

# NEW JERSEY.

## INDUSTRIES IN GENERAL.

**General character of the state.**—New Jersey, with a gross area of 8,224 square miles, of which 710 represent water surface, ranks forty-fifth in size among the 49 states and territories of continental United States. Its population in 1910 was 2,537,167, as compared with 1,883,669 in 1900 and 1,444,933 in 1890. It ranked eleventh among the states and territories as regards population in 1910 and sixteenth in 1900. New Jersey is the third most densely populated state in the Union, its density being 337.7 per square mile in 1910, the corresponding figure for 1900 being 250.7. Seventy-five and two-tenths per cent of the entire population of the state in 1910 resided in cities and other incorporated places having a population of 2,500 or over, as against 70.4 per cent in 1900.

In 1910 the state had 9 cities with a population of over 50,000: Newark, 347,469; Jersey City, 267,779; Paterson, 125,600; Trenton, 96,815; Camden, 94,538; Elizabeth, 73,409; Hoboken, 70,324; Bayonne, 55,545; and Passaic, 54,773. There were also 23 cities and other incorporated places with a population between 10,000 and 50,000. (See table on page 748.) These 32 places contained 64.5 per cent of the total population of the state in 1910 and reported 74.3 per cent of the total value of its manufactured products. Only 10.7 per cent of the population resided in incorporated places having between 2,500 and 10,000 inhabitants.

The industrial prominence of New Jersey is due largely to its exceptionally favorable geographic position and to its splendid transportation facilities, since a large part of the materials used in the manufacturing industries of the state are produced beyond its borders and most of the manufactured products are shipped to outside markets. The proximity of the state to the anthracite coal fields of Pennsylvania, which supply a large portion of the fuel used in its manufacturing industries, and to the markets of New York City and Philadelphia, have been powerful factors in its industrial development. The manufacturing centers of the state are either located on New York Harbor or connected therewith by water or by rail. A total trackage of 2,256 miles<sup>1</sup> of steam railroads was operated within the state in 1909.

**Importance and growth of manufactures.**—New Jersey is preeminently a manufacturing state. During 1849 an average of 37,830 wage earners, representing 7.7 per cent of the total population, were employed in manufactures, while in 1909 an average of 326,223, or 12.9 per cent of the total population, were so engaged. The total value of the manufactures of the state, including the products of the neighborhood and hand industries, amounted to only \$39,851,000 in 1849, while in 1909, exclusive of the value of the products of the neighborhood and hand industries, it reached \$1,145,529,000, or nearly twenty-nine times the value reported in 1849. The population of the state in 1910, however, was only a little more than five times its population in 1850. The gross value of products per capita of the total population of the state increased from \$81 in 1849 to \$451 in 1909. New Jersey reported 3.9 per cent of the total value of products of the manufacturing industries in the United States in 1849 and 5.5 per cent in 1909, holding sixth place among the states in gross value of manufactures at both censuses.

The table on the following page 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 New Jersey had 8,817 manufacturing establishments, which gave employment to an average of 371,265 persons during the year and paid out \$218,046,000 in salaries and wages. Of the persons employed, 326,223 were wage earners. These establishments turned out products to the value of \$1,145,529,000, to produce which materials costing \$720,033,000 were used. The value added by manufacture was thus \$425,496,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of New Jersey had a greater development during the more recent five-year period, 1904-1909, than during the preceding five-year period, 1899-1904. During the more recent period the number of establishments increased 25.8 per cent and the average number of wage earners 22.5 per cent,

<sup>1</sup> Interstate Commerce Commission, Statistics of Railways in the United States, 1909.

while the value of products increased 47.9 per cent and the value added by manufacture 40 per cent. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the

full extent indicated by these figures 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.....	8,817	7,010	6,415	25.8	9.3
Persons engaged in manufactures.....	371,265	296,262	(1)	25.3	.....
Proprietors and firm members.....	8,204	6,730	(1)	21.9	.....
Salaried employees.....	36,838	23,196	15,361	58.8	51.0
Wage earners (average number).....	326,223	266,336	213,975	22.5	24.5
Primary horsepower.....	612,293	436,274	322,503	40.3	35.3
Capital.....	\$977,172,000	\$715,060,000	\$477,302,000	36.7	49.8
Expenses.....	1,032,698,000	694,128,000	487,774,000	48.8	42.8
Services.....	218,046,000	157,126,000	114,223,000	38.8	37.6
Salaries.....	48,336,000	28,957,000	19,058,000	66.9	51.9
Wages.....	169,710,000	128,169,000	95,165,000	32.4	34.7
Materials.....	720,033,000	470,449,000	334,726,000	53.1	40.5
Miscellaneous.....	94,619,000	66,553,000	38,825,000	42.2	71.4
Value of products.....	1,145,529,000	774,369,000	553,006,000	47.9	40.0
Value added by manufacture (value of products less cost of materials).....	425,496,000	303,920,000	218,280,000	40.0	39.2

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

The relative importance and growth of the leading manufacturing industries of the state are shown in the table on page 741.

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 table specifies 79 industries which in 1909 had products in excess of \$500,000 in value. Of the industries listed in the table, there are 3 whose products exceeded \$50,000,000 in value; 5, with products between \$25,000,000 and \$50,000,000; and 16, with products between \$10,000,000 and \$25,000,000; making an aggregate of 24 industries, with products in excess of \$10,000,000. Mention is also made of 19 other industries, with products between \$5,000,000 and \$10,000,000; 28, with products between \$1,000,000 and \$5,000,000; and 8, with products of less than \$1,000,000.

In addition to the industries presented separately in the table, there are 38 other important industries in the state which had products in 1909 exceeding \$1,000,000 in value, distributed as follows: 30, with \$1,000,000 but less than \$5,000,000; 3, with \$5,000,000 but less than \$10,000,000; and 5, with \$10,000,000 and over. These industries 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, for the reason that it is more or less interwoven with one or more other industries; and in still others, because comparative sta-

tistics can not be presented for 1904 and 1899 on account of changes in classification.<sup>1</sup> Of the industries which are not presented separately, those which are of special importance are petroleum refining and the refining of cane sugar. The statistics for 1909, however, for 6 of these industries, namely, the manufacture of automobiles, including bodies and parts; blacking and cleansing and polishing preparations; chocolate and cocoa products; men's furnishing goods; signs and advertising novelties; and sulphuric, nitric, and mixed acids are presented separately in Table II, page 774.

There are, as already noted, a very large number of industries which are of considerable importance. Furthermore, it will be seen from Table II that there is a wide diversity in the manufacturing activities of the state. The leading products of the state are refined copper, silk goods, woolen goods, and foundry and machine-shop products. If the several textile industries are combined and considered as a unit they constitute the leading industry of the state. The principal details concerning some of the more important industries are specially considered on pages 742 to 744.

<sup>1</sup> These industries are:

Automobiles, including bodies and parts.	Lard, refined, not made in slaughtering and meat-packing establishments.
Babbitt metal and solder.	Mineral and soda waters.
Bags, other than paper.	Moving pictures.
Blacking and cleansing and polishing preparations.	Oil, cottonseed, and cake.
Boots and shoes, rubber.	Paving materials.
Chocolate and cocoa products.	Pencils, lead.
Coffee and spice, roasting and grinding.	Petroleum, refining.
Coke.	Oil, cottonseed, and cake.
Dyestuffs and extracts.	Pipes, tobacco.
Drug grinding.	Roofing materials.
Explosives.	Sewing machines, cases, and attachments.
Firearms and ammunition.	Signs and advertising novelties.
Files.	Smelting and refining, lead.
Food preparations.	Sugar refining, not including beet sugar.
Furnishing goods, men's.	Sulphuric, nitric, and mixed acids.
Glucose and starch.	Upholstering materials.
Grease and tallow.	Window shades and fixtures.
Hat and cap materials.	Wirework, including wire rope and cable.
Iron and steel, blast furnaces.	
Iron and steel pipe, wrought.	

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. <sup>1</sup>			
		Average number.	Per cent distribution.	Amount.	Per cent distribution.	Amount.	Per cent distribution.	Value of products.		Value added by manufacture.	
								1904-1909	1899-1904	1904-1909	1899-1904
All Industries.....	8,817	326,223	100.0	\$1,145,529,000	100.0	\$425,496,000	100.0	47.9	40.0	40.0	39.2
Smelting and refining, copper.....	4	2,322	0.7	125,651,000	11.0	6,715,000	1.6	100.1	63.7	68.5	-31.5
Silk and silk goods, including throwsters.....	348	30,285	9.3	65,430,000	5.7	32,169,000	7.6	52.6	7.2	56.7	11.9
Foundry and machine-shop products.....	591	27,815	8.5	65,398,000	5.7	35,458,000	8.3	29.4	36.5	19.2	48.8
Slaughtering and meat packing.....	84	1,817	0.6	37,583,000	3.3	3,843,000	0.9	111.7	24.9	123.3	34.6
Woolen, worsted, and felt goods, and wool hats.....	33	12,652	3.9	33,939,000	3.0	12,906,000	3.0	107.0	33.6	123.8	24.2
Wire.....	7	5,646	1.7	28,558,000	2.5	6,560,000	1.5				
Leather, tanned, curried, and finished.....	86	5,500	1.7	28,431,000	2.5	8,233,000	1.9	32.3	50.4	32.3	47.7
Electrical machinery, apparatus, and supplies.....	69	11,099	3.4	28,365,000	2.5	13,639,000	3.3	105.5	83.2	101.1	73.5
Tobacco manufactures.....	462	9,406	2.9	24,177,000	2.1	13,381,000	3.1	120.0	5.3	80.4	2.7
Chemicals.....	50	5,046	1.5	22,824,000	2.0	10,567,000	2.5	75.2	6.7	65.3	22.7
Liquors, malt.....	33	2,125	0.7	20,184,000	1.8	15,303,000	3.6	15.7	21.3	12.6	17.1
Bread and other bakery products.....	1,217	4,936	1.5	20,086,000	1.7	7,891,000	1.9	48.8	65.0	48.9	46.3
Rubber goods, not elsewhere specified.....	36	4,255	1.3	19,543,000	1.7	6,811,000	1.5	304.1	-42.8	246.9	-32.0
Dyeing and finishing textiles.....	67	10,120	3.1	15,796,000	1.4	9,443,000	2.2	31.9	14.2	36.3	15.9
Cotton goods, including cotton small wares.....	26	6,038	2.0	13,729,000	1.2	5,164,000	1.2	60.0	23.8	50.3	-8.9
Soap.....	21	1,599	0.5	13,074,000	1.2	6,500,000	1.5	240.3		233.7	
Lumber and timber products.....	416	4,857	1.5	13,511,000	1.2	5,501,000	1.3	68.9	14.3	56.9	5.9
Jewelry.....	150	4,008	1.2	13,272,000	1.1	6,978,000	1.6	42.6	20.1	49.8	31.2
Pottery, terra-cotta, and fire-clay products.....	88	9,815	3.0	13,139,000	1.1	9,588,000	2.3	12.1	31.0	9.4	33.6
Paint and varnish.....	63	1,493	0.5	12,767,000	1.1	4,841,000	1.1	83.2	12.1	53.7	23.7
Printing and publishing.....	684	5,451	1.7	12,333,000	1.1	8,861,000	2.1	43.0	41.3	39.7	43.1
Iron and steel, steel works and rolling mills.....	16	4,071	1.4	12,014,000	1.0	5,379,000	1.3				
Copper, tin, and sheet-iron products.....	175	5,062	1.5	11,114,000	1.0	4,842,000	1.2	77.3	132.9	46.7	127.3
Oilcloth and linoleum.....	10	2,123	0.7	10,143,000	0.9	3,505,000	0.8	86.3	91.4	97.1	60.2
Clothing, men's, including shirts.....	150	6,994	2.1	9,865,000	0.9	4,789,000	1.1	32.8	29.1	19.4	21.7
Gas, illuminating and heating.....	47	1,917	0.6	9,837,000	0.9	6,982,000	1.6	54.4	69.1	44.0	62.6
Cars and general shop construction and repairs by steam-railroad companies.....	23	6,604	2.0	9,819,000	0.9	5,185,000	1.2	42.3	37.0	41.5	34.2
Belting and hose, woven and rubber.....	12	2,295	0.7	9,793,000	0.8	3,822,000	0.9	-11.5	295.3	-10.3	358.1
Smelting and refining, not from the ore.....	14	1,057	0.3	9,598,000	0.8	2,371,000	0.6				
Shipbuilding, including boat building.....	97	4,869	1.5	8,841,000	0.8	4,592,000	1.1	14.3	60.8	7.5	49.4
Hats, fur-felt.....	58	4,657	1.4	8,825,000	0.8	4,713,000	1.1	-7.5	32.3	-11.3	48.7
Boots and shoes, including cut stock and findings.....	53	4,232	1.3	8,042,000	0.7	3,315,000	0.8	6.0	0.9	-2.2	10.7
Oil, not elsewhere specified.....	23	410	0.1	7,851,000	0.7	1,655,000	0.4	106.4	62.4	128.3	47.7
Fertilizers.....	22	1,208	0.4	7,672,000	0.7	1,987,000	0.5	35.7	31.7	15.3	50.6
Paper and wood pulp.....	37	2,223	0.7	7,554,000	0.7	2,785,000	0.7	49.8	57.8	37.8	36.6
Glass.....	23	5,651	1.7	6,961,000	0.6	4,962,000	1.2	7.9	26.6	8.0	27.4
Millinery and lace goods.....	179	4,120	1.3	6,895,000	0.6	3,710,000	0.9				
Clothing, women's.....	99	4,213	1.3	5,927,000	0.5	3,072,000	0.7	40.5	64.7	50.2	45.6
Gas and electric fixtures and lamps and reflectors.....	28	1,884	0.6	5,771,000	0.5	2,421,000	0.6	64.5	36.6	69.4	-8.5
Flour-mill and gristmill products.....	238	453	0.1	5,538,000	0.5	977,000	0.2	1.3	2.7	3.2	7.6
Cordage and twine and jute and linen goods.....	12	3,025	0.9	5,527,000	0.5	1,631,000	0.4	64.0	14.0	24.4	9.6
Patent medicines and compounds and druggists' preparations.....	111	1,005	0.3	5,410,000	0.5	3,321,000	0.8	45.8	135.7	38.7	132.5
Brass and bronze products.....	60	1,265	0.4	5,131,000	0.4	1,776,000	0.4	36.7	13.1	26.9	65.1
Gold and silver, reducing and refining, not from the ore.....	8	112	(?)	4,436,000	0.4	525,000	0.1	-16.0	134.5	17.4	179.4
Confectionery.....	71	1,263	0.4	4,116,000	0.4	1,683,000	0.4	101.5	475.5	59.5	517.0
Brick and tile.....	76	3,405	1.0	4,073,000	0.4	3,229,000	0.8	122.6	-0.9	116.3	-2.2
Leather goods.....	99	1,813	0.6	4,095,000	0.3	1,865,000	0.4	-4.9	20.7	-10.0	19.3
Marble and stone work.....	131	1,479	0.5	3,901,000	0.3	2,523,000	0.6	59.9	9.8	60.2	16.9
Clocks and watches, including cases and materials.....	9	2,129	0.7	3,848,000	0.3	2,119,000	0.5	-0.6	102.2	-7.4	129.0
Hosiery and knit goods.....	37	2,508	0.8	3,810,000	0.3	1,984,000	0.5	49.5	43.0	70.0	51.4
Cement.....	3	1,445	0.4	3,725,000	0.3	1,672,000	0.4	27.4		57.4	
Canning and preserving.....	84	1,818	0.6	3,664,000	0.3	1,456,000	0.3	36.1	-23.5	46.8	-20.6
Furniture and refrigerators.....	49	1,755	0.5	3,614,000	0.3	1,917,000	0.4	132.1	69.6	100.3	67.0
Corsets.....	11	1,845	0.6	3,336,000	0.3	2,031,000	0.5	59.4	60.5	43.9	94.6
Carriages and wagons and materials.....	256	1,601	0.5	3,250,000	0.3	1,970,000	0.5	-6.1	-11.6	-6.7	-8.4
Cooperage and wooden goods, not elsewhere specified.....	43	1,046	0.3	3,230,000	0.3	902,000	0.2	303.2	13.3	141.2	4.5
Silverware and plated ware.....	26	1,266	0.4	3,035,000	0.3	1,902,000	0.4	-2.2	44.7	-3.3	52.4
Surgical appliances and artificial limbs.....	11	1,412	0.4	2,991,000	0.3	1,742,000	0.4	41.9	75.7	73.5	59.9
Wall paper.....	8	782	0.2	2,872,000	0.2	1,372,000	0.3	37.2	38.9	29.2	110.7
Buttons.....	64	2,281	0.7	2,760,000	0.2	1,587,000	0.4	72.7	55.2	63.6	52.8
Cutlery and tools, not elsewhere specified.....	70	2,208	0.7	2,735,000	0.2	1,886,000	0.4	15.4	2.8	24.9	2.6
Boxes, fancy and paper.....	46	2,142	0.7	2,675,000	0.2	1,489,000	0.4	103.0	40.9	94.6	53.3
Paper goods, not elsewhere specified.....	19	663	0.2	2,640,000	0.2	943,000	0.2	115.5	4.9	179.0	-20.1
Musical instruments, pianos and organs and materials.....	18	1,393	0.4	2,229,000	0.2	1,153,000	0.3	50.9	10.9	40.6	6.6
Carpets and rugs, other than rag.....	9	884	0.3	1,945,000	0.2	1,047,000	0.2	11.2	14.8	36.0	17.6
Brooms and brushes.....	33	915	0.3	1,905,000	0.2	954,000	0.2	172.5	-13.0	144.0	-3.2
Fancy articles, not elsewhere specified.....	31	1,112	0.3	1,841,000	0.2	1,013,000	0.2	-16.5	-7.8	-24.5	5.9
Stoves and furnaces, including gas and oil stoves.....	8	690	0.2	1,688,000	0.1	1,114,000	0.3	11.2		3.3	
Ice, manufactured.....	59	456	0.1	1,497,000	0.1	1,111,000	0.3	131.0	65.3	133.4	67.6
Mattresses and spring beds.....	23	406	0.2	1,323,000	0.1	515,000	0.1	81.7	67.4	82.0	53.0
Cars and general shop construction and repairs by street-railroad companies.....	15	826	0.3	1,158,000	0.1	544,000	0.1	55.0	96.1	96.4	43.5
Dairymen's, poultrymen's, and apiarists' supplies.....	7	296	0.1	954,000	0.1	724,000	0.2	984.1		1,440.4	
Artificial stone.....	97	483	0.1	859,000	0.1	585,000	0.1	813.8		796.8	
Cork, cutting.....	10	418	0.1	791,000	0.1	381,000	0.1	108.2	62.4	101.6	107.7
Agricultural implements.....	10	224	0.1	755,000	0.1	428,000	0.1	92.6	56.8	58.2	104.5
Typewriters and supplies.....	8	272	0.1	740,000	0.1	462,000	0.1	134.9	-57.7	143.2	-63.0
Musical instruments and materials, not specified.....	7	385	0.1	695,000	0.1	427,000	0.1	-26.4	-1.9	-21.7	5.8
Wall plaster.....	5	178	0.1	613,000	0.1	281,000	0.1	200.5		195.8	
Coffins, burial cases, and undertakers' goods.....	7	212	0.1	521,000	(?)	256,000	0.1	15.0	15.0	12.8	2.3
All other industries.....	1,321	47,137	14.4	250,551,000	21.8	71,714,000	16.9				

