000, or 14.4 per cent of the total value of manufactured products. Of the total value of products for these four branches of the textile industry, 34.4 per cent was contributed by the cotton mills, 29.9 per cent by the silk mills, 27.5 per cent by the woolen and worsted mills, and 8.2 per cent by the hosiery and knitting mills.

Brass and bronze products.—This is the leading individual industry of the state, measured by value of products, reporting 13.7 per cent of the total value of products for the state in 1909. It includes the manufacture of rolled brass and copper, which composed the major portion of the product, and of brass ware, in the manufacture of which Connecticut is particularly prominent. Brass castings, brass finishing, and bronze castings, also included in this classification, form only a small part of the total output. At the census of 1904 Connecticut reported more than four-fifths of the total value of the output of rolled brass and copper of the country, and also led in the production of brass ware, with over one-half of the total value of output. In 1909 it ranked first among the states in the combined value of brass and bronze products, reporting 44.6 per cent of the total for the United States.

Foundry and machine-shop products.—This industry is of greater importance in the state than is indicated by the statistics, as some machine shops manufactured a distinctive product and were assigned to other classifications. The most important product consists of hardware, of which more than two-fifths of the total value reported for the United States in 1909 was reported from Connecticut. Some of the largest establishments, other than those producing hardware, were engaged in the manufacture of textile and metal-working machinery and internal-combustion engines.

Firearms and ammunition.—This industry is now mainly centralized in New Haven and Bridgeport. The increase in the value of products was much greater from 1899 to 1904 than from 1904 to 1909, being 57.2 per cent and 12.3 per cent, respectively, for the two five-year periods. In 1904, exclusive of governmental establishments, almost four-fifths of the total value of the ammunition and over one-fourth of the total value of the firearms manufactured in the United States was reported from establishments located in this state. Connecticut was the leading state in the total value of products reported for the combined industries in 1909.

Silverware and plated ware.—In 1909 the combined products of this industry for the state formed over one-third of the total value for the country. The manufacture of plated ware comprises the principal part of this industry. In 1904 and 1909 over two-thirds of the total value of plated ware in the United States was reported from Connecticut.

Corsets.—Of the 17 establishments reported in 1909 as primarily engaged in the manufacture of corsets, 5 were located in Bridgeport and 9 in New Haven. The value of products for the industry increased from $5,591,000 in 1904 to $12,815,000 in 1909, a gain of $7,224,000, or 129.2 per cent, for the five years. This increase is noteworthy in view of the fact that from 1899 to 1904 the value of products decreased 18.3 per cent. In 1904 and in 1909 Connecticut was the leading state in the production of corsets, reporting over one-third of the total value of products for the United States in both years.

Automobiles, including bodies and parts.—This industry includes 8 establishments reporting the manufacture of automobiles and 20 establishments (with about one-fourth of the total value of products for the whole industry) reporting automobile bodies and parts as the most important product. A marked increase is shown in value of products and in value added by manufacture from 1904 to 1909.

Cutlery and tools, not elsewhere specified.—Connecticut ranked second in this industry in the United States in 1909, and in 1904 it ranked first among the states in the value of its manufactures of cutlery and edge tools, and fourth in tools "not elsewhere specified."

Hats, fur-felt.—The manufacture of hats in Connecticut was begun in 1780 at Danbury, which city is still the leading center of the industry. In 1904 and in 1909 this state was second in importance in the industry, with 23.6 per cent of the total value of products for the United States in 1904 and 21.7 per cent in 1909.

Electrical machinery, apparatus, and supplies.—The exceptionally rapid progress during recent years in the use of electricity has created a demand for appliances with which to utilize this energy. The establishments engaged in this industry in Connecticut are devoted primarily to the production of insulated wires and cables and electric-light fixtures.

Lumber and timber products.—Under this classification are included the statistics for establishments engaged in logging, as well as for sawmills, planing mills, and wooden packing-box factories. About three-fifths of the total value of products reported for the entire industry in the state was contributed by the planing-mill branch.

Clocks and watches, including cases and materials.—The state ranked first in the total value of products for this industry in 1909. Nine of the 16 establishments in the state were engaged primarily in the manufacture of clocks. This branch of the industry in Connecticut dates from early in 1800, and much of its early development took place in that state, where it has been largely centralized. In 1904 nearly three-fourths of the total value of the output of clocks in the United States was reported from Connecticut factories.

Of the first 10 industries shown separately in the preceding table, the cotton-goods industry is the only one which occupies the same position when measured by value added by manufacture as when measured by value of products. The positions of the first two, the foundry and machine-shop and the brass and bronze products industries, are reversed; the firearms and ammunition industry exchanges places with the silk industry; and the silverware and plated-ware industry takes sixth place instead of the woolen, worsted, and felt goods industry, which latter falls to ninth place. The cutlery industry becomes seventh in order, having advanced from tenth place, and the automobile industry moves from ninth to eighth place, while the manufacture of corsets drops from eighth to tenth place.

This table shows also the percentages of increase for these leading industries in respect to value of products and value added by manufacture. The automobile industry showed greater rates of increase from 1904 to 1909 in value of products and in value added by manufacture than any other of the important industries shown separately in the table, namely, 341.3 per cent and 360 per cent, respectively. Remarkable increases in both these items also are shown for the manufacture of silverware and plated ware, corsets, electrical machinery, apparatus, and supplies, typewriters and typewriter supplies, and paint and varnish.

Some striking differences appear among the several industries as respects the increase from 1899 to 1904 as compared with that from 1904 to 1909. All but six of the industries listed separately showed an increase from 1904 to 1909 in value of products, and all but eight an increase in value added by manufacture. None of the industries showing decreases are among the first 15 industries shown separately. From 1899 to 1904, 11 of the industries given separately showed losses in value of products, and 12 showed decreases in value added by manufacture. Of the 15 most important industries, measured by value of products, which are presented separately, the silverware and the corset industries were the only ones that showed decreases during this period.

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	**233,871**	**176,478**	**57,393**
Proprietors and officials	9,030	8,666	364
Proprietors and firm members	3,468	3,311	157
Salaried officers of corporations	2,124	2,088	36
Superintendents and managers	3,438	3,267	171
Clerks	14,049	10,153	3,896
Wage earners (average number)	210,792	157,659	53,133
16 years of age and over	205,371	154,724	50,647
Under 16 years of age	5,421	2,935	2,486

The average number of persons engaged in manufactures during 1909 was 233,871, of whom 210,792 were wage earners. Of the remainder, 9,030 were proprietors and officials and 14,049 were clerks. Corresponding figures for individual industries will be found in Table II, page 156.

The next 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 19 important industries individually.

Of the total number of persons engaged in all manufacturing industries, 3.9 per cent were proprietors and officials, 6 per cent clerks, and 90.1 per cent wage earners. In the bakery and the printing and publishing industries 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 these industries falling into the class of proprietors and officials is much higher than for most other industries or for all industries combined. Similar conditions prevail to some extent in the manufacture of lumber and timber products, where the proprietors and officials formed 13.1 per cent of the total number of persons engaged.

On account of the large average number of wage earners employed in the textile, the corset, and the brass and bronze industries, they show the smallest proportions of proprietors and officials.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries	**233,871**	**3.9**	**6.0**	**90.1**
Automobiles, including bodies and parts	4,444	3.5	10.7	85.8
Brass and bronze products	17,890	1.6	4.4	94.0
Bread and other bakery products	2,611	19.7	8.7	71.6
Clocks and watches, including cases and materials	6,195	2.2	3.3	94.4
Corsets	7,177	1.9	5.5	92.6
Cotton goods, including cotton small wares	14,887	1.5	2.1	96.5
Cutlery and tools, not elsewhere specified	8,094	2.3	4.4	93.2
Electrical machinery, apparatus, and supplies	4,120	4.1	10.8	85.1
Firearms and ammunition	9,205	2.2	5.1	92.7
Foundry and machine-shop products	42,101	3.0	7.4	89.6
Hats, fur-felt	5,877	3.9	7.3	88.8
Hosiery and knit goods	3,524	1.6	3.6	94.8
Lumber and timber products	4,219	13.1	4.1	82.8
Musical instruments, pianos and organs and materials	2,469	2.6	4.0	93.3
Paper and wood pulp	1,920	6.2	4.2	89.6
Printing and publishing	4,103	12.8	17.0	70.1
Silk and silk goods, including throwsters	9,385	1.8	5.4	92.7
Silverware and plated ware	6,812	2.0	6.7	91.4
Woolen, worsted, and felt goods, and wool hats	8,140	2.8	1.5	95.7
All other industries	70,698	5.2	6.5	88.3

The next 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 number employed for the year is also given in each case.

For all industries combined, 73.4 per cent of the average number of wage earners were males 16 years of age and over, 24 per cent females 16 years of age and over, and 2.6 per cent persons under the age of 16. Nearly one-third of the total number of female wage earners were employed in the textile industries. In the cotton-goods industry nearly two-fifths of the wage earners were women 16 years of age and over; in the hosiery and knit-goods industry, about two-thirds; in the silk industry, nearly one-half; and in the woolen and worsted industry, over one-fourth. The manufacture of corsets shows the largest proportion of this class of female wage earners, namely, 82.1 per cent.

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	**210,792**	**73.4**	**24.0**	**2.6**
Automobiles, including bodies and parts	3,815	98.8	0.7	0.6
Brass and bronze products	16,817	88.3	10.4	1.3
Bread and other bakery products	1,809	87.2	12.0	0.9
Clocks and watches, including cases and materials	5,851	65.4	30.9	3.7
Corsets	6,643	14.5	82.1	3.4
Cotton goods, including cotton small wares	14,360	55.8	39.4	4.8
Cutlery and tools, not elsewhere specified	7,547	89.5	9.3	1.2
Electrical machinery, apparatus, and supplies	3,505	64.1	31.1	4.8
Firearms and ammunition	8,533	75.4	23.6	1.0
Foundry and machine-shop products	37,736	89.2	8.9	2.0
Hats, fur-felt	5,217	70.2	29.1	0.7
Hosiery and knit goods	3,340	30.8	66.1	3.1
Lumber and timber products	3,495	98.7	0.9	0.3
Musical instruments, pianos and organs and materials	2,304	84.2	13.5	2.4
Paper and wood pulp	1,720	84.2	15.1	0.7
Printing and publishing	2,878	77.4	19.3	3.2
Silk and silk goods, including throwsters	8,703	46.1	49.6	4.3
Silverware and plated ware	6,223	80.5	17.1	2.4
Woolen, worsted, and felt goods, and wool hats	7,789	66.4	28.9	4.7
All other industries	62,447	71.5	25.7	2.8

[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	**233,871**	**100.0**	**198,046**	**100.0**	**18.1**
Proprietors and firm members	3,468	1.5	2,918	1.5	18.8
Salaried employees	19,611	8.4	13,523	6.8	45.0
Wage earners (average number)	210,792	90.1	181,605	91.7	16.1

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 next 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.)

This table indicates that for all industries combined there has been only a slight change during the 10 years in the proportion of male and female wage earners, although there has been a decided actual increase in the number of both classes of employees. In 1909 males 16 years of age and over formed 73.4 per cent of all wage earners, as compared with 73.1 in 1904 and 72.3 in 1899. During the same period there has been a small actual and proportional increase in the employment of persons under 16 years of age.

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total	**210,792**	**100.0**	**181,605**	**100.0**	**159,733**	**100.0**
16 years of age and over	205,371	97.4	177,304	97.6	156,319	97.9
Male	154,724	73.4	132,750	73.1	115,499	72.3
Female	50,647	24.0	44,554	24.5	40,820	25.6
Under 16 years of age	5,421	2.6	4,301	2.4	3,414	2.1

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 156, are 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.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January	201,545	89.2	July	206,295	91.3
February	199,325	88.2	August	211,295	93.6
March	202,523	89.7	September	218,037	96.8
April	203,599	90.1	October	222,052	98.3
May	205,198	90.9	November	224,439	99.4
June	208,732	92.4	December	225,862	100.0

There are no seasonal industries of importance in Connecticut, and few of the important industries show conditions which differ from those for all industries combined.

The number of wage earners employed in all industries combined was smallest in February. With the exception of July, the increase was steady month by month to the end of the year, when the largest number was employed. During the month of least employment 11.8 per cent fewer wage earners were employed than during the month of greatest employment.

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 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	**310,792**	**6,634**	**11,068**	**33,849**	**117,295**	**38,978**	**1,008**	**499**	**541**
Automobiles, including bodies and parts	3,815	.....	72	1,308	884	1,461	.....	.....	.....
Boots and shoes, including cut stock and findings	520	.....	.....	40	480	.....	.....	.....	.....
Boxes, fancy and paper	1,849	11	110	79	901	658	.....	.....	.....
Brass and bronze products	16,817	24	198	323	13,441	2,831	.....	.....	.....
Bread and other bakery products	1,869	188	80	206	80	1,238	46	27	4
Butter, cheese, and condensed milk	105	32	.....	4	10	44	6	4	5
Buttons	1,057	1	184	19	387	466	.....	.....	.....
Carriages and wagons and materials	578	6	6	288	125	153	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies	1,226	651	108	384	.....	.....	23	.....	.....
Clocks and watches, including cases and materials	5,851	.....	.....	3,362	1,306	1,183	.....	.....	.....
Clothing, men's, including shirts	751	28	11	61	584	47	20	.....	.....
Clothing, women's	1,382	2	678	16	681	5	.....	.....	.....
Confectionery	233	5	20	12	166	28	2	.....	.....
Copper, tin, and sheet-iron products	2,475	189	145	51	1,293	411	386	.....	.....
Cordage and twine and jute and linen goods	286	.....	.....	.....	283	3	.....	.....	.....
Corsets	6,643	.....	1,476	.....	5,165	2	.....	.....	.....
Cotton goods, including cotton small wares	14,360	.....	33	.....	13,448	879	.....	.....	.....
Cutlery and tools, not elsewhere specified	7,547	248	342	1,022	4,716	1,219	.....	.....	.....
Dyeing and finishing textiles	1,719	.....	.....	2	351	1,366	.....	.....	.....
Electrical machinery, apparatus, and supplies	3,505	7	.....	592	2,633	273	.....	.....	.....
Fancy articles, not elsewhere specified	307	.....	70	.....	22	283	13	.....	.....
Fertilizers	205	.....	.....	45	96	154	.....	.....	.....
Firearms and ammunition	8,533	.....	.....	708	7,825	.....	.....	.....	.....
Flour-mill and gristmill products	145	23	.....	4	4	114	.....	.....	.....
Foundry and machine-shop products	37,736	187	1,235	13,500	18,682	4,126	6	.....	.....
Furniture and refrigerators	208	.....	.....	82	168	58	.....	.....	.....
Gas, illuminating and heating	926	11	.....	1	57	173	264	.....	420
Hat and cap materials	478	4	6	.....	97	371	.....	.....	.....
Hats, fur-felt	5,217	588	3,016	22	1,468	123	.....	.....	.....
Hosiery and knit goods	3,340	2	.....	441	2,622	275	.....	.....	.....
Leather goods	272	.....	6	160	82	24	.....	.....	.....
Leather, tanned, curried, and finished	150	.....	.....	.....	95	55	.....	.....	.....
Lime	325	.....	10	24	179	39	.....	.....	67
Liquors, malt	475	85	145	215	.....	30	.....	.....	.....
Lumber and timber products	3,495	365	317	1,248	113	1,452	.....	.....	.....
Marble and stone work	782	519	56	69	114	24	.....	.....	.....
Musical instruments, pianos and organs and materials	2,304	.....	.....	750	356	1,198	.....	.....	.....
Needles, pins, and hooks and eyes	2,648	.....	.....	.....	334	2,314	.....	.....	.....
Paint and varnish	236	78	40	17	8	93	.....	.....	.....
Paper and wood pulp	1,720	.....	.....	229	112	542	567	270	.....
Paper goods, not elsewhere specified	632	.....	7	225	396	4	.....	.....	.....
Patent medicines and compounds and druggists' preparations	237	48	32	41	108	5	3	.....	.....
Printing and publishing	2,878	1,372	650	474	346	27	.....	.....	.....
Silk and silk goods, including throwsters	8,703	.....	.....	.....	8,064	639	.....	.....	.....
Silverware and plated ware	6,223	.....	230	525	3,561	1,907	.....	.....	.....
Slaughtering and meat packing	432	3	295	26	30	46	19	4	.....
Tobacco manufactures	1,513	1,442	31	10	24	6	.....	.....	.....
Typewriters and supplies	2,034	.....	171	2,631	132	.....	.....	.....	.....
Wirework, including wire rope and cable	1,420	.....	26	34	881	479	.....	.....	.....
Woolen, worsted, and felt goods, and wool hats	7,789	.....	.....	87	4,741	2,961	.....	.....	.....
All other industries	35,671	515	1,198	4,422	19,555	9,189	553	194	45

It is evident from these figures that for the great majority of wage earners employed in the manufacturing industries of Connecticut the prevailing hours of labor range from 54 to 60 a week, only 8.4 per cent of the total number being employed in establishments where the prevailing hours are less than 54 a week, and but 1.4 per cent in establishments where more than 60 hours a week prevail.

The foundries and machine shops gave employment to 37,736 wage earners, or more than twice as many as any other single industry in the state, and 96.2 per cent of these were employed from 54 to 60 hours per week, inclusive. In most of the other industries employing large numbers of wage earners, employment was for a week of over 54 but less than 60 hours. Of those employed in the tobacco manufacturing industry, 95.3 per cent were employed 48 hours per week or less, and of those employed in railroad repair shops and in printing and publishing, 53.1 per cent and 47.7 per cent, respectively. Nearly 70 per cent of the wage earners employed in making fur-felt hats worked less than 54 hours a week. The majority of the wage earners in the bakery and flour-mill and gristmill industries and in establishments engaged in the manufacture of needles, pins, and hooks and eyes were in plants operating 60 hours a week, while for the majority of the wage earners in the gas industry the prevailing hours of labor were over 60 a week.

Location of establishments.—The next table shows the extent to which the manufactures of Connecticut are centralized in cities or boroughs of 10,000 inhabitants 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 or boroughs that came within the group having over 10,000 inhabitants.

ITEM.	Year.	Aggregate.	CITIES AND BOROUGHS HAVING A POPULATION OF 10,000 AND OVER.								DISTRICTS OUTSIDE OF CITIES AND BOROUGHS HAVING A POPULATION OF 10,000 AND OVER.	
			Total.		10,000 to 25,000.		25,000 to 100,000.		100,000 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.	Number or amount.	Per cent of total.
Population	1910	1,114,756	630,732	56.6	126,698	11.4	268,375	24.1	235,659	21.1	484,024	43.4
	1900	908,420	445,581	49.0	114,851	12.6	222,703	24.5	108,027	11.9	462,839	50.9
Number of establishments	1909	4,251	2,367	55.7	528	12.4	882	20.7	957	22.5	1,884	44.3
	1899	3,382	1,710	50.6	459	13.6	814	24.1	437	12.9	1,672	49.4
Average number of wage earners	1909	210,792	138,499	65.7	29,038	13.8	60,139	28.5	49,322	23.4	72,293	34.3
	1899	159,733	91,209	57.1	24,656	15.4	48,959	30.6	17,594	11.0	68,524	42.9
Value of products	1909	$490,271,695	$334,336,355	68.2	$79,549,035	16.2	$138,107,117	28.2	$116,680,203	23.8	$155,935,340	31.8
	1899	315,106,150	193,446,554	61.4	59,755,550	19.0	98,791,567	31.4	34,899,437	11.1	121,659,596	38.6
Value added by manufacture	1909	233,012,302	158,754,210	68.1	31,797,487	13.6	72,542,476	31.1	54,414,247	23.4	74,258,092	31.9
	1899	145,434,502	89,456,068	61.5	23,354,908	16.1	47,337,239	32.5	18,763,921	12.9	55,978,434	38.5

In 1909, 68.2 per cent of the total value of products was reported from cities and boroughs having over 10,000 inhabitants, and 65.7 per cent of the average number of wage earners were employed in these places. The figures indicate that not only has a considerable change taken place during the last decade in the relative importance of the manufacturing industries of the different groups of cities and boroughs having over 10,000 inhabitants, but the combined industries of such places have gained considerably on those of the districts outside.

The increase in the population of the different places has affected the grouping in the table. In 1900 Meriden and Stamford were included in the group of cities and boroughs having from 10,000 to 25,000 inhabitants, but both now belong to the group made up of cities having between 25,000 and 100,000 inhabitants. New Haven was the only city in the state in 1900 which had over 100,000 inhabitants, but in 1910 Bridgeport had reached that group. Prior to 1910 Middletown, Torrington, and Willimantic each had less than 10,000 inhabitants, and their statistics, therefore, were included with the districts outside in 1899.

The group of cities having over 100,000 inhabitants shows a decided gain in its proportions of the total, largely as the result of the addition of Bridgeport, while the other two groups show losses. Of the total value of the products reported for the state in 1909, 16.2 per cent was reported from the eight cities and boroughs having from 10,000 to 25,000 inhabitants, 28.2 per cent from the five cities having between 25,000 and 100,000 inhabitants, and 23.8 per cent from the two cities having more than 100,000 inhabitants. The corresponding proportions for 1899 were 19 per cent, 31.4 per cent, and 11.1 per cent, respectively.

The population for 1910 and 1900 of the 15 cities and boroughs which had 10,000 inhabitants or over in 1910 is given in the next statement.

CITY OR BOROUGH.	1910	1900	CITY OR BOROUGH.	1910	1900
New Haven	133,605	108,027	Danbury	20,234	16,537
Bridgeport	102,054	70,996	New London	19,659	17,548
Hartford	98,915	79,850	Torrington	15,483	8,360
Waterbury	73,141	45,859	Ansonia	15,152	12,681
New Britain	43,916	25,998	Naugatuck	12,722	10,541
Meriden	27,265	24,296	Middletown	11,851	9,589
Stamford	25,138	15,997	Willimantic	11,230	8,937
Norwich	20,367	17,251			

The relative importance of each of these 15 cities and boroughs in the manufacturing industries is shown in the following table, in which the value of products and average number of wage earners are shown for each city for 1909, 1904, and 1899.

CITY OR BOROUGH.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
Bridgeport	25,775	19,492	17,038	$65,608,806	$44,586,519	$33,536,276
New Haven	23,547	21,437	17,594	51,071,397	39,666,118	34,899,437
Waterbury	20,170	15,406	13,225	50,349,816	32,367,359	30,330,300
Hartford	14,627	11,221	10,677	40,679,598	25,973,651	23,828,961
New Britain	13,513	10,073	8,019	22,021,241	14,959,543	11,096,030
Ansonia	4,127	3,394	3,288	20,088,269	19,132,455	18,515,043
Meriden	7,845	7,281	6,689	16,316,918	13,703,548	11,750,440
Torrington	4,488	4,025	3,161	12,549,872	9,674,124	9,178,320
Naugatuck	3,464	3,028	3,160	11,032,836	11,009,573	8,886,676
Danbury	4,810	4,515	3,939	10,317,875	8,065,652	6,527,163
Norwich	4,470	3,706	3,172	9,388,960	6,022,391	5,935,160
Stamford	3,984	3,341	2,445	8,739,544	5,890,416	3,920,010
Willimantic	3,020	2,852	2,258	6,733,185	4,902,447	3,022,862
Middletown[1]	2,434	2,318	2,495	4,954,799	4,351,201	4,152,071
New London	2,225	2,554	1,963	4,483,239	4,709,628	4,221,058

[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 and borough for which comparable figures are available, except New London, shows an increase in value of products for the 10 years and for each of the five-year periods. New London shows a decrease of 4.8 per cent from 1904 to 1909, due to the decline in shipbuilding. The largest relative gains in value of products during the decade were as follows: Stamford, 122.9 per cent; Willimantic, 122.7 per cent; New Britain, 98.5 per cent; and Bridgeport, 95.6 per cent. For most of the cities shown in the table the percentages of increase in value of products were greater from 1904 to 1909 than from 1899 to 1904.

During the later period the average number of wage earners employed in the manufacturing industries of each place, except New London and Ansonia, increased much less, relatively, than the value of products. In New London there was an actual decrease in the number of wage earners.

Bridgeport, the foremost city of the state in manufactures, shows an increase in 1909, as compared with 1904, of 47.1 per cent in value of products and 32.2 per cent in average number of wage earners. The gain in value of products was due largely to the increases in the output of automobiles, corsets, electrical machinery, foundry and machine-shop products, and gold and silver reducing and refining. Compared with other manufacturing cities of the country, Bridgeport ranked thirty-ninth in 1899, thirty-fifth in 1904, and thirty-third in 1909 in value of products. In 1909 the foundries and machine shops of this city turned out products valued at $9,752,000, or 14.9 per cent of the corresponding total for the state. The corset industry was also of considerable importance, with an output valued at $6,899,000, or 53.8 per cent of the total for this industry in the state, while the establishments engaged in the manufacture of electrical machinery, apparatus, and supplies reported products valued at $3,321,000, or 33.8 per cent of the state total. Other industries of importance in which this city produced over half of the value of products for the state are the manufacture of phonographs and graphophones and of sewing machines and attachments.

New Haven, the second city of the state in importance when measured by value of products, shows an increase from 1904 to 1909 of 28.8 per cent in value of products and 9.8 per cent in average number of wage earners. These gains were due largely to increases in the production of automobiles, firearms and ammunition, corsets, rubber goods, and foundry and machine-shop products (including hardware), and in the output of slaughtering and meat-packing establishments. The value of the clocks and watches made in New Haven during 1909 is considerable, but exact figures can not be given without disclosing individual operations. The statistics for some of the most important industries are included with "All other industries" because they can not be presented separately in Table I without disclosing the operations of individual establishments. Among these industries, each of which reported products amounting to more than $1,000,000 in value, are automobiles, including bodies and parts; boots and shoes, including cut stock and findings; boots and shoes, rubber; boxes, fancy and paper; clocks and watches, including cases and materials; confectionery; corsets; firearms and ammunition; gas, illuminating and heating; rubber goods, not elsewhere specified; and slaughtering and meat packing.

Waterbury shows an increase of 55.6 per cent in value of products and 30.9 per cent in number of wage earners in 1909 as compared with 1904. Unlike the manufactures of the other cities of importance in the state, those of Waterbury are concentrated largely in a single industry, that of brass and bronze manufactures, which in 1909 reported products amounting to $31,462,000, or 62.5 per cent of the total for the city. Twenty-four and three-tenths per cent of the total value of rolled brass and copper and 42.2 per cent of the total value of brass ware manufactured in the United States during 1904 were reported from this city, and in 1909, of the value of all brass and bronze products, 21 per cent was reported from this city. Over two-fifths of the total value of clocks and watches manufactured in the state during 1909 was reported from Waterbury. Other industries of importance in the city are the manufacture of foundry and machine-shop products; gas and electric fixtures and lamps and reflectors; needles, pins, and hooks and eyes; and buttons.

Hartford shows an increase of 56.6 per cent in value of products and 30.4 per cent in number of wage earners from 1904 to 1909. These gains are due largely to the increase in the manufacture of automobiles, foundry and machine-shop products, rubber goods, and typewriters and typewriter supplies, the four leading industries in the city. The major portion of the total value of the output for the state of dentists' materials, nails and spikes not made in steel works or rolling mills, leather belting, and machine screws was reported from Hartford.

Of the other cities given separately in the preceding table Norwich shows the greatest relative increase from 1904 to 1909 in value of products, 55.9 per cent, and New Britain the greatest in number of wage earners, 34.2 per cent. The manufacturing interests of New Britain are so centralized in the manufacture of hardware that the output of this industry represents 52.9 per cent of the total value of products for the city. Forty-four and two-tenths per cent of the value of the cutlery and tools made in the state in 1909 was reported from New Britain. In Norwich the textile industries are of most importance.

The manufacture of brass and bronze products is the most important industry in Ansonia and in Torrington. The silverware and plated-ware industry is the most important in Meriden. In 1909 this city reported 65.9 per cent of the total value of gas and electric fixtures and lamps and reflectors manufactured in the state. The leading industries in Naugatuck are the manufacture of rubber boots and shoes and of rubber goods. The manufacture of men's furnishing goods (elastic goods) is the most important industry in Middletown. In Danbury the leading industry is the manufacture of

fur-felt hats, the output of which in 1909 was valued at $7,114,683, and formed 68.4 per cent of the total value reported for this industry in the state. The manufacture of locks makes the foundry and machine-shop industry the most important in Stamford; and the textile industries predominate in Willimantic and in New London.

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	4,251	210,792	$490,271,695	$233,012,302
1904	3,477	181,605	369,082,091	177,780,210
Individual:				
1909	2,119	12,944	28,436,151	14,810,245
1904	1,737	14,591	28,550,567	14,552,896
Firm:				
1909	589	8,752	19,807,920	9,793,598
1904	519	11,008	25,395,624	10,628,148
Corporation:				
1909	1,501	188,932	441,267,987	208,213,680
1904	1,187	155,875	314,484,099	152,413,853
Other:				
1909	42	164	759,637	194,779
1904	34	131	651,801	185,313
Per cent of total:				
1909	100.0	100.0	100.0	100.0
1904	100.0	100.0	100.0	100.0
Individual:				
1909	49.8	6.1	5.8	6.4
1904	50.0	8.0	7.7	8.2
Firm:				
1909	13.9	4.2	4.0	4.2
1904	14.9	6.1	6.9	6.0
Corporation:				
1909	35.3	89.6	90.0	89.4
1904	34.1	85.8	85.2	85.7
Other:				
1909	1.0	0.1	0.2	0.1
1904	1.0	0.1	0.2	0.1
Brass and bronze products, 1909	80	16,817	$66,932,969	$19,069,029
Individual	29	279	849,884	401,766
Firm	8	57	134,988	78,757
Corporation	43	16,481	65,948,097	18,588,506
Per cent of total	100.0	100.0	100.0	100.0
Individual	36.2	1.7	1.3	2.1
Firm	10.0	0.3	0.2	0.4
Corporation	53.8	98.0	98.5	97.5
Bread and other bakery products, 1909	431	1,869	$7,309,817	$2,846,908
Individual	360	1,194	4,735,935	1,892,935
Firm	46	218	824,266	318,204
Corporation	25	457	1,749,616	635,769
Per cent of total	100.0	100.0	100.0	100.0
Individual	83.5	63.9	64.8	66.5
Firm	10.7	11.7	11.3	11.2
Corporation	5.8	24.5	23.9	22.3
Cotton goods, including cotton small wares, 1909	52	14,360	$24,231,881	$12,272,159
Individual	7	457	1,215,338	436,251
Firm	7	367	487,231	195,691
Corporation	38	13,536	22,529,312	11,640,217
Per cent of total	100.0	100.0	100.0	100.0
Individual	13.5	3.2	5.0	3.6
Firm	13.5	2.6	2.0	1.6
Corporation	73.1	94.3	93.0	94.8
Cutlery and tools, not elsewhere specified, 1909	82	7,547	$10,716,918	$7,406,943
Individual	23	157	255,121	177,303
Firm	7	48	72,660	52,559
Corporation	52	7,342	10,389,137	7,177,081
Per cent of total	100.0	100.0	100.0	100.0
Individual	28.0	2.1	2.4	2.4
Firm	8.5	0.6	0.7	0.7
Corporation	63.4	97.3	96.9	96.9
Electrical machinery, apparatus, and supplies, 1909	41	3,505	$9,824,373	$4,613,069
Individual[1]	6	22	49,504	30,093
Corporation	35	3,483	9,774,869	4,582,976
Electrical machinery, etc.—Continued.				
Per cent of total	100.0	100.0	100.0	100.0
Individual[1]	14.6	0.6	0.5	0.7
Corporation	85.4	99.4	99.5	99.3
Foundry and machine-shop products, 1909	403	37,736	$65,535,155	$40,715,099
Individual	108	875	1,912,871	1,075,623
Firm	42	463	1,117,841	577,430
Corporation	253	36,398	62,504,443	39,062,046
Per cent of total	100.0	100.0	100.0	100.0
Individual	26.8	2.3	2.9	2.6
Firm	10.4	1.2	1.7	1.4
Corporation	62.8	96.5	95.4	95.9
Hats, fur-felt, 1909	80	5,217	$10,399,860	$5,550,877
Individual	20	248	531,682	223,714
Firm	16	1,034	2,120,383	1,112,795
Corporation	44	3,935	7,747,795	4,214,368
Per cent of total	100.0	100.0	100.0	100.0
Individual	25.0	4.8	5.1	4.0
Firm	20.0	19.8	20.4	20.1
Corporation	55.0	75.4	74.5	75.9
Lumber and timber products, 1909	393	3,495	$7,845,521	$3,927,063
Individual	257	1,635	2,779,570	1,665,721
Firm	84	611	1,313,973	646,854
Corporation	52	1,249	3,751,969	1,614,488
Per cent of total	100.0	100.0	100.0	100.0
Individual	65.4	46.8	35.4	42.4
Firm	21.4	17.5	16.7	16.5
Corporation	13.2	35.7	47.8	41.1
Printing and publishing, 1909	363	2,878	$6,370,450	$4,601,233
Individual	211	768	1,655,722	1,188,745
Firm	40	256	407,612	310,114
Corporation	94	1,823	4,208,438	3,035,801
Other	18	31	98,678	66,573
Per cent of total	100.0	100.0	100.0	100.0
Individual	58.1	26.7	26.0	25.8
Firm	11.0	8.9	6.4	6.7
Corporation	26.9	63.3	66.1	66.0
Other	5.0	1.1	1.5	1.4
Silk and silk goods, including throwsters, 1909	47	8,703	$21,062,687	$9,228,342
Individual	8	633	1,030,757	583,018
Firm	10	623	1,109,736	512,329
Corporation	29	7,447	18,922,194	8,132,995
Per cent of total	100.0	100.0	100.0	100.0
Individual	17.0	7.3	4.9	6.3
Firm	21.2	7.2	5.3	5.6
Corporation	61.7	85.6	89.8	88.1
Silverware and plated ware, 1909	31	6,223	$15,836,608	$8,604,607
Individual[1]	4	31	49,601	25,723
Corporation	27	6,192	15,787,007	8,578,884
Per cent of total	100.0	100.0	100.0	100.0
Individual[1]	12.9	0.5	0.3	0.3
Corporation	87.1	99.5	99.7	99.7
Woolen, worsted, and felt goods, and wool hats, 1909	56	7,789	$19,363,228	$6,525,086
Individual	9	665	1,484,710	520,444
Firm	7	395	972,985	448,798
Corporation	40	6,729	16,905,533	5,555,844
Per cent of total	100.0	100.0	100.0	100.0
Individual	16.1	8.5	7.7	8.0
Firm	12.5	5.1	5.0	6.9
Corporation	71.4	86.4	87.3	85.1

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

The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined 35.3 per cent of the total number of establishments were in 1909 under corporate ownership, as against 64.7 per cent under all other forms. The corresponding figures for 1904 were 34.1 per cent and 65.9 per cent, respectively. In 1909 the establishments operated by corporations reported 90 per cent of the total value of manufactured products for the state, as against 10 per cent for those under all other forms of ownership, while in 1904 the corresponding figures were 85.2 per cent and 14.8 per cent, respectively. This gain in the relative importance of establishments under corporate ownership was due largely to increases in the manufacture of automobiles, brass and bronze products, corsets, cotton goods, firearms and ammunition, foundry and machine-shop products, silk and silk goods, and silverware and plated ware. All but three-tenths of 1 per cent of the value of silverware and plated ware and all but five-tenths of 1 per cent of the value of electrical machinery, apparatus, and supplies reported for 1909 were returned by establishments under corporate ownership. There are three other industries shown in the table in which over 95 per cent of the value of products was reported by this class of establishments.

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 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 4,251 establishments only 93, or 2.2 per cent, had a value of products exceeding $1,000,000. These 93 establishments, however, employed an average of 95,373 wage earners, or 45.2 per cent of the total number in all establishments, and reported 49.3 per cent of the total value of products and 44.7 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 (30.9 per cent) of the total number of establishments, but the value of their products amounted to only six-tenths of 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.

It will be seen from the table that during the five years from 1904 to 1909 there was a considerable increase in the relative importance, as measured by value of products, of the largest establishments—those reporting products of not less than $1,000,000 in value—and a decrease in the importance of all other classes except that having a value of products of less than $5,000, the proportion in that class remaining unchanged. Of the 93 establishments whose products in 1909 exceeded $1,000,000 in value, 13 were engaged in the manufacture of brass and bronze products, 4 in the manufacture of cotton goods, 3 in the manufacture of cutlery and edge tools, 14 in the manufacture of foundry and machine-shop products, 6 in the manufacture of silk goods, and 5 in the manufacture of silverware and plated ware.

The fact that the average value of products per establishment increased from $106,150 to $115,331, and the value added by manufacture from $51,130 to $54,814, can not be taken as in itself indicating a tendency toward concentration. These increased values shown may be, and probably are, due wholly or in part to the increase that has taken place in the prices of commodities.

The average number of wage earners per establishment decreased from 52 to 50. The table shows further that when the size of establishments is measured by the average value of products per establishment, the bakery, the lumber, and the printing and publishing industries are conducted chiefly in rather small establishments, while the manufacture of brass and bronze products, cotton goods, cutlery, electrical machinery, foundry and machine-shop products, fur-felt hats, silk and silk goods, silverware, and woolen and worsted goods is mainly carried on in larger establishments.

INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
ALL INDUSTRIES:				
1909	**4,251**	**210,792**	**$490,271,695**	**$233,012,302**
1904	**3,477**	**181,605**	**369,082,091**	**177,780,210**
Less than $5,000:				
1909	1,312	1,629	3,047,313	1,986,061
1904	932	1,338	2,297,644	1,459,806
$5,000 and less than $20,000:				
1909	1,296	6,514	13,621,192	7,709,840
1904	1,099	5,981	11,676,232	6,871,487
$20,000 and less than $100,000:				
1909	909	19,981	40,437,942	21,893,012
1904	827	19,838	37,466,372	20,753,487
$100,000 and less than $1,000,000:				
1909	641	87,295	191,603,190	97,294,219
1904	554	88,202	159,950,425	82,214,624
$1,000,000 and over:				
1909	93	95,373	241,562,058	104,129,170
1904	65	66,246	157,691,418	66,480,806
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	30.9	0.8	0.6	0.9
1904	26.8	0.7	0.6	0.8
$5,000 and less than $20,000:				
1909	30.5	3.1	2.8	3.3
1904	31.6	3.3	3.2	3.9
$20,000 and less than $100,000:				
1909	21.4	9.5	8.2	9.4
1904	23.8	10.9	10.2	11.7
$100,000 and less than $1,000,000:				
1909	15.1	41.4	39.1	41.8
1904	15.9	48.6	43.3	46.2
$1,000,000 and over:				
1909	2.2	45.2	49.3	44.7
1904	1.9	36.5	42.7	37.4
Average per establishment:				
1909	.....	50	$115,331	$54,814
1904	.....	52	106,150	51,130
Brass and bronze products, 1909	**80**	**16,817**	**$66,932,969**	**$19,069,029**
Less than $5,000	12	7	29,179	15,115
$5,000 and less than $20,000	23	82	219,529	95,094
$20,000 and less than $100,000	15	206	576,023	286,375
$100,000 and less than $1,000,000	17	1,821	5,030,577	1,997,699
$1,000,000 and over	13	14,701	61,077,661	16,674,836
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	15.0	(1)	(1)	0.1
$5,000 and less than $20,000	28.8	0.5	0.3	0.5
$20,000 and less than $100,000	18.8	1.2	0.9	1.5
$100,000 and less than $1,000,000	21.2	10.8	7.5	10.5
$1,000,000 and over	16.2	87.4	91.3	87.4
Average per establishment	.....	210	$836,662	$238,363
Bread and other bakery products, 1909	**431**	**1,869**	**$7,309,817**	**$2,846,908**
Less than $5,000	107	62	290,263	132,789
$5,000 and less than $20,000	219	597	2,378,743	958,914
$20,000 and less than $100,000	96	842	3,214,366	1,222,262
$100,000 and less than $1,000,000	9	368	1,426,445	532,943
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	24.8	3.3	4.0	4.7
$5,000 and less than $20,000	50.8	31.9	32.5	33.7
$20,000 and less than $100,000	22.3	45.0	44.0	42.9
$100,000 and less than $1,000,000	2.1	19.7	19.5	18.7
Average per establishmet	.....	4	$16,960	$6,605
Cotton goods, including cotton small wares, 1909	**52**	**14,360**	**$24,231,881**	**$12,272,159**
Less than $5,000 [2]	3	17	21,228	8,879
$20,000 and less than $100,000	11	364	585,736	242,105
$100,000 and less than $1,000,000	34	8,969	14,132,352	6,787,837
$1,000,000 and over	4	5,010	9,492,565	5,233,338
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000 [2]	5.8	0.1	0.1	0.1
$20,000 and less than $100,000	21.2	2.5	2.4	2.0
$100,000 and less than $1,000,000	65.4	62.5	58.3	55.3
$1,000,000 and over	7.7	34.9	39.2	42.6
Average per establishment	.....	276	$465,998	$236,003
Cutlery and tools, not elsewhere specified, 1909	**82**	**7,547**	**$10,716,918**	**$7,406,943**
Less than $5,000	16	27	36,522	27,538
$5,000 and less than $20,000	19	143	177,516	114,387
$20,000 and less than $100,000	24	885	1,204,084	811,859
$100,000 and less than $1,000,000	20	2,940	3,587,794	2,584,452
$1,000,000 and over	3	3,552	5,711,002	3,858,707
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	19.5	0.4	0.3	0.4
$5,000 and less than $20,000	23.2	1.9	1.7	1.5
$20,000 and less than $100,000	29.3	11.7	11.2	11.0
$100,000 and less than $1,000,000	24.4	39.0	33.5	34.9
$1,000,000 and over	3.7	47.1	53.3	52.2
Average per establishment	.....	92	$130,694	$90,329
Electrical machinery, apparatus, and supplies, 1909	**41**	**3,505**	**$9,824,373**	**$4,613,069**
Less than $5,000	5	9	14,886	7,645
$5,000 and less than $20,000	10	50	132,232	64,523
$20,000 and less than $100,000	6	195	370,003	236,000
$100,000 and less than $1,000,000	20	3,251	9,307,252	4,304,901
Electrical machinery, etc.—Continued.				
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	12.2	0.3	0.2	0.2
$5,000 and less than $20,000	24.4	1.4	1.3	1.4
$20,000 and less than $100,000	14.6	5.6	3.8	5.1
$100,000 and less than $1,000,000	48.8	92.8	94.7	93.3
Average per establishment	.....	85	$239,619	$112,514
Foundry and machine-shop products, 1909	**403**	**37,736**	**$65,535,155**	**$40,715,099**
Less than $5,000	64	82	163,445	119,125
$5,000 and less than $20,000	100	585	1,044,209	697,573
$20,000 and less than $100,000	123	3,311	6,163,133	3,847,050
$100,000 and less than $1,000,000	102	15,500	29,772,161	18,008,882
$1,000,000 and over	14	18,258	28,392,207	18,041,869
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	15.9	0.2	0.2	0.3
$5,000 and less than $20,000	24.8	1.6	1.6	1.7
$20,000 and less than $100,000	30.5	8.8	9.4	9.5
$100,000 and less than $1,000,000	25.3	41.1	45.4	44.2
$1,000,000 and over	3.5	48.4	43.3	44.3
Average per establishment	.....	94	$162,569	$101,030
Hats, fur-felt, 1909	**80**	**5,217**	**$10,399,860**	**$5,550,877**
Less than $5,000	11	20	36,917	18,958
$5,000 and less than $20,000	9	46	99,846	46,759
$20,000 and less than $100,000	24	592	1,128,473	582,476
$100,000 and less than $1,000,000	36	4,559	9,134,624	4,902,684
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	13.8	0.4	0.4	0.3
$5,000 and less than $20,000	11.2	0.9	1.0	0.8
$20,000 and less than $100,000	30.0	11.3	10.9	10.5
$100,000 and less than $1,000,000	45.0	87.4	87.8	88.3
Average per establishment	.....	65	$129,998	$69,386
Lumber and timber products, 1909	**393**	**3,495**	**$7,845,521**	**$3,927,063**
Less than $5,000	177	356	394,592	284,174
$5,000 and less than $20,000	131	960	1,460,527	967,651
$20,000 and less than $100,000	75	1,477	2,960,043	1,637,808
$100,000 and less than $1,000,000	10	702	3,030,359	1,037,370
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	45.0	10.2	5.0	7.2
$5,000 and less than $20,000	33.3	27.5	18.6	24.6
$20,000 and less than $100,000	19.1	42.3	37.7	41.7
$100,000 and less than $1,000,000	2.5	20.1	38.6	26.4
Average per establishment	.....	9	$19,963	$9,993
Printing and publishing, 1909	**363**	**2,878**	**$6,370,450**	**$4,601,233**
Less than $5,000	189	230	433,545	330,907
$5,000 and less than $20,000	98	519	935,286	709,957
$20,000 and less than $100,000	65	1,344	3,034,083	2,197,071
$100,000 and less than $1,000,000	11	785	1,967,536	1,363,298
Per cent of total	100.0	100.0	100.0	100.0
Less than $5,000	52.1	8.0	6.8	7.2
$5,000 and less than $20,000	27.0	18.0	14.7	15.4
$20,000 and less than $100,000	17.9	46.7	47.6	47.7
$100,000 and less than $1,000,000	3.0	27.3	30.9	29.6
Average per establishment	.....	8	$17,549	$12,676
Silk and silk goods, including throwsters, 1909	**47**	**8,703**	**$21,062,687**	**$9,228,342**
$5,000 and less than $20,000 [3]	8	151	68,399	62,169
$20,000 and less than $100,000	16	576	788,608	409,374
$100,000 and less than $1,000,000	17	2,514	6,276,262	2,605,388
$1,000,000 and over	6	5,462	13,929,328	6,151,411
Per cent of total	100.0	100.0	100.0	100.0
$5,000 and less than $20,000 [3]	17.0	1.7	0.3	0.7
$20,000 and less than $100,000	34.0	6.6	3.7	4.4
$100,000 and less than $1,000,000	36.2	28.9	29.8	28.2
$1,000,000 and over	12.8	62.8	66.1	66.7
Average per establishment	.....	185	$448,142	$196,348
Silverware and plated ware, 1909	**31**	**6,223**	**$15,836,608**	**$8,604,607**
$5,000 and less than $20,000 [3]	5	33	37,209	17,703
$20,000 and less than $100,000	6	209	275,313	157,079
$100,000 and less than $1,000,000	15	2,560	5,358,479	3,330,662
$1,000,000 and over	5	3,421	10,165,607	5,099,163
Per cent of total	100.0	100.0	100.0	100.0
$5,000 and less than $20,000 [3]	16.1	0.5	0.2	0.2
$20,000 and less than $100,000	19.4	3.4	1.7	1.8
$100,000 and less than $1,000,000	48.4	41.1	33.8	38.7
$1,000,000 and over	16.1	55.0	64.2	59.3
Average per establishment	.....	201	$510,858	$277,568
Woolen, worsted, and felt goods, and wool hats, 1909	**56**	**7,789**	**$19,363,228**	**$6,525,086**
$5,000 and less than $20,000 [3]	3	15	13,183	10,758
$20,000 and less than $100,000	5	179	283,601	103,907
$100,000 and less than $1,000,000 [4]	48	7,595	19,066,444	6,410,421
Per cent of total	100.0	100.0	100.0	100.0
$5,000 and less than $20,000 [3]	5.4	0.2	0.1	0.2
$20,000 and less than $100,000	8.9	2.3	1.5	1.6
$100,000 and less than $1,000,000 [4]	85.7	97.5	98.5	98.2
Average per establishment	.....	139	$345,772	$116,519

[1] Less than one-tenth of 1 per cent.
[2] Includes the group "$5,000 and less than $20,000."
[3] Includes the group "Less than $5,000."
[4] Includes the group "$1,000,000 and over."