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

*Textiles.*—The textile industries of New Jersey comprise the manufacture of silk and silk goods, including the operations of throwsters; woolen, worsted, and felt goods, and wool hats; cotton goods, including cotton small wares; fur-felt hats; cordage and twine and jute and linen goods; hosiery and knit goods; carpets and rugs, other than rag; and shoddy. The statistics for the manufacture of shoddy can not be shown without disclosing the operations of individual establishments. Combined, the other seven industries gave employment in 1909 to an average of 60,647 wage earners and the value of their products amounted to \$133,205,000. These figures represent an increase over 1904 of 9,670, or 19 per cent, in the average number of wage earners and \$48,160,000, or 56.6 per cent, in value of products. From 1899 to 1904 the gain in number of wage earners was 4,177, or 8.9 per cent, and that in value of products \$12,405,000, or 17.1 per cent. In 1909, 18.6 per cent of the total number of wage earners employed in the manufacturing industries of the state and 11.6 per cent of the total value of manufactured products were reported for these industries. The corresponding figures for 1904 were 19.1 per cent and 11 per cent, respectively.

*Dyeing and finishing textiles.*—Closely allied to the textile industry is the dyeing and finishing of textiles. The classification covers the independent establishments bleaching, dyeing, and mercerizing raw fibers, yarns, and woven cloth, as well as the printing of cotton piece goods. A considerable number of the cotton, silk, and woolen mills carry on one or more of these subordinate processes with the primary manufacturing in the same establishment, therefore the statistics for the independent establishments engaged in dyeing and finishing do not represent the full extent of the industry. In 1909 reports for some of the dyeing and finishing establishments in the state included the cost of the materials upon which the work was performed and its value as finished. In such cases the cost and value of these goods were deducted, in order to place all of the reports on a uniform basis and to make the statistics comparable with those for prior censuses, when the value of products represented only the value added to the materials by the processes. From 1904 to 1909 the average number of wage earners in the industry increased 2,532, or 33.3 per cent, and the value of products \$3,816,000, or 31.9 per cent. In 1904 New Jersey was the first state in the Union in this industry, with products valued at \$11,980,000, but although the value of products had increased to \$15,796,000 in 1909, it then held second place.

*Smelting and refining, copper.*—This industry is confined chiefly in New Jersey to the refining of crude copper. The value of all ore smelted and crude copper refined is included in the cost of materials, and the total value of all products is reported, regardless of whether the materials belonged to the plant reporting or were worked on a toll basis. Measured by value of products, the industry was by far the most impor-

tant in the state in 1909, the value of the output (\$125,651,000) representing 11 per cent of the total value of all manufactured products. From 1904 to 1909 the value of products increased \$62,855,000, or 100.1 per cent, and from 1899 to 1904 the increase was \$24,431,000, or 63.7 per cent. New Jersey ranked first among the states in this industry in 1909, 1904, and 1899.

*Foundry and machine-shop products.*—This classification includes foundries and machine shops and all allied industries except those which manufacture a distinctive product which is covered by some other classification, such as cash registers and calculating machines, sewing machines, and electrical machinery. The establishments engaged in the manufacture of gas meters, hardware, plumbers' supplies, steam fittings, structural ironwork, and cast-iron pipe, nearly all of which were reported under separate classifications at previous censuses, are all included under this general heading. The industry showed a relatively greater increase in value of products from 1899 to 1904 than from 1904 to 1909, the percentages being 36.5 and 29.4, respectively.

*Slaughtering and meat packing.*—Under this head are included the wholesale slaughtering and meat-packing establishments and those engaged in the manufacture of sausage only. From 1899 to 1904 the average number of wage earners increased but 154, or 26.1 per cent, and the value of products \$3,539,000, or 24.9 per cent, but the development of the industry was so rapid during the later five-year period, 1904-1909, that the average number of wage earners increased 1,072, or 143.9 per cent, and the value of products \$19,829,000, or 111.7 per cent. The industry is confined largely to the northern part of the state, 59.4 per cent of the total value of products being reported from Jersey City alone.

*Wire.*—This classification includes establishments primarily engaged in drawing wire from purchased wire rods. It does not include the wire product of the wire departments of steel works and rolling mills. The industry shows a remarkable growth for each of the five-year periods.

*Leather, tanned, curried, and finished.*—This industry includes not only establishments which are engaged primarily in the manufacture of leather, but also those which treat hides or skins for others. The cost of materials and the value of products, however, do not include the value of the hides or skins treated under contract. In 1849 New Jersey was the seventh state of the Union with respect to value of products, reporting 143 establishments, which employed an average of 618 wage earners and turned out products valued at \$1,389,582. In 1909 the state held fourth position, in which year, although only 86 establishments were engaged in the industry, the number of wage earners was nearly nine times as great and the value of products more than twenty times as great as in 1849.

*Electrical machinery, apparatus, and supplies.*—The rapid extension of the uses of electricity in science and industry has created an increasing demand for



appliances with which to utilize such energy. Therefore it was to be expected that the industry would show remarkable development during the decade. Measured by value of products, New Jersey held third place among the states in this industry in 1909, with products valued at \$28,365,000, an increase over 1904 of \$14,562,000, or 105.5 per cent, and for the 10-year period 1899 to 1909 an increase of \$20,832,000, or 276.5 per cent.

*Chemicals.*—This classification includes the manufacture of acids (except sulphuric, nitric, and mixed acids), sodas, alums, coal-tar products, cyanides, bleaching materials, plastics (celluloid, etc.), compressed or liquefied gases, alkaloids, etc., when they are made as a chief product by the establishment reporting. Chemicals manufactured as by-products in establishments classified under a different head are not included. In 1909 the industry gave employment to 5,046 wage earners, an increase of 1,449, or 40.3 per cent, over the number reported for 1904, and during the same period the value of products increased \$9,800,000, or 75.2 per cent. New Jersey held second rank in this industry in the United States both in 1904 and in 1909.

*Manufactures from precious metals.*—The manufacture of jewelry is allied closely to the production of silverware and plated ware and the reducing and refining of gold and silver from clippings, sweepings, and scrap. In 1909 these three industries combined employed an average of 5,416 wage earners, and turned out products valued at \$20,743,000. The most important branch of the industry is the manufacture of jewelry, which gave employment to an average of 4,008 wage earners in 1909 and reported products to the value of \$13,272,000. Measured by value of products, New Jersey ranked fourth among the states in the jewelry industry in 1909.

*Rubber goods, not elsewhere specified.*—This classification includes the manufacture of rubber clothing, automobile, carriage, and bicycle tires, mechanical rubber goods, etc. It does not include the manufacture of rubber boots and shoes, rubber belting and hose, or suspenders, garters, and elastic woven goods. Although there was a decline in value of products from 1899 to 1904 of \$3,622,000, or 42.8 per cent, there was an increase of \$11,085,000, or 131.1 per cent, for the 10-year period from 1899 to 1909. New Jersey held second place among the states in this industry in 1909.

*Soap.*—The manufacture of soap is an important industry, in which the state held fourth place among the states in 1909, advancing from fifth place in 1904. In 1909 this industry gave employment to an average of 1,599 wage earners and reported products to the value of \$13,674,000, these figures representing increases over the corresponding figures for 1904 of 158.3 per cent and 240.3 per cent, respectively.

*Pottery, terra-cotta, and fire-clay products.*—The name of New Jersey is intimately associated with this industry, and the state held second rank among the states in the industry at the censuses of 1909, 1904, and

1899. From 1904 to 1909 the average number of wage earners increased 3.5 per cent and the value of products 12.1 per cent, the corresponding increases from 1899 to 1904 being 16.9 per cent and 31 per cent, respectively.

*Paint and varnish.*—Of the 63 establishments included under this classification in 1909, 37 were engaged primarily in the manufacture of paint, with products valued at \$7,486,000, representing 58.6 per cent of the total for the industry as a whole. From 1904 to 1909 there was an increase in the average number of wage earners of 533, or 55.5 per cent, and in the value of products of \$5,800,000, or 83.2 per cent. Measured by value of products, New Jersey was one of the leading states in the manufacture of paint and varnish at each of the last three censuses, reporting 10.2 per cent of the total value of such products for the United States in 1909, 7.7 per cent in 1904, and 8.9 per cent in 1899.

*Oilcloth and linoleum.*—New Jersey leads all other states in the production of oilcloth and linoleum, with 43.5 per cent of the value of such products in 1909 and 36.8 per cent in 1904. The value of products reported for the industry in the state, as presented in Table I, shows an increase of \$4,699,000, or 86.3 per cent, from 1904 to 1909. A comparison of the statistics for 1909 and 1899 shows that during the decade the average number of wage earners increased 1,260, or 146 per cent; the value of products, \$7,298,000, or 256.5 per cent; and the value added by manufacture, \$2,395,000, or 215.8 per cent.

It will be seen from the table on page 741 that some of the industries that stand very high in gross value of products hold a comparatively low rank in the average number of wage earners employed and in value added by manufacture. Where this is the case it indicates that the cost of materials represents a large proportion of the total value of products, and that therefore the value added by manufacture, of which wages constitute usually the largest item, is not commensurate with the total value of products. Thus the smelting and refining of copper, which ranks first in gross value of products, and the slaughtering and meat-packing industry, which ranks fourth in that respect, hold thirtieth and forty-fourth places, respectively, with regard to number of wage earners, and fifteenth and twenty-ninth places, respectively, when ranked by value added by manufacture. Similar conditions exist in the wire industry, the manufacture of paint and varnish, and a considerable number of less important industries.

On the other hand, the foundry and machine-shop industry, which ranks third in value of products, ranks first in value added by manufacture and second in number of wage earners; the manufacture of silk goods ranks second both in value of products and in value added by manufacture, and first in number of wage earners; the woolen-goods industry ranks fifth in value of products, sixth in value added by manu-

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. <sup>1</sup>			
		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.....	313	4,143	100.0	\$7,898,000	100.0	\$4,637,000	100.0	38.4	40.5	38.6	68.8
Cars and general shop construction and repairs by steam-railroad companies.....	11	1,489	35.9	2,251,000	28.5	1,288,000	27.8	-10.3	134.8	-7.0	123.5
Lumber and timber products.....	76	1,475	35.6	2,162,000	27.4	1,584,000	34.2	50.7	212.6	41.9	257.7
Printing and publishing.....	93	283	6.8	589,000	7.5	468,000	10.1	99.7	49.0	65.0	46.3
Flour-mill and gristmill products.....	16	28	0.7	462,000	5.8	108,000	2.3	19.1	-0.8	42.1	-20.0
Bread and other bakery products.....	32	54	1.3	272,000	3.4	118,000	2.5	78.9	23.6	81.5	-4.4
Ice, manufactured.....	10	50	1.2	144,000	1.8	102,000	2.2	71.4	7.7	50.0	7.9
Brick and tile.....	13	92	2.2	123,000	1.6	81,000	2.0	51.9	5.2	44.4	8.6
All other industries.....	62	672	16.2	1,895,000	24.0	878,000	18.9				

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

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

*Cars and general shop construction and repairs by steam-railroad companies.*—This industry represents the work done in the car shops operated by steam-railroad companies and is exclusive of minor repairs in roundhouses. Although there may be a limited amount of new construction, the operations consist almost exclusively of repairs to the rolling stock and equipment of the companies reporting. Although there was a slight decrease shown in the total value of products from 1904 to 1909, in the latter year these shops gave employment to an average of 1,489 wage earners and reported products to the value of \$2,251,000, a greater number of wage earners and a greater value of products than reported for any other manufacturing industry in the territory.

*Lumber and timber products.*—This industry covers the operations of timber camps, sawmills, and planing mills. It gave employment to 1,475 wage earners in 1909, and the value of its products amounted to \$2,162,000.

*Printing and publishing.*—The majority of the establishments in this industry are small newspaper and job printing offices, and although the number of establishments is in excess of that reported for any other industry, the number of wage earners and value of products are not correspondingly large. Employment was given to an average of but 283 wage earners, and the total value of products was \$589,000.

*Flour-mill and gristmill products.*—There were 16 mills reported for this industry, and as a rule were small and located in the rural districts. They gave employment to an average of 28 wage earners and reported \$462,000 as the value of their products.

Measured by value added by manufacture, these industries held a somewhat different rank than when measured by value of products, the lumber industry becoming first in order instead of steam-railroad repair shops, which, in turn, becomes second, while bakery products becomes fourth in order instead of flour-mill and gristmill manufactures, which, in turn, becomes fifth. Owing to the comparatively simple processes involved in the latter 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 or the number of the establishments.

This table shows also the percentages of increase for the leading industries in respect to value of products and value added by manufacture. Of the specified industries, printing and publishing shows the greatest percentage of increase from 1904 to 1909 both in value of products and in value added by manufacture.

In addition to the seven industries presented separately, there are two important industries included in the group "All other industries." One of these is the manufacture of coke, which ranks among the leading industries of the territory, but for which separate figures can not be given without disclosing individual operations. The other is the manufacture of malt liquors, for which comparative figures are not available for prior years, but the 1909 statistics will be found in Table II.

*Persons engaged in manufacturing industries.*—The table following 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.

The average number of persons engaged in manufactures during 1909 was 4,766. Of these, 4,143 were wage earners, 446 were proprietors and officials, and

Of the total number of persons engaged in all manufacturing industries, 4.7 per cent were proprietors and officials, 7.4 per cent clerks, and 87.9 per cent wage earners. The highest percentage of proprietors and officials is shown for the bakeries. In this industry and in the lumber 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. The highest proportion of wage earners is reported for the woolen and worsted goods industry, and the lowest for establishments engaged in the manufacture of oils, "not elsewhere specified," which industry shows the largest percentage of clerks.