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 following table shows, for 1909, such a classification for all industries combined and for 19 important industries individually, and gives not only the number of establishments falling into each group but also the average number of wage earners employed:

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	**4,251**	**444**	**1,847**	**886**	**423**	**223**	**251**	**94**	**48**	**35**
Automobiles, including bodies and parts	28	1	4	4	6	5	6	.....	1	1
Brass and bronze products	80	7	28	11	10	5	4	6	3	6
Bread and other bakery products	431	58	272	90	9	2	.....	.....	.....	.....
Clocks and watches, including cases and materials	16	.....	2	4	1	1	1	4	1	2
Corsets	17	.....	2	3	2	.....	3	2	3	2
Cotton goods, including cotton small wares	52	1	1	2	9	4	15	12	5	3
Cutlery and tools, not elsewhere specified	82	6	17	19	12	10	13	2	1	2
Electrical machinery, apparatus, and supplies	41	1	11	5	5	4	13	1	1	.....
Firearms and ammunition	10	.....	.....	.....	1	1	2	2	2	2
Foundry and machine-shop products	403	18	116	85	69	40	44	16	8	7
Hats, fur-felt	80	2	17	12	17	13	14	5	.....	.....
Hosiery and knit goods	21	.....	2	1	1	2	11	4	.....	.....
Lumber and timber products	393	10	222	129	26	3	3	.....	.....	.....
Musical instruments, pianos and organs and materials	17	.....	.....	4	3	3	4	2	1	.....
Paper and wood pulp	51	.....	6	19	19	4	3	.....	.....	.....
Printing and publishing	303	82	169	76	28	6	2	.....	.....	.....
Silk and silk goods, including throwsters	47	.....	.....	10	11	8	11	4	2	1
Silverware and plated ware	31	.....	2	4	5	4	8	6	1	1
Woolen, worsted, and felt goods, and wool hats	56	1	.....	2	11	10	25	6	.....	1
All other industries	2,032	257	976	406	178	98	60	22	10	7
	AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**210,792**	.....	**4,390**	**9,911**	**14,024**	**15,880**	**38,187**	**32,730**	**34,219**	**61,451**
Automobiles, including bodies and parts	3,815	.....	9	38	188	354	1,000	.....	957	1,200
Brass and bronze products	10,817	.....	82	110	325	314	627	2,096	2,057	10,300
Bread and other bakery products	1,899	.....	641	805	291	132	.....	.....	.....	.....
Clocks and watches, including cases and materials	5,851	.....	5	56	22	58	112	1,442	793	3,363
Corsets	6,643	.....	4	43	69	.....	354	859	2,087	3,227
Cotton goods, including cotton small wares	14,360	.....	2	24	287	340	2,505	4,040	2,605	4,497
Cutlery and tools, not elsewhere specified	7,547	.....	48	225	413	769	1,858	983	845	2,706
Electrical machinery, apparatus, and supplies	3,505	.....	30	53	158	330	1,075	371	570	.....
Firearms and ammunition	8,533	.....	.....	.....	30	89	422	575	1,193	6,224
Foundry and machine-shop products	37,736	.....	308	1,059	2,273	2,814	6,053	5,867	5,660	13,102
Hats, fur-felt	5,217	.....	47	172	629	884	1,983	1,502	.....	.....
Hosiery and knit goods	3,340	.....	6	15	40	141	1,749	1,389	.....	.....
Lumber and timber products	3,495	.....	527	1,551	806	253	358	.....	.....	.....
Musical instruments, pianos and organs and materials	2,304	.....	.....	35	111	203	734	610	611	.....
Paper and wood pulp	1,720	.....	23	254	701	324	418	.....	.....	.....
Printing and publishing	2,878	.....	410	854	893	397	324	.....	.....	.....
Silk and silk goods, including throwsters	8,703	.....	.....	142	387	506	1,718	1,396	1,595	2,899
Silverware and plated ware	6,223	.....	7	35	177	286	1,404	2,218	900	1,187
Woolen, worsted, and felt goods, and wool hats	7,789	.....	.....	14	404	864	3,560	1,655	.....	1,292
All other industries	62,447	.....	2,232	4,420	5,820	6,753	10,364	8,027	13,437	11,394
	PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.									
All industries	**100.0**	.....	**2.1**	**4.7**	**6.7**	**7.5**	**18.1**	**15.5**	**16.2**	**29.2**
Automobiles, including bodies and parts	100.0	.....	0.2	1.0	4.9	9.3	26.4	.....	25.1	33.0
Brass and bronze products	100.0	.....	0.5	0.7	1.9	1.9	3.7	12.5	17.6	61.2
Bread and other bakery products	100.0	.....	34.3	43.1	15.6	7.1	.....	.....	.....	.....
Clocks and watches, including cases and materials	100.0	.....	0.1	1.0	0.4	1.0	1.9	24.6	13.6	57.5
Corsets	100.0	.....	0.1	0.6	1.0	.....	5.3	12.9	31.4	48.6
Cotton goods, including cotton small wares	100.0	.....	(1)	0.2	2.0	2.4	17.9	28.1	18.1	31.3
Cutlery and tools, not elsewhere specified	100.0	.....	0.6	3.0	5.5	10.2	24.6	9.0	11.2	35.9
Electrical machinery, apparatus, and supplies	100.0	.....	1.1	1.5	4.5	9.7	56.3	10.6	16.3	.....
Firearms and ammunition	100.0	.....	.....	.....	0.4	1.0	4.9	6.7	14.0	72.9
Foundry and machine-shop products	100.0	.....	0.8	2.8	6.0	7.7	17.4	15.5	15.0	34.7
Hats, fur-felt	100.0	.....	0.9	3.3	12.1	16.9	38.0	28.8	.....	.....
Hosiery and knit goods	100.0	.....	0.2	0.4	1.2	4.2	52.4	41.6	.....	.....
Lumber and timber products	100.0	.....	15.1	44.4	23.1	7.2	10.2	.....	.....	.....
Musical instruments, pianos and organs and materials	100.0	.....	.....	1.5	4.8	8.8	31.9	26.5	26.5	.....
Paper and wood pulp	100.0	.....	1.3	14.8	40.8	18.8	24.3	.....	.....	.....
Printing and publishing	100.0	.....	14.2	29.7	31.0	13.8	11.3	.....	.....	.....
Silk and silk goods, including throwsters	100.0	.....	.....	1.6	4.5	6.5	19.7	16.0	18.3	33.3
Silverware and plated ware	100.0	.....	0.1	0.6	2.8	4.6	22.6	35.6	14.0	19.1
Woolen, worsted, and felt goods, and wool hats	100.0	.....	.....	0.2	5.2	11.1	45.7	21.2	.....	16.6
All other industries	100.0	.....	3.6	7.1	9.3	10.8	16.6	12.9	21.5	18.2

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

Of the 4,251 establishments reported for all industries, 9.6 per cent employed no wage earners; 44.6 per cent, from 1 to 5; 21 per cent, 6 to 20; 9.6 per cent, 21 to 50; and 15.2 per cent, over 50. The most numerous single group consists of the 1,896 establishments employing from 1 to 5 wage earners, and the next of the 893 establishments employing from 6 to 20. There were 84 establishments that employed over 500 wage earners, and 37 that employed over 1,000.

Of the total number of wage earners, 60.9 per cent were in establishments employing over 250 wage earners. The single group having the largest number of employees was the group comprising establishments employing over 1,000 wage earners. Of the 11 industries represented in this group for which separate presentation is made in the table, the foundries and machine shops reported the largest number of wage earners, 13,102. Five other industries, however, exceeded the

foundries and machine shops in the proportion of their wage earners in this group, namely, firearms and ammunition, brass and bronze products, clocks and watches, corsets, and cutlery and tools. The industries listed in this table but not in the preceding one, namely, automobiles, clocks and watches, corsets, firearms and ammunition, hosiery and knit goods, musical instruments, and paper and wood pulp, are all industries in which comparatively large establishments do most of the business, as appears from the classification according to the number of wage earners.

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 for 1909, 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, page 156.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries	**6.0**	**25.6**	**59.8**	**8.6**
Automobiles, including bodies and parts	6.7	30.5	51.5	11.3
Brass and bronze products	2.4	15.6	77.3	4.7
Bread and other bakery products	2.7	19.4	70.7	7.3
Clocks and watches, including cases and materials	6.9	50.3	34.8	7.9
Corsets	8.1	23.2	61.4	7.4
Cotton goods, including cotton small wares	3.9	28.5	60.1	7.6
Cutlery and tools, not elsewhere specified	8.4	44.5	37.0	10.1
Electrical machinery, apparatus, and supplies	9.5	18.7	60.7	11.1
Firearms and ammunition	6.1	28.8	58.4	6.7
Foundry and machine-shop products	9.0	37.5	43.7	9.8
Hats, fur-felt	6.1	36.0	51.6	6.3
Hosiery and knit goods	6.2	26.1	58.3	9.4
Lumber and timber products	4.3	28.7	58.9	8.1
Musical instruments, pianos and organs and materials	6.3	25.1	60.7	8.0
Paper and wood pulp	6.9	18.2	65.0	10.0
Printing and publishing	16.4	33.3	34.0	16.3
Silk and silk goods, including throwsters	5.5	20.8	65.7	8.0
Silverware and plated ware	7.2	25.8	54.2	12.7
Woolen, worsted, and felt goods, and wool hats	3.2	19.9	73.3	3.6
All other industries	6.0	23.1	60.8	10.1

This table shows that, for all industries combined, 59.8 per cent of the total expense was for materials, 31.6 per cent for services—that is, salaries and wages—and but 8.6 per cent for other purposes. 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.

Of the owned power in 1909, 75.9 per cent was steam, as compared with 72 per cent in 1899. Water power, although showing an actual increase during the decade of 6,723 horsepower, decreased in proportion of owned power from 27.2 per cent in 1899 to 20.4 per cent in 1909. The more general use of gas engines is shown, the number of such engines being 460 in 1909, as against 254 in 1904 and 171 in 1899. The figures also show that the practice of renting power is on the increase, 9.5 per cent of the total power being rented in 1909, as against 4.7 per cent in 1904 and 3.6 per cent in 1899. The use of electric motors for the purpose of applying the power generated within the establishment is also shown to be rapidly increasing, the horsepower of such motors having increased from 8,710 in 1899 to 26,346 in 1904 and 64,051 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	**7,357**	**3,535**	**3,967**	**400,275**	**304,204**	**256,331**	**100.0**	**100.0**	**100.0**
Owned	3,930	3,535	3,967	362,217	289,924	247,080	90.5	95.3	96.4
Steam	2,574	2,331	2,695	274,942	218,668	177,819	68.7	71.9	69.4
Gas	460	254	171	12,844	3,393	1,608	3.2	1.1	0.6
Water wheels	869	916	1,101	73,697	66,667	67,211	18.4	21.9	26.2
Water motors	27	34	(2)	237	141	(2)	0.1	(3)	(2)
Other	.....	.....	.....	497	1,055	451	0.1	0.3	0.2
Rented	3,427	(2)	(2)	38,058	14,280	9,242	9.5	4.7	3.6
Electric	3,427	(2)	(2)	33,620	8,233	4,215	8.4	2.7	1.6
Other	.....	.....	.....	4,438	6,047	5,027	1.1	2.0	2.0
Electric motors	**8,536**	**1,521**	**442**	**97,671**	**34,579**	**12,925**	**100.0**	**100.0**	**100.0**
Run by current generated by establishment	5,109	1,521	442	64,051	26,346	8,710	65.6	76.2	67.4
Run by rented power	3,427	(2)	(2)	33,620	8,233	4,215	34.4	23.8	32.6

[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.—The following table shows the quantity of each kind of fuel used in 1909, by totals, for all industries 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	**387,424**	**1,511,473**	**60,527**	**149,224**	**494,498**	**593,991**
Automobiles, including bodies and parts	820	16,115	44	4	15,749	21,732
Brass and bronze products	76,473	210,109	1,329	45,606	113,337	31,812
Bread and other bakery products	11,524	2,134	2,340	1,958	35	10,789
Clocks and watches, including cases and materials	306	17,320	.....	.....	98	4,935
Corsets	427	9,658	.....	1	2	2,110
Cotton goods, including cotton small wares	26,603	83,617	.....	5,100	77	36
Cutlery and tools, not elsewhere specified	17,449	43,852	2,335	498	6,017	9,996
Electrical machinery, apparatus, and supplies	485	18,771	.....	110	257	3,229
Firearms and ammunition	12,284	34,092	232	25	13,280	20,065
Foundry and machine-shop products	47,766	197,347	40,306	5,427	43,325	402,164
Gas, illuminating and heating	33,925	89,977	5,691	7	192,670	1,419
Hats, fur-felt	1,499	33,162	39	6	169	8,478
Hosiery and knit goods	110	14,414	.....	27	88	1,515
Iron and steel, steel works and rolling mills	47,057	62,511	2,020	200	78,712	3,860
Liquors, malt	2,782	28,319	.....	.....	56	.....
Lumber and timber products	558	5,647	50	311	414	1,642
Musical instruments, pianos and organs and materials	4,185	9,955	.....	3	.....	500
Paper and wood pulp	23,184	92,807	.....	64	97	540
Printing and publishing	3,496	3,119	.....	68	202	8,540
Silk and silk goods, including throwsters	2,268	39,794	.....	557	135	484
Silverware and plated ware	1,464	27,363	116	216	3,759	4,742
Woolen, worsted, and felt goods, and wool hats	1,993	76,533	.....	14,684	131	229
All other industries	70,706	394,848	6,025	74,343	25,888	55,174

NOTE.—In addition, there were 20,180 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, the quantity and value of products, and the number of machines used in manufactures which do not appear on the general schedule. Certain data of this character for nine important industries in Connecticut are here presented.

Textiles.—The following statement shows the number of producing spindles, looms, knitting machines, sets of woolen cards, and wool-combing machines used by the four most important textile industries in Connecticut during 1909, 1904, and 1899, and indicates the progress during the decade of the four industries combined as well as each of the branches separately.

MACHINE.	Census.	Total.	Cotton goods, including cotton small wares.	Silk and silk goods, including throwsters.	Woolen, worsted, and felt goods, and wool hats.[1]	Hosiery and knit goods.
Producing spindles	1909	1,593,418	1,241,524	118,302	179,688	53,904
	1904	1,510,793	1,150,915	106,704	166,422	86,752
	1899	1,353,157	1,001,474	96,415	170,892	78,376
Looms	1909	32,785	24,370	5,006	3,409	.....
	1904	28,264	20,803	4,260	3,201	.....
	1899	25,633	19,550	2,975	3,108	.....
Knitting machines	1909	2,501	.....	.....	.....	2,501
	1904	2,557	.....	.....	.....	2,557
	1899	2,602	.....	.....	.....	2,602
Woolen cards (sets)	1909	522	.....	.....	408	114
	1904	551	.....	.....	442	109
	1899	549	.....	.....	415	134
Wool-combing machines.	1909	33	.....	.....	33	.....
	1904	25	.....	.....	18	7
	1899	49	.....	.....	40	9

[1] Statistics for 1899 not available for two establishments manufacturing felt goods.

The above table shows that from 1904 to 1909 the number of producing spindles increased 82,625, or 5.5 per cent, and the number of looms 4,521, or 16 per cent, while knitting machines show a decrease of 56, or 2.2 per cent. The number of sets of woolen cards decreased 29, or 5.3 per cent, and the number of wool-combing machines increased 8, or 32 per cent. Of the total number of producing spindles reported in 1909 for these four industries combined, 1,241,524, or 77.9 per cent, were in cotton mills; 118,302, or 7.4 per cent, in silk mills; 179,688, or 11.3 per cent, in woolen, worsted, and felt mills; and 53,904, or 3.4 per cent, in hosiery and knitting mills. The cotton industry made the largest absolute gain in number of spindles during the last five years, the increase being 90,609, or 7.9 per cent. The largest relative gain in number of spindles, however, was in the silk industry, where there was an increase of 11,598, or 10.9 per cent. The falling off in the number of spindles in knitting mills is due to the tendency to purchase yarn already spun. In addition to the spindles shown in the table there were 13,756 producing spindles employed in the manufacture of cordage and twine in 1909. There were 3,567 more looms used in the cotton industry and 746 more in the silk industry in 1909 than in 1904.

Cotton goods, including cotton small wares.—Cotton manufacturing maintains the lead in the textile group, although the silk industry has grown more rapidly during the last decade.

The quantity and cost of the principal materials used in the manufacture of cotton goods and the quantity and value of the principal products reported in 1909, 1904, and 1899 are given below.

MATERIAL OR PRODUCT.	1909	1904	1899[1]
Materials used, total cost	**$11,959,723**	**$10,203,269**	**$7,535,926**
Cotton:			
Domestic—			
Pounds	51,664,051	49,775,004	50,910,381
Cost	$6,425,319	$6,241,393	$3,770,503
Foreign—			
Pounds	6,058,409	3,503,478	5,955,428
Cost	$1,058,728	$619,173	$656,019
Yarns, purchased:			
Cotton—			
Pounds	3,671,011	3,958,078	4,868,512
Cost	$1,430,813	$1,526,080	$1,151,503
Other—			
Pounds	154,757	184,813	99,831
Cost	$450,801	$264,237	$225,102
Cotton waste, purchased:			
Pounds	2,224,582	1,049,150	2,067,074
Cost	$149,267	$66,067	$68,781
Starch:			
Pounds	2,944,826	2,284,201	2,073,522
Cost	$111,368	$69,456	$70,434
Chemicals and dyestuffs	$225,354	$218,977	$259,129
Fuel and rent of power and heat	$478,710	$354,361	$242,621
All other materials	$1,029,362	$843,519	$1,091,834
Products, total value	**$24,331,881**	**$18,425,384**	**$15,489,442**
Plain cloths for printing or converting:			
Square yards	59,730,700	66,974,935	60,560,820
Value	$4,571,087	$3,889,725	$3,382,225
Brown or bleached sheetings and shirtings:			
Square yards	33,411,424	29,917,468	17,367,180
Value	$2,249,623	$1,580,429	$884,960
Twills and sateens:			
Square yards	40,827,992	24,594,276	19,724,407
Value	$3,152,078	$1,402,558	$952,385
Fancy woven fabrics:			
Square yards	17,222,224	14,316,168	20,518,759
Value	$1,747,789	$1,278,319	$1,495,298
Ticks, denims, and stripes:			
Square yards	14,888,985	10,479,607	7,180,813
Value	$1,612,636	$1,697,062	$1,528,744
Yarns for sale:			
Pounds	7,914,873	6,385,473	6,010,562
Value	$2,846,742	$2,459,139	$1,536,266
Thread:			
Pounds	5,263,776	4,038,361	3,432,159
Value	$5,199,313	$3,745,906	$2,861,134
Cotton waste for sale:			
Pounds	11,315,800	9,923,878	10,153,771
Value	$469,811	$466,209	$254,150
All other products	$2,382,802	$1,906,037	$2,594,280

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

The cotton consumed in this industry in 1909 amounted to 57,723,360 pounds, costing $7,484,047, and representing an increase over 1904 of 4,444,878 pounds, or 8.3 per cent, in quantity, and $623,481, or 9.1 per cent, in cost. In 1909 the quantity and cost of domestic cotton represented 89.5 per cent and 85.9 per cent, respectively, of the total quantity and cost of all cotton consumed, proportions somewhat smaller than the corresponding figures for 1904, which were 93.4 per cent and 91 per cent, respectively. The consumption of foreign cotton increased considerably between 1899 and 1909, although a pronounced decrease occurred from 1899 to 1904. Cotton waste purchased increased for the decade as a whole, although a decrease is shown for the period from 1899 to 1904.

Each kind of product presented separately shows an increase in value from 1904 to 1909, with the exception of ticks, denims, and stripes. Twills and sateens made the largest gain during the period, the increase in value being $1,749,520, or 124.7 per cent. Plain cloths for printing and converting were the most important class of fabrics manufactured in both quantity and value, although the output shows a decrease in 1909 of 7,244,235 square yards as compared with 1904 and 830,120 square yards as compared with 1899; there has, however, been an increase during the decade in the value of this class of products. Twills and sateens stand next to plain cloths in the quantity manufactured in 1909. The increase for the decade in the output of this class of goods was 21,103,585 square yards, or 107 per cent, the greater part of which occurred between 1904 and 1909. The increases in the quantity and value of sheetings and shirtings were very much less than the gains shown for twills and sateens. Fancy woven fabrics, which are made in considerable quantities, show a decrease of 3,296,535 square yards, or 16.1 per cent, for the 10-year period, and an increase in value of $252,491, or 16.9 per cent. It will be noted that the value of the thread manufactured exceeds that reported for any other class of products.

Silk and silk goods, including throwsters.—The second industry of importance in respect to value of products among the textile industries of Connecticut is the manufacture of silk and silk goods. The state has one of the largest factories in the country manufacturing broad silks and other woven silk goods. Of the 47 establishments reported in 1909 a number are engaged solely in throwing silk for others on contract.

The quantity and cost of the various materials used in the silk mills and the quantity and value of the different classes of products reported for 1909, 1904, and 1899 are shown in the next table.

Cotton and mercerized yarns formed the principal material according to weight, and showed the most marked increase, while raw silk was the material of greatest value.

Three groups of products furnished nearly equal proportions of the total value, namely, velvets and plushes, with $5,959,175, or 28.3 per cent of the total; broad silks, with $5,890,233, or 28 per cent; and machine twist, sewing, embroidery, wash, fringe, and floss silks, with $5,108,180, or 24.3 per cent.

The output of velvets and plushes increased 125.9 per cent in quantity and 114.7 per cent in value during the 10-year period, that of broad silks 108.4 per cent in quantity and 93.4 per cent in value, and that of machine twist and other sewing and embroidery silks 5.4 per cent in quantity and 12.3 per cent in value. Organzine, tram, and spun silk yarns, which ranked next in value of output, increased 76.4 per cent in quantity and 80.2 per cent in value between 1899 and 1909. Ribbons show a gain of 71.7 per cent in value for the decade as a whole, although a decrease of 2.5 per cent occurred during the last five years.