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. <sup>1</sup>	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
<b>All industries</b> .....	326,223	72.5	25.2	2.3
Belt and hose, woven and rubber.....	2,205	86.1	13.5	0.4
Boots and shoes, including cut stock and findings.....	4,232	90.8	36.3	2.9
Bread and other bakery products.....	4,936	93.7	4.9	1.4
Cars and general shop construction and repairs by steam-railroad companies.....	6,604	99.1	0.8	( <sup>2</sup> )
Chemicals.....	5,046	90.3	8.7	1.0
Clothing, men's, including shirts.....	6,994	81.5	66.3	2.1
Copper, tin, and sheet-iron products.....	5,002	80.0	15.1	4.9
Cotton goods, including cotton small wares.....	6,638	38.1	52.9	8.9
Dyeing and finishing textiles.....	10,129	85.6	13.4	1.1
Electrical machinery, apparatus, and supplies.....	11,099	59.9	39.3	0.7
Fertilizers.....	1,208	98.5	1.2	0.2
Foundry and machine-shop products.....	27,315	96.5	2.8	0.7
Gas, illuminating and heating.....	1,917	99.9	0.1	.....
Hats, fur-felt.....	4,637	77.6	20.7	1.7
Iron and steel, steel works and rolling mills.....	4,671	99.4	0.5	0.1
Jewelry.....	4,008	72.4	23.4	4.1
Leather, tanned, curried, and finished.....	5,560	97.3	1.0	1.7
Liquors, malt.....	2,125	99.4	( <sup>2</sup> )	0.5
Lumber and timber products.....	4,857	98.2	1.2	0.6
Oil, not elsewhere specified.....	419	91.9	7.9	0.2
Oilcloth and linoleum.....	2,123	97.9	0.7	1.4
Paint and varnish.....	1,493	92.2	7.6	0.1
Paper and wood pulp.....	2,223	91.5	7.2	1.3
Pottery, terra-cotta, and fire-clay products.....	9,315	87.7	11.3	1.0
Printing and publishing.....	5,451	81.5	10.5	2.0
Rubber goods, not elsewhere specified.....	4,255	85.9	12.4	1.7
Shipbuilding, including boat building.....	4,869	100.0	( <sup>2</sup> )	.....
Silk and silk goods, including throwsters.....	30,285	43.5	52.9	3.6
Slaughtering and meat packing.....	1,317	95.7	4.2	0.1
Smelting and refining, copper.....	2,322	100.0	.....	.....
Smelting and refining, not from the ore.....	1,057	100.0	.....	.....
Soap.....	1,599	96.4	31.1	2.4
Tobacco manufactures.....	9,466	24.7	70.2	5.0
Wire.....	5,646	91.8	7.7	0.5
Woolen, worsted, and felt goods, and wool hats.....	12,652	44.5	50.9	4.5
All other industries.....	110,938	69.6	27.8	2.6

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

In all industries combined, 72.5 per cent of the average number of wage earners were males 16 years of age and over; 25.2 per cent, females 16 years of age and over; and 2.3 per cent, children under the age of 16. Of the total number of women employed as wage earners, 31.6 per cent were in the cotton-goods, silk-goods, and woolen and worsted goods industries, over one-half of the employees in each of these industries being women 16 years of age and over. The manufacture of boots and shoes, men's clothing, electrical machinery, and tobacco products each shows a large proportion of female wage earners, 36.3 per cent, 66.3 per cent, 39.3 per cent, and 70.2 per cent, respectively.

The three textile industries above mentioned together employed 30 per cent of the total number of wage earners under 16 years of age. The proportions of such wage earners engaged in each industry were as follows: Cotton goods, 8.9 per cent; silk goods, 3.6 per cent; and woolen and worsted goods, 4.5 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.				Per cent of increase, 1904-1909.
	1909		1904		
	Number.	Percent distribution.	Number.	Percent distribution.	
Total.....	371,265	100.0	296,262	100.0	25.3
Proprietors and firm members.....	8,204	2.2	6,730	2.3	21.9
Salaried employees.....	36,838	9.9	23,196	7.8	58.8
Wage earners (average number)....	326,223	87.0	266,336	89.0	22.5

Comparable figures are not obtainable for 1899. The table shows that the greatest percentage of increase was in the salaried employees.

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 of wage earners reported for a single representative day. (See Introduction.)

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Percent distribution.	Number.	Percent distribution.	Number.	Percent distribution.
Total.....	326,223	100.0	266,336	100.0	213,975	100.0
16 years of age and over.....	318,685	97.7	258,334	97.0	206,143	96.3
Male.....	236,499	72.5	195,447	73.4	166,787	78.3
Female.....	82,186	25.2	62,887	23.6	49,356	23.1
Under 16 years of age....	7,538	2.3	8,002	3.0	7,832	3.7

This table indicates that for all industries combined the proportion of children under 16 years of age was smaller in 1909 than in 1899. Although there was not

much change in the proportions of male and female wage earners 16 years of age and over, the proportion of females was greater in 1909 than in 1899, while on the other hand, that of males was smaller in 1909.

**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 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 774, are shown, for a majority of the important industries in the state, the largest number and the smallest number of wage earners reported for any month. The figures are for the 15th day, or the nearest representative day, of the month.

MONTH.	WAGE EARNERS.					
	All industries.		Canning and preserving.		All other industries.	
	Number.	Percent of maximum.	Number.	Percent of maximum.	Number.	Percent of maximum.
January.....	313,168	91.2	273	4.5	312,885	91.4
February.....	313,216	91.2	317	5.3	312,899	91.4
March.....	318,401	92.7	290	4.8	318,111	92.6
April.....	321,883	93.7	396	6.6	321,487	93.6
May.....	321,876	93.7	760	12.0	321,116	93.3
June.....	321,969	93.8	1,662	27.0	320,307	93.5
July.....	318,216	92.7	1,483	24.6	316,733	92.5
August.....	323,506	94.2	3,344	55.5	320,162	93.5
September.....	334,710	97.5	6,021	100.0	328,680	96.0
October.....	341,569	99.5	4,768	79.2	336,801	98.3
November.....	342,786	99.8	1,566	26.0	341,220	99.6
December.....	343,389	100.0	937	15.6	342,452	100.0

Canning and preserving, which is a seasonal industry, gave employment to a large number of persons in the months of August, September, and October, and to a relatively small number through the winter and spring months. From 273 wage earners in January, the number employed increased to 6,021 in September. The

number reported for January, the month of minimum activity, was only 4.5 per cent of the number reported for September, the month of maximum activity. In the glass industry the greatest number of wage earners, 7,286, was reported for the month of April, and the least number, 1,151, for the month of August. This variation is accounted for by the fact that the manufacture of glass is practically suspended during the months of July and August. So few wage earners are employed in these two industries, however, as compared with the total number employed in all industries, that they have only a slight effect on the fluctuation of employment from month to month in all industries combined.

**Prevailing hours of labor.**—In the next table wage earners have been classified according to the prevailing hours of labor in the establishment 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.

It is evident from this table that for the great majority of wage earners employed in the manufacturing industries of New Jersey the usual hours of labor range from 54 to 60 per week, 12.8 per cent of the total being employed in establishments where the prevailing hours are less than 54 a week and only 4.6 per cent in establishments where they are more than 60 a week.

In the malt-liquor, marble and stone work, and printing and publishing industries 48 hours or less per week prevail for a majority of the wage earners. In nearly all of the larger industries the prevailing hours are from 54 to 60 per week. Practically all of the wage earners in the gas industry, however, are in plants where the hours of employment are 60 a week or more.

MANUFACTURES—NEW JERSEY.

747

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.....	326,223	16,189	25,713	45,861	173,701	49,716	7,011	2,461	4,071
Agricultural implements.....	224			9	5	210			
Artificial stone.....	488	65	65	146	111	95		6	
Belt and hose, woven and rubber.....	2,295	4			1,711	580			
Belting and hose, woven and rubber.....	4,232	14	12	71	3,680	455			
Boots and shoes, including cut stock and findings.....	2,142	62	162	351	1,007	60			
Boxes, fancy and paper.....									
Brass and bronze products.....	1,265	12	93	284	640	205		31	
Bread and other bakery products.....	4,936	256	39	670	306	2,922	548	178	22
Brick and tile.....	3,405	160	137	564	270	2,274			
Brooms and brushes.....	915	10	147	48	706	4			
Buttons.....	2,261	31		160	1,874	196			
Canning and preserving.....	1,818	149	82	97	485	988	10	7	
Carpets and rugs, other than rag.....	884	30	3		845				
Carriages and wagons and materials.....	1,601	51	116	407	669	339	18	1	
Cars and general shop construction and repairs by steam-railroad companies.....	6,604	1,002	1,337	1,490	1,032	568	990		155
Cars and general shop construction and repairs by street-railroad companies.....	826			2	585		92	5	10
Cement.....	1,445					1,119			326
Chemicals.....	5,046	6	20	90	2,804	962	198	74	862
Clocks and watches, including cases and materials.....	2,129		372		1,622	185			
Clothing, men's, including shirts.....	6,094	661	951	447	4,574	361			
Clothing, women's.....	4,216	43	1,305	1,197	1,511	160			
Coffins, burial cases, and undertakers' goods.....	212	1	1	12		198			
Confectionery.....	1,263	26	240	169	652	174		2	
Cooperage and wooden goods, not elsewhere specified.....	1,046	39	337	433	54	183			
Copper, tin, and sheet-iron products.....	5,002	899	68	551	3,295	199			
Cordage and twine and jute and linen goods.....	3,025	1		301	2,671	52			
Cork, cutting.....	418	44		68	306	5			
Corsets.....	1,845		178	237	1,122	308			
Cotton goods, including cotton small wares.....	6,638		3		5,537	1,098			
Cutlery and tools, not elsewhere specified.....	2,208	97	125	117	1,814	55			
Dairymen's, poulterers', and apiarists' supplies.....	296				276	20			
Dyeing and finishing textiles.....	10,129	4	33	60	6,194	2,968	870		
Electrical machinery, apparatus, and supplies.....	11,090	147	107	4,160	6,561	104		20	
Fancy articles, not elsewhere specified.....	1,112	3	29	17	1,008				
Fertilizers.....	1,208	9		11	51	1,137			
Flour-mill and gristmill products.....	453	40	7	9	34	275	31	41	16
Foundry and machine-shop products.....	27,815	326	1,833	11,753	9,507	4,343	3		
Furniture and refrigerators.....	1,755	214	115	56	1,210	160			
Gas and electric fixtures and lamps and reflectors.....	1,884	33	118	310	1,380	4			
Gas, illuminating and heating.....	1,917	9		15		47	247	4	1,595
Glass.....	5,651	1,007	2,451	420	1,773				
Gold and silver, reducing and refining, not from the ore.....	112			6	75	27	4		
Hats, fur-felt.....	4,637	619	3,295	108	366	269			
Hosiery and knit goods.....	2,506	24	109	107	2,140	126			
Ice, manufactured.....	456			10	81	70			146
Iron and steel, steels works and rolling mills.....	4,071		225	1,007	2,134	224	1,081		
Jewelry.....	4,008	157	404	1,052	1,582	153			
Leather goods.....	1,813	188	83	44	1,303	195			
Leather, tanned, curried, and finished.....	5,500	180	245	115	4,578	442			
Liquors, malt.....	2,125	1,236		708		71			
Lumber and timber products.....	4,837	723	903	1,371	1,085	750	5		
Marble and stone work.....	1,479	1,068	41	145	163	62			
Mattresses and spring beds.....	493	49		7	420	20			
Millinery and lace goods.....	4,120	114	65	523	2,904	483	31		
Musical instruments and materials, not specified.....	335	2		72	311				
Musical instruments, pianos and organs and materials.....	1,393	64	5	978	345				
Oil, not elsewhere specified.....	419	1	45	84	44	245			
Olecloth and linoleum.....	2,123			103	1,377	643			
Paint and varnish.....	1,493	93	480	28	282	364	17	229	
Paper and wood pulp.....	2,223	12			394	194	726	843	54
Paper goods, not elsewhere specified.....	563	6	3	115	110	184	145		
Patent medicines and compounds and druggists' preparations.....	1,005	80	86	378	383	78			
Pottery, terra-cotta, and fire-clay products.....	9,815	652	1,968	1,443	3,028	2,719			
Printing and publishing.....	5,451	3,251	1,141	640	315	79	25		
Rubber goods, not elsewhere specified.....	4,255		15	10	2,571	1,659			
Shipbuilding, including boat building.....	4,589	150	191	1,278	340	2,910			
Silk and silk goods, including throwsters.....	20,285	42	477	190	29,448	123			
Silverware and plated ware.....	1,296		593	13	687	3			
Slaughtering and meat packing.....	1,817	116	261	44	136	1,090	16	142	12
Smelting and refining, copper.....	2,322					1,238	1,084		
Smelting and refining, not from the ore.....	1,057	2	3		180				680
Soap.....	1,599	3	1,101	202	188	105			
Stoves and furnaces, including gas and oil stoves.....	696	4	35	152	46	459			
Surgical appliances and artificial limbs.....	1,412	13		35	1,363	1			
Tobacco manufactures.....	9,466	712	205	486	6,562	1,499	2		
Typewriters and supplies.....	272	57	10	44	161				
Wall paper.....	782				248	534			
Wall plaster.....	178			7	44	127			
Wire.....	5,646				5,559	87			
Woolen, worsted, and felt goods, and wool hats.....	12,652		153	8	11,747	744			
All other industries.....	47,187	1,055	2,980	8,456	28,054	8,286	1,350	813	1,103

Location of establishments.—The next table shows the extent to which the manufactures of New Jersey are centralized in cities and other incorporated places of 10,000 population or over. (See Introduction.)

The comparison is confined here, as in other states, to the years 1899 and 1909, in the absence of a Federal census of population by which the grouping of cities in 1904 could be determined for all the states.

ITEM.	Year.	Aggregate.	CITIES, TOWNS, OR BOROUGHES HAVING A POPULATION OF 10,000 AND OVER.								DISTRICTS OUTSIDE OF CITIES, TOWNS, OR BOROUGHES 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.	Percent of total.
			Number or amount.	Percent of total.	Number or amount.	Percent of total.	Number or amount.	Percent of total.	Number or amount.	Percent of total.		
Population.....	1910 1900	2,537,167 1,883,669	1,635,863 1,125,018	64.5 59.7	271,936 218,271	10.7 11.6	623,079 349,073	24.6 18.5	740,848 557,674	29.2 29.6	901,804 758,681	35.5 40.2
Number of establishments....	1909 1899	8,817 6,415	5,939 4,253	67.4 66.3	818 585	9.3 9.1	1,816 1,072	20.6 16.7	3,305 2,596	37.5 40.5	2,878 2,162	32.6 33.7
Average number of wage earners.	1909 1899	326,223 213,975	248,765 160,842	76.3 75.2	37,697 24,567	11.6 11.5	93,655 47,464	28.7 22.2	117,413 89,811	36.0 41.5	77,468 53,133	23.7 24.8
Value of products.....	1909 1899	\$1,145,529,076 553,005,684	\$851,498,583 419,801,662	74.3 75.0	\$93,720,092 53,854,761	8.2 9.7	\$356,907,642 131,787,132	31.2 23.8	\$400,870,849 234,159,779	35.0 42.3	\$294,030,493 133,204,022	25.7 24.1
Value added by manufacture...	1909 1899	425,495,677 218,279,590	325,638,307 166,024,706	76.5 76.1	43,817,178 22,625,292	10.3 10.4	119,674,513 45,331,541	28.1 20.8	162,146,016 98,067,573	38.1 44.9	99,857,370 52,254,884	23.5 23.9

In 1909, 74.3 per cent of the total value of products was reported from cities and other incorporated places having over 10,000 inhabitants, and 76.3 per cent of the average number of wage earners were employed in such places. The figures indicate that the manufacturing industries in incorporated places with more than 10,000 inhabitants contributed slightly larger percentages of the total number of establishments, average number of wage earners, and value added by manufacture, and a somewhat smaller percentage of the value of products in 1909 than in 1899.

The increase in the population of certain places has affected the grouping in the table. East Orange, Orange, Perth Amboy, and West Hoboken, which for 1909 fall into the group comprising places having between 25,000 and 100,000 inhabitants, had less than 25,000 inhabitants in 1900, and for 1899, therefore, are included with the cities and towns having between 10,000 and 25,000 inhabitants. Eight of the places falling in 1909 into the group comprising incorporated places of between 10,000 and 25,000 inhabitants—Asbury Park, Bloomfield, Garfield, Hackensack, Irvington, Long Branch, West New York, and West Orange—had less than 10,000 inhabitants in 1900, so that for 1899 their statistics are included with those for districts outside of cities. The fact that in 1909 the combined value of products reported by the manufacturing industries of the eight places just mentioned was \$31,524,468, or 2.8 per cent of the total for the state, makes the increase in the proportion of the total value of products reported by the industries outside of incorporated places of over 10,000 inhabitants more worthy of note.

The group comprising the incorporated places of between 10,000 and 25,000 inhabitants contributed a

smaller proportion of the total value of products in 1909 than in 1899, and the group made up of the places having between 25,000 and 100,000 inhabitants a considerably larger proportion, while for Newark, Jersey City, and Paterson, the three cities having more than 100,000 inhabitants, a decided loss is shown in the percentage which their combined value of products forms of the total. Of the total value of products reported for the state in 1909, 8.2 per cent was reported from the 6 cities, 11 towns, and 1 borough having between 10,000 and 25,000 inhabitants, 31.2 per cent from the 10 cities and 1 town having between 25,000 and 100,000 inhabitants, and 35 per cent from the 3 cities having 100,000 inhabitants and over.

The population for 1910 and 1900 of the 32 incorporated places which had 10,000 inhabitants or over in 1910 is given in the following statement:

CITY, TOWN, OR BOROUGH.	1910	1900	CITY, TOWN, OR BOROUGH.	1910	1900
Newark.....	347,469	246,070	Union.....	21,023	15,187
Jersey City.....	267,779	206,433	Plainfield.....	20,550	15,369
Paterson.....	125,600	105,171	Kearny.....	18,659	10,880
Trenton.....	90,815	73,307	Bloomfield.....	15,070	9,668
Camden.....	94,638	75,935	Harrison.....	14,498	10,586
Elizabeth.....	73,409	52,130	Bridgeton.....	14,209	13,913
Hoboken.....	70,324	59,364	Hackensack.....	14,050	9,443
Bayonne.....	55,545	32,722	Phillipsburg.....	13,603	10,632
Passaic.....	54,773	27,777	West New York.....	13,660	8,267
Atlantic City.....	40,160	27,838	Long Branch.....	13,298	8,872
West Hoboken.....	35,403	23,094	Morristown.....	12,507	11,267
East Orange.....	34,371	21,506	Millville.....	12,451	10,583
Perth Amboy.....	32,121	17,699	Irvington.....	11,877	5,889
Orange.....	29,630	24,141	West Orange.....	10,980	3,694
New Brunswick.....	23,388	20,006	Garfield.....	10,213	8,044
Montclair.....	21,550	13,962	Asbury Park.....	10,150	4,148

The relative industrial importance of each of the 32 incorporated places having a population of 10,000 or over in 1910 is shown in the next table, in which the value of products and average number of wage earners are shown separately for 1909, 1904, and 1899.



CITY, TOWN, OR BOROUGH.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
Newark.....	59,955	50,697	42,878	\$202,511,520	\$150,055,227	\$112,728,045
Jersey City.....	25,454	20,353	17,391	123,774,978	75,740,934	72,929,690
Bayonne.....	7,519	7,057	4,670	73,640,900	60,633,761	38,601,429
Perth Amboy.....	5,896	3,950	2,005	73,092,703	34,800,402	14,061,072
Paterson.....	32,004	28,509	25,542	69,584,351	54,673,053	48,502,044
Camden.....	16,597	12,661	7,742	49,137,874	33,587,273	17,969,954
Trenton <sup>1</sup> .....	18,543	14,130	13,138	49,008,715	32,359,945	28,458,068
Passaic.....	15,086	11,000	6,399	41,720,257	22,782,725	12,804,805
Elizabeth.....	8,107	7,227	5,712	29,147,334	29,300,801	22,861,375
Hoboken.....	6,500	4,040	2,859	20,413,015	14,077,305	10,483,079
Harrison.....	5,284	4,590	3,836	13,142,377	8,408,924	6,086,477
New Brunswick.....	1,508	( <sup>2</sup> )	( <sup>2</sup> )	10,004,802	8,916,983	5,791,321
West New York.....	4,333	2,450	1,640	9,273,717	( <sup>2</sup> )	( <sup>2</sup> )
Orange.....	3,432	3,148	2,216	9,175,910	6,150,635	2,995,688
Phillipsburg.....	2,530	( <sup>2</sup> )	( <sup>2</sup> )	9,150,227	6,084,173	4,584,886
Garfield.....	2,820	1,303	980	8,893,710	( <sup>2</sup> )	( <sup>2</sup> )
Kearny.....	2,894	1,850	1,376	8,306,276	4,427,904	1,607,002
Union.....	2,957	1,893	1,612	7,941,047	3,512,451	3,403,136
Bloomfield.....	2,782	3,502	2,733	5,894,710	4,045,483	3,370,924
West Hoboken.....	2,761	2,707	2,239	5,577,430	5,947,267	4,769,436
Millville.....	2,387	2,276	2,132	4,181,824	3,719,417	2,513,433
Bridgeport.....	1,336	854	690	4,070,508	2,963,840	2,258,772
East Orange.....	1,758	1,986	1,384	3,724,879	2,326,552	2,080,910
Plainfield.....	540	( <sup>2</sup> )	( <sup>2</sup> )	3,648,745	3,572,134	2,437,434
Irvington.....	726	381	305	3,017,824	( <sup>2</sup> )	( <sup>2</sup> )
Atlantic City.....	738	812	487	2,259,616	974,835	608,222
Hackensack.....	415	294	96	1,977,966	1,488,358	782,232
Long Branch.....	252	161	169	1,116,663	577,268	280,590
Montclair.....	476	( <sup>2</sup> )	( <sup>2</sup> )	1,025,585	621,145	663,592
West Orange.....	201	307	252	747,684	( <sup>2</sup> )	( <sup>2</sup> )
Morrisstown.....	246	( <sup>2</sup> )	( <sup>2</sup> )	724,233	704,412	595,592
Asbury Park.....	204	( <sup>2</sup> )	( <sup>2</sup> )	602,194	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> 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.  
<sup>2</sup> Figures not available.

With the exception of Elizabeth and West Hoboken, each place for which comparative statistics are presented shows an increase in value of products from 1904 to 1909, and all but Montclair show an increase from 1899 to 1904.

Newark, the largest and most important city in the state, shows an increase from 1904 to 1909 of \$52,456,000, or 35 per cent, in value of products and 9,258, or 18.3 per cent, in the average number of wage earners. In value of manufactured products, it stood eleventh among the cities of the United States in 1909 and tenth in 1904 and 1899. Eighteen and four-tenths per cent of the wage earners employed in manufactures in the state in 1909 and 17.7 per cent of the value of the manufactured products were reported from Newark. The leading industry of the city in 1909 was the smelting and refining of copper, but statistics for this industry can not be shown separately without disclosing the operations of individual establishments. Next in order of importance as measured by value of products were leather (tanned, curried, and finished), foundry and machine-shop products, jewelry, and malt liquors, the combined products of which represented 29.6 per cent of the total value of all products for the city in 1909. Other important industries were the manufacture of paint and varnish; electrical machinery and apparatus; chemicals; bread and other bakery products; printing and publishing; fur-felt hats; slaughtering and meat packing; and copper, tin, and sheet-iron products.

The total value of products reported for Jersey City increased \$53,034,000, or 70 per cent, from 1904 to 1909, and the average number of wage earners in-

creased 5,101, or 25.1 per cent. Among the leading industries, measured by value of products, was the slaughtering and meat-packing industry, with products valued at \$22,314,000, which represented 59.4 per cent of the total value of products for this industry in the state. Other important industries were tobacco manufactures, foundries and machine shops, the manufacture of gas, and steam-railroad repair shops. Three of the most important industries in the city in 1909 were the manufacture of soap, the refining of sugar, and the refining of petroleum, but their statistics can not be shown separately without disclosing the operations of individual establishments.

Bayonne shows an increase in value of manufactured products amounting to \$13,007,000, or 21.5 per cent, from 1904 to 1909, and an increase in average number of wage earners of 462, or 6.5 per cent. The leading industries were petroleum refining, smelting and refining from clippings, sweepings, and scrap, foundries and machine shops, and the manufacture of electrical machinery and apparatus. The foundry and machine-shop industry, however, is the only one of these for which statistics can be shown separately in Table I without disclosing the operations of individual establishments. Twenty-one industries were reported in 1909 which did not appear at the census of 1904, the most important of which were the manufacture of copper, tin, and sheet-iron products, cooperage and wooden goods, silk and silk goods, and soap.

Perth Amboy was the fourth city in the state in 1909 in value of manufactured products, having advanced from fifth position since 1904 and displaced Paterson. Since the city had less than 50,000 inhabitants in 1910, its statistics are presented by totals only in Table I. From 1904 to 1909 the total value of products increased \$38,292,000, or 110 per cent, and the average number of wage earners 1,916, or 43.5 per cent. These large gains were due in a great measure to the appearance of several important industries in 1909 which were not reported at the census of 1904, such as the manufacture of ammunition, of paving materials, and of electrical machinery and apparatus, and to the increase in the value of products of the copper smelting and refining industry, which is by far the most important industry of the city.

The fifth city in importance, measured by value of products, was Paterson. From 1904 to 1909 the total value of the manufactured products of this city increased \$14,911,000, or 27.3 per cent, and the average number of wage earners 3,495, or 12.3 per cent. The leading industry was the manufacture of silk and silk goods, in the production of which this city outranked all others in the United States in 1909, 1904, and 1899. In 1909 this industry gave employment in Paterson to 18,828 wage earners, or 58.8 per cent of the total number for all industries, and reported products to the value of \$40,358,000, or 58 per cent of

the total value of products for the city. Other important industries were the dyeing and finishing of textiles, foundries and machine shops, the making of men's clothing, and slaughtering and meat packing.

From 1904 to 1909 the total value of manufactured products in Camden increased \$15,551,000, or 46.3 per cent, and the average number of wage earners 3,866, or 30.5 per cent. Measured by value of products, the most important industry was the tanning, currying, and finishing of leather, with products valued at \$5,920,000, which gave employment to an average of 1,111 wage earners. The shipbuilding industry was next in importance, with a value of products amounting to \$5,626,000, and an average of 3,324 wage earners. Other important industries were the manufacture of phonographs and graphophones, foundry and machine-shop products, and woolen and worsted goods.

The total value of products reported for Trenton increased \$16,649,000, or 51.4 per cent, and the average number of wage earners 4,413, or 31.2 per cent, during the five-year period 1904-1909. Trenton owes much of its industrial prominence to the manufacture of pottery, terra-cotta, and fire-clay products, which industry in 1909 reported products to the value of \$6,996,000, and gave employment to an average of 5,030 wage earners, these figures representing 14.3 per cent and 27.1 per cent, respectively, of the totals for all industries in the city, and 53.2 per cent and 51.2 per cent, respectively, of the totals for this industry in the state. Other important industries were the manufacture of wire, rubber goods, foundry and machine-shop products, and rubber belting and hose.

In Passaic the value of products increased \$18,947,000, or 83.2 per cent, and the average number of wage earners 4,086, or 37.1 per cent, between 1904 and 1909. Two of the most important industries in the city were the manufacture of cotton goods and of woolen and worsted goods, the combined value of their products amounting to \$20,536,000 and the average number of wage earners employed to 8,191, representing 49.2 per cent and 54.3 per cent, respectively, of the corresponding totals for all industries in the city.

The value of products for Elizabeth showed a slight decrease between 1904 and 1909, due principally to a falling off in foundry and machine-shop products, and in oils, "not elsewhere specified," and to the fact that a large establishment engaged in the refining of copper in 1904 was reported as idle in 1909. The most important industry in the city in 1909 was the manufacture of sewing machines. The statistics for this industry can not be shown separately without disclosing the operations of individual establishments, but in 1909 the industry gave employment to more

than one-half of the average number of wage earners reported for all manufacturing industries in the city. Other important industries were the manufacture of wire and of electrical machinery and apparatus, and steam-railroad repair shops.

While there was a decrease of 35, or 12.5 per cent, in the number of establishments in Hoboken between 1904 and 1909, the value of products increased \$6,336,000, or 45 per cent, and the average number of wage earners 873, or 12.1 per cent. The foundries and machine shops, which gave employment in 1909 to 855 wage earners and reported products to the value of \$1,808,000, formed the most important industry in the city. Next in importance were the bakeries and the furniturefactories. The tanning and finishing of leather, shipbuilding, and the manufacture of moving picture apparatus and of lead pencils were other important industries, but their statistics can not be shown without disclosing the operations of individual establishments.

The other incorporated places having over 10,000 population in the order of their importance as measured by value of products in 1909, and the principal industries of each, were as follows: Harrison, foundries and machine shops, steel works and rolling mills, and electrical machinery and apparatus; New Brunswick, surgical appliances and tobacco manufactures; West New York, lard refining, cottonseed oil and cake, and silk goods; Orange, phonographs and graphophones and fur-felt hats; Phillipsburg, foundries and machine shops and silk goods; Garfield, worsted goods and paper and wood pulp; Kearny, slaughtering and meat packing and oilcloth and linoleum; Union, silk goods and malt liquors; Bloomfield, electrical machinery and apparatus; West Hoboken, silk goods; Millville and Bridgeton, glass; East Orange, electrical machinery and apparatus; Plainfield, foundry and machine-shop products; Irvington, reducing and refining gold and silver, not from the ore; Atlantic City, bakeries; Hackensack, silk goods; Long Branch, men's clothing; Montclair, paper goods; West Orange, electrical machinery and apparatus; Morristown, bakeries; and Asbury Park, planing-mill products.

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



The most important distinction shown is that between corporate and all other forms of ownership. For all industries combined, 29 per cent of the total number of establishments were under corporate ownership in 1909, as against 71 per cent under all other forms. The corresponding figures for 1904 were 26.2 per cent and 73.8 per cent, respectively. Of the total value of products in 1909, the establishments operated by corporations reported 84.8 per cent, as against 15.2 per cent for those under all other forms of ownership, while in 1904 the corresponding figures were 79.7 per cent and 20.3 per cent, respectively. Similar conditions prevail to a greater or less extent in most of the industries presented separately, except that for men's clothing the greatest proportion, 38.8 per cent, of value