Ribbons constitute the only item which shows a decrease in value between 1904 and 1909. "All other products," on the other hand, which fell off somewhat during the earlier five-year period, increased 324.2 per cent between 1904 and 1909.

In 1909, 290,253 pounds of silk were thrown on commission, 150,332 pounds into organzine, and 139,921 pounds into tram. The corresponding total for 1904 was 216,454 pounds, of which 131,038 pounds were thrown into organzine and 85,416 pounds into tram.

MATERIAL OR PRODUCT.	1909	1904	1899
Materials used, total cost	$11,834,845	$9,098,196	$7,198,008
Silk:			
Raw—			
Pounds	1,624,701	1,320,509	1,159,961
Cost	$6,099,209	$5,067,381	$4,537,720
Spun—			
Pounds	696,379	716,607	502,558
Cost	$1,425,657	$1,609,152	$998,566
Organzine and tram, purchased—			
Pounds	54,619	28,844	31,041
Cost	$238,785	$144,358	$154,881
Yarns, purchased:			
Cotton, including mercerized—			
Pounds	2,439,405	1,380,581	1,189,505
Cost	$870,707	$446,362	$390,252
Wool, mohair, and other—			
Pounds	832,204	120,215	3,661
Cost	$826,208	$124,434	$6,468
Chemicals and dyestuffs	$294,025	$268,675	(1)
Fuel and rent of power	$214,763	$129,061	$96,917
All other materials	$1,864,991	$1,308,773	$1,013,204
Products, total value	$21,082,687	$15,623,693	$12,378,981
Organzine, tram, and spun silk yarns for sale:			
Pounds	455,678	373,104	258,265
Value	$1,623,722	$1,411,085	$901,191
Machine twist, sewing, embroidery, wash, fringe, and floss silks:			
Pounds	828,678	782,434	786,261
Value	$5,108,180	$4,573,582	$4,548,802
Broad silks:			
Yards	11,404,011	7,562,166	5,470,874
Value	$5,890,233	$4,037,599	$3,045,569
Velvets and plushes:			
Yards	11,912,758	9,048,494	5,272,665
Value	$5,959,175	$3,935,014	$2,775,318
Ribbons	$1,125,697	$1,153,983	$655,807
Embroideries, braids and bindings, fringes and gimps	$210,427	$80,393	$38,685
Amount received for contract work	$293,332	$230,614	$136,362
All other products	$851,921	$200,323	$277,247

[1] Not reported separately.

Woolen, worsted, and felt goods.[1]—Three establishments were primarily engaged in the manufacture of felt goods in 1909, one in 1904, and two in 1899. The following table gives the details concerning the cost of the different materials used in the manufacture of woolen and worsted goods and the quantity and value of the leading kinds of products for these two branches of the industry in 1909, 1904, and 1899, the cost of materials used and the value of products for felt goods also being included for 1909.

[1] The title of this industry in the tables, being uniform for all states, is "Woolen, worsted, and felt goods, and wool hats," but in Connecticut no wool hats were reported.

MATERIAL OR PRODUCT.	1909	1904 [1]	1899 [1]
Materials used, total cost	**$12,838,142**	**$10,078,219**	**$7,923,088**
Wool:			
Foreign (in condition purchased)—			
Pounds	1,088,035	934,051	1,493,925
Cost	$293,687	$321,325	$520,433
Domestic (in condition purchased)—			
Pounds	9,084,587	11,831,199	9,709,648
Cost	$3,474,052	$3,523,049	$2,718,264
Equivalent in scoured condition, pounds	7,045,156	8,205,794	7,271,894
Cotton:			
Pounds	558,585	1,504,567	1,697,350
Cost	$82,852	$175,622	$159,424
Shoddy:			
Pounds	1,593,181	2,457,223	4,461,072
Cost	$295,442	$323,976	$489,976
Waste and noils of wool, mohair, etc.:			
Pounds	1,871,548	2,263,438	1,186,679
Cost	$466,078	$517,193	$254,264
Yarns, purchased:			
Worsted—			
Pounds	5,113,210	2,558,669	2,352,505
Cost	$5,629,603	$2,498,109	$2,036,573
Cotton—			
Pounds	1,193,956	1,689,875	1,475,188
Cost	$291,770	$387,894	$306,802
All other—			
Pounds	65,573	345,239	55,681
Cost	$134,628	$300,751	$36,161
Chemicals and dyestuffs	$534,281	$502,957	$419,494
Fuel and rent of power	$329,872	$304,732	$226,189
All other materials	$1,305,877	$1,217,611	$755,508
Products, total value	**$19,362,228**	**$15,483,499**	**$12,637,032**
All-wool woven goods, whether woolen or worsted:			
Wool cloths, etc.—			
Square yards	4,371,262	4,318,678	2,201,081
Value	$3,834,073	$2,845,913	$1,601,295
Worsted coatings, etc.—			
Square yards	6,993,858	3,078,079	2,975,355
Value	$6,783,552	$3,550,183	$3,149,666
Woolen overcoatings, etc.—			
Square yards	2,827,661	1,905,708	2,213,987
Value	$2,618,255	$1,579,030	$1,953,424
Wool dress goods, cashmeres, buntings, etc.—			
Square yards	1,610,089	4,171,561	2,301,173
Value	$902,806	$2,086,833	$939,698
All other—			
Square yards	2,183,833	4,903,771	1,858,213
Value	$964,942	$1,207,707	$236,060
Union or cotton mixed woven goods:			
Union tweeds, etc.—			
Square yards	860,666	2,821,517	2,001,035
Value	$366,593	$1,196,191	$863,243
All other—			
Square yards	1,307,818	1,356,083	1,375,027
Value	$730,074	$707,374	$745,018
Goods woven on cotton warp:			
Wool filling cassimeres, jeans, etc.—			
Square yards	2,108,671	1,766,051	1,927,154
Value	$544,445	$591,412	$842,955
All other—			
Square yards	2,288,745	4,138,150	3,730,325
Value	$710,840	$982,633	$1,086,699
Yarns, for sale:			
Pounds	751,185	413,561	[2]801,629
Value	$675,155	$292,612	$616,796
Waste and noils, for sale:			
Pounds	487,026	213,619	369,713
Value	$78,653	$48,974	$41,298
Amount received for contract work	$32,848	$19,185	$13,470
All other products	$1,111,983	$465,452	$457,110

[1] Excluding statistics for one establishment in 1904 and two in 1899, to avoid disclosure of individual operations.
[2] Includes tapes.

The increase during the decade in the total cost of materials was proportionally greater than the increase in the value of products. Both the quantity and the cost of foreign wool consumed have decreased since 1899, although there has been a slight gain in quantity since 1904. From 1899 to 1904 there was a decided gain in the quantity and cost of domestic wool consumed, but from 1904 to 1909 a decrease occurred in both items. For the decade the quantity of domestic wool decreased slightly, although its cost shows a considerable increase. The most conspicuous gain was for worsted yarns purchased, which increased during the last five-year period, 1904–1909, 99.8 per cent in quantity and 125.4 per cent in cost.

The quantity of all-wool woven goods reported, whether woolen or worsted, was 17,987,303 square yards in 1909, 18,377,887 square yards in 1904, and 11,549,809 square yards in 1899. The combined value of these classes of goods represented 78 per cent of the total value of products for the industry in 1909, 72.8 per cent in 1904, and 63.1 per cent in 1899. The quantity and value of union tweeds increased from 1899 to 1904, but decreased from 1904 to 1909, with the result that both items were smaller in 1909 than in 1899. The output of all other union or cotton-mixed woven goods decreased steadily from 1899 to 1909, and their value was also lower in 1909 than in 1899, although somewhat higher than in 1904. For each of the two classes into which goods woven on cotton warps are divided in the table, the values declined regularly from 1899 to 1909, but the output of wool-filling cassimeres and jeans was greatest in 1909 and that of the cotton-warp goods included under the head of "All other" was greatest in 1904.

Hosiery and knit goods.—Twenty-one establishments—three less than in 1904 and four less than in 1899—were reported in this industry at the census of 1909. The quantity and cost of the principal materials used and the quantity and value of the products reported for the hosiery and knit-goods industry at the last three censuses were as follows:

MATERIAL OR PRODUCT.	1909	1904	1899
Materials used, total cost	**$3,048,547**	**$2,825,014**	**$2,202,640**
Cotton:			
Domestic—			
Pounds	1,102,924	1,489,447	2,008,413
Cost	$146,609	$171,439	$176,729
Foreign—			
Pounds	868,588	654,414	(1)
Cost	$139,870	$126,075	(1)
Wool:			
Domestic (in condition purchased)—			
Pounds	708,190	1,678,529	1,291,104
Cost	$354,254	$615,320	$344,178
Foreign (in condition purchased)—			
Pounds	251,055	397,454	1,181,663
Cost	$113,600	$113,639	$479,436
Wool waste and noils:			
Pounds	2,015,712	930,683	493,216
Cost	$630,130	$225,964	$117,035
Yarns, purchased:			
Cotton—			
Pounds	1,539,828	1,221,624	991,497
Cost	$463,922	$364,634	$260,011
Woolen, worsted, and merino—			
Pounds	463,026	397,103	271,444
Cost	$419,887	$353,004	$254,219
All other—			
Pounds	7,194	8,091	16,650
Cost	$24,742	$21,906	$38,700
Chemicals and dyestuffs	$52,240	$67,964	$40,094
Fuel and rent of power	$67,043	$73,845	$47,603
All other materials	$635,632	$691,224	$453,735
Products, total value	**$5,800,692**	**$5,871,452**	**$4,043,977**
Hose and half hose:			
Dozen pairs	560,100	672,242	393,111
Value	$1,109,617	$1,018,327	$552,145
Shirts and drawers:			
Merino or mixed—			
Dozens	338,589	286,049	298,148
Value	$2,941,515	$2,368,443	$1,990,994
All wool [2]—			
Dozens	19,516	42,574	62,993
Value	$239,100	$402,061	$519,969
All cotton—			
Dozens	113,603	112,108	159,169
Value	$475,545	$411,793	$446,073
Combination suits:			
Merino or mixed—			
Dozens	2,998	1,832	898
Value	$48,253	$27,407	$13,450
All other—			
Dozens	39,615	1,630	256
Value	$360,772	$16,300	$2,828
All other products	$685,890	$1,067,121	$409,518

[1] Included with domestic cotton.
[2] Includes silk or silk mixed.

The consumption of domestic cotton was 26 per cent less in 1909 than in 1904. Because of the demand for long fiber the quantity of foreign cotton increased 32.7 per cent from 1904 to 1909. The consumption of both domestic and foreign wool decreased, the quantity reported being 966,738 pounds less in 1909 than in 1904. Waste and noils show the largest gain, the increase during the last five years being 116.6 per cent in quantity and 178.9 per cent in cost. Both the quantity and the cost of cotton and woolen, worsted, and merino yarns purchased in 1909 were greater than in 1904.

The gain shown in both quantity and value of hose and half hose during the 10-year period is marked, although the quantity decreased considerably from 1904 to 1909. The growth in the production of merino and mixed shirts and drawers is noticeable; there was, however, a falling off in the production of all-wool underwear.

Automobiles, including bodies and parts.—The number and value of the different classes of machines manufactured as reported at the censuses of 1909 and 1904 are shown in the following table:

PRODUCT.	NUMBER.		VALUE.	
	1909	1904	1909	1904
Total	2,913	832	$11,668,228	[1] $2,644,334
Passenger vehicles:				
Gasoline	2,913	386	7,359,652	1,125,863
Electric	(2)	319	(2)	747,420
Steam		127		85,399
All other products, including parts			4,107,809	331,253
Custom work and repairing			200,767	354,399

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

This table shows a remarkable increase in the number of machines manufactured and also in their value. The increase in value was, however, somewhat greater relatively than that in number, so that the average value per machine in 1909, $2,526, was higher than in 1904, when it was $2,354. The value of all other products reported increased even more rapidly than that of the complete machines, on account of the increased production of bodies and parts. In 1909 there were 20 establishments primarily engaged in making bodies and parts, as compared with 1 in 1904.

Although the electric machine was the type first produced in Connecticut, practically all machines built in the state in 1909 were of the gasoline type.

A detailed statement by classes of the automobiles manufactured is not presented, because to do so would disclose the operations of individual establishments. Touring cars rank first in number, runabouts second, and closed pleasure and family vehicles third. Cabs, patrol wagons, and ambulances rank in the order named. Nearly all the machines were equipped with engines of from 30 to 50 horsepower, although a few pleasure and family vehicles exceeded that rating and a limited number fell below it.

Hats, fur-felt.—The manufacture of fur-felt hats has long been an important industry in the state, but the development was greater during the last five-year period. The following table shows the quantity and cost of materials used and the quantity and value of products reported for the industry at the last three censuses:

MATERIAL OR PRODUCT.	1909	1904	1899
Materials used, total cost	$4,848,983	$3,953,693	$3,685,748
Hatters' fur:			
Pounds	1,673,332	1,385,325	1,499,767
Cost	$1,909,915	$1,535,579	$1,463,491
Fur-felt hat bodies and hats in the rough, purchased:			
Dozens	87,117	30,783	61,726
Cost	$491,161	$194,207	$381,362
Chemicals and dyestuffs	$315,598	$501,640	$272,635
Fuel and rent of power and heat	$175,076	$162,748	$119,884
All other materials	$1,957,233	$1,559,519	$1,448,376
Products, total value	$10,399,860	$8,662,799	$7,546,882
Fur-felt hats:			
Dozens	530,558	600,312	497,683
Value	$7,858,882	$8,198,376	$6,543,736
Fur-felt hat bodies and hats in the rough, for sale:			
Dozens	335,947	63,676	153,188
Value	$2,407,044	$396,056	$946,957
Amount received for contract work	$123,273	$50,612	$52,371
All other products	$10,661	$17,755	$3,818

The cost of hatters' fur, which was the principal material reported, represented 39.4 per cent of the total cost of all materials in 1909 and about the same proportion in 1904 and 1899. The quantity and cost were both highest in 1909, although the quantity decreased from 1899 to 1904. A decided increase is shown from 1904 to 1909 in the number and cost of hat bodies used, which followed a decided decrease in both items between 1899 and 1904.

The proportion that the value of finished hats represents of the total value of products for the industry has varied greatly during the last decade, being 86.7 per cent in 1899, 94.6 per cent in 1904, and 75.6 per cent in 1909. The decrease in the value of finished hats from 1904 to 1909 was more than offset by the gain in that of hat bodies and hats in the rough.

Electrical machinery, apparatus, and supplies.—This industry has developed rapidly during recent years, which may have been due, to some extent, to the fact that Connecticut is a center of the brass and bronze industry. The following tabular statement gives the quantity and value of the different products reported at the last two censuses. Comparable statistics are not available for 1899.

PRODUCT.	1909	1904
Total value	$9,824,373	$4,939,831
Sockets, receptacles, bases, etc	1,652,086	1,022,287
Electric-lighting fixtures of all kinds	111,054	195,098
Electric switches, signals, and attachments	1,382,183	(1)
Insulated wires and cables	3,772,881	2,156,369
All other products	2,905,669	1,566,077

[1] Included under "All other products," to avoid disclosure of individual operations.

The totals for this industry do not include the electric machinery and apparatus, to the value of $689,696 in 1909 and $591,094 in 1904, which were manufactured by establishments primarily engaged in some other industry.

Insulated wires and cables formed the products of highest value at both censuses. The largest relative gain was in the value of the different classes of machinery and apparatus included under the head of "All other products," which consisted mainly of electric lamps, dynamos, motors, storage and primary batteries, telephones and telephone parts, and magneto-ignition apparatus.

Printing and publishing.—The following table shows the number of the several classes of publications in the state during 1909, 1904, and 1899, and their aggregate circulation per issue:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total	**160**	**158**	**158**	**539,765**	**566,791**	**457,622**
Daily	38	36	44	258,543	229,357	208,815
Sunday	10	5	3	86,261	59,095	(1)
Semiweekly	9	[2] 11	22	23,612	27,500	29,325
Weekly	78	80	74	134,849	165,479	155,507
Monthly	18	19	9	28,650	40,950	44,375
All other classes	7	7	6	7,850	38,350	19,600

[1] Included in circulation of dailies. [2] Includes one triweekly publication.

An increase of 82,143, or 17.9 per cent, is shown in the total circulation per issue of all publications during the last decade, yet a decided decrease is shown for 1909 as compared with 1904. With the exception of the dailies and the Sunday papers, each class shows a loss during the five-year period 1904–1909. The growth from 1904 to 1909 in the circulation of Sunday papers was 46 per cent, and the increase in that of the dailies was 12.7 per cent. Between 1904 and 1909 the number of Sunday papers increased by five and the number of dailies by two. The circulation of the dailies constituted 47.9 per cent of the total circulation of all publications in 1909, that of the weeklies 25 per cent, and that of the Sunday papers 16 per cent. The corresponding proportions in 1904 were 40.5 per cent, 29.2 per cent, and 10.4 per cent, respectively, while in 1899 the circulation of dailies and Sunday publications combined constituted 45.6 per cent of the total and the circulation of the weeklies 34 per cent. The circulation of evening newspapers increased from 177,728 in 1904 to 186,601 in 1909 and that of morning papers from 51,629 to 71,942. All of the publications were in the English language except one daily, which was in Italian; 10 weeklies, 4 of which were in German, 4 in Italian, 1 in Polish, and 1 in Swedish; and 1 semimonthly included under the head of "All other classes," which was in German.

Paper and wood pulp.—The quantity and value of the various products of this industry, as reported for the censuses of 1909, 1904, and 1899, are shown in the next table.

PRODUCT.	1909	1904	1899
Total value	**$5,527,334**	**$5,039,147**	**$3,565,031**
Book paper:			
Tons	3,180	4,425	6,076
Value	$399,856	$517,562	$676,248
Writing and other fine paper:			
Tons	2,896	6,439	2,298
Value	$559,954	$804,055	$361,412
Wrapping paper:			
Tons	6,316	7,056	14,219
Value	$538,830	$502,544	$743,747
Boards:			
Tons	65,567	64,610	30,762
Value	$2,386,945	$2,354,053	$1,158,499
Tissue:			
Tons	2,041	2,169	1,740
Value	$438,097	$406,675	$283,378
All other paper products:			
Tons	12,224	4,950	4,712
Value	$750,683	$357,442	$276,312
All other products	$452,969	$36,816	$71,425

The output of each class of products for which statistics as to quantity are given, with the exception of boards and "All other paper products," decreased from 1904 to 1909. Book paper and writing and other fine paper also show decreases in value. Slight increases in both quantity and value are reported for paper boards, which form the chief product of the industry in the state. Book paper showed a marked decrease in both quantity and value during each five-year period. "All other paper products" comprises principally news paper and blotting paper and card and bristol boards, the first of which was made much more extensively in 1909 than in 1904 or 1899.

The paper-making machinery in the mills of the state in 1909 consisted mainly of 17 Fourdrinier and 66 cylinder machines, having a yearly capacity of 127,025 tons and in 1904 of 17 Fourdrinier and 64 cylinder machines, with an annual capacity of 110,121 tons.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. In 1909 there were 95 such establishments in Connecticut, 15 of which were in New Haven, 12 in Hartford, 7 in Bridgeport, 7 in Waterbury, 5 in New London, 4 each in Danbury, Meriden, and Stamford, and 3 in Norwich. The following statement summarizes the statistics:

Number of establishments	95
Persons engaged in the industry	1,638
Proprietors and firm members	101
Salaried employees	96
Wage earners (average number)	1,441
Primary horsepower	1,852
Capital	$870,567
Expenses	1,039,900
Services	684,373
Materials	246,066
Miscellaneous	159,461
Amount received for work done	1,416,122

Of these establishments, 53 were operated by individuals, 23 by firms, and 19 by corporations. Twenty-two establishments had receipts for the year's business

of less than $5,000; 50 of $5,000 but less than $20,000, and 23 of $20,000 but less than $100,000.