of products is shown for firm ownership, while the bakeries show 73.6 per cent for individual 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 manufacture. The totals for all industries are shown for the last two censuses, while for the industries presented separately 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.	INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
<b>ALL INDUSTRIES:</b>									
1909	8,817	328,223	\$1,145,529,078	\$425,405,677	<b>Clothing, men's, including shirts, 1909</b>	150	6,994	\$9,864,646	\$4,788,278
1904	7,010	266,336	774,369,025	303,919,849	Less than \$5,000	30	138	83,421	77,826
Less than \$5,000:					\$5,000 and less than \$20,000	48	811	516,854	452,107
1909	2,288	3,094	5,815,878	3,771,287	\$20,000 and less than \$100,000	51	3,201	2,900,784	1,802,489
1904	1,900	2,767	4,861,044	3,150,687	\$100,000 and less than \$1,000,000 <sup>1</sup>	21	2,844	6,363,587	2,455,761
\$5,000 and less than \$20,000:					Per cent of total	100.0	100.0	100.0	100.0
1909	3,081	16,218	32,476,593	18,157,917	Less than \$5,000	20.0	2.0	0.8	1.6
1904	2,424	13,928	24,898,863	13,987,375	\$5,000 and less than \$20,000	32.0	11.6	5.2	9.4
\$20,000 and less than \$100,000:					\$20,000 and less than \$100,000	34.0	45.8	20.4	37.6
1909	2,053	43,646	90,682,537	46,875,049	\$100,000 and less than \$1,000,000 <sup>1</sup>	14.0	40.7	64.5	51.3
1904	1,610	39,147	72,862,614	38,602,710	Average per establishment		47	\$95,784	\$31,922
\$100,000 and less than \$1,000,000:					<b>Cotton goods, including cotton small wares, 1909</b>	26	6,638	\$13,728,874	\$5,164,141
1909	1,201	137,123	366,705,326	163,792,863	Less than \$5,000	8	54	84,880	43,354
1904	955	128,483	286,892,957	138,229,831	\$5,000 and less than \$20,000	4	126	255,100	133,933
\$1,000,000 and over:					\$20,000 and less than \$100,000	11	2,461	5,397,487	2,170,895
1909	194	126,142	649,848,742	187,808,561	\$100,000 and less than \$1,000,000	3	3,997	7,991,407	2,815,959
1904	121	82,011	384,853,547	109,979,246	Per cent of total	100.0	100.0	100.0	100.0
Per cent of total:					Less than \$5,000	30.8	0.8	0.6	0.3
1909	100.0	100.0	100.0	100.0	\$5,000 and less than \$20,000	15.4	1.9	1.9	2.6
1904	100.0	100.0	100.0	100.0	\$20,000 and less than \$100,000	42.3	37.1	39.3	42.0
Less than \$5,000:					\$100,000 and over	11.5	60.2	58.2	54.5
1909	25.9	0.9	0.5	0.9	Average per establishment		255	\$528,034	\$198,621
1904	27.1	1.0	0.6	0.9	<b>Dyeing and finishing textiles, 1909</b>	67	10,129	\$15,785,788	\$9,443,082
\$5,000 and less than \$20,000:					Less than \$5,000	8	18	23,737	17,994
1909	34.9	5.0	2.8	4.3	\$5,000 and less than \$20,000	13	132	173,127	125,715
1904	34.0	5.2	3.2	4.6	\$20,000 and less than \$100,000	21	646	914,561	569,897
\$20,000 and less than \$100,000:					\$100,000 and less than \$1,000,000	20	3,838	6,184,234	3,787,977
1909	23.3	13.4	7.9	11.0	\$1,000,000 and over	5	5,405	8,500,129	4,941,509
1904	23.0	14.7	9.4	12.7	Per cent of total	100.0	100.0	100.0	100.0
\$100,000 and less than \$1,000,000:					Less than \$5,000	11.9	0.2	0.2	0.2
1909	13.6	42.0	32.0	39.7	\$5,000 and less than \$20,000	19.4	1.3	1.1	1.3
1904	13.6	48.2	37.0	45.5	\$20,000 and less than \$100,000	31.3	6.4	5.8	6.0
\$1,000,000 and over:					\$100,000 and less than \$1,000,000	29.9	37.9	39.2	40.1
1909	2.2	38.7	56.7	44.2	\$1,000,000 and over	7.5	54.2	53.8	52.3
1904	1.7	30.8	49.7	36.2	Average per establishment		151	\$235,788	\$140,942
Average per establishment:					<b>Electrical machinery, apparatus, and supplies, 1909</b>	69	11,089	\$23,365,377	\$13,939,852
1909		37	\$129,923	\$48,259	Less than \$5,000	6	28	18,961	9,977
1904		38	110,466	43,355	\$5,000 and less than \$20,000	13	79	161,357	80,821
<b>Boots and shoes, including out stock and findings, 1909</b>	53	4,232	\$8,041,623	\$3,314,498	\$20,000 and less than \$100,000	23	480	1,166,688	666,455
Less than \$5,000	9	13	21,664	12,090	\$100,000 and less than \$1,000,000	19	3,197	8,369,203	4,428,746
\$5,000 and less than \$20,000	7	87	84,194	45,116	\$1,000,000 and over	8	7,315	18,649,168	8,750,853
\$20,000 and less than \$100,000	17	446	888,628	371,892	Per cent of total	100.0	100.0	100.0	100.0
\$100,000 and less than \$1,000,000 <sup>1</sup>	20	3,686	7,046,937	2,885,400	Less than \$5,000	8.7	0.3	0.1	(*)
Per cent of total	100.0	100.0	100.0	100.0	\$5,000 and less than \$20,000	18.8	0.7	0.0	4.8
Less than \$5,000	17.0	0.3	0.3	0.4	\$20,000 and less than \$100,000	33.3	4.3	4.1	8.1
\$5,000 and less than \$20,000	13.2	2.1	1.0	1.4	\$100,000 and less than \$1,000,000	27.5	28.8	29.5	62.8
\$20,000 and less than \$100,000	32.1	10.5	11.0	11.2	\$1,000,000 and over	11.6	65.9	65.7	\$202,027
\$100,000 and less than \$1,000,000 <sup>1</sup>	37.7	87.1	87.6	87.1	Average per establishment		161	\$411,092	
Average per establishment		80	\$151,729	\$62,538	<b>Foundry and machine-shop products, 1909</b>	581	27,815	\$65,398,437	\$35,458,387
<b>Bread and other bakery products, 1909</b>	1,217	4,936	\$20,085,029	\$7,890,424	Less than \$5,000	100	148	268,563	184,208
Less than \$5,000	217	178	789,590	313,192	\$5,000 and less than \$20,000	184	1,071	1,021,962	1,240,069
\$5,000 and less than \$20,000	771	1,990	3,212,281	3,204,185	\$20,000 and less than \$100,000	176	3,861	7,532,400	4,548,838
\$20,000 and less than \$100,000	210	1,700	6,888,029	2,632,765	\$100,000 and less than \$1,000,000	119	14,304	32,049,781	17,370,407
\$100,000 and less than \$1,000,000	19	1,068	4,245,719	1,680,279	\$1,000,000 and over	12	8,431	23,625,731	12,110,905
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	100.0	100.0	100.0	100.0
Less than \$5,000	17.8	3.6	3.7	4.0	Less than \$5,000	8.7	0.3	0.1	(*)
\$5,000 and less than \$20,000	63.4	40.3	40.9	41.4	\$5,000 and less than \$20,000	18.8	0.7	0.0	4.8
\$20,000 and less than \$100,000	17.3	34.4	34.3	33.4	\$20,000 and less than \$100,000	33.3	4.3	4.1	8.1
\$100,000 and less than \$1,000,000	1.6	21.6	21.1	21.3	\$100,000 and less than \$1,000,000	27.5	28.8	29.5	62.8
Average per establishment		4	\$16,504	\$6,484	\$1,000,000 and over	11.6	65.9	65.7	\$202,027
					Average per establishment		161	\$411,092	

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

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

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

INDUSTRY AND VALUE OF PRODUCTS.				INDUSTRY AND VALUE OF PRODUCTS.				
Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	
<b>Foundry and machine-shop products, 1909—Con.</b>				<b>Printing and publishing, 1909</b>				
Per cent of total.	100.0	100.0	100.0	684	5,451	\$12,332,700	\$8,860,549	
Less than \$5,000	16.9	0.5	0.4	342	410	830,371	633,735	
\$5,000 and less than \$20,000	31.1	3.9	2.9	260	1,285	2,528,288	1,900,158	
\$20,000 and less than \$100,000	29.8	13.9	11.5	62	1,284	2,610,239	1,820,084	
\$100,000 and less than \$1,000,000	20.1	51.4	49.0	20	2,482	0,868,502	4,506,572	
\$1,000,000 and over	2.0	30.3	36.1					
Average per establishment		47	\$110,657				\$59,997	
<b>Hats, fur-felt, 1909</b>				<b>Silk and silk goods, including throwsters, 1909</b>				
Less than \$5,000	58	4,657	\$8,825,217	\$4,713,649	348	30,285	\$65,429,550	\$32,164,373
\$5,000 and less than \$20,000	3	4	12,150	7,672	20	62	45,184	37,223
\$20,000 and less than \$100,000	11	53	113,020	52,911	74	1,035	838,834	582,060
\$100,000 and less than \$1,000,000	19	793	906,997	572,340	111	3,925	5,511,023	2,998,470
\$1,000,000 and over	25	3,807	7,793,050	4,080,720	131	17,585	39,541,130	19,672,218
Average per establishment					12	7,678	19,492,370	8,873,502
<b>Jewelry, 1909</b>				<b>Slaughtering and meat packing, 1909</b>				
Less than \$5,000	150	4,008	\$13,272,004	\$6,977,608	84	1,817	\$37,588,395	\$3,843,811
\$5,000 and less than \$20,000	12	18	33,273	26,032	13	43	153,543	47,749
\$20,000 and less than \$100,000	27	154	320,723	185,678	30	111	1,321,284	268,117
\$100,000 and less than \$1,000,000	75	1,822	3,561,201	1,949,511	30	423	9,703,445	1,024,243
\$1,000,000 and over	36	2,454	9,366,717	4,816,385	11	1,240	26,405,143	2,503,702
Average per establishment								
<b>Leather, tanned, curried, and finished, 1909</b>				<b>Tobacco manufactures, 1909</b>				
Less than \$5,000	86	5,560	\$28,430,955	\$8,232,485	462	9,466	\$24,177,343	\$13,381,069
\$5,000 and less than \$20,000	8	24	64,547	25,706	360	262	687,856	460,692
\$20,000 and less than \$100,000	24	457	1,345,804	513,518	60	274	538,786	345,485
\$100,000 and less than \$1,000,000	48	3,392	18,210,831	4,963,454	27	540	1,065,647	632,603
\$1,000,000 and over	6	1,887	8,809,713	2,720,807	8	1,521	2,157,927	1,244,882
Average per establishment					7	6,869	19,727,127	10,697,407
<b>Lumber and timber products, 1909</b>				<b>Woolen, worsted, and felt goods, and wool hats, 1909</b>				
Less than \$5,000	416	4,857	\$13,511,182	\$5,501,207	33	12,652	\$33,936,637	\$12,905,758
\$5,000 and less than \$20,000	142	282	341,361	236,120	4	16	44,709	19,652
\$20,000 and less than \$100,000	149	1,043	1,692,468	1,035,028	8	238	436,250	157,179
\$100,000 and less than \$1,000,000	89	1,856	3,835,918	1,856,797	12	2,087	5,271,694	1,637,183
\$1,000,000 and over	36	2,176	7,631,415	2,374,262	9	10,311	28,185,984	11,091,744
Average per establishment								
<b>Paint and varnish, 1909</b>				<b>Per cent of total</b>				
Less than \$5,000	63	1,493	\$12,766,929	\$4,540,556	100.0	100.0	100.0	100.0
\$5,000 and less than \$20,000	9	5	24,490	11,885	Less than \$5,000	77.9	2.8	3.4
\$20,000 and less than \$100,000	8	13	86,497	43,101	\$5,000 and less than \$20,000	13.0	2.9	2.6
\$100,000 and less than \$1,000,000	22	149	1,137,802	517,506	\$20,000 and less than \$100,000	5.8	5.7	4.4
\$1,000,000 and over	3	580	3,071,838	1,351,902	\$100,000 and less than \$1,000,000	1.7	16.1	8.9
Average per establishment					\$1,000,000 and over	1.5	72.6	79.9
<b>Per cent of total</b>				Average per establishment				
Less than \$5,000	14.3	0.3	0.2	0.3	20		\$52,332	\$28,963
\$5,000 and less than \$20,000	12.7	0.9	0.7	0.9				
\$20,000 and less than \$100,000	34.9	10.0	8.9	11.4				
\$100,000 and less than \$1,000,000	33.3	49.4	61.5	57.6				
\$1,000,000 and over	4.8	39.4	28.8	29.8				
Average per establishment		24	\$202,650	\$72,079				

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

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

This table shows that in 1909 of the 8,817 manufacturing establishments in the state only 194, or 2.2 per cent, had a value of products exceeding \$1,000,000. These establishments, however, employed an average of 126,142 wage earners, or 38.7 per cent of the total number for all establishments, and reported 56.7 per cent of the total value of products and 44.2 per cent of the total value added by manufacture.

On the other hand, the very small establishments—that is, those having a value of products of less than \$5,000—constituted a considerable proportion (25.9

per cent) of the total number of establishments, but the value of their products amounted to only five-tenths of 1 per cent of the total. The great 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 marked increase in the proportion of the total value of products reported by the largest establishments—those reporting products to the value of \$1,000,000 and over—a decrease in the proportions reported by each of the four remaining classes.



The fact that between 1904 and 1909 the average value of products per establishment increased from \$110,466 to \$129,923, and the average value added by manufacture from \$43,355 to \$48,259, can not be taken as in itself indicating a tendency toward concentration. The increased values shown may be, and probably are, due in part to the increase that has taken place in the price of commodities. The average number of wage earners per establishment decreased from 38 to 37.

In some respects, and especially from the standpoint of conditions under which persons engaged in manufacture work, the best classification of establishments according to 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 35 important industries individually, and gives not only the number of establishments in 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.....	8,817	712	4,078	2,010	841	513	387	170	75	31
Belting and hose, woven and rubber.....	12	1	1	1	3	3	2	1	1	1
Boots and shoes, including cut stock and findings.....	53	4	7	13	9	8	7	4	1	1
Bread and other bakery products.....	1,217	77	961	154	19	3	3	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	23	.....	.....	1	8	2	4	4	1	1
Chemicals.....	50	1	11	9	13	8	2	3	2	1
Clothing, men's, including shirts.....	150	3	22	49	39	19	14	3	1	1
Copper, tin, and sheet-iron products.....	175	7	88	47	14	8	6	4	1	1
Cotton goods, including cotton small wares.....	26	.....	3	7	2	3	4	4	2	1
Dyeing and finishing textiles.....	67	.....	12	15	12	11	7	2	5	3
Electrical machinery, apparatus, and supplies.....	69	.....	11	23	14	3	7	6	2	3
Fertilizers.....	22	.....	9	6	2	.....	3	2	.....	.....
Foundry and machine-shop products.....	591	20	200	168	77	55	50	12	8	1
Gas, illuminating and heating.....	47	.....	23	17	2	.....	3	1	1	1
Hats, fur-felt.....	58	1	11	8	12	10	11	4	1	1
Iron and steel, steel works and rolling mills.....	.....	.....	.....	1	4	5	3	2	.....	1
Jewelry.....	150	3	29	65	34	11	7	1	.....	.....
Leather, tanned, curried, and finished.....	86	1	8	24	27	6	15	5	.....	.....
Liquors, malt.....	33	.....	3	7	9	.....	3	2	.....	.....
Lumber and timber products.....	416	10	215	142	34	12	1	2	.....	.....
Oil, not elsewhere specified.....	23	.....	8	9	4	2	.....	.....	.....	.....
Olecloth and linoleum.....	10	.....	.....	.....	2	2	3	2	1	.....
Paint and varnish.....	63	3	29	14	9	4	4	4	.....	.....
Paper and wood pulp.....	37	1	7	11	11	6	1	.....	.....	.....
Pottery, terra-cotta, and fire-clay products.....	88	1	9	14	18	13	23	8	2	.....
Printing and publishing.....	684	150	366	125	25	9	7	2	.....	.....
Rubber goods, not elsewhere specified.....	36	2	4	7	4	6	10	.....	3	.....
Shipbuilding, including boat building.....	97	8	57	13	6	8	3	1	.....	1
Silk and silk goods, including throwsters.....	348	.....	29	102	74	63	54	19	4	3
Slaughtering and meat packing.....	84	1	43	28	3	6	2	1	.....	.....
Smelting and refining, copper.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Smelting and refining, not from the ore.....	14	1	8	1	.....	1	2	.....	.....	.....
Soap.....	21	3	6	4	2	3	2	.....	.....	.....
Tobacco manufactures.....	462	180	223	35	13	2	.....	4	3	3
Wire.....	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Woolen, worsted, and felt goods, and wool hats.....	33	.....	3	4	7	.....	7	6	4	2
All other industries.....	3,645	236	1,679	889	340	200	111	59	21	10
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	326,223	10,005	22,539	27,554	36,848	60,448	59,516	52,497	56,816	.....
Belting and hose, woven and rubber.....	2,295	4	12	41	196	516	824	702	.....	.....
Boots and shoes, including cut stock and findings.....	4,232	14	146	296	592	1,215	1,420	549	.....	.....
Bread and other bakery products.....	4,936	2,282	1,400	640	225	389	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	6,604	.....	7	82	609	231	1,363	3,072	1,240	.....
Chemicals.....	5,046	38	138	445	645	333	977	1,296	1,174	.....
Clothing, men's, including shirts.....	6,994	68	550	1,263	1,844	2,059	822	878	.....	.....
Copper, tin, and sheet-iron products.....	5,002	266	478	385	629	966	1,383	905	.....	.....
Cotton goods, including cotton small wares.....	6,638	10	81	89	249	692	1,520	1,501	2,496	.....
Dyeing and finishing textiles.....	10,129	34	170	369	691	1,098	614	3,042	4,111	.....
Electrical machinery, apparatus, and supplies.....	11,099	34	293	479	226	1,213	2,161	1,297	5,396	.....
Fertilizers.....	1,208	19	65	66	.....	452	606	.....	.....	.....
Foundry and machine-shop products.....	27,815	560	1,915	2,335	3,927	7,524	3,962	5,921	1,621	.....
Gas, illuminating and heating.....	1,917	69	175	81	.....	492	484	616	.....	.....
Hats, fur-felt.....	4,657	37	88	436	746	1,549	1,226	875	1,681	.....
Iron and steel, steel works and rolling mills.....	4,671	.....	6	.....	277	845	1,027	1,435	.....	.....
Jewelry.....	4,008	84	796	1,123	721	1,025	259	.....	.....	.....
Leather, tanned, curried, and finished.....	5,560	24	335	916	415	2,375	1,495	.....	.....	.....
Liquors, malt.....	2,125	11	94	321	570	471	658	.....	.....	.....
Lumber and timber products.....	4,857	570	1,587	1,115	840	217	528	.....	.....	.....
Oil, not elsewhere specified.....	419	21	124	145	129	.....	.....	.....	.....	.....
Olecloth and linoleum.....	2,123	.....	67	144	390	850	672	.....	.....	.....
Paint and varnish.....	1,493	64	149	327	258	605	.....	.....	.....	.....
Paper and wood pulp.....	2,223	5	92	332	690	748	306	.....	.....	.....
Pottery, terra-cotta, and fire-clay products.....	9,815	18	168	601	967	3,809	2,820	1,372	.....	.....
Printing and publishing.....	5,451	966	1,193	795	607	1,219	671	.....	.....	.....
Rubber goods, not elsewhere specified.....	4,255	19	90	103	347	1,606	2,090	.....	.....	.....
Shipbuilding, including boat building.....	4,669	116	124	206	688	523	453	.....	2,859	.....
Silk and silk goods, including throwsters.....	30,285	73	1,290	2,540	4,586	8,590	6,860	2,562	3,764	.....
Slaughtering and meat packing.....	1,817	119	322	106	436	442	392	.....	.....	.....
Smelting and refining, copper.....	2,322	.....	.....	.....	.....	.....	.....	2,322	.....	.....
Smelting and refining, not from the ore.....	1,057	13	16	.....	89	358	.....	681	.....	.....
Soap.....	1,599	11	47	87	195	290	.....	960	.....	.....
Tobacco manufactures.....	9,466	390	368	379	158	.....	1,715	2,578	3,878	.....
Wire.....	5,646	.....	14	.....	158	.....	1,088	.....	4,386	.....
Woolen, worsted, and felt goods, and wool hats.....	12,652	7	44	274	.....	1,049	2,305	3,074	5,899	.....
All other industries.....	110,938	4,069	10,162	11,010	14,594	17,007	20,717	14,458	18,921	.....