The number of wage earners employed each month and the percentage 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	1,350	86.3	July	1,564	100.0
February	1,342	85.8	August	1,547	98.9
March	1,343	85.9	September	1,503	96.1
April	1,363	87.1	October	1,485	94.9
May	1,399	89.4	November	1,451	92.8
June	1,497	95.7	December	1,451	92.8

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

KIND.	Number of engines or motors.	Horsepower.
Primary power, total		1,852
Owned—Steam	85	1,695
Rented:		
Electric	21	135
Other		22

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

KIND.	Unit.	Quantity.
Anthracite coal	Tons	3,492
Bituminous coal	Tons	10,448
Coke	Tons	11
Wood	Cords	39
Oil	Barrels	102
Gas	1,000 feet	12,249

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	31	59
Persons engaged in the industry	86	80
Proprietors and firm members	36	61
Wage earners (average number)	50	19
Primary horsepower	873	1,982
Capital	$51,408	$132,577
Expenses	23,026	187,152
Services	19,478	5,737
Materials	1,045	[1] 178,750
Miscellaneous	2,503	2,665
Value of products	46,481	[1] 220,775

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—All industries	1909	4,251	233,871	3,468	19,611	210,792	400,275	$517,547	$25,637	$110,119	$257,259	$490,272	$233,013
	1904	3,477	198,046	2,918	13,523	181,605	304,204	373,284	17,040	87,943	191,302	369,082	177,780
	1899	3,382	.....	.....	9,258	159,733	256,331	299,207	11,755	73,394	169,672	315,106	145,434
Automobiles, including bodies and parts	1909	28	4,444	8	621	3,815	3,937	12,131	634	2,878	4,856	11,668	6,812
	1904	[1] 7	1,131	4	62	1,065	1,283	3,713	86	784	1,163	2,644	1,481
	[2] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Boots and shoes, including *cut stock and findings.*	1909	10	582	15	47	520	235	746	56	226	1,088	1,658	570
	1904	12	559	13	47	499	253	589	54	209	820	1,319	499
	1899	15	787	23	40	719	379	790	38	298	987	1,517	530
Boxes, fancy and paper	1909	38	2,074	20	205	1,849	1,306	2,337	262	748	1,386	2,911	1,525
	1904	37	2,186	24	130	2,032	1,149	1,837	158	764	1,432	2,768	1,336
	1899	34	1,740	16	92	1,632	.....	1,423	100	553	922	2,057	1,135
Brass and bronze products	1909	80	17,890	47	1,026	16,817	50,034	47,873	1,478	9,667	47,864	66,933	19,069
	1904	[3] 64	16,490	29	1,079	15,382	38,915	40,571	1,506	8,196	37,913	53,916	16,003
	1899	62	.....	.....	607	12,747	.....	25,582	916	6,754	36,603	49,059	12,456
Bread and other bakery products	1909	431	2,011	467	275	1,869	658	2,532	169	1,222	4,463	7,310	2,847
	1904	327	2,376	355	270	1,751	557	2,260	183	1,019	3,446	5,898	2,452
	1899	309	2,149	332	205	1,612	.....	2,115	133	861	2,915	5,209	2,294
Butter, cheese, and condensed milk	1909	30	148	9	34	105	231	211	17	52	623	745	122
	1904	[1] 41	140	17	28	95	209	159	15	57	670	815	145
	1899	71	262	49	47	166	531	275	24	85	882	1,094	212
Buttons	1909	20	1,133	16	60	1,057	1,673	1,501	107	465	735	1,635	900
	1904	11	1,118	5	69	1,044	831	1,308	95	410	599	1,446	847
	1899	11	834	10	24	800	491	632	31	306	430	1,087	657
Carriages and wagons and materials	1909	92	720	99	43	578	957	1,226	41	372	383	1,077	694
	1904	109	1,730	122	101	1,507	1,329	2,326	131	767	793	2,196	1,403
	1899	135	.....	.....	112	1,044	.....	3,529	136	1,032	1,245	3,166	1,921
Cars and general shop construction and repairs by steam-railroad companies.	1909	5	1,300	.....	74	1,226	595	948	77	742	760	1,580	820
	1904	5	2,108	.....	133	1,975	810	1,331	87	1,256	923	2,155	1,232
	1899	6	1,657	.....	100	1,557	613	1,639	78	944	1,366	2,430	1,064
Clocks and watches, including cases and materials.	1909	16	6,195	5	339	5,851	4,273	9,846	415	3,030	2,098	7,390	5,292
	1904	13	6,137	2	370	5,765	3,699	8,288	364	2,939	2,116	7,060	4,944
	1899	[1] 15	4,088	8	124	3,956	.....	5,110	196	1,924	1,836	4,596	2,760
Clothing, men's, including shirts	1909	28	854	30	73	751	418	958	106	304	726	1,362	636
	1904	22	1,012	19	41	952	168	708	76	344	733	1,443	710
	1899	22	.....	.....	20	907	.....	562	22	285	434	920	486
Clothing, women's	1909	17	1,473	13	78	1,382	461	677	102	415	708	1,716	918
	1904	17	942	19	57	866	301	435	66	246	534	1,098	564
	1899	14	523	16	13	494	.....	194	12	182	225	615	390
Confectionery	1909	22	312	27	52	233	96	332	91	82	889	1,233	344
	1904	20	322	25	75	222	204	302	57	82	365	636	281
	1899	11	.....	.....	29	143	.....	178	19	65	214	436	222
Copper, tin, and sheet-iron products	1909	48	2,655	27	153	2,475	1,520	4,091	213	949	1,565	3,604	2,039
	1904	43	2,359	37	153	2,169	1,504	3,077	192	911	,049	2,705	1,656
	1899	26	.....	.....	67	1,683	.....	1,506	96	709	890	1,981	1,091
Cordage and twine and jute and linen goods	1909	8	314	7	21	286	1,134	481	19	85	431	561	130
	1904	[1] 5	210	3	5	202	910	280	5	56	258	361	103
	1899	[4] 7	255	6	4	245	.....	277	3	63	179	285	106
Corsets	1909	17	7,177	15	519	6,643	1,566	6,931	876	2,520	6,676	12,815	6,139
	1904	13	4,784	12	360	4,412	1,507	3,925	480	1,418	2,084	5,591	2,907
	1899	24	6,124	32	337	5,755	.....	2,979	443	1,796	3,179	6,847	3,668
Cotton goods, including cotton small wares	1909	52	14,887	26	501	14,360	58,137	39,243	778	5,666	11,960	24,232	12,272
	1904	52	13,479	18	350	13,111	47,950	31,159	516	4,653	10,203	18,425	8,222
	1899	[3] 55	13,404	19	281	13,104	41,184	27,352	396	4,394	7,536	15,489	7,953
Cutlery and tools, not elsewhere specified	1909	82	8,094	45	502	7,547	14,135	13,758	751	3,980	3,310	10,717	7,407
	1904	71	6,170	43	374	5,753	8,658	8,090	479	3,098	2,830	8,336	5,506
	1899	71	4,846	54	252	4,540	.....	6,528	311	2,315	2,085	5,977	3,892
Dyeing and finishing textiles	1909	10	1,817	3	95	1,719	5,851	5,375	198	872	1,480	3,562	2,082
	1904	10	1,496	2	88	1,406	4,883	4,562	102	640	927	2,215	1,288
	1899	5	1,339	.....	39	1,300	4,724	3,244	101	579	907	2,270	1,363
Electrical machinery, apparatus, and supplies	1909	41	4,120	7	608	3,505	4,457	9,852	813	1,003	5,211	9,824	4,613
	1904	32	1,942	10	225	1,707	2,505	4,184	278	724	2,754	4,940	2,186
	1899	17	1,111	8	142	961	987	2,514	170	406	1,074	3,168	1,194

[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.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—Continued.													
Fancy articles, not elsewhere specified	1909	8	437	4	36	397	526	$574	$47	$172	$423	$730	$307
	1904	11	325	10	23	292	271	282	30	123	234	477	243
	1899	[1] 10	259	7	26	226	.....	313	35	80	166	361	195
Fertilizers	1909	12	374	9	70	295	1,273	1,591	78	137	1,091	1,573	482
	1904	10	348	6	32	310	607	987	37	124	525	943	418
	1899	9	171	8	30	133	.....	383	28	54	228	391	163
Firearms and ammunition	1909	10	9,205	1	671	8,533	9,391	21,681	1,048	4,968	10,066	19,948	9,882
	1904	13	8,049	9	347	7,693	5,125	11,776	562	4,601	8,311	17,762	9,451
	1899	13	5,473	13	182	5,278	.....	7,606	342	2,919	5,509	11,301	5,792
Flour-mill and gristmill products	1909	98	288	122	21	145	3,616	1,277	22	72	1,731	2,024	293
	1904	86	311	98	46	167	3,108	1,336	39	86	1,690	1,982	292
	1899	84	.....	.....	32	170	.....	1,042	23	76	1,399	1,700	301
Foundry and machine-shop products	1909	403	42,101	202	4,163	37,736	49,167	89,715	5,144	21,332	24,820	65,535	40,715
	1904	[2] 349	32,545	204	2,513	29,828	32,248	57,909	3,148	15,417	15,362	44,816	29,454
	1899	361	.....	.....	1,828	27,041	.....	48,728	2,315	13,766	15,669	39,997	24,328
Furniture and refrigerators	1909	25	383	18	67	298	803	651	79	179	368	786	418
	1904	[1] 19	328	14	31	283	537	292	30	166	238	557	319
	1899	9	241	9	24	208	.....	277	20	101	254	489	235
Gas, illuminating and heating	1909	28	1,211	.....	285	926	4,100	16,016	286	557	1,005	3,446	2,441
	1904	26	849	1	208	640	2,237	11,036	190	330	826	2,558	1,732
	1899	21	488	.....	134	354	.....	7,906	117	231	362	1,421	1,059
Hat and cap materials	1909	14	514	9	27	478	1,024	1,183	42	183	702	1,508	806
	1904	11	398	13	20	365	599	597	22	135	437	826	389
	1899	14	325	21	6	298	.....	442	6	102	366	588	222
Hats, fur-felt	1909	80	5,877	59	601	5,217	5,619	7,144	574	3,384	4,849	10,400	5,551
	1904	56	5,664	57	449	5,158	3,729	3,352	427	2,696	3,954	8,663	4,709
	1899	58	5,126	85	173	4,868	3,370	3,198	173	2,415	3,686	7,547	3,861
Hosiery and knit goods	1909	21	3,524	2	182	3,340	3,540	6,464	324	1,363	3,049	5,801	2,752
	1904	24	3,703	7	102	3,594	3,642	5,815	163	1,305	2,825	5,371	2,546
	1899	25	3,356	12	101	3,243	3,108	6,149	159	1,131	2,203	4,044	1,841
Leather goods	1909	18	315	15	28	272	277	403	41	143	330	588	258
	1904	20	325	19	25	281	75	351	26	142	296	542	246
	1899	[1] 14	.....	.....	14	265	.....	247	10	129	267	490	223
Leather, tanned, curried, and finished	1909	8	176	5	21	150	356	777	35	95	805	1,047	242
	1904	9	197	7	21	169	371	894	28	82	543	748	205
	1899	7	201	10	12	179	215	639	14	90	681	891	210
Lime	1909	10	347	1	21	325	170	1,373	28	160	275	553	278
	1904	6	141	1	5	135	57	1,381	5	70	148	296	148
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liquors, malt	1909	19	588	9	104	475	2,530	5,310	218	426	1,375	4,426	3,051
	1904	22	518	17	107	394	2,171	3,956	205	315	818	2,927	2,109
	1899	20	445	20	81	344	2,134	3,109	133	279	640	2,653	2,013
Lumber and timber products	1909	393	4,219	443	281	3,495	15,153	6,109	288	1,907	3,918	7,846	3,928
	1904	176	2,496	206	181	2,109	7,275	3,372	168	1,128	2,479	4,792	2,313
	1899	191	.....	.....	130	2,064	.....	2,776	107	899	2,169	4,234	2,065
Marble and stone work	1909	86	940	96	62	782	2,317	1,297	74	514	370	1,237	867
	1904	69	1,203	72	80	1,051	2,060	1,494	87	655	402	1,497	1,095
	1899	49	.....	.....	36	845	.....	832	25	411	251	847	596
Musical instruments, pianos and organs and materials.	1909	17	2,469	5	160	2,304	2,559	5,627	312	1,251	3,022	5,538	2,516
	1904	17	2,715	6	126	2,583	2,224	5,226	240	1,337	2,402	5,273	2,871
	1899	15	1,953	6	84	1,863	.....	3,586	146	890	1,570	3,396	1,826
Needles, pins, and hooks and eyes	1909	8	2,825	4	173	2,648	3,190	3,209	220	1,311	1,697	4,236	2,539
	1904	13	2,463	7	130	2,326	1,654	2,835	158	1,055	1,182	3,062	1,880
	1899	15	1,329	10	63	1,256	.....	2,289	89	543	740	1,815	1,075
Paint and varnish	1909	17	360	6	118	236	1,024	1,100	171	147	825	1,543	718
	1904	[4] 10	83	6	24	53	170	369	44	28	302	515	213
	1899	[2] 8	55	6	17	32	62	374	22	19	234	400	166
Paper and wood pulp	1909	51	1,920	24	176	1,720	19,509	7,195	351	924	3,303	5,527	2,224
	1904	50	1,933	29	154	1,750	18,021	5,893	236	843	2,738	5,039	2,301
	1899	49	1,576	36	115	1,425	14,621	3,968	152	633	1,982	3,565	1,583
Paper goods, not elsewhere specified	1909	10	708	4	72	632	593	2,101	72	255	883	1,521	638
	1904	10	814	5	66	743	675	1,781	80	288	1,437	2,086	649
	1899	[2] 4	633	.....	44	589	.....	1,570	48	260	930	1,482	552

[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] Not reported separately.
[4] Excluding statistics for four establishments, to avoid disclosure of individual operations.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
STATE—Continued.													
Patent medicines and compounds and druggists' preparations.	1909	64	432	30	156	237	381	$808	$217	$88	$488	$1,342	$854
	1904	52	296	37	113	146	174	632	122	57	290	1,023	733
	1899	42	.....	.....	150	286	.....	826	165	123	435	1,402	967
Printing and publishing	1909	303	4,103	295	930	2,878	3,425	6,322	855	1,736	1,769	6,370	4,601
	1904	[1] 328	3,426	285	613	2,528	2,530	4,768	632	1,502	1,276	5,066	3,790
	1899	[1] 286	2,824	252	377	2,195	.....	4,328	355	1,234	1,037	4,114	3,077
Silk and silk goods, including throwsters	1909	[1] 47	9,385	37	645	8,703	8,564	19,730	996	3,749	11,834	21,063	9,229
	1904	43	8,157	38	327	7,792	7,821	16,676	479	3,124	9,098	15,624	6,526
	1899	38	6,860	23	323	6,514	5,415	12,167	403	2,393	7,198	12,379	5,181
Silverware and plated ware	1909	31	6,812	5	584	6,223	5,751	17,247	967	3,446	7,232	15,837	8,605
	1904	[1] 22	4,161	2	305	3,854	3,500	10,569	450	2,099	3,640	8,126	4,486
	1899	26	4,747	3	253	4,491	.....	13,067	507	2,293	4,679	9,538	4,859
Slaughtering and meat packing	1909	28	523	28	63	432	590	1,967	62	239	3,949	4,572	623
	1904	26	426	29	26	371	461	733	22	204	2,809	3,218	409
	1899	19	.....	.....	38	403	.....	587	37	188	3,259	3,835	576
Tobacco manufactures	1909	205	1,861	289	59	1,513	48	1,370	57	908	1,064	2,738	1,674
	1904	226	1,593	253	73	1,267	24	1,174	70	766	852	2,350	1,498
	1899	216	1,296	238	26	1,032	.....	864	29	571	672	1,776	1,104
Typewriters and supplies	1909	8	3,510	.....	576	2,934	2,034	8,468	486	1,898	1,041	4,016	2,975
	1904	6	1,611	.....	104	1,507	1,113	2,291	132	809	355	1,637	1,282
	1899	4	718	1	24	693	.....	1,142	39	374	163	784	621
Wirework, including wire rope and cable	1909	28	1,557	20	117	1,420	1,517	2,487	197	684	1,648	3,345	1,697
	1904	29	1,417	20	136	1,261	2,410	2,444	210	575	1,249	2,600	1,351
	1899	21	864	22	51	791	.....	1,320	74	350	563	1,246	683
Woolen, worsted, and felt goods, and wool hats.	1909	56	8,140	31	320	7,780	17,518	20,011	564	3,485	12,838	19,363	6,525
	1904	59	7,748	39	280	7,429	14,949	15,031	416	2,998	10,073	15,483	5,410
	1899	61	7,113	47	200	6,866	15,454	14,195	313	2,608	7,923	12,637	4,714
All other industries	1909	950	39,067	800	3,496	35,671	82,030	97,291	4,579	18,428	53,187	93,280	40,093
	1904	768	37,112	662	2,839	33,611	66,651	78,928	3,592	16,310	42,369	77,256	34,947
	1899	783	.....	.....	2,149	31,726	.....	68,948	2,644	14,681	39,628	71,580	31,952

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

BRIDGEPORT—All industries	1909	367	28,952	243	2,934	25,775	43,387	$62,779	$3,709	$13,349	$37,947	$65,609	$27,662
	1904	306	21,681	234	1,955	19,492	.....	49,381	2,511	9,480	22,335	44,587	22,252
	1899	286	.....	.....	1,057	17,038	.....	31,625	1,434	7,885	17,987	33,536	15,249
Artificial stone	1909	5	56	4	4	48	53	172	4	27	23	80	57
	1904	3	21	1	3	17	.....	42	3	11	8	33	25
Bread and other bakery products	1909	49	342	40	31	202	117	235	20	186	591	964	373
	1904	42	328	52	39	237	.....	338	26	148	453	801	348
	1899	41	204	42	36	186	.....	310	19	111	301	586	285
Carriages and wagons and materials	1909	6	88	4	11	73	108	150	13	47	50	145	95
	1904	[2] 5	186	3	19	164	.....	438	26	109	128	347	219
	1899	[2] 8	.....	.....	9	169	.....	501	11	113	104	315	211
Copper, tin, and sheet-iron products	1909	9	320	3	30	287	253	423	42	124	263	492	229
	1904	[2] 9	188	7	25	156	.....	258	26	78	148	299	151
	1899	6	.....	.....	8	97	.....	88	7	43	48	136	88
Corsets	1909	5	3,889	.....	230	3,650	984	4,205	401	1,349	3,802	6,899	3,097
	1904	6	2,494	2	203	2,289	.....	2,694	354	667	1,251	2,954	1,703
	1899	7	3,122	11	127	2,984	.....	1,361	247	878	1,677	3,224	1,547
Cutlery and tools, not elsewhere specified	1909	7	814	2	44	768	843	983	88	406	205	954	659
	1904	8	744	2	65	677	.....	891	68	374	248	883	635
	1899	[2] 3	.....	.....	13	350	.....	194	16	148	105	364	259
Electrical machinery, apparatus, and supplies	1909	5	1,631	.....	231	1,400	1,440	3,229	217	575	1,842	3,321	1,479
	1904	3	644	.....	95	549	.....	1,064	64	196	594	1,104	510
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products	1909	48	5,657	14	739	4,904	10,555	13,426	882	2,716	4,336	9,752	5,416
	1904	36	2,214	17	198	1,999	.....	3,503	291	1,007	1,239	3,269	2,030
	1899	[2] 39	.....	.....	150	2,124	.....	3,238	201	1,102	1,371	3,427	2,056
Liquors, malt	1909	3	86	.....	14	72	365	810	35	59	160	518	358
	1904	4	75	8	18	49	.....	648	36	46	104	414	310
	1899	5	76	9	10	57	.....	611	18	52	108	521	413

[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.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
BRIDGEPORT—Continued.													
Marble and stone work	1909	7	58	8	7	43	148	$73	$6	$32	$43	$102	$59
	1904	[1] 4	32	4	2	26	.....	14	2	21	24	58	34
	1899	[2] 3	26	1	7	18	.....	34	4	12	13	41	28
Models and patterns, not including paper patterns.	1909	7	47	5	4	38	27	27	5	33	10	56	46
	1904	5	23	5	.....	18	.....	9	.....	11	3	24	21
	1899	3	9	3	.....	6	.....	4	.....	3	1	11	10
Printing and publishing	1909	35	297	28	97	172	303	855	102	120	127	512	385
	1904	[1] 22	229	16	53	160	.....	426	55	118	110	409	299
	1899	[2] 18	193	10	44	139	.....	429	42	82	61	289	228
Tobacco manufactures	1909	16	54	19	.....	35	.....	41	.....	20	21	69	48
	1904	20	61	22	5	34	.....	41	4	19	22	76	54
	1899	17	41	18	1	22	.....	24	1	11	17	47	30
All other industries	1909	165	15,613	107	1,492	14,014	28,191	38,150	1,894	7,655	26,384	41,745	15,361
	1904	139	14,442	95	1,230	13,117	.....	39,015	1,556	6,675	18,003	33,916	15,913
	1899	136	.....	.....	652	10,886	.....	24,831	868	5,330	13,481	24,575	11,094
HARTFORD—All industries	**1909**	**396**	**17,447**	**320**	**2,500**	**14,627**	**18,410**	**$48,085**	**$2,710**	**$9,374**	**$17,863**	**$40,680**	**$22,817**
	1904	**340**	**12,907**	**303**	**1,383**	**11,221**	.....	**28,359**	**1,693**	**6,562**	**11,487**	**25,974**	**14,487**
	1899	**322**	.....	.....	**1,149**	**10,677**	.....	**28,057**	**1,374**	**5,950**	**11,369**	**23,829**	**12,460**
Boxes, fancy and paper	1909	3	54	2	2	50	13	25	4	14	32	60	28
	1904	3	53	2	3	48	.....	20	6	15	23	47	24
	1899	3	53	2	1	50	.....	24	1	19	30	56	26
Brass and bronze products	1909	6	58	5	2	51	43	65	5	39	104	183	79
	1904	[2] 4	38	4	4	30	.....	110	6	17	43	70	27
	1899	3	36	5	2	29	.....	62	2	21	23	56	33
Bread and other bakery products	1909	37	328	37	50	241	89	423	27	172	668	1,105	437
	1904	26	268	26	43	199	.....	324	31	124	451	843	392
	1899	34	229	36	16	177	.....	192	11	105	298	542	244
Brick and tile	1909	5	57	6	.....	51	415	80	.....	29	15	66	51
	1904	4	50	6	1	43	.....	66	1	23	7	42	35
	1899	7	78	8	2	68	.....	114	1	31	11	60	49
Carriages and wagons and materials	1909	6	132	5	9	118	87	149	7	30	53	178	125
	1904	[1] 7	133	12	12	109	.....	125	8	67	66	219	153
	1899	[2] 5	.....	.....	5	47	.....	47	4	32	31	93	62
Clothing, men's, including shirts	1909	3	39	3	1	35	13	43	1	17	55	97	42
	1904	4	82	4	7	71	.....	48	5	28	113	174	61
	1899	3	49	4	1	44	.....	22	1	14	32	58	26
Clothing, women's	1909	6	378	8	9	361	32	90	10	103	99	269	170
	1904	6	116	10	12	94	.....	64	10	25	63	142	79
	1899	4	63	5	.....	58	.....	29	.....	18	51	77	26
Copper, tin, and sheet-iron products	1909	6	54	6	5	43	89	83	4	29	36	95	59
	1904	7	58	10	6	42	.....	39	7	28	50	108	58
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electrical machinery, apparatus, and supplies.	1909	10	901	1	120	780	599	1,537	192	382	622	1,704	1,082
	1904	7	591	3	40	548	.....	769	80	244	362	1,182	770
	1899	7	373	3	29	341	.....	586	54	129	360	672	312
Foundry and machine-shop products	1909	52	3,180	19	393	2,768	4,128	11,576	570	2,014	2,142	6,549	4,407
	1904	39	2,562	19	221	2,322	.....	6,202	320	1,458	1,328	4,117	2,789
	1899	40	.....	.....	158	2,622	.....	6,697	298	1,550	1,396	3,773	2,377
Leather goods	1909	6	199	3	20	176	203	249	29	97	201	342	141
	1904	[2] 3	202	3	16	183	.....	220	16	93	181	314	133
	1899	3	.....	.....	9	205	.....	204	8	95	203	366	163
Liquors, malt	1909	4	169	1	30	138	483	1,352	56	125	444	1,256	812
	1904	4	129	1	26	102	.....	980	38	71	254	760	506
	1899	4	132	1	32	99	.....	889	44	82	209	742	533
Lumber and timber products	1909	15	227	11	21	195	929	308	27	141	224	473	249
	1904	[2] 9	186	9	30	147	.....	338	34	99	270	477	207
	1899	[1] 7	118	7	13	98	.....	179	11	63	311	430	119
Marble and stone work	1909	7	67	8	16	43	154	113	17	38	84	175	91
	1904	4	38	3	10	25	.....	74	11	17	36	101	65
	1899	[2] 3	.....	.....	7	35	.....	38	4	25	42	87	45

[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 can not be shown without disclosing individual operations.