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.
		PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.								
All industries.....	100.0	3.1	6.9	8.4	11.3	18.5	18.2	16.1	17.4	
Belt and hose, woven and rubber.....	100.0	0.2	0.5	1.8	3.5	22.5	35.9	30.6	.....	
Boots and shoes, including out stock and findings.....	100.0	0.3	3.4	7.0	14.0	28.7	33.6	13.0	.....	
Bread and other bakery products.....	100.0	46.2	28.4	13.0	4.6	7.9	.....	.....	.....	
Cars and general shop construction and repairs by steam-railroad companies.....	100.0	.....	0.1	1.2	9.2	3.5	20.6	46.5	18.8	
Chemicals.....	100.0	0.8	2.7	8.8	12.8	6.6	19.4	25.7	23.3	
Clothing, men's, including shirts.....	100.0	1.0	7.9	18.1	19.2	20.4	11.9	12.0	.....	
Copper, tin, and sheet-iron products.....	100.0	5.1	9.6	7.7	12.6	19.3	27.6	18.1	.....	
Cotton goods, including cotton small wares.....	100.0	0.2	1.2	1.3	3.8	10.4	22.9	22.6	37.6	
Dyeing and finishing textiles.....	100.0	0.3	1.7	3.6	6.8	10.8	6.1	30.0	40.6	
Electrical machinery, apparatus, and supplies.....	100.0	0.3	2.6	4.3	2.0	10.9	19.5	11.7	48.6	
Fertilizers.....	100.0	1.6	5.4	5.5	.....	37.4	50.2	.....	.....	
Foundry and machine-shop products.....	100.0	2.0	6.9	8.6	14.1	27.0	14.2	21.3	5.8	
Gas, illuminating and heating.....	100.0	3.6	9.1	4.2	.....	25.7	25.2	32.1	.....	
Hats, fur-felt.....	100.0	0.8	1.9	9.4	.....	16.0	33.3	26.3	12.3	
Iron and steel, steel works and rolling mills.....	100.0	.....	0.1	.....	.....	5.9	18.1	22.0	30.7	
Jewelry.....	100.0	2.1	19.9	28.0	18.0	25.6	6.5	.....	.....	
Leather, tanned, curried, and finished.....	100.0	0.4	6.0	10.5	7.5	42.7	26.9	.....	.....	
Liquors, malt.....	100.0	0.5	4.4	15.1	26.8	22.2	31.0	.....	.....	
Lumber and timber products.....	100.0	11.7	32.7	23.0	17.3	4.5	10.0	.....	.....	
Oil, not elsewhere specified.....	100.0	5.0	29.6	34.6	30.8	.....	.....	.....	.....	
Oilcloth and linoleum.....	100.0	.....	.....	3.2	6.8	18.4	40.0	31.7	.....	
Paint and varnish.....	100.0	4.3	10.0	21.9	17.3	46.5	.....	.....	.....	
Paper and wood pulp.....	100.0	0.2	4.1	17.2	31.0	33.6	13.8	.....	.....	
Pottery, terra-cotta, and fire-clay products.....	100.0	0.2	1.7	6.1	9.9	39.4	28.7	14.0	.....	
Printing and publishing.....	100.0	17.7	21.9	14.6	11.1	22.4	12.3	.....	.....	
Rubber goods, not elsewhere specified.....	100.0	0.4	2.1	2.4	8.2	37.7	.....	49.1	.....	
Shipbuilding, including boat building.....	100.0	2.4	2.5	4.2	12.1	10.7	9.3	.....	58.7	
Silk and silk goods, including throwsters.....	100.0	0.2	4.3	8.4	15.1	23.4	22.7	8.6	12.4	
Slaughtering and meat packing.....	100.0	6.5	17.7	5.8	24.0	24.3	21.6	.....	.....	
Smelting and refining, copper.....	100.0	.....	.....	.....	.....	.....	.....	100.0	.....	
Smelting and refining, not from the ore.....	100.0	1.2	1.5	.....	8.4	33.9	.....	55.0	.....	
Soap.....	100.0	0.7	2.9	5.4	12.2	18.1	.....	60.6	.....	
Tobacco manufactures.....	100.0	4.1	3.9	4.0	1.7	.....	18.1	27.2	41.0	
Wire.....	100.0	.....	0.2	.....	2.8	.....	19.3	.....	77.7	
Woolen, worsted, and felt goods, and wool hats.....	100.0	0.1	0.3	2.2	.....	8.3	18.2	24.3	46.6	
All other industries.....	100.0	3.7	9.2	9.9	13.2	15.3	18.7	13.0	17.1	

Of the 8,817 establishments reported for all industries, 8.1 per cent employed no wage earners; 46.3 per cent, from 1 to 5; 22.8 per cent, from 6 to 20; 9.5 per cent, from 21 to 50; and 13.3 per cent, 51 or more. The largest single group consists of the 4,078 establishments employing from 1 to 5 wage earners each, and the next of the 2,010 establishments employing from 6 to 20 wage earners. There were 276 establishments that employed over 250 wage earners, including 31 that employed over 1,000.

Of the total number of wage earners, 51.7 per cent were in establishments employing over 250 wage earners. The single group having the largest number of wage earners was that comprising the establishments employing from 101 to 250 each. These establishments employed 60,448 wage earners, or 18.5 per cent of the total. Most of the industries listed in this table but not in the preceding one are 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 im-

puted for all industries combined and for certain important industries separately. The figures on which the percentages are based appear in Table II, page 774.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	4.7	16.4	69.7	9.2
Belt and hose, woven and rubber.....	6.0	13.3	68.9	11.0
Boots and shoes, including out stock and findings.....	6.0	25.6	63.0	5.4
Bread and other bakery products.....	2.4	19.5	71.8	6.4
Cars and general shop construction and repairs by steam-railroad companies.....	6.2	42.5	47.2	4.0
Chemicals.....	8.4	15.3	64.9	11.3
Clothing, men's, including shirts.....	4.7	31.7	54.7	8.9
Copper, tin, and sheet-iron products.....	5.7	27.5	61.1	5.6
Cotton goods, including cotton small wares.....	3.2	20.8	69.2	6.8
Dyeing and finishing textiles.....	7.6	37.1	47.0	8.3
Electrical machinery, apparatus, and supplies.....	8.7	22.0	56.5	12.8
Fertilizers.....	3.7	7.8	81.5	7.1
Foundry and machine-shop products.....	9.0	28.9	51.1	11.0
Gas, illuminating and heating.....	6.9	9.4	81.4	82.3
Hats, fur-felt.....	5.8	36.3	50.2	7.6
Iron and steel, steel works and rolling mills.....	6.2	25.6	60.1	8.2
Jewelry.....	11.3	22.7	50.4	9.6
Leather, tanned, curried, and finished.....	3.0	13.6	79.3	4.1
Liquors, malt.....	7.4	11.3	30.0	51.3
Lumber and timber products.....	4.0	22.5	68.6	4.8
Oil, not elsewhere specified.....	6.4	3.4	83.3	7.0
Oilcloth and linoleum.....	2.2	13.4	75.1	9.3
Paint and varnish.....	9.9	7.6	74.2	8.3
Paper and wood pulp.....	6.5	16.8	67.9	8.8
Pottery, terra-cotta, and fire-clay products.....	9.1	49.9	31.3	9.7
Printing and publishing.....	13.4	37.1	35.5	14.0
Rubber goods, not elsewhere specified.....	4.5	13.4	75.7	6.4
Shipbuilding, including boat building.....	7.0	33.3	49.4	8.3
Silk and silk goods, including throwsters.....	3.9	23.4	55.8	16.9
Slaughtering and meat packing.....	1.7	3.5	92.2	2.5
Smelting and refining, copper.....	0.3	1.1	98.0	0.6
Smelting and refining, not from the ore.....	2.2	7.2	85.6	5.0
Soap.....	7.5	6.7	60.1	25.7
Tobacco manufactures.....	4.0	15.1	51.7	29.3
Wire.....	2.3	10.1	81.5	6.1
Woolen, worsted, and felt goods, and wool hats.....	3.1	17.7	74.9	4.3
All other industries.....	4.7	16.1	71.2	8.0

The table shows that, for all industries combined, 69.7 per cent of the total expenses were incurred for materials, 21.1 per cent for services—that is, salaries and wages—and 9.2 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

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

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 <sup>1</sup>	1909	1904	1899 <sup>1</sup>	1909	1904	1899
<b>Primary power, total</b> .....	13,044	6,090	5,738	612,293	436,274	322,503	100.0	100.0	100.0
Owned.....	8,039	6,090	5,738	570,391	417,362	312,401	93.2	95.7	96.9
Steam.....	6,378	4,876	4,794	529,068	386,770	281,306	86.5	88.7	87.2
Gas.....	1,116	677	420	20,867	9,070	3,284	3.4	2.1	1.0
Water wheels.....	496	504	524	18,558	18,072	20,161	3.0	4.1	6.3
Water motors.....	49	33	( <sup>2</sup> )	1,118	125	( <sup>2</sup> )	0.2	( <sup>2</sup> )	( <sup>2</sup> )
Other.....				180	3,325	7,650	( <sup>2</sup> )	0.8	2.4
Rented.....	5,005	( <sup>2</sup> )	( <sup>2</sup> )	41,902	18,912	10,102	6.8	4.3	3.1
Electric.....	5,005	( <sup>2</sup> )	( <sup>2</sup> )	33,157	10,603	4,126	5.4	2.4	1.3
Other.....				8,745	8,309	5,976	1.4	1.9	1.9
<b>Electric motors</b> .....	17,145	4,673	804	182,475	69,301	15,857	100.0	100.0	100.0
Run by current generated by establishment.....	12,140	4,673	804	149,318	58,698	11,731	81.8	84.7	74.0
Run by rented power.....	5,005	( <sup>2</sup> )	( <sup>2</sup> )	33,157	10,603	4,126	18.2	15.3	26.0

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

Of the increase of 289,790 horsepower in the total primary power from 1899 to 1909, 248,362 horsepower was in that generated by steam engines. The proportion of steam power in the total primary power, however, increased from 87.2 per cent in 1899 to 88.7 per cent in 1904 but decreased to 86.5 per cent in 1909. The more general use of gas engines is shown, there being 1,116 such engines, with an indicated capacity of 20,867 horsepower, reported in 1909, as against 677 engines, with 9,070 horsepower, in 1904 and 420 engines, with 3,284 horsepower, in 1899. The figures also show that the practice of renting electric power is on the increase, 5.4 per cent of the total power being of this character in 1909, as compared with 2.4 per cent

in 1904 and 1.3 per cent in 1899. Water power and the owned power classed as "Other" show decreases for the decade.

The use of electric motors for the purpose of applying the power generated within the establishment is also shown to be increasing rapidly, the horsepower of such motors having increased from 11,731 in 1899 to 58,698 in 1904 and 149,318 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 utilized 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).
<b>All industries</b> .....	3,725,740	3,763,581	739,083	43,571	1,189,592	842,743
Belt and hose, woven and rubber.....	37,383	13,700				7
Boots and shoes, including out stock and findings.....	4,020	2,911	10		192	1,314
Bread and other bakery products.....	47,551	4,398	5,789	2,098	83	18,676
Cars and general shop construction and repairs by steam-railroad companies.....	62,135	50,510		4	923	
Chemicals.....	215,265	76,734	1,863	50	3,939	1,850
Clothing, men's, including shirts.....	5,254	193		8	230	110,111
Copper, tin, and sheet-iron products.....	9,177	8,247	399	20	1,583	13,543
Cotton goods, including cotton small wares.....	48,696	29,905			1	1,365
Dyeing and finishing textiles.....	304,610	109,535	180		1,640	89,122
Electrical machinery, apparatus, and supplies.....	26,633	45,919	549	30	3,248	74,505
Fertilizers.....	11,479	30,304		10	50	7
Foundry and machine-shop products.....	117,348	161,089	92,806	4,169	20,185	33,928
Gas, illuminating and heating.....	72,990	179,915	3,428	4	628,280	
Hats, fur-felt.....	29,097	8,902		15	1	10,350
Iron and steel, steel works and rolling mills.....	31,671	252,611	8,964	877	32,086	3,347
Jewelry.....	2,879	639	31	8	865	13,726
Leather, tanned, curried, and finished.....	14,869	77,345	192	5	125	698
Liquors, malt.....	97,275	19,051		10	263	276
Lumber and timber products.....	10,770	6,127	42	132	694	8,555
Oil, not elsewhere specified.....	9,762	6,328	45	5,015	16	60
Oilcloth and linoleum.....	17,439	65,395	1,557			
Paint and varnish.....	17,903	42,871	1,581	3	13	1,064
Paper and wood pulp.....	167,046	79,481			52	
Pottery, terra-cotta, and fire-clay products.....	80,785	291,857	1,142	1,238	703	126
Printing and publishing.....	8,518	5,624	62	25	276	19,300
Rubber goods, not elsewhere specified.....	20,120	69,485	25		9	
Shipbuilding, including boat building.....	3,526	33,460	1,543	89	380	506
Silk and silk goods, including throwsters.....	74,090	16,817		8	273	5,640
Slaughtering and meat packing.....	64,498	2,355		1,031	284	4,805
Smelting and refining, copper.....	223,608	92,829	36,620		25,225	1,173
Smelting and refining, not from the ore.....	6,068	68,816	21,169	885	53,112	238
Soap.....	27,240	21,625	81		1	860
Tobacco manufactures.....	20,296	1,529		85	77	8,101
Wire.....	13,628	118,117	2,614		42,980	
Woolen, worsted, and felt goods, and wool hats.....	126,841	26,480			1,388	
All other industries.....	1,705,700	1,747,453	558,395	27,768	371,010	459,198

NOTE.—In addition, there were 9,515 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, number and classes of machines used,

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

Textiles.—The relative importance of seven of the eight principal textile industries in New Jersey, measured by value of products, is shown in the following table, which presents the total amount reported for each at the last three censuses:

INDUSTRY.	VALUE OF PRODUCTS.		
	1909	1904	1899
Total .....	\$133,205,000	\$85,045,000	\$72,640,000
Silk and silk goods, including throwsters.	65,430,000	42,863,000	39,967,000
Woolen, worsted, and felt goods, and wool hats.....	33,930,000	16,394,000	12,270,000
Cotton goods, including cotton small wares.....	13,720,000	8,579,000	6,031,000
Hats, fur-felt.....	8,825,000	9,540,000	7,211,000
Cordage and twine and jute and linen goods.....	5,527,000	3,371,000	2,950,000
Hosiery and knit goods.....	3,810,000	2,549,000	1,782,000
Carpets and rugs, other than rag.....	1,945,000	1,749,000	1,523,000

The progress of the textile industries in New Jersey during the past decade is indicated by the following table, which shows the number of spindles, looms, and other equipment reported for four leading industries of this group in 1909, 1904, and 1899:

MACHINE.	Census.	Total.	Cotton goods, including cotton small wares.	Woolen, worsted, and felt goods, and wool hats.	Silk and silk goods, including throwsters.	Hosiery and knit goods.
Producing spindles.....	1909	910,724	420,784	230,714	249,644	9,582
	1904	864,984	430,764	181,203	237,435	9,462
	1899	868,812	431,730	147,084	281,500	8,408
Looms.....	1909	37,287	3,381	4,991	28,915	.....
	1904	29,984	2,250	3,799	23,935	.....
	1899	25,487	2,276	2,639	20,572	.....
Knitting machines.....	1909	1,492	.....	.....	.....	1,492
	1904	1,345	.....	.....	.....	1,345
	1899	1,335	.....	.....	.....	1,335
Woolen cards (sets).....	1909	163	.....	131	.....	32
	1904	205	.....	179	.....	26
	1899	223	.....	197	.....	26
Wool-combing machines	1909	265	.....	265	.....	.....
	1904	160	.....	166	.....	.....
	1899	125	.....	125	.....	.....