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
HARTFORD—Continued.													
Models and patterns, not including paper patterns.	1909	6	67	6	5	56	63	$35	$4	$47	$12	$90	$78
	1904	3	50	2	4	44	.....	26	4	38	7	57	50
	[1] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Patent medicines and compounds and druggists' preparations.	1909	7	34	4	17	13	.....	47	13	5	25	79	54
	1904	11	36	9	13	14	.....	28	10	4	32	70	38
	1899	7	.....	.....	10	10	.....	43	10	8	18	83	65
Printing and publishing	1909	68	1,155	59	230	866	1,111	1,827	229	541	620	2,008	1,388
	1904	67	1,002	55	186	761	.....	1,671	204	491	453	1,667	1,214
	1899	62	.....	.....	100	692	.....	1,482	125	401	380	1,437	1,057
Tobacco manufactures	1909	28	316	36	8	272	2	234	7	184	213	517	304
	1904	24	302	30	11	261	.....	205	14	167	192	494	302
	1899	25	269	31	3	235	.....	234	3	138	164	392	228
All other industries	1909	121	10,032	100	1,562	8,370	10,057	29,840	1,508	5,317	12,214	25,434	13,220
	1904	108	7,011	95	738	6,178	.....	17,050	888	3,553	7,556	15,140	7,584
	1899	105	.....	.....	752	5,858	.....	17,215	797	3,219	7,810	14,905	7,095
NEW HAVEN—All industries	**1909**	**590**	**26,874**	**536**	**2,791**	**23,547**	**31,382**	**$52,014**	**$3,462**	**$12,776**	**$24,319**	**$51,071**	**$26,752**
	1904	**490**	**23,711**	**455**	**1,819**	**21,437**	.....	**31,413**	**2,026**	**11,204**	**18,521**	**39,666**	**21,145**
	1899	**437**	.....	.....	**1,396**	**17,594**	.....	**27,962**	**1,443**	**8,520**	**16,136**	**34,899**	**18,763**
Brass and bronze products	1909	7	75	5	9	61	71	229	19	32	250	354	104
	1904	[2] 4	61	5	10	46	.....	243	15	27	177	264	87
	1899	7	.....	.....	13	72	.....	180	12	46	152	222	70
Bread and other bakery products	1909	65	502	63	69	370	163	537	50	230	876	1,473	597
	1904	53	392	52	86	254	.....	305	57	155	537	926	389
	1899	41	372	43	50	279	.....	579	40	168	513	944	431
Canning and preserving	1909	3	45	2	12	31	45	100	12	14	50	127	77
	1904	3	38	2	11	25	.....	60	6	13	36	75	39
	1899	3	29	2	7	20	.....	35	3	9	16	44	28
Carriages and wagons and materials	1909	15	113	16	6	91	73	223	8	62	98	223	125
	1904	28	921	27	41	853	.....	1,141	69	374	329	947	618
	1899	30	978	30	58	890	.....	1,072	67	597	669	1,726	1,057
Clothing, men's, including shirts	1909	10	58	14	2	42	6	51	1	19	67	111	44
	1904	[2] 4	27	5	.....	22	.....	26	.....	11	47	68	21
	1899	[2] 3	20	5	.....	15	.....	10	.....	5	21	29	8
Cutlery and tools, not elsewhere specified	1909	6	265	3	30	232	101	516	49	133	87	400	313
	1904	3	124	8	15	101	.....	141	27	56	53	196	143
	1899	3	.....	.....	11	90	.....	131	17	51	40	143	103
Electroplating	1909	3	40	4	1	35	35	11	1	16	9	34	25
	1904	3	16	3	.....	13	.....	6	.....	7	1	14	13
	1899	4	14	6	.....	8	.....	5	.....	4	2	11	9
Foundry and machine-shop products	1909	55	5,770	33	547	5,190	4,393	8,861	501	2,885	3,005	7,806	4,801
	1904	58	4,569	39	355	4,176	.....	6,266	410	2,050	1,818	5,395	3,577
	1899	52	.....	.....	245	3,433	.....	5,938	251	1,588	1,836	4,510	2,674
Furniture and refrigerators	1909	10	136	8	27	101	254	268	27	57	133	252	119
	1904	[2] 7	81	8	11	62	.....	41	11	38	56	135	79
	1899	4	71	3	18	50	.....	144	15	25	141	245	104
Hats and caps, other than felt, straw, and wool.	1909	6	90	12	12	66	11	72	12	43	116	240	124
	1904	4	48	4	7	37	.....	37	6	27	56	109	53
	1899	7	35	7	1	27	.....	19	.....	12	24	54	30
Jewelry	1909	7	27	6	6	15	5	44	2	7	27	55	28
	1904	4	19	3	3	13	.....	18	2	7	12	32	20
Liquors, malt	1909	4	142	3	25	114	607	1,392	54	100	326	1,290	964
	1904	4	131	3	30	98	.....	1,177	68	85	217	905	688
	1899	4	117	3	20	94	.....	929	40	80	180	799	619
Lumber and timber products	1909	20	324	16	29	279	1,073	584	31	166	533	809	276
	1904	[3] 9	174	6	28	140	.....	470	28	82	404	598	194
	1899	[2] 5	159	1	21	137	.....	632	27	64	411	569	158
Marble and stone work	1909	10	64	13	4	47	65	98	5	41	25	86	61
	1904	[3] 6	41	9	4	28	.....	64	4	18	22	65	43
	1899	[3] 3	.....	.....	1	25	.....	27	1	11	17	42	25

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

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. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
NEW HAVEN—Continued.													
Patent medicines and compounds and druggists' preparations.	1909	23	99	14	28	57	24	$130	$17	$14	$70	$145	$75
	1904	10	24	10	8	6	.....	40	7	3	26	70	44
	1899	[1] 9	.....	.....	66	33	.....	129	31	12	62	245	183
Printing and publishing	1909	72	840	53	275	512	508	999	199	332	334	1,325	991
	1904	66	711	53	148	510	.....	709	147	331	234	1,101	867
	1899	53	.....	.....	90	422	.....	755	80	225	267	952	685
Shipbuilding, including boat building	1909	4	16	4	.....	12	16	32	.....	11	8	28	20
	1904	5	11	5	.....	6	.....	12	.....	5	4	14	10
	1899	5	16	5	.....	11	.....	17	.....	7	7	20	13
Tobacco manufactures	1909	61	739	70	22	647	43	564	22	388	455	1,141	686
	1904	38	512	48	19	445	.....	382	19	274	304	799	495
	1899	36	357	41	3	313	.....	160	3	183	229	558	329
All other industries	1909	209	17,529	197	1,687	15,645	23,799	37,303	2,392	8,226	17,850	35,172	17,322
	1904	181	15,811	166	1,043	14,602	.....	20,269	1,150	7,641	14,188	27,953	13,765
	1899	168	.....	.....	792	11,675	.....	16,300	856	5,443	11,549	23,786	12,237
WATERBURY—All industries	**1909**	**169**	**21,600**	**97**	**1,333**	**20,170**	**37,518**	**$44,653**	**$1,926**	**$11,244**	**$28,726**	**$50,350**	**$21,624**
	1904	**143**	**16,671**	**92**	**1,173**	**15,406**	.....	**32,950**	**1,521**	**8,016**	**17,770**	**32,367**	**14,597**
	1899	**124**	.....	.....	**595**	**13,225**	.....	**21,967**	**912**	**6,691**	**18,202**	**30,330**	**12,128**
Brass and bronze products	1909	15	10,031	.....	428	9,603	26,530	24,663	718	5,451	21,599	31,462	9,863
	1904	[1] 14	7,879	1	433	7,445	.....	19,985	655	3,981	13,183	19,987	6,804
	1899	11	.....	.....	253	6,464	.....	12,597	429	3,435	14,111	20,238	6,127
Bread and other bakery products	1909	20	182	24	25	133	40	172	15	90	325	505	180
	1904	18	158	19	2	137	.....	91	1	86	302	453	151
	1899	17	98	5	10	83	.....	99	7	51	208	332	124
Carriages and wagons and materials	1909	5	42	7	3	32	16	68	3	23	18	58	40
	1904	6	60	7	.....	53	.....	54	.....	36	24	75	51
	1899	3	.....	.....	2	28	.....	45	1	14	11	36	25
Copper, tin, and sheet-iron products	1909	5	901	.....	43	858	396	1,076	75	366	430	1,046	616
	1904	[2] 4	904	.....	53	851	.....	1,344	78	354	364	1,038	674
	1899	[2] 4	852	.....	32	820	.....	713	56	353	444	976	532
Foundry and machine-shop products	1909	23	2,167	4	156	2,007	2,359	3,985	231	1,282	1,306	3,558	2,252
	1904	13	899	7	71	821	.....	1,409	111	517	349	1,335	986
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lumber and timber products	1909	7	246	2	39	205	399	748	37	134	309	681	372
	1904	3	69	4	6	59	.....	164	6	48	77	160	83
	[3] 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing	1909	15	239	10	48	181	186	395	52	129	97	399	302
	1904	[1] 14	183	10	47	126	.....	294	42	82	55	269	214
	1899	[1] 10	168	7	21	140	.....	205	17	96	43	200	157
Tobacco manufactures	1909	18	89	19	3	67	1	49	2	36	41	115	74
	1904	9	36	10	.....	26	.....	26	.....	15	20	49	29
	1899	11	28	12	.....	16	.....	27	.....	13	14	41	27
All other industries	1909	61	7,703	31	588	7,084	7,591	13,497	793	3,733	4,601	12,526	7,925
	1904	62	6,483	34	561	5,888	.....	9,583	628	2,897	3,396	9,001	5,605
	1899	68	.....	.....	277	5,674	.....	8,281	402	2,729	3,371	8,507	5,136

[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 can not be shown without disclosing individual operations.

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

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

CITY OR BOROUGH.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).	Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
								Expressed in thousands.					
Ansonia	1909	53	4,488	46	315	4,127	13,209	$9,703	$438	$2,384	$14,611	$20,088	$5,477
	1904	49	3,739	40	305	3,394	.....	7,026	377	1,683	15,308	19,132	3,824
	1899	49	.....	.....	186	3,288	.....	6,240	202	1,707	14,956	18,515	3,559
Danbury	1909	131	5,499	122	567	4,810	5,660	7,786	492	2,858	4,879	10,318	5,439
	1904	103	5,030	107	408	4,515	.....	4,037	346	2,264	3,695	8,066	4,371
	1899	104	.....	.....	154	3,939	.....	3,423	139	1,845	3,258	6,527	3,269
Meriden	1909	120	8,730	80	805	7,845	6,615	17,675	1,194	4,235	6,943	16,317	9,374
	1904	97	7,945	82	582	7,281	.....	10,442	807	3,669	5,644	13,764	8,120
	1899	92	.....	.....	374	6,689	.....	15,417	605	3,243	5,106	11,750	6,644
Middletown	1909	58	2,678	38	206	2,434	3,333	3,544	247	1,003	2,943	4,955	2,012
	[1] 1904	65	2,507	58	131	2,318	.....	3,583	145	977	2,563	4,351	1,788
	1899	60	.....	.....	144	2,495	.....	4,816	162	1,012	2,353	4,152	1,799
Naugatuck	1909	24	3,657	19	174	3,464	5,067	8,642	211	1,067	7,329	11,033	3,704
	1904	22	3,787	14	145	3,628	.....	7,900	184	1,098	7,260	11,010	3,750
	1899	22	.....	.....	82	3,160	.....	6,607	121	1,601	6,072	8,887	2,815
New Britain	1909	111	14,755	80	1,162	13,513	14,363	31,790	1,477	6,741	8,328	22,021	13,693
	1904	95	10,921	65	783	10,073	.....	19,980	892	4,687	5,668	14,960	9,292
	1899	82	.....	.....	439	8,619	.....	13,768	533	3,618	4,596	11,096	6,500
New London	1909	70	2,467	52	190	2,225	2,912	5,467	183	926	2,531	4,483	1,952
	1904	57	2,747	42	151	2,554	.....	4,590	162	1,070	2,527	4,710	2,183
	1899	54	.....	.....	130	1,963	.....	4,256	126	801	2,262	4,221	1,959
Norwich	1909	91	4,795	65	260	4,470	12,027	12,531	386	2,164	4,802	9,389	4,587
	1904	87	4,014	67	241	3,706	.....	8,475	310	1,694	3,043	6,022	2,979
	1899	89	.....	.....	154	3,172	.....	6,438	193	1,423	3,046	5,935	2,889
Stamford	1909	86	4,719	64	671	3,984	6,554	11,926	741	2,350	3,704	8,740	5,036
	1904	62	3,816	58	417	3,341	.....	7,526	439	1,722	2,330	5,890	3,560
	1899	49	.....	.....	281	2,445	.....	4,813	261	1,193	1,700	3,920	2,220
Torrington	1909	54	4,853	42	323	4,488	7,165	15,692	421	2,384	7,463	12,550	5,087
	1904	43	4,252	33	194	4,025	.....	9,157	270	1,953	5,915	9,674	3,759
	1899	37	.....	.....	146	3,161	.....	6,039	212	1,500	6,261	9,178	2,917
Willimantic	1909	47	3,278	41	217	3,020	10,566	9,919	223	1,235	3,194	6,733	3,539
	1904	35	3,005	34	119	2,852	.....	6,682	139	1,057	2,070	4,902	2,832
	1899	30	.....	.....	78	2,258	.....	5,621	87	833	1,360	3,023	1,663

[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. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Wage earners. Number. Maximum month.	Wage earners. Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	4,251	233,871	3,468	5,562	10,153	3,896	210,792	De 225,862	Fe 199,325	(1)	(1)	(1)	(1)	(1)	400,275
2	Agricultural implements	4	210	1	11	4	3	191	Mh 206	Au 172	198	198	.....	.....	.....	730
3	Artificial stone	43	320	40	21	2	6	251	Oc 322	Ja 152	321	321	.....	.....	.....	173
4	Automobiles, including bodies and parts.	28	4,444	8	146	362	113	3,815	De 4,586	Ja 3,320	4,996	4,936	32	28	.....	3,937
5	Baskets, and rattan and willow ware	5	12	4	2	.....	.....	6	Jy 2 10	Ja 2 3	8	8	.....	.....	.....	31
6	Blacking and cleansing and polishing preparations.	12	42	11	1	2	3	25	No 30	Fe 2 21	30	18	11	1	.....	35
7	Boots and shoes, including cut stock and findings.	10	582	15	20	17	10	520	Mh 2 536	Au 493	568	256	304	6	2	235
8	Boxes, fancy and paper	38	2,074	20	107	58	40	1,849	No 2,055	Ap 1,668	2,053	812	1,057	28	156	1,306
9	Brass and bronze products	80	17,890	47	245	647	134	16,817	De 18,601	Ap 15,871	18,634	16,452	1,944	138	100	50,038
10	Bread and other bakery products	431	2,611	467	48	117	110	1,869	De 1,901	Ja 1,808	1,932	1,684	231	12	5	654
11	Brooms	7	43	7	1	.....	1	34	Ja 2 34	Jy 2 34	34	22	10	2	.....	16
12	Brushes	12	157	14	8	5	1	129	De 2 135	Ja 122	135	87	48	.....	.....	138
13	Butter, cheese, and condensed milk	30	148	9	31	3	.....	105	Je 108	De 2 104	104	103	1	.....	.....	231
14	Buttons	20	1,133	16	27	23	10	1,057	Ap 1,144	Au 982	1,003	404	567	18	14	1,673
15	Canning and preserving	12	166	8	7	16	7	128	Se 300	Ap 62	306	143	163	.....	.....	199
16	Carpets, rag	7	23	8	.....	.....	.....	15	Ap 20	Au 12	13	9	4	.....	.....	20
17	Carriages and wagons and materials	92	720	99	23	12	8	578	My 641	Ja 521	547	545	2	.....	.....	957
18	Cars and general shop construction and repairs by steam-railroad companies.	5	1,300	.....	7	66	1	1,226	De 1,268	Ja 1,137	1,268	1,267	.....	1	.....	595
19	Cars and general shop construction and repairs by street-railroad companies.	15	533	.....	6	2	1	524	De 2 535	My 515	527	526	1	.....	.....	388
20	Clocks and watches, including cases and materials.	16	6,195	5	132	126	81	5,851	De 6,569	Jy 4,251	6,610	4,326	2,042	172	70	4,273
21	Clothing, men's, including shirts	28	854	30	19	43	11	751	De 893	My 664	930	214	709	.....	7	418
22	Clothing, women's	17	1,473	13	35	21	22	1,382	Mh 1,583	Au 1,052	1,485	119	1,314	8	44	461
23	Coffins, burial cases, and undertakers' goods.	5	165	3	6	35	8	113	De 117	No 109	117	106	10	1	.....	237
24	Confectionery	22	312	27	4	41	7	233	Je 267	Fe 192	216	99	107	.....	10	96
25	Cooperage and wooden goods, not elsewhere specified.	8	52	10	1	2	.....	39	Au 41	De 37	37	37	.....	.....	.....	78
26	Copper, tin, and sheet-iron products	48	2,655	27	74	42	37	2,475	Oc 2,591	Ja 2,299	2,575	1,712	759	51	53	1,526
27	Cordage and twine and jute and linen goods.	8	314	7	13	3	5	286	Au 315	No 114	297	148	140	7	2	1,134
28	Corsets	17	7,177	15	122	270	127	6,643	No 7,044	Ja 6,239	7,111	1,034	5,835	31	211	1,566
29	Cotton goods, including cotton small wares.	52	14,887	26	193	202	106	14,360	De 14,556	Jy 14,199	14,760	8,238	5,810	331	381	58,137
30	Cutlery and tools, not elsewhere specified.	82	8,094	45	145	260	97	7,547	De 8,007	Jy 7,288	8,028	7,189	743	77	19	14,135
31	Dyeing and finishing textiles	10	1,817	3	36	46	13	1,719	Ap 1,768	Se 1,679	1,730	1,474	211	33	12	5,851
32	Electrical machinery, apparatus, and supplies.	41	4,120	7	161	294	153	3,505	De 4,062	My 3,215	4,149	2,659	1,290	102	98	4,457
33	Electroplating	14	135	17	7	6	2	103	No 116	Ja 2 92	118	108	4	6	.....	172
34	Fancy articles, not elsewhere specified	8	437	4	17	10	9	397	No 438	Je 351	448	284	153	2	9	526
35	Fertilizers	12	374	9	18	41	11	295	My 394	Ja 185	224	202	20	2	.....	1,273
36	Firearms and ammunition	10	9,205	1	198	341	132	8,533	Ap 8,703	De 8,213	8,213	6,192	1,938	25	58	9,391
37	Flour-mill and gristmill products	98	288	122	11	6	4	145	De 2 153	Je 2 140	155	152	2	1	.....	3,616
38	Foundry and machine-shop products	403	42,101	202	1,049	2,223	891	37,736	De 41,560	Ja 35,670	41,657	37,141	3,704	582	230	49,167
39	Fur goods	6	30	6	.....	2	2	20	No 30	Jy 13	25	10	15	.....	.....	1
40	Furnishing goods, men's	16	2,392	4	46	47	13	2,282	De 2,346	Jy 2,227	2,370	1,083	1,252	22	13	1,674
41	Furniture and refrigerators	25	383	18	25	33	9	298	Se 317	Ja 279	298	275	20	3	.....	803
42	Gas and electric fixtures and lamps and reflectors.	12	2,512	3	59	154	47	2,249	No 2,350	Ja 2,169	2,336	1,786	511	27	12	1,946
43	Gas, illuminating and heating	28	1,211	.....	78	145	62	926	Au 1,069	Fe 738	916	909	3	4	.....	4,100
44	Hand stamps and stencils and brands	7	35	7	4	.....	2	22	De 2 24	Au 20	24	23	1	.....	.....	24
45	Hat and cap materials	14	514	9	17	8	2	478	Ja 545	My 441	484	397	85	1	1	1,024
46	Hats and caps, other than felt, straw, and wool.	8	100	13	4	7	2	74	No 2 79	My 60	78	63	15	.....	.....	11
47	Hats, fur-felt	80	5,877	59	170	343	88	5,217	Se 7,289	Fe 1,940	7,656	5,373	2,231	42	10	5,619
48	Hosiery and knit goods	21	3,524	2	56	98	28	3,340	Je 3,501	Au 2,918	3,493	1,076	2,308	24	85	3,540
49	Ice, manufactured	7	89	5	10	5	3	66	Jy 84	Ja 44	63	63	.....	.....	.....	1,029
50	Jewelry	15	319	12	16	13	14	264	No 2 281	Jy 195	274	202	69	1	2	83
51	Kaolin and ground earths	6	135	3	6	2	2	122	My 157	Au 94	155	155	.....	.....	.....	1,240
52	Leather goods	18	315	15	15	9	4	272	De 295	Ap 245	299	249	41	8	1	277
53	Leather, tanned, curried, and finished	8	176	5	14	4	3	150	De 167	Ap 126	167	148	19	.....	.....	356
54	Lime	10	347	1	16	3	2	325	My 370	Ja 249	321	320	.....	1	.....	170
55	Liquors, distilled	10	33	6	5	2	1	19	No 2 25	Au 15	24	24	.....	.....	.....	111
56	Liquors, malt	19	588	9	37	63	4	475	Au 488	My 2 468	469	469	.....	.....	.....	2,530
57	Lumber and timber products	393	4,219	443	110	109	62	3,495	De 4,039	Jy 2,850	4,400	4,344	41	15	.....	15,153
58	Marble and stone work	86	940	96	21	35	6	782	Se 944	Fe 499	794	794	.....	.....	.....	2,317
59	Mattresses and spring beds	16	187	16	9	5	5	152	Oc 163	Au 145	164	130	25	9	.....	116
60	Millinery and lace goods	7	142	11	4	1	2	124	De 143	Ja 97	143	37	101	3	2	59

[1] No figures given for reasons explained in the Introduction.

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	$517,546,554	$429,904,944	$13,052,310	$12,584,996	$110,119,045	$9,751,797	$247,507,596	$1,353,244	$3,265,744	$1,279,258	$30,990,954	$490,271,695	$233,012,302
2	397,996	260,505	18,040	5,528	76,379	10,237	125,778	.....	2,239	.....	21,704	331,542	195,527
3	408,634	312,118	21,738	3,294	138,101	4,812	114,530	6,445	1,333	1,450	20,415	424,301	304,959
4	12,131,142	9,430,363	343,540	290,013	2,878,187	126,719	4,729,585	25,007	51,291	4,700	981,321	11,668,228	6,811,924
5	11,643	7,708	400	.....	2,803	227	3,750	136	10	200	182	13,151	9,174
6	74,204	98,075	225	2,900	11,296	1,106	60,995	750	272	.....	20,531	125,234	63,133
7	746,199	1,466,375	26,740	29,427	225,924	5,418	1,082,829	5,532	2,066	12,116	76,323	1,657,578	569,331
8	2,337,205	2,521,858	199,373	62,375	747,778	29,946	1,350,103	21,443	10,922	75	93,843	2,910,697	1,524,648
9	47,372,781	61,941,189	689,757	788,473	9,666,536	1,542,851	46,321,080	20,604	198,815	18,681	2,085,383	66,932,969	19,069,029
10	2,532,067	6,311,870	53,726	114,842	1,221,770	136,945	4,325,964	100,968	17,444	1,707	338,504	7,309,817	2,846,908
11	23,274	53,513	1,200	100	9,062	848	40,803	100	72	.....	1,328	70,067	28,416
12	106,907	184,536	8,370	4,830	53,621	2,087	107,127	1,793	529	.....	6,179	210,496	101,282
13	210,618	709,495	14,781	1,800	52,409	6,099	617,013	482	718	.....	16,193	745,450	122,338
14	1,500,680	1,423,920	66,030	40,919	465,457	23,776	711,470	3,370	9,097	350	103,457	1,635,133	899,043
15	329,344	275,430	12,020	13,582	45,127	3,924	171,097	8,656	1,657	.....	19,367	345,740	170,719
16	27,143	15,481	.....	.....	6,655	411	4,553	516	73	.....	3,273	27,479	22,515
17	1,225,850	873,724	28,664	12,780	371,838	19,018	363,623	15,758	6,661	15,655	30,727	1,076,582	693,941
18	948,151	1,580,285	13,736	63,006	742,377	45,407	714,902	.....	430	.....	337	1,580,285	819,886
19	2,061,913	994,698	8,489	1,242	368,044	6,817	595,700	.....	302	.....	14,104	994,700	392,183
20	9,845,689	6,021,599	236,623	178,729	3,029,903	65,736	2,032,744	2,120	48,597	17,431	409,716	7,390,051	5,291,571
21	958,219	1,270,957	48,508	57,984	304,008	10,066	716,406	10,412	2,581	20,678	100,314	1,362,312	635,840
22	677,073	1,576,617	65,767	35,803	415,175	12,999	784,527	10,261	5,367	.....	246,718	1,715,700	918,174
23	429,992	342,773	14,496	45,376	74,549	5,791	161,828	4,990	1,751	.....	33,992	400,717	233,098
24	331,514	1,125,668	55,000	35,592	81,994	6,418	882,853	20,803	1,198	921	40,889	1,238,308	344,037
25	68,821	95,363	1,500	5,200	21,358	720	61,273	1,735	454	.....	3,063	111,576	49,583
26	4,090,948	3,100,610	162,451	50,247	1,049,364	61,027	1,503,775	21,847	16,558	380	234,952	3,603,706	2,088,904
27	480,582	555,743	13,570	5,224	84,737	4,003	427,208	3,065	2,368	.....	15,508	561,264	129,993
28	6,931,145	10,872,871	355,186	521,117	2,519,982	37,178	6,638,803	21,146	22,297	85,219	671,853	12,814,736	6,138,065
29	39,243,161	19,908,236	530,394	247,399	5,065,836	478,710	11,481,012	37,286	180,927	2,268	1,284,404	24,231,881	12,272,159
30	13,757,976	8,940,306	374,828	376,379	3,979,723	237,126	3,072,849	11,065	80,085	6,754	800,897	10,716,918	7,406,943
31	5,375,233	2,828,323	122,880	75,404	872,202	199,458	1,280,010	1,000	32,326	.....	244,443	3,561,027	2,081,859
32	9,852,232	8,578,600	446,061	367,246	1,602,987	109,469	5,110,835	32,181	23,318	1,278	894,225	9,824,373	4,613,069
33	90,717	117,925	4,535	4,081	53,307	4,693	38,795	4,824	338	.....	6,452	152,902	109,414
34	573,971	699,346	33,055	14,639	171,879	13,239	409,744	540	1,914	.....	45,935	729,695	306,712
35	1,590,640	1,413,764	39,823	37,930	136,893	25,788	1,065,273	.....	5,137	.....	102,920	1,572,575	481,514
36	21,681,237	17,230,426	496,356	551,695	4,967,511	204,715	9,861,534	2,563	88,176	.....	1,057,876	19,948,235	9,881,986
37	1,276,512	1,855,389	10,321	5,628	72,008	16,837	1,714,192	4,840	6,322	300	18,941	2,023,909	292,880
38	39,715,440	56,855,031	2,514,151	2,630,215	21,332,185	1,513,606	23,306,456	114,542	417,935	178,888	4,847,050	65,536,155	40,715,099
39	42,276	60,776	.....	1,500	13,178	489	38,947	2,280	145	.....	4,237	74,922	35,486
40	3,104,620	2,586,029	111,320	58,022	930,193	50,950	2,156,701	5,120	11,651	480	261,592	3,938,702	1,731,051
41	650,797	738,115	52,641	26,588	178,732	8,034	360,283	11,402	4,619	18,059	77,757	786,258	417,941
42	3,901,731	3,191,408	137,471	247,000	1,189,312	54,216	1,276,038	5,564	26,919	464	254,424	4,023,027	2,692,773
43	16,016,124	2,297,645	127,122	159,016	557,271	827,511	177,429	34,950	114,015	19,394	280,937	3,445,961	2,441,021
44	49,319	32,200	4,000	572	11,157	832	11,513	924	353	214	2,035	40,580	28,235
45	1,182,503	1,319,347	28,461	12,035	182,903	26,471	675,463	8,046	4,747	.....	330,561	1,507,928	805,994
46	75,346	206,276	4,830	7,509	46,566	1,997	124,305	3,524	347	2,065	15,133	259,123	132,821
47	7,143,713	9,395,203	297,723	276,613	3,384,364	175,076	4,673,007	42,689	21,796	28,013	495,022	10,399,860	5,550,877
48	6,463,632	5,225,820	158,412	165,825	1,363,148	67,643	2,980,904	13,372	44,370	31,518	400,628	5,800,692	2,752,145
49	558,152	121,168	13,537	4,762	42,264	27,740	15,770	1,000	2,980	.....	13,115	159,346	115,836
50	395,082	393,457	31,556	38,128	142,755	3,209	105,175	4,415	5,873	1,996	60,260	457,430	348,956
51	330,771	172,677	7,770	2,060	67,172	16,723	59,952	2,081	1,933	.....	14,086	184,118	107,443
52	402,902	540,505	20,071	11,465	143,053	6,043	323,712	5,144	3,224	.....	18,793	588,098	258,343
53	776,708	975,971	29,534	5,271	94,538	10,494	794,414	3,700	2,936	.....	35,084	1,047,343	242,435
54	1,372,785	484,582	24,305	3,848	160,195	131,052	144,318	3,405	2,048	.....	15,411	553,200	277,830
55	219,771	249,793	14,450	3,684	11,564	5,014	65,721	428	141,420	.....	7,512	335,784	265,049
56	5,309,840	3,489,083	127,828	89,677	425,838	100,536	1,264,996	.....	715,700	.....	756,108	4,426,061	3,051,529
57	6,108,887	6,649,538	159,279	128,491	1,907,220	43,561	3,874,897	45,377	28,296	98,078	364,339	7,845,521	3,927,063
58	1,297,095	1,028,281	38,919	35,343	514,410	20,114	344,146	8,125	6,132	2,993	52,090	1,236,654	866,394
59	296,764	389,121	15,164	5,836	68,378	3,643	270,347	5,936	1,253	.....	18,564	422,646	148,656
60	164,314	255,131	6,504	2,295	49,101	1,661	184,254	1,695	226	.....	9,395	293,383	107,468

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

[3] Same number reported throughout the year.

TABLE II.—DETAIL STATEMENT FOR THE

	INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners. Average number.	Number. Maximum month.	Number. Minimum month.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	Models and patterns, not including paper patterns.	25	153	22	10	.....	1	120	De 141	Ja 102	142	138	4	.....	.....	141
2	Musical instruments and materials, not specified.	3	5	3	.....	.....	.....	2	Ja[1] 2	Jy[1] 2	2	2	.....	.....	.....	4
3	Musical instruments, pianos and organs and materials.	17	2,469	5	60	72	28	2,304	Oc 2,378	Jy 2,188	2,297	1,933	309	34	21	2,559
4	Needles, pins, and hooks and eyes	8	2,825	4	48	80	45	2,648	De 2,864	Ja 2,491	2,879	1,447	1,271	66	95	3,190
5	Paint and varnish	17	360	6	29	68	21	236	My 244	No 229	230	222	8	.....	.....	1,024
6	Paper and wood pulp	51	1,920	24	95	51	30	1,720	De 1,861	Ja 1,638	1,868	1,573	282	7	6	19,509
7	Paper goods, not elsewhere specified	10	708	4	17	37	18	632	No 692	Au 574	657	280	346	10	21	593
8	Patent medicines and compounds and druggists' preparations.	64	432	39	46	69	41	237	De 261	Au 210	276	138	138	.....	.....	381
9	Photo-engraving	7	95	8	15	4	5	63	Je 70	Oc 52	65	59	4	2	.....	54
10	Printing and publishing	363	4,103	295	232	506	192	2,878	Fe 2,944	Au 2,793	2,951	2,285	570	88	8	3,425
11	Rubber goods, not elsewhere specified	13	2,397	2	42	165	73	2,115	De 2,534	Fe 1,648	2,534	2,010	497	13	14	6,138
12	Sewing machines, cases, and attachments.	6	2,865	.....	51	98	20	2,696	Au 2,872	Ja 2,323	2,773	2,459	196	101	17	1,870
13	Shipbuilding, including boat building	43	502	37	15	18	5	427	Je 550	Fe 347	428	428	.....	.....	.....	1,454
14	Shoddy	6	114	5	5	6	.....	98	De 107	Se 88	106	97	9	.....	.....	1,170
15	Silk and silk goods, including throwsters.	47	9,385	37	135	418	92	8,703	Se 9,248	Ja 8,370	9,296	4,283	4,614	145	254	8,564
16	Silverware and plated ware	31	6,812	5	129	326	129	6,223	No 7,077	Jy 5,385	6,842	5,507	1,171	115	49	5,751
17	Slaughtering and meat packing	28	523	28	11	37	15	432	Ja 465	My 397	456	450	3	3	.....	590
18	Stereotyping and electrotyping	5	81	5	4	4	2	66	Ap 68	Jy 63	68	68	.....	.....	.....	82
19	Stoves and furnaces, including gas and oil stoves.	5	126	4	7	12	4	99	Oc 110	De 90	90	89	.....	1	.....	82
20	Surgical appliances and artificial limbs.	6	8	4	.....	.....	.....	4	De[2] 5	Au[2] 4	5	3	2	.....	.....	1
21	Tobacco manufactures	265	1,861	289	19	32	8	1,513	De 1,557	Ap 1,453	1,579	1,241	317	21	.....	48
22	Typewriters and supplies	8	3,510	.....	46	391	139	2,934	Mh 3,118	Au 2,446	3,097	2,574	444	66	13	2,034
23	Wall plaster	3	37	4	4	3	2	24	De 27	Fe[2] 22	27	27	.....	.....	.....	235
24	Wirework, including wire rope and cable.	28	1,557	20	36	52	29	1,420	De 1,580	My 1,307	1,581	969	542	39	31	1,517
25	Woolen, worsted, and felt goods, and wool hats.	56	8,140	31	196	96	28	7,789	De 8,071	Ja 7,110	8,179	5,434	2,361	178	206	17,518
26	All other industries[3]	574	25,752	497	636	1,172	442	23,005	.....	.....	.....	.....	.....	.....	.....	62,288

[1] Same number reported for entire year.
[2] Same number reported for one or more other months.
[3] All other industries embrace—

Artificial flowers and feathers and plumes	1
Artists' materials	1
Awnings, tents, and sails	10
Babbitt metal and solder	3
Bags, other than paper	1
Bags, paper	1
Belting and hose, leather	4
Belting and hose, woven and rubber	1
Bicycles, motorcycles, and parts	4
Billiard tables and materials	1
Boots and shoes, rubber	5
Boxes, cigar	4
Brick and tile	36
Card cutting and designing	1
Carpets and rugs, other than rag	3
Carriages and sleds, children's	1
Cash registers and calculating machines	2
Cement	1
Charcoal	1
Chemicals	3
Chocolate and cocoa products	1
Coffee and spice, roasting and grinding	9
Cordials and sirups	1
Crucibles	2
Dairymen's, poulterers', and apiarists' supplies	1
Dentists' materials	3
Dyestuffs and extracts	1
Emery and other abrasive wheels	2
Enameling and japanning	1
Engravers' materials	1
Engraving and diesinking	3
Engraving, wood	6
Explosives	1
Files	3
Fire extinguishers, chemical	1
Fireworks	2
Flags, banners, regalia, society badges, and emblems	2
Flavoring extracts	8
Food preparations	13
Foundry supplies	2
Galvanizing	1
Glass, cutting, staining, and ornamenting	15
Gloves and mittens, leather	2
Glucose and starch	3
Glue	2
Gold and silver, leaf and foil	2
Gold and silver, reducing and refining, not from the ore	3
Grease and tallow	8
Hair work	2
Hats, straw	3
Hones and whetstones	1
Horseshoes, not made in steel works or rolling mills	2

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.		
1	$90,293	$152,672	$11,401	$200	$96,882	$3,637	$27,692	$6,681	$411	$230	$5,538	$192,515	$161,186
2	5,100	4,976	.....	.....	1,092	122	3,194	96	31	.....	441	10,850	7,534
3	5,626,585	4,984,149	201,612	110,483	1,251,393	56,768	2,964,983	16,546	22,189	7,731	352,444	5,538,018	2,516,267
4	3,208,746	3,674,067	110,792	109,260	1,311,227	38,406	1,658,591	110,192	15,991	.....	319,608	4,236,036	2,539,039
5	1,100,131	1,404,872	69,322	101,821	146,891	23,468	801,995	2,364	3,605	2,063	253,343	1,543,010	717,547
6	7,194,953	5,085,020	268,589	82,111	923,600	407,218	2,896,198	2,412	31,003	9,314	464,575	5,527,334	2,223,918
7	2,101,082	1,397,152	37,095	34,879	255,476	12,277	870,245	4,452	10,305	.....	172,423	1,521,158	638,636
8	808,166	1,166,977	138,014	79,044	87,755	8,078	479,919	10,665	3,148	983	359,371	1,341,567	853,570
9	85,694	108,837	23,751	6,381	38,541	1,976	24,442	3,184	376	3,411	6,775	123,790	97,372
10	6,322,398	5,207,118	415,042	439,701	1,736,499	89,985	1,679,232	119,508	29,168	195,105	502,878	6,370,450	4,601,233
11	8,723,886	10,000,816	118,625	225,685	1,115,725	116,130	7,010,351	10,708	16,276	2,777	1,384,539	11,004,556	3,878,075
12	3,182,483	2,377,062	91,228	118,326	1,505,186	51,224	487,364	16,115	18,840	.....	88,779	2,119,768	1,581,180
13	1,467,617	669,723	22,576	11,799	253,664	12,856	302,351	2,791	2,600	1,012	60,074	742,254	427,047
14	450,459	267,170	5,760	5,970	45,305	9,049	188,151	150	1,781	.....	11,004	324,251	127,051
15	19,730,268	18,022,348	404,230	591,920	3,749,186	214,763	11,619,582	47,287	84,964	369,832	940,584	21,062,687	9,228,342
16	17,247,495	13,339,995	353,457	613,386	3,445,571	127,263	7,104,738	15,911	61,640	5,375	1,612,654	15,836,608	8,604,607
17	1,966,531	4,341,420	18,920	43,453	239,172	29,948	3,918,985	6,000	9,960	.....	74,982	4,572,225	623,292
18	136,318	87,683	6,320	3,594	39,953	2,449	24,217	3,022	857	.....	7,271	112,529	85,863
19	188,537	183,230	8,101	11,278	60,984	2,563	65,297	1,980	1,585	7,178	24,264	219,962	152,102
20	11,703	7,517	.....	.....	2,584	95	2,684	549	53	358	1,194	16,674	13,895
21	1,870,270	2,348,175	20,576	36,165	907,718	7,677	1,055,963	38,588	203,839	1,125	76,524	2,738,330	1,674,690
22	8,468,310	3,940,161	160,850	325,513	1,898,184	41,720	999,427	2,282	25,310	10	486,865	4,016,028	2,974,881
23	114,849	65,790	6,500	1,462	12,016	2,598	38,526	4	480	.....	4,204	81,708	40,584
24	2,486,530	2,828,683	130,351	66,597	684,249	26,973	1,621,405	18,749	9,723	27,550	243,086	3,345,118	1,696,740
25	20,011,122	17,514,379	417,619	145,959	3,485,157	329,872	12,508,270	42,873	68,044	5,782	510,803	19,363,228	6,525,086
26	69,667,043	58,080,537	1,552,088	1,451,670	11,822,689	1,571,362	37,232,740	134,578	261,002	67,088	3,987,320	64,933,965	26,129,863

[1] All other industries embrace—Continued.

House-furnishing goods, not elsewhere specified	6
Ink, printing	1
Ink, writing	1
Instruments, professional and scientific	2
Iron and steel, blast furnaces	2
Iron and steel, steel works and rolling mills	5
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills	13
Iron and steel forgings	13
Iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills	3
Labels and tags	1
Lapidary work	1
Looking-glass and picture frames	7
Mineral and soda waters	96
Mirrors	1
Moving pictures	1
Mucilage and paste	3
Oakum	1
Oil, essential	11
Optical goods	4
Paving materials	1
Pens, fountain, stylographic, and gold	1
Pens, steel	1
Phonographs and graphophones	3
Photographic apparatus and materials	2
Pottery, terra-cotta, and fire-clay products	5
Pumps, not including steam pumps	1
Roofing materials	1
Rules, ivory and wood	1
Saws	4
Scales and balances	1
Screws, machine	7
Screws, wood	3
Show cases	1
Signs and advertising novelties	2
Smelting and refining, not from the ore	4
Soap	9
Sporting and athletic goods	3
Springs, steel, car and carriage	3
Stationery goods, not elsewhere specified	3
Statuary and art goods	5
Steam packing	3
Sulphuric, nitric, and mixed acids	3
Toys and games	13
Type founding and printing materials	3
Umbrellas and canes	2
Upholstering materials	3
Vinegar and cider	72
Wall paper	1
Window shades and fixtures	3
Wire	3
Wood, turned and carved	43
Wool scouring	1

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

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

BRIDGEPORT.

	INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	Wage earners 16 and over. Male.	Wage earners 16 and over. Female.	Wage earners Under 16.	WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horse-power.
1	**All industries**	367	28,952	243	703	1,717	514	25,775	18,262	6,852	661	28,668	20,291	7,639	341	398	43,387
2	Artificial stone	5	56	4	3	.....	1	48	48	.....	.....	43	43	.....	.....	.....	53
3	Bread and other bakery products	49	342	49	9	14	8	262	241	20	1	262	241	20	1	.....	117
4	Carriages and wagons and materials	6	88	4	7	1	3	73	73	.....	.....	68	68	.....	.....	.....	108
5	Copper, tin, and sheet-iron products	9	320	3	18	6	6	287	146	101	40	305	155	107	17	26	253
6	Corsets	5	3,889	.....	30	134	66	3,659	637	2,931	91	4,090	714	3,275	7	94	984
7	Cutlery and tools, not elsewhere specified	7	814	2	20	14	10	768	678	55	35	835	737	60	31	7	843
8	Electrical machinery, apparatus, and supplies.	5	1,631	.....	43	129	59	1,400	766	514	120	1,694	927	622	60	85	1,440
9	Foundry and machine-shop products	48	5,657	14	141	519	79	4,904	4,649	186	69	5,627	5,334	216	70	7	10,555
10	Liquors, malt	3	86	.....	5	8	1	72	72	.....	.....	71	71	.....	.....	.....	365
11	Marble and stone work	7	58	8	4	2	1	43	43	.....	.....	43	43	.....	.....	.....	148
12	Models and patterns, not including paper patterns.	7	47	5	4	.....	.....	38	35	3	.....	45	41	4	.....	.....	27
13	Printing and publishing	35	297	28	29	57	11	172	148	21	3	180	155	22	3	.....	303
14	Tobacco manufactures	16	54	19	.....	.....	.....	35	32	3	.....	37	34	3	.....	.....	.....
15	All other industries[1]	165	15,613	107	390	833	269	14,014	10,694	3,018	302	15,369	11,728	3,310	152	179	28,191

[1] All other industries embrace: Automobiles, including bodies and parts, 4; awnings, tents, and sails, 1; babbitt metal and solder, 1; bags, other than paper, 1; belting and hose, leather, 1; bicycles, motorcycles, and parts, 1; blacking and cleansing and polishing preparations, 3; boots and shoes, including cut stock and findings, 1; boxes, fancy and paper, 4; brass and bronze products, 7; buttons, 1; carpets and rugs, other than rag, 1; carpets, rag, 1; cars and general shop construction and repairs by street-railroad companies, 1; clothing, men's, including shirts, 3; clothing, women's, 2; coffee and spice, roasting and grinding, 2; coffins, burial cases, and undertakers' goods, 1; confectionery, 5; crucibles, 1; electroplating, 4; emery and other abrasive wheels, 1; enameling and japanning, 1; engraving and diesinking, 1; fertilizers, 1; firearms and ammunition, 1; flavoring extracts, 1; flour-mill and gristmill products, 2; food preparations, 1; fur goods, 1; furnishing goods, men's, 5; furniture and refrigerators, 3; gas and electric fixtures and lamps and reflectors, 4; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 1; gold and silver, reducing and refining, not from the ore, 1; grease and tallow, 1; hair work 2· hand stamps and stencils and brands, 1; hats, fur-felt, 1; hosiery and knit goods, 1; ice, manufactured,

HARTFORD.

1	**All industries**	396	17,447	320	508	1,498	494	14,627	12,224	2,217	186	16,863	14,147	2,502	177	37	19,410
2	Boxes, fancy and paper	3	54	2	2	.....	.....	50	8	41	1	56	9	46	1	.....	13
3	Brass and bronze products	6	58	5	2	.....	.....	51	50	1	.....	55	54	1	.....	.....	43
4	Bread and other bakery products	37	328	37	4	10	36	241	205	34	2	247	210	35	2	.....	89
5	Brick and tile	5	57	6	.....	.....	.....	51	51	.....	.....	75	75	.....	.....	.....	415
6	Carriages and wagons and materials	6	132	5	4	5	.....	118	118	.....	.....	112	112	.....	.....	.....	87
7	Clothing, men's, including shirts	3	39	3	.....	1	.....	35	22	13	.....	47	30	17	.....	.....	13
8	Clothing, women's	6	378	8	7	1	1	361	25	336	.....	386	27	359	.....	.....	32
9	Copper, tin, and sheet-iron products	6	54	6	2	2	1	43	43	.....	.....	51	51	.....	.....	.....	89
10	Electrical machinery, apparatus, and supplies.	10	901	1	35	53	32	780	493	263	24	928	586	313	25	4	599
11	Foundry and machine-shop products	52	3,180	19	105	222	66	2,768	2,696	50	22	3,473	3,383	62	23	5	4,128
12	Leather goods	6	199	3	8	8	4	176	138	31	7	191	150	33	7	1	203
13	Liquors, malt	4	169	1	8	21	1	138	138	.....	.....	138	138	.....	.....	.....	483
14	Lumber and timber products	15	227	11	9	9	3	195	193	1	1	192	190	1	1	.....	929
15	Marble and stone work	7	67	8	3	12	1	43	43	.....	.....	38	38	.....	.....	.....	154
16	Models and patterns, not including paper patterns.	6	67	6	5	.....	.....	56	56	.....	.....	65	65	.....	.....	.....	63
17	Patent medicines and compounds and druggists' preparations.	7	34	4	7	5	5	13	7	6	.....	21	12	9	.....	.....	.....
18	Printing and publishing	68	1,155	59	62	125	43	866	686	164	16	813	644	154	15	.....	1,111
19	Tobacco manufactures	28	316	36	2	6	.....	272	212	59	1	281	219	61	1	.....	2
20	All other industries[1]	121	10,032	100	243	1,018	301	8,370	7,040	1,218	112	9,694	8,154	1,411	102	27	10,957

[1] All other industries embrace: Artificial stone, 1; automobiles, including bodies and parts, 7; belting and hose, leather, 1; billiard tables and materials, 1; blacking and cleansing and polishing preparations, 1; boots and shoes, including cut stock and findings, 1; boxes, cigar, 1; brooms, 2; brushes, 2; canning and preserving, 1; carpets, rag, 1; cars and general shop construction and repairs by steam-railroad companies, 1; cars and general shop construction and repairs by street-railroad companies, 1; cash registers and calculating machines, 1; coffee and spice, roasting and grinding, 4; coffins, burial cases, and undertakers' goods, 2; confectionery, 2; cotton goods, including cotton small wares, 1; cutlery and tools, not elsewhere specified, 2; dentists' materials, 1; electroplating, 3; engraving, wood, 3; fertilizers, 1; firearms and ammunition, 1; flavoring extracts, 1; flour-mill and gristmill products, 1; food preparations, 3; furniture and refrigerators, 2; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 2; glue, 1; gold and silver, leaf and foil, 2; hand stamps and stencils and brands, 3; hats and caps, other than felt, straw, 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.

BRIDGEPORT.