The total number of producing spindles increased from 864,984 in 1904 to 910,724 in 1909, or 5.3 per cent, the largest increase being in the woolen and worsted goods industry. The total number of looms increased from 29,984 in 1904 to 37,287 in 1909, or 24.4 per cent, the largest relative gain being in the cotton-goods industry, although both the silk and the woolen industries show substantial increases. The number of sets of woolen cards decreased, while the number of combing machines increased, these changes resulting from a decline in the woolen branch and a rapid growth in the worsted branch of the woolen and worsted goods industry.

Silk and silk goods, including throwsters.—The next table gives in detail the quantity and cost of the principal materials used and the quantity and value of the principal products manufactured in the silk-goods industry in 1909, 1904, and 1899.

The raw silk used in 1909 amounted to 6,112,647 pounds, costing \$23,705,609, an increase of 72 per cent in quantity and 70.3 per cent in cost over the corresponding figures for 1904. The quantity of spun silk

purchased in 1909 was greater than in 1904, but the quantity of organzine and tram purchased was somewhat less. The latter condition is due to a large extent to the increase in the practice among the mills of having the raw silk thrown on contract instead of purchasing the silk in the form of organzine and tram.

Of the products, plain and fancy broad silks were the most important. The output of those made wholly of silk in 1909 was 36,759,094 yards, valued at \$24,000,880, a gain of 11.5 per cent in quantity and 26.1 per cent in value over the corresponding figures for 1904. The production of all-silk Jacquards practically doubled in the five years. In each class of broad silks, the silk-mixed fabrics show a greater relative increase than the all-silk fabrics. The value of the ribbons produced in 1909 shows a gain of 49.2 per cent over 1904, and of 79.5 per cent over 1899. The large increase in the amount received for contract work is indicative of the greater prevalence of commission throwing; the quantity of silk thrown on commission in 1909 was 2,661,205 pounds, as compared with 1,689,088 pounds in 1904.

MATERIAL OR PRODUCT.	1909	1904	1899
<b>Materials used, total cost .....</b>	<b>\$33,265,177</b>	<b>\$22,339,447</b>	<b>\$21,631,118</b>
<b>Silk:</b>			
Raw—			
Pounds.....	6,112,647	3,553,090	3,155,334
Cost.....	\$23,705,609	\$13,920,194	\$13,514,501
Spun—			
Pounds.....	244,617	154,201	178,735
Cost.....	\$628,027	\$341,298	\$553,612
Artificial—			
Pounds.....	103,148	8,066	.....
Cost.....	\$197,208	\$36,074	.....
Organzine and tram—			
Pounds.....	1,143,754	1,343,081	1,209,012
Cost.....	\$4,890,843	\$5,832,154	\$5,702,506
<b>Yarns, other than silk:</b>			
Cotton—			
Pounds.....	1,889,158	1,054,973	757,486
Cost.....	\$781,061	\$402,480	\$304,481
Mercurized cotton—			
Pounds.....	490,307	261,905	122,053
Cost.....	\$390,198	\$208,204	\$90,013
Woolen or worsted—			
Pounds.....	69,169	25,725	16,940
Cost.....	\$106,333	\$27,962	\$15,042
Other:			
Pounds.....	122,303	14,891	480
Cost.....	\$170,009	\$10,622	\$170
Chemicals and dyestuffs.....	\$455,342	\$191,553	( <sup>1</sup> )
Fuel and rent of power.....	\$637,514	\$404,394	\$243,212
All other materials.....	\$1,394,033	\$965,512	\$1,227,581
<b>Products, total value.....</b>	<b>\$65,429,550</b>	<b>\$42,862,907</b>	<b>\$39,966,662</b>
<b>Organzine and tram, for sale:</b>			
Pounds.....	266,458	171,187	315,046
Value.....	\$1,240,406	\$777,250	\$1,500,060
<b>Broad silks:</b>			
Plain and fancy—			
All-silk—			
Yards, single width.....	36,759,094	32,971,793	28,268,970
Value.....	\$24,000,880	\$19,031,558	\$18,871,325
Silk-mixed—			
Yards, single width.....	6,077,863	1,822,091	2,331,493
Value.....	\$3,808,772	\$1,404,546	\$1,680,091
Jaquard—			
All-silk—			
Yards, single width.....	10,880,081	5,480,654	6,451,655
Value.....	\$8,352,659	\$4,388,069	\$4,722,532
Silk-mixed—			
Yards, single width.....	2,722,960	1,220,195	1,406,355
Value.....	\$1,970,175	\$749,466	\$1,154,305
Piece-dyed—			
All-silk—			
Yards, single width.....	4,763,872	3,874,771	1,694,075
Value.....	\$3,200,166	\$2,175,034	\$905,942
Silk-mixed—			
Yards, single width.....	3,584,329	1,331,233	381,000
Value.....	\$1,834,553	\$439,935	\$154,500
Ribbons.....	\$14,971,005	\$10,036,331	\$8,341,721
Laces, nets, veils, veillings, etc.....	\$531,923	\$414,891	\$423,267
All other products.....	\$3,082,438	\$2,440,937	\$1,446,025
Amount received for contract work.....	\$2,436,573	\$998,890	\$766,844

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

Woolen, worsted, and felt goods, and wool hats.—The following table gives the quantity and cost of the principal materials used in this industry in 1909, 1904, and 1899:

MATERIAL.	1909	1904	1899 <sup>1</sup>
Total cost.....	\$21,032,879	\$10,627,540	\$7,625,895
Wool:			
In condition purchased—			
Pounds.....	44,150,157	37,371,456	18,005,003
Cost.....	\$11,673,250	\$6,805,098	\$5,128,902
Domestic—			
Pounds.....	31,109,309	33,963,274	13,022,301
Cost.....	\$6,806,485	\$5,638,501	\$3,611,294
Foreign—			
Pounds.....	13,040,848	3,408,182	4,983,302
Cost.....	\$4,776,765	\$1,226,597	\$1,517,608
Equivalent in scoured condition, pounds.....	22,346,674	14,859,789	9,728,167
Tailors' clippings, rags, etc.:			
Pounds.....	1,051,906	5,813,231	( <sup>2</sup> )
Cost.....	\$42,276	\$283,393	\$180,667
Cotton:			
Pounds.....	228,378	625,301	1,519,668
Cost.....	\$26,541	\$69,456	\$100,294
Shoddy, mungo, and wool extract:			
Pounds.....	272,038	264,764	195,983
Cost.....	\$37,974	\$40,562	\$20,250
Waste and noils:			
Pounds.....	1,586,752	973,898	1,209,093
Cost.....	\$567,593	\$246,702	\$320,636
Yarns, purchased:			
Worsted—			
Pounds.....	5,800,786	1,307,443	375,520
Cost.....	\$5,823,416	\$995,207	\$258,593
Woolen—			
Pounds.....	90,084	138,627	283,000
Cost.....	\$73,145	\$99,907	\$169,480
Cotton—			
Pounds.....	833,227	1,819,443	966,787
Cost.....	\$189,702	\$293,620	\$190,402
Silk and spun silk—			
Pounds.....	6,122	5,855	1,806
Cost.....	\$31,284	\$18,227	\$4,966
Chemicals and dyestuffs.....	\$482,983	\$384,717	\$338,234
Fuel and rent of power.....	\$403,317	\$262,916	\$153,987
All other materials.....	\$1,691,398	\$1,070,735	\$737,485

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

<sup>2</sup> Not reported.

This table shows a number of important changes between 1904 and 1909 in the quantity and character of the materials used in the industry. The quantity of foreign wool used increased greatly, while that of domestic wool decreased. In 1909, of the total quantity of wool reported, 70.5 per cent was domestic and 29.5 per cent foreign, while in 1904 the proportions were 90.9 per cent and 9.1 per cent, respectively. There was an increase in total quantity of wool, as shown on the scoured-wool basis, from 9,728,167 pounds in 1899 to 22,346,674 pounds in 1909. The quantity of tailors' clippings, rags, etc., and of cotton and cotton yarn purchased fell off considerably, but the quantity of worsted yarn purchased increased 248.2 per cent from 1899 to 1904, and 349 per cent from 1904 to 1909.

The quantities and values of the products of the industry are shown in the next table.

The increase in wool manufactures as a whole has been almost entirely in the worsted-goods branch of the industry. The output of worsted dress goods more than quadrupled during the decade, amounting in 1909 to 19,126,851 square yards, valued at \$10,855,092. Included under the head of "All other" all-wool woven goods are large quantities of carded wool fabrics, especially woolen dress goods. Contrasted with the large increases in all-wool fabrics are the decreases in the

quantities of cotton-mixed and cotton-warp goods. The large increase in the quantity of worsted yarn produced for sale indicates a greater degree of specialization in the industry. Because of the fact that the spinning and the weaving operations are frequently carried on in different establishments, the products of one establishment in the industry often become materials for another. To the extent, therefore, that the yarns manufactured for sale were sold by the establishments producing them to other establishments in the state engaged in the woolen industry, for use as materials in their manufacturing processes, a duplication is involved in the total cost of materials and value of products for the industry.

PRODUCT.	1909	1904	1899 <sup>1</sup>
Total value.....	\$33,938,637	\$16,398,689	\$12,270,317
All-wool woven goods, both woolen and worsted:			
Worsted coatings and suitings—			
Square yards.....	2,660,339	1,370,951	808,859
Value.....	\$3,643,730	\$1,089,384	\$617,816
Worsted dress goods—			
Square yards.....	19,126,851	11,693,773	4,368,475
Value.....	\$10,855,092	\$4,296,178	\$1,310,543
All other—			
Square yards.....	5,005,897	3,740,102	2,941,188
Value.....	\$4,422,523	\$2,206,403	\$1,708,662
Cotton-mixed and cotton-warp woven goods:			
Square yards.....	3,216,002	8,006,335	7,499,379
Value.....	\$1,362,695	\$2,491,003	\$3,802,261
Worsted yarn, for sale:			
Pounds.....	11,100,625	5,676,075	4,665,683
Value.....	\$11,517,331	\$4,610,434	\$3,605,322
Noils:			
Pounds.....	1,628,352	878,838	708,793
Value.....	\$588,740	\$311,906	\$229,424
Waste:			
Pounds.....	2,102,373	1,136,229	702,392
Value.....	\$528,524	\$326,740	\$211,683
All other products.....	\$1,019,993	\$1,061,641	\$784,816

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

<sup>2</sup> Includes tops.

Cotton goods, including cotton small wares.—The following table shows the quantity and cost of the principal materials used and the quantity and value of products reported for this industry in 1909, 1904, and 1899:

MATERIAL OR PRODUCT.	1909	1904 <sup>1</sup>	1899
Materials used, total cost.....	\$8,564,733	\$5,142,785	\$3,167,768
Cotton:			
Pounds.....	18,400,527	16,319,367	15,287,668
Cost.....	\$3,113,446	\$2,647,840	\$1,411,743
Cotton yarn:			
Pounds.....	10,451,910	5,523,955	2,916,328
Cost.....	\$4,206,668	\$1,385,751	\$582,929
Starch.....	\$33,040	\$19,711	\$26,821
Chemicals and dyestuffs.....	\$111,385	\$75,363	\$298,015
Fuel and rent of power.....	\$199,252	\$178,570	\$127,700
All other materials.....	\$900,942	\$885,550	\$710,560
Products, total value.....	\$13,728,874	\$8,578,527	\$6,980,766
Plain and fancy fabrics, twills, satens, and duck:			
Square yards.....	17,376,260	18,159,747	13,159,526
Value.....	\$4,064,351	\$1,606,199	\$1,280,540
Other woven goods:			
Square yards.....	22,820,187	12,145,798	15,107,858
Value.....	\$1,255,044	\$468,295	\$537,472
Yarns, for sale:			
Pounds.....	4,920,844	4,230,629	3,727,865
Value.....	\$1,810,075	\$1,285,023	\$870,824
Waste, for sale:			
Pounds.....	3,569,041	3,305,170	2,547,061
Value.....	\$211,347	\$203,633	\$78,208
All other products.....	\$6,387,457	\$5,015,377	\$4,163,722

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

The quantity of raw cotton consumed increased 2,081,160 pounds, or 12.8 per cent, and its cost \$465,606, or 17.6 per cent, from 1904 to 1909. The cost of cotton used in 1909 averaged almost 17 cents a pound, the highest for any of the states. This is accounted for by the extensive use of sea-island and Egyptian cottons in the manufacture of thread. The fact that the quantity of cotton yarn purchased nearly doubled during the same five-year period indicates an increasing reliance by the weavers upon independent spinners of cotton yarn.

Thread is the most important product of the cotton mills of the state, but in order to avoid disclosure of the operations of individual establishments the value is included under "All other products." The output of plain and fancy fabrics, twills, sateens, and duck was smaller in quantity in 1909 than in 1904, but more than twice as great in value. This is due very largely to a decrease in the production of fancy woven fabrics and to a very large increase in the production of high-grade duck. The products included under the head of "Other woven goods," which increased 87.9 per cent in quantity and 168.1 per cent in value from 1904 to 1909, consist principally of cotton towels and towelings, mosquito netting, and tapestries.

To the extent that the yarns made in the state for sale were sold by the establishment producing them to other establishments in New Jersey engaged in the cotton-goods industry, for use as material in their manufacturing processes, their value represents a duplication in both the total cost of materials and the total value of products for the state.

**Slaughtering and meat packing.**—The remarkable growth in this industry from 1904 to 1909 was due largely to the growth of the meat-packing branch of the industry. The table following shows the quantity and cost of materials and the quantity and value of products for 1909, 1904, and 1899.

The cost of dressed meat purchased fresh for curing increased from \$1,706,436, representing 10.6 per cent of the total cost of all materials used, in 1904, to \$10,175,511, representing 30.2 per cent of the total cost of materials, in 1909. From 1904 to 1909 the output of fresh beef increased 63.6 per cent and its value 89.1 per cent, while the quantity of beef, salted or cured, was more than eighteen times as great in 1909 as in 1904 and its value was more than nineteen times as great. The output of fresh pork, the product of greatest value at each census, decreased 20.7 per cent from 1904 to 1909, but its value increased 23.9 per cent, while the output of pork, salted or cured, increased 157.1 per cent and its value 247.5 per cent. The quantity of lard reported for 1909 was more than nine times, and its value more than fourteen times, as great as in 1904. Of the other products, veal and mutton show a decrease in quantity, but an increase in value, "All other fresh meats" show a small increase in quantity but a decrease in value, sheep pelts show

a decrease in both quantity and value, while the remaining products show considerable increases in both respects.