	Capital.	Expenses. Total.	Services. Officials.	Services. Clerks.	Services. Wage earners.	Materials. Fuel and rent of power.	Materials. Other.	Miscellaneous. Rent of factory.	Miscellaneous. Taxes, including internal revenue.	Miscellaneous. Contract work.	Miscellaneous. Other.	Value of products.	Value added by manufacture.
1	$62,779,173	$60,046,551	$1,858,662	$1,850,270	$13,349,103	$1,168,063	$36,778,635	$174,592	$299,933	$248,812	$4,318,481	$65,608,806	$27,662,108
2	171,749	58,233	3,866	416	26,815	1,375	21,318	640	266	1,000	2,537	80,478	57,785
3	234,957	884 832	9,532	10,548	185,764	20,012	571,275	13,332	1,412	.....	72,957	963,880	372,593
4	149,733	129,695	9,640	3,000	47,282	3,143	47,220	4,180	1,313	.....	13,917	144,666	94,303
5	422,607	466,944	35,844	6,014	123,590	6,039	257,372	4,530	1,558	276	31,721	492,156	228,745
6	4,205,485	6,064,982	190,391	210,773	1,349,070	20,171	3,782,323	7,550	10,104	85,219	409,381	6,898,875	3,096,381
7	983,211	867,343	57,823	30,025	405,977	13,970	280,593	300	3,215	.....	75,440	954,239	659,676
8	3,229,256	2,928,090	98,710	118,491	574,759	30,261	1,811,404	6,000	7,321	.....	281,144	3,321,448	1,479,783
9	13,425,698	8,667,787	393,745	488,415	2,716,202	235,306	4,101,125	13,299	50,366	112,300	557,029	9,752,304	5,415,873
10	810,295	429,909	20,800	13,984	58,663	14,436	145,360	.....	86,888	.....	89,778	518,149	358,353
11	72,588	90,616	5,100	1,383	32,140	1,343	41,618	1,380	212	.....	7,440	101,674	58,713
12	26,772	53,296	5,465	.....	33,318	979	9,058	2,261	106	230	1,879	56,141	46,104
13	855,166	420,321	48,720	53,559	119,769	9,217	117,445	15,437	2,269	17,029	36,876	511,596	384,934
14	40,857	50,060	.....	.....	20,002	155	20,582	1,638	5,594	.....	2,089	69,170	48,433
15	38,150,799	38,934,443	979,026	913,662	7,655,752	811,656	25,571,942	104,045	129,309	32,758	2,736,293	41,744,030	15,360,432

1; ink, writing, 1; iron and steel, steel works and rolling mills, 2; iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills, 1; iron and steel forgings, 3; leather goods, 2; leather, tanned, curried, and finished, 1; lumber and timber products, 7; mattresses and spring beds, 2; millinery and lace goods, 2; mineral and soda waters, 10; paint and varnish, 4; paper and wood pulp, 1; paper goods, not elsewhere specified, 1; patent medicines and compounds and druggists' preparations, 3; phonographs and graphophones, 2; photo-engraving, 1; rubber goods, not elsewhere specified, 3; sewing machines, cases, and attachments, 3; show cases, 1; silk and silk goods, including throwsters, 1; silverware and plated ware, 6; slaughtering and meat packing, 3; soap, 1; springs, steel, car and carriage, 1; statuary and art goods, 1; steam packing, 1; stereotyping and electrotyping, 1; stoves and furnaces, including gas and oil stoves, 1; sulphuric, nitric, and mixed acids, 1; surgical appliances and artificial limbs, 1; toys and games, 4; type founding and printing materials, 1; typewriters and supplies, 3; umbrellas and canes, 1; wall plaster, 1; wirework, including wire rope and cab'e, 7; wood, turned and carved, 2.

HARTFORD.

1	$48,084,921	$34,214,083	$1,204,604	$1,505,886	$9,374,007	$690,111	$17,172,627	$200,858	$440,672	$64,088	$3,561,230	$40,679,598	$22,816,860
2	25,086	53,159	4,500	.....	14,036	623	31,198	2,064	104	.....	634	59,500	27,679
3	64,671	158,254	5,200	.....	38,874	3,532	100,450	735	130	.....	9,333	183,307	79,325
4	422,697	922,953	4,262	22,637	172,137	16,594	651,793	13,758	2,475	.....	39,297	1,105,056	436,669
5	79,850	55,883	.....	.....	29,054	14,056	1,294	1,800	408	3,000	6,271	65,625	50,275
6	148,926	149,733	2,600	4,052	80,120	3,029	50,412	2,244	650	.....	6,626	178,113	124,672
7	43,000	80,424	.....	520	16,880	776	54,096	1,932	140	.....	6,080	97,000	42,128
8	89,994	238,732	8,492	1,166	103,110	1,952	96,628	4,345	518	.....	22,521	268,982	170,402
9	82,675	73,248	2,444	1,300	28,522	756	35,520	1,620	533	.....	2,553	94,583	58,307
10	1,536,781	1,448,349	101,155	90,398	382,104	15,312	606,977	18,216	5,660	.....	228,527	1,703,815	1,081,526
11	11,575,974	5,252,974	283,819	286,399	2,014,341	202,557	1,939,043	39,213	47,499	24,061	416,042	6,548,627	4,407,027
12	249,222	343,328	17,931	10,715	97,245	3,785	197,346	2,775	2,493	.....	11,038	342,169	141,038
13	1,352,042	1,071,931	28,440	28,058	124,692	30,048	413,993	.....	187,778	.....	258,922	1,256,033	811,992
14	308,147	421,184	18,320	9,046	140,694	8,353	215,416	8,947	2,049	.....	18,359	473,323	249,554
15	113,025	152,683	5,600	11,552	38,154	2,764	81,320	2,590	641	300	9,762	175,109	91,025
16	34,887	67,235	4,236	.....	46,596	1,486	10,832	2,567	64	.....	1,454	89,988	77,670
17	47,420	62,289	6,900	6,010	4,931	125	24,894	1,500	587	.....	17,342	79,293	54,274
18	1,826,528	1,646,870	113,182	115,359	540,905	21,210	598,580	40,232	8,188	24,177	185,037	2,007,593	1,387,803
19	233,762	457,499	1,930	5,240	184,185	551	212,434	6,790	39,651	.....	6,718	516,860	303,905
20	29,850,234	21,557,355	595,593	913,434	5,317,427	362,602	11,850,401	49,530	141,104	12,550	2,314,714	25,434,592	13,221,589

wool, 1; horseshoes, not made in steel works or rolling mills, 2; hosiery and knit goods, 2; iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills, 1; jewelry, 3; liquors, distilled, 1; looking-glass and picture frames, 5; mattresses and spring beds, 2; mineral and soda waters, 9; mucilage and paste, 1; musical instruments and materials, not specified, 1; musical instruments, pianos and organs and materials, 1; optical goods, 1; paper and wood pulp, 1; paper goods, not elsewhere specified, 2; photo-engraving, 3; pottery, terra-cotta, and fire-clay products, 2; rubber goods, not elsewhere specified, 1; screws, machine, 2; screws, wood, 1; sewing machines, cases, and attachments, 1; silk and silk goods, including throwsters, 1; silverware and plated ware, 1; slaughtering and meat packing, 3; smelting and refining, not from the ore, 1; soap, 2; statuary and art goods, 1; steam packing, 1; stereotyping and electrotyping, 1; surgical appliances and artificial limbs, 2; typewriters and supplies, 2; wall plaster, 1; wirework, including wire rope and cable, 2; wood, turned and carved, 2.

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.

NEW HAVEN.

	Industry and city.	Number of establishments	Persons engaged in industry. Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks. Male.	Clerks. Female.	Wage earners (average number). Total.	Wage earners. 16 and over. Male.	Wage earners. 16 and over. Female.	Wage earners. Under 16.	Wage earners—number Dec. 15, or nearest representative day. Total.	16 and over. Male.	16 and over. Female.	Under 16. Male.	Under 16. Female.	Primary horsepower.
1	**All industries**	590	26,874	536	704	1,360	727	23,547	17,405	5,439	703	25,015	18,488	5,778	450	299	31,382
2	Brass and bronze products	7	75	5	3	5	1	61	58	3	.....	72	68	4	.....	.....	71
3	Bread and other bakery products	65	502	63	14	33	22	370	299	64	7	388	314	67	2	5	163
4	Canning and preserving	3	45	2	1	8	3	31	18	13	.....	29	17	12	.....	.....	45
5	Carriages and wagons and materials	15	113	16	4	1	1	91	91	.....	.....	84	84	.....	.....	.....	73
6	Clothing, men's, including shirts	10	58	14	.....	2	.....	42	23	19	.....	44	24	20	.....	.....	6
7	Cutlery and tools, not elsewhere specified	6	265	3	14	10	6	232	222	6	4	249	238	7	3	1	191
8	Electroplating	3	40	4	.....	1	.....	35	29	.....	6	38	32	.....	6	.....	35
9	Foundry and machine-shop products	55	5,770	33	116	202	229	5,190	4,422	529	239	5,555	4,735	567	193	60	4,393
10	Furniture and refrigerators	10	136	8	8	17	2	101	96	4	1	92	87	4	1	.....	254
11	Hats and caps, other than felt, straw, and wool.	6	90	12	4	6	2	66	52	14	.....	71	56	15	.....	.....	11
12	Jewelry	7	27	6	4	.....	2	15	14	.....	1	15	14	.....	1	.....	5
13	Liquors, malt	4	142	3	9	14	2	114	114	.....	.....	112	112	.....	.....	.....	607
14	Lumber and timber products	20	324	16	15	7	7	279	268	.....	11	305	293	.....	12	.....	1,073
15	Marble and stone work	10	64	13	2	1	1	47	47	.....	.....	49	49	.....	.....	.....	65
16	Patent medicines and compounds and druggists' preparations.	23	99	14	10	3	15	57	22	35	.....	64	25	39	.....	.....	24
17	Printing and publishing	72	840	53	44	167	64	512	402	88	22	574	451	99	23	1	508
18	Shipbuilding, including boat building	4	16	4	.....	.....	.....	12	12	.....	.....	10	10	.....	.....	.....	16
19	Tobacco manufactures	61	739	70	6	11	5	647	468	174	5	684	495	184	5	.....	43
20	All other industries [1]	209	17,529	197	450	872	365	15,645	10,748	4,490	407	16,580	11,384	4,760	204	232	23,799

[1] All other industries embrace: Artificial flowers and feathers and plumes, 1; artificial stone, 5; automobiles, including bodies and parts, 11; awnings, tents, and sails, 4; baskets, and rattan and willow ware, 1; bicycles, motorcycles, and parts, 1; blacking and cleansing and polishing preparations, 3; boots and shoes, rubber, 1; boxes, cigar, 1; boxes, fancy and paper, 6; brushes, 2; buttons, 2; card cutting and designing, 1; carriages and sleds, children's, 1; cars and general shop construction and repairs by steam-railroad companies, 1; cars and general shop construction and repairs by street-railroad companies, 1; cash registers and calculating machines, 1; cement, 1; charcoal, 1; clocks and watches, including cases and materials, 1; clothing, women's, 3; coffee and spice, roasting and grinding, 3; coffins, burial cases, and undertakers' goods, 1; confectionery, 3; cooperage and wooden goods, not elsewhere specified, 2; copper, tin, and sheet-iron products, 11; corsets, 9; dentists' materials, 2; dyeing and finishing textiles, 2; electrical machinery, apparatus, and supplies, 2; engraving and diesinking, 1; fancy articles, not elsewhere specified, 1; fertilizers, 1; files, 1; firearms and ammunition, 2; fire extinguishers, chemical, 1; flags, banners, regalia, society badges, and emblems, 2; flour-mill and gristmill products, 1; food preparations, 3; foundry supplies, 1; fur goods, 1; gas and electric fixtures and lamps and reflectors, 2; gas, illuminating and heating, 2; glass, cutting, staining, and ornamenting, 2; gloves and mittens, leather, 1; glucose and starch, 2; hats, fur-felt, 4; hosiery and knit goods, 2; ice, manufactured, 1; iron and steel, steel works and rolling mills, 1; iron and steel, bolts, nuts,

WATERBURY.

1	**All industries**	169	21,600	97	447	603	283	20,170	15,088	4,648	434	22,041	16,497	5,065	239	240	37,518
2	Brass and bronze products	15	10,031	.....	114	235	79	9,603	7,990	1,479	134	10,667	8,879	1,638	63	87	26,530
3	Bread and other bakery products	20	182	24	8	7	10	133	119	14	.....	139	124	15	.....	.....	40
4	Carriages and wagons and materials	5	42	7	2	.....	1	32	32	.....	.....	32	32	.....	.....	.....	16
5	Copper, tin, and sheet-iron products	5	901	.....	18	17	8	858	573	268	17	881	588	275	10	8	396
6	Foundry and machine-shop products	23	2,167	4	68	51	37	2,007	1,760	219	28	2,146	1,883	233	17	13	2,359
7	Lumber and timber products	7	246	2	17	11	11	205	202	1	2	229	226	1	2	.....	399
8	Printing and publishing	15	239	10	17	16	15	181	151	20	10	195	163	21	10	1	186
9	Tobacco manufactures	18	89	19	1	2	.....	67	64	1	2	67	64	1	2	.....	1
10	All other industries [1]	61	7,703	31	202	264	122	7,084	4,197	2,646	241	7,685	4,538	2,881	135	131	7,591

[1] All other industries embrace: Artificial stone, 2; awnings, tents, and sails, 1; boots and shoes, including cut stock and findings, 1; boxes, fancy and paper, 2; buttons, 3; canning and preserving, 1; cars and general shop construction and repairs by street-railroad companies, 1; clocks and watches, including cases and materials, 4; confectionery, 1; crucibles, 1; cutlery and tools, not elsewhere specified, 2; electrical machinery, apparatus, and supplies, 2; flour-mill and gristmill products, 1; fur goods, 1; furnishing goods, men's, 1; gas, illuminating and heating, 1; grease and tallow, 1; hand stamps and stencils and brands, 1; hats, fur-felt, 2; hosiery and knit goods, 1; ice,

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

1	ANSONIA	53	4,488	46	76	197	42	4,127	3,743	347	37	4,568	4,144	383	31	10	13,209
2	DANBURY	131	5,499	122	170	306	91	4,810	3,391	1,371	48	6,693	4,721	1,906	51	15	5,660
3	MERIDEN	120	8,730	80	232	399	174	7,845	6,080	1,585	180	8,240	6,388	1,664	121	67	6,615
4	MIDDLETOWN	58	2,678	38	79	96	31	2,434	1,543	840	51	2,502	1,586	864	37	15	3,333
5	NAUGATUCK	24	3,657	19	65	93	16	3,464	2,113	1,261	90	3,595	2,194	1,307	42	52	5,967
6	NEW BRITAIN	111	14,755	80	211	666	285	13,513	10,500	2,675	338	14,405	11,198	2,853	173	181	14,363
7	NEW LONDON	70	2,467	52	52	111	27	2,225	1,466	692	67	2,232	1,470	694	16	52	2,912
8	NORWICH	91	4,795	65	94	123	43	4,470	3,281	1,077	112	4,605	3,378	1,111	66	50	12,027
9	STAMFORD	86	4,719	64	137	401	133	3,984	3,554	382	48	4,451	3,970	429	35	17	6,554
10	TORRINGTON	54	4,853	42	103	164	56	4,488	3,828	512	148	4,880	4,165	555	112	48	7,165
11	WILLIMANTIC	47	3,278	41	61	79	77	3,020	1,549	1,383	88	3,170	1,627	1,451	38	54	10,566

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.

NEW HAVEN.

	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	$52,014,121	$44,846,334	$1,599,555	$1,862,932	$12,775,963	$947,515	$23,371,743	$197,217	$533,273	$224,986	$3,333,150	$51,071,397	$26,752,139
2	229,098	312,134	12,080	7,356	32,086	6,007	243,606	2,472	439	.....	8,088	353,703	104,090
3	537,383	1,283,070	18,460	31,803	229,735	23,744	851,841	18,677	4,139	.....	104,671	1,473,375	597,790
4	99,584	91,083	3,120	8,927	13,702	1,296	48,370	6,756	269	.....	8,643	127,195	77,529
5	223,103	193,403	6,800	1,688	62,075	2,419	95,242	2,780	1,204	15,500	5,695	222,712	125,051
6	50,674	97,249	.....	1,196	19,284	762	65,920	2,730	131	1,729	5,497	111,029	44,347
7	516,368	311,371	35,619	13,397	133,093	5,971	81,495	1,960	2,167	443	37,226	399,974	312,508
8	11,114	30,423	.....	910	16,318	202	9,015	2,040	17	.....	1,921	33,592	24,375
9	8,861,410	7,069,017	284,122	277,263	2,884,844	139,486	2,865,274	18,230	46,905	27,389	525,504	7,805,968	4,801,208
10	268,349	244,895	14,610	12,732	56,084	1,641	131,652	2,984	1,656	6,488	16,448	252,338	119,045
11	72,486	190,676	4,830	6,729	42,760	1,886	113,967	3,092	336	2,065	15,011	240,438	124,585
12	44,340	40,474	1,250	524	7,436	731	26,167	1,145	9	1,996	1,216	55,471	28,573
13	1,391,569	936,105	32,200	21,370	99,950	21,314	305,007	.....	204,542	.....	251,722	1,289,965	963,644
14	583,886	770,607	22,570	8,541	166,422	5,243	528,229	9,188	3,274	1,156	25,984	808,587	275,115
15	97,625	78,605	4,151	1,144	40,704	1,573	23,544	400	745	2,175	4,169	86,379	61,262
16	129,807	130,055	9,120	8,235	13,623	696	69,291	3,827	357	503	24,403	144,627	74,640
17	999,125	1,124,475	79,026	119,855	331,659	16,394	317,478	24,941	4,963	123,169	106,990	1,324,844	990,972
18	31,550	19,725	.....	.....	10,541	220	7,882	431	109	.....	542	28,209	20,107
19	564,033	998,802	7,918	13,653	387,597	2,877	451,831	15,284	79,507	.....	40,135	1,140,574	685,866
20	37,302,617	30,924,165	1,063,679	1,327,609	8,227,450	715,053	17,135,932	80,280	182,504	42,373	2,149,285	35,172,417	17,321,432

washers, and rivets, not made in steel works or rolling mills, 2; iron and steel forgings, 4; kaolin and ground earths, 1; leather goods, 2; leather, tanned, curried, and finished, 1; liquors, distilled, 1; looking-glass and picture frames, 2; mattresses and spring beds, 5; millinery and lace goods, 2; mineral and soda waters, 13; mirrors, 1; models and patterns, not including paper patterns, 2; moving pictures, 1; mucilage and paste, 1; musical instruments, pianos and organs and materials, 2; paint and varnish, 3; paper goods, not elsewhere specified, 2; paper and wood pulp, 2; paving materials, 1; photographic apparatus and materials, 1; photo-engraving, 1; pottery, terra-cotta, and fire-clay products, 2; roofing materials 1; rubber goods, not elsewhere specified, 3; saws, 1; scales and balances, 1; screws, machine, 3; sewing machines, cases, and attachments, 1; signs and advertising novelties, 2; silk and silk goods, including throwsters, 1; slaughtering and meat packing, 4; smelting and refining, not from the ore, 1; springs, steel, car and carriage, 1; stationery goods, not elsewhere specified, 1; statuary and art goods, 3; stereotyping and electrotyping, 3; surgical appliances and artificial limbs, 1; toys and games, 1; upholstering materials, 1; vinegar and cider, 1; wall plaster, 1; window shades and fixtures, 2; wire, 1; wirework, including wire rope and cable, 4; wood, turned and carved, 3.

WATERBURY.

1	$44,052,550	$45,089,673	$1,007,232	$918,621	$11,243,530	$1,257,108	$27,468,804	$95,177	$349,046	$42,151	$2,708,004	$50,349,816	$21,623,904
2	24,662,752	29,314,475	325,234	393,141	5,451,101	830,588	20,768,720	10,432	123,506	18,391	1,393,362	31,461,875	9,862,567
3	172,262	444,425	7,108	8,015	90,217	11,425	313,758	5,264	1,449	.....	7,189	504,545	179,362
4	68,338	46,016	3,000	450	22,628	1,331	17,061	420	551	.....	575	58,041	39,649
5	1,075,675	933,776	52,894	22,316	365,685	14,930	415,285	3,420	6,221	.....	53,025	1,046,202	615,987
6	3,985,367	3,158,917	154,162	76,427	1,282,451	178,804	1,127,416	6,979	19,094	9,871	303,713	3,557,777	2,251,557
7	747,705	522,869	22,596	14,478	134,138	2,829	306,657	1,815	4,787	.....	35,569	680,876	371,390
8	394,561	325,021	27,720	24,308	128,874	6,633	90,030	8,375	2,068	2,339	34,674	398,564	301,901
9	48,976	95,037	260	1,600	35,997	478	40,313	3,876	10,963	29	1,521	115,437	74,646
10	13,496,914	10,249,137	414,258	377,886	3,732,439	210,090	4,389,564	54,596	180,407	11,521	878,376	12,526,499	7,926,845

manufactured, 1; instruments, professional and scientific, 1; iron and steel forgings, 1; gas and electric fixtures and lamps and reflectors, 1; liquors, malt, 2; marble and stone work, 2; mattresses and spring beds, 2; mineral and soda waters, 6; models and patterns, not including paper patterns, 1; needles, pins, and hooks and eyes, 2; patent medicines and compounds and druggists' preparations, 2; silk and silk goods, including throwsters, 1; silverware and plated ware, 1; slaughtering and meat packing, 4; sulphuric, nitric, and mixed acids, 1; upholstering materials, 1; wirework, including wire rope and cable, 2.

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

1	$9,762,562	$18,188,537	$194,901	$242,979	$2,383,506	$287,391	$14,323,472	$10,229	$57,546	$240	$688,273	$20,088,269	$5,477,406
2	7,785,687	9,140,000	258,758	233,536	2,858,374	196,808	4,681,926	46,927	33,366	16,927	813,378	10,317,875	5,439,141
3	17,674,701	14,119,605	506,725	686,934	4,234,946	213,277	6,730,045	32,298	160,812	852	1,553,716	16,316,918	9,373,596
4	3,543,764	4,626,513	138,623	108,692	1,003,485	133,418	2,809,834	33,881	20,079	3,445	375,056	4,954,799	2,011,547
5	8,642,476	9,784,025	129,670	81,734	1,966,707	165,523	7,103,424	17,954	40,733	1,482	216,798	11,032,836	3,703,889
6	31,799,415	18,475,471	593,496	883,190	6,740,931	476,828	7,851,314	38,379	253,535	3,713	1,639,085	22,021,241	13,693,099
7	5,466,970	3,986,905	113,590	69,177	926,437	70,299	2,460,566	22,147	14,035	149,571	161,083	4,483,239	1,952,374
8	12,531,386	7,944,249	215,432	170,873	2,163,525	286,111	4,515,850	29,565	58,744	6,310	497,839	9,388,960	4,586,999
9	11,925,944	7,637,720	327,234	413,605	2,349,713	212,932	3,491,495	27,040	39,462	21,838	754,401	8,739,544	5,035,117
10	15,692,429	11,166,671	241,287	179,491	2,383,942	284,863	7,178,048	113,316	45,700	146	739,878	12,549,872	5,086,961
11	9,918,752	5,352,639	127,675	95,226	1,235,172	97,363	3,096,652	8,882	50,781	6,900	633,928	6,733,185	3,539,170