MATERIAL OR PRODUCT.	1909	1904	1899
<b>Materials used, total cost.....</b>	<b>\$33,739,584</b>	<b>\$16,070,854</b>	<b>\$12,965,008</b>
Beeves slaughtered:			
Number.....	53,234	38,591	29,080
Cost.....	\$3,608,621	\$1,839,384	\$1,552,980
Calves slaughtered:			
Number.....	95,604	103,389	63,037
Cost.....	\$1,145,785	\$989,487	\$570,599
Sheep slaughtered:			
Number.....	423,724	502,042	380,400
Cost.....	\$2,283,693	\$2,376,854	\$1,585,683
Hogs slaughtered:			
Number.....	1,210,849	1,282,410	931,694
Cost.....	\$11,694,440	\$8,537,754	\$6,408,684
Dressed meat, purchased.....	\$10,175,511	\$1,706,436	\$2,266,059
Fuel and rent of power.....	\$106,444	\$39,010	\$30,186
All other materials.....	\$4,605,090	\$581,829	\$550,517
<b>Products, total value.....</b>	<b>\$37,583,395</b>	<b>\$17,753,610</b>	<b>\$14,215,298</b>
Beef, fresh:			
Pounds.....	35,415,243	21,653,910	18,794,370
Value.....	\$3,475,755	\$1,837,742	\$1,510,941
Beef, salted or cured:			
Pounds.....	5,445,719	293,925	245,600
Value.....	\$661,906	\$32,973	\$32,540
Veal:			
Pounds.....	8,702,274	10,092,263	5,387,285
Value.....	\$1,131,267	\$1,059,149	\$693,610
Mutton:			
Pounds.....	16,228,067	21,468,265	17,021,273
Value.....	\$2,085,232	\$1,938,163	\$1,343,451
Pork, fresh:			
Pounds.....	96,500,828	121,630,717	76,518,271
Value.....	\$10,115,850	\$8,109,454	\$5,068,390
Pork, salted or cured:			
Pounds.....	49,690,559	19,325,603	41,653,811
Value.....	\$6,314,238	\$1,510,944	\$3,542,950
Sausage, fresh or cured.....	\$2,864,949	\$387,849	\$331,804
All other fresh meat:			
Pounds.....	1,538,626	1,365,846	.....
Value.....	\$79,949	\$97,088	.....
Lard:			
Pounds.....	49,017,209	5,423,649	11,668,825
Value.....	\$4,747,104	\$330,592	\$711,979
Tallow, oleo stock, and stearin:			
Pounds.....	8,785,195	(1)	(1)
Value.....	\$304,836	(1)	(1)
Fertilizers and fertilizer materials:			
Tons.....	8,742	5,349	2,599
Value.....	\$256,815	\$52,828	\$61,207
Hides:			
Number.....	131,027	85,064	72,773
Pounds.....	5,102,392	3,230,549	2,395,855
Value.....	\$636,928	\$301,230	\$205,278
Sheep pelts:			
Number.....	423,624	502,042	(1)
Value.....	\$376,036	\$567,247	(1)
All other products.....	\$4,177,698	\$653,601	\$510,380
Custom or contract work.....	\$154,842	\$12,250	\$2,708

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

**Wire.**—This industry includes only those establishments that purchase the wire rods from which the wire is drawn. Where the wire is drawn in the same plant which manufactures the rods, the wire is reported with other products of establishments classified as "Iron and steel, steel works and rolling mills." The next table shows, for 1909, the quantity and cost of the principal materials used in the industry and the quantity and value of the products. Comparable figures are not obtainable for prior censuses.

The product of chief value in 1909 was copper wire, of which 62,686 tons were reported, having a value of \$17,777,115, or 61.6 per cent of the total value of all products for the industry in the state. New Jersey was the leading state of the Union in the production of copper wire in 1909, contributing two-fifths of the total quantity of such wire reported by the industry in the United States. There were 83,636 tons of steel and iron wire and wire manufactures produced in the state by establishments which purchased the rods,

valued at \$8,017,520, of which 39,058 tons, valued at \$2,550,661, was drawn for sale as wire, and 44,578 tons, valued at \$5,466,859, represents the manufacture of wire into nails, rope, etc. In addition to the value of products shown in the table, the value of the wire products reported by the wire departments of rolling mills was \$2,507,079, being chiefly steel wire. By adding this amount to the total value of products shown in the table below the result obtained, \$31,365,507, represents fairly the total value of the output of wire for the state.

MATERIAL OR PRODUCT.	1909
Materials used, total cost .....	\$22,297,737
Wire rods:	
Steel and iron—	
Tons.....	92,118
Cost.....	\$3,323,105
Copper—	
Tons.....	62,915
Cost.....	\$16,502,669
All other materials, including brass and miscellaneous wire rods and purchased wire.....	\$2,471,963
Wire drawn, whether for consumption or sale, tons:	
Steel and iron.....	83,647
Copper.....	62,686
Products, total value.....	\$28,858,428
Wire and manufactures of wire:	
Steel and iron—	
Tons.....	83,636
Value.....	\$8,017,520
Wire drawn for sale—	
Tons.....	39,058
Value.....	\$2,550,661
Manufactures of wire, nails, rope, etc.—	
Tons.....	44,578
Value.....	\$5,466,859
Copper—	
Tons.....	62,686
Value.....	\$17,777,115
All other products, including wire other than steel, iron, and copper.....	\$3,063,798

<sup>1</sup> Includes 92 tons of iron rods.

Leather, tanned, curried, and finished.—The quantity and value of the products manufactured during the last three census years are shown in the following table:

PRODUCT.	1909	1904	1899
Total value .....	\$28,430,955	\$21,495,329	\$13,747,155
Leather:			
Sole: Oak and chrome—			
Sides.....	129,600	( <sup>1</sup> )	( <sup>1</sup> )
Value.....	\$1,015,495	( <sup>1</sup> )	( <sup>1</sup> )
Patent and enameled upper leather—			
Sides.....	523,494	318,182	181,082
Value.....	\$2,060,181	\$1,497,893	\$830,540
Calf and kip skins, tanned and finished—			
Number.....	371,666	96,992	539,350
Value.....	\$856,533	\$172,550	\$999,235
Goatskins, tanned and finished—			
Number.....	6,340,036	3,481,123	4,969,191
Value.....	\$5,025,936	\$3,161,730	\$3,061,738
Black—			
Number.....	5,800,833	3,466,523	3,416,489
Value.....	\$4,573,552	\$3,141,830	\$2,190,402
Colored—			
Number.....	539,203	14,600	1,552,702
Value.....	\$452,384	\$19,950	\$871,336
Sheepskins, tanned and finished—			
Number.....	1,901,020	1,228,500	454,988
Value.....	\$1,529,969	\$743,802	\$283,012
Carriage, automobile, and furniture—			
Sides.....	940,572	484,552	441,873
Value.....	\$8,836,740	\$5,143,295	\$4,134,980
Trunk, bag, and pocketbook.....	\$1,487,097	\$1,669,360	\$906,733
Bookbinders'.....	\$1,502,657	\$1,235,594	\$975,089
Leather, sold in rough.....	\$1,234,065	\$573,093	\$453,053
All other.....	\$3,608,470	\$5,556,857	\$1,720,046
All other products.....	\$471,654	\$190,576	\$234,035
Work on materials for others.....	\$767,158	\$1,251,529	\$148,694

<sup>1</sup> Not reported.

In 1909 the \$28,430,955 reported as the value of products in New Jersey represented 8.7 per cent of the total shown for the industry in the United States. Corresponding percentages for 1904 and 1899 were 8.5 per cent and 6.7 per cent, respectively. Most of the different groups of products show a decided increase from 1904 to 1909. The state reported in 1909, 523,494 sides of patent and enameled upper leather, 1,901,020 tanned and finished sheepskins, and 6,340,036 tanned and finished goatskins, these figures representing 19.4 per cent, 9.7 per cent, and 13.2 per cent, respectively, of the corresponding totals for the United States.

In 1909 carriage, automobile, and furniture leather was the product of greatest value, forming 31.1 per cent in 1909 and 23.9 per cent in 1904 of the total value of products of the industry in the state. The amount received in 1909 for work on materials furnished by others (\$767,158) represents a decided decrease as compared with the amount shown for 1904, but is more than five times that reported for 1899. The estimated value of the leather treated on commission in 1909 was \$4,044,508.

Chemicals.—The following table shows the quantity and value of certain chemicals or groups of chemicals manufactured during 1909 and 1904:

PRODUCT.	1909	1904
Total value .....	\$22,824,140	\$13,023,629
Acids: <sup>1</sup>		
Hydrofluoric—		
Pounds.....	1,182,655	( <sup>1</sup> )
Value.....	\$71,726	( <sup>1</sup> )
Muriatic—		
Pounds.....	44,934,781	( <sup>1</sup> )
Value.....	\$410,016	( <sup>1</sup> )
Other acids (acetic, boric, citric, phosphoric, salicylic, etc.).....	\$2,671,086	\$1,150,972
Sodas:		
Sulphuric, caustic soda, and borax—		
Tons.....	19,301	15,549
Value.....	\$1,240,076	\$1,557,244
Other soda products.....	\$265,039	\$180,496
Coal-tar products.....	\$352,059	\$186,610
Bleaching materials: Hypochlorites, hydrogen peroxide, and bisulphites.....	\$75,941	\$46,595
Plastics.....	\$4,341,643	\$3,774,216
Compressed and liquefied gases:		
Anhydrous ammonia—		
Pounds.....	1,386,627	( <sup>1</sup> )
Value.....	\$319,590	\$132,129
All other.....	\$104,935	\$65,008
Fine chemicals: Alkaloids, gold, silver, and platinum salts, other, acetone, vanillin, etc.....	\$2,900,030	\$1,908,749
Epsom salts:		
Pounds.....	25,404,186	( <sup>1</sup> )
Value.....	\$122,528	( <sup>1</sup> )
Phosphates of soda:		
Pounds.....	23,049,129	6,406,552
Value.....	\$436,958	\$108,549
Tin salts:		
Pounds.....	10,657,837	2,891,500
Value.....	\$401,089	\$282,691
Zinc salts:		
Pounds.....	22,427,536	( <sup>1</sup> )
Value.....	\$1,124,613	( <sup>1</sup> )
All other chemicals.....	\$7,486,811	\$3,570,070

<sup>1</sup> Not including sulphuric, nitric, or mixed acids. <sup>2</sup> Figures not available.

Plastics (including celluloid, etc.) formed the most important class of products at both censuses, their value increasing \$567,427, or 15 per cent, from 1904 to 1909. Acids were next in importance in point of value. The principal acids included in this group are hydrofluoric, muriatic, acetic, boric, citric, phosphoric, and salicylic; the statistics in regard to the manufacture of sulphuric and nitric acids are not included under the classification "Chemicals," but are



shown independently in Table II, page 774. Fine chemicals, which consist mainly of gold, silver, and platinum salts, ether, and alkaloids, show an increase in value in 1909 over 1904 of \$991,281, or 51.9 per cent. Sodas still remain an important product, though the value of the output in 1909 was less by \$262,625, or 14.9 per cent, than in 1904.

Phosphates of soda show remarkable gains, the increase in the output of this product from 1904 to 1909 being 16,642,577 pounds, or 259.8 per cent, and the increase in value, \$328,409, or 302.5 per cent. Zinc salts were an important product in 1909, but comparable figures for 1904 are not available. All the other classes of products show a substantial increase both in quantity and in value.

In addition to those mentioned in the above table, chemicals valued at \$1,506,845 were reported in 1909 by 13 establishments assigned to other classifications because they were engaged primarily in the manufacture of other products.

**Pottery, terra-cotta, and fire-clay products.**—Since the early part of the nineteenth century New Jersey has been prominent in this industry, especially in the manufacture of the finest porcelain, granite, and white ware, owing to the abundance of valuable clays and sands easily available within the state. As early as 1849 there were 30 potteries in the state, which reported products valued in the aggregate at \$230,900. The influence of the successful competition of the fine wares manufactured in Trenton (which is the center of this branch of the industry in the United States) with foreign-made pottery was felt shortly after 1876 and had a decidedly stimulating effect upon the industry. Measured by value of products of the industry as a whole, New Jersey ranked second among the states of the Union in this industry in 1904 and 1909. The total value of products increased \$1,421,897, or 12.1 per cent, during the five-year period. The following table shows the value of the principal products for 1909 and 1904:

PRODUCT.	1909	1904
<b>Total value.....</b>	<b>\$13,139,000</b>	<b>\$11,717,103</b>
Pottery.....	7,791,136	6,462,024
Red earthenware.....	36,573	30,034
Stoneware and yellow and Rockingham ware.....	60,293	58,819
White ware, including C.C. ware, white granite, semi-porcelain ware, and semivitreous porcelain ware.....	1,242,361	1,290,768
China, bone china, delft, and belleek ware.....	1,082,398	469,300
Sanitary ware, including solid porcelain bath tubs, laundry tubs, etc.....	4,341,040	3,006,406
Porcelain electrical supplies.....	823,056	328,524
All other pottery products.....	199,415	1,278,113
Terra-cotta and fire-clay products.....	5,347,804	5,254,479
Fire brick—		
Thousands.....	135,454	31,057
Value.....	\$907,276	\$709,396
Architectural terra cotta.....	1,037,705	1,216,400
Fireproofing.....	1,299,540	1,266,909
Tile, not drain.....	992,406	245,518
All other terra-cotta and fire-clay products.....	510,737	21,816,196

<sup>1</sup> Includes refractory blocks or tile, boiler and locomotive tile and tank blocks, and other refractory products (9-inch equivalent).

<sup>2</sup> Includes drain tile to the value of \$23,537, and 101,431,000 of common, front, enameled, and vitrified paving brick or blocks, valued at \$987,709.

In 1909 and in 1904 New Jersey ranked first among the states in the manufacture of sanitary ware, including porcelain bath tubs, laundry tubs, etc., the

value of which increased \$1,334,634, or 44.4 per cent, during the five-year period. The state also ranked first at the census of 1909 in the production of china (porcelain), bone china, delft, and belleek ware, the value of which increased \$613,038, or 130.6 per cent. The only decrease for any class of products shown separately in the table is one of \$48,407, or 3.8 per cent, in the value of white ware, including C. C. (cream colored) ware, and white granite, semiporcelain, and semivitreous porcelain ware. Among the pottery products the largest relative gain, 150.5 per cent, was in the value of porcelain electrical supplies.

Architectural terra cotta, the principal terra-cotta product in 1909, shows an increase in value over 1904 of \$421,305, or 34.6 per cent, while the value of tile (not drain tile) increased \$747,088, or 304.3 per cent.

**Paint and varnish.**—The quantity and value of the different products are shown in the following table:

PRODUCT.	1909	1904	1899
<b>Total value.....</b>	<b>\$12,766,929</b>	<b>\$6,966,869</b>	<b>\$6,213,924</b>
Pigments.....	\$2,989,162	\$1,276,290	\$1,537,076
White lead, dry:			
Pounds.....	16,958,467	16,725,261	14,471,171
Value.....	\$580,567	\$329,498	\$717,047
Oxides of lead:		( <sup>2</sup> )	( <sup>2</sup> )
Pounds.....	4,854,000	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$329,780	( <sup>2</sup> )	( <sup>2</sup> )
Iron oxides and other earth colors:			
Pounds.....	4,133,200	1,902,500	500,000
Value.....	\$27,605	\$9,223	\$25,000
Other dry colors:			
Pounds.....	30,143,495	8,477,798	5,891,364
Value.....	\$1,797,277	\$750,569	\$632,473
Pulp colors, sold moist:			
Pounds.....	3,240,000	5,060,000	5,150,948
Value.....	\$203,933	\$187,000	\$187,556
Paints in oil.....	\$3,026,726	\$1,810,198	\$1,132,641
White lead in oil:			
Pounds.....	3,713,557	( <sup>3</sup> )	( <sup>3</sup> )
Value.....	\$253,308	( <sup>3</sup> )	( <sup>3</sup> )
Paste:			
Pounds.....	14,858,470	10,703,000	8,072,911
Value.....	\$891,493	\$512,967	\$552,452
Ready mixed for use:			
Gallons.....	2,584,449	1,490,561	622,542
Value.....	\$2,461,925	\$1,303,231	\$580,189
Varnishes and japans.....	\$5,009,691	\$3,441,758	\$2,873,106
Oleoresinous varnishes:			
Gallons.....	2,614,152	2,030,670	1,604,845
Value.....	\$3,325,912	\$2,407,310	\$2,254,321
Spirit varnishes:			
Gallons.....	60,376	103,477	67,543
Value.....	\$84,462	\$185,877	\$124,223
Damar and similar turpentine and benzine varnishes:			
Gallons.....	815,905	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$685,966	( <sup>2</sup> )	( <sup>2</sup> )
Pyroxylin varnishes:			
Gallons.....	125,670	34,928	5,366
Value.....	\$233,322	\$45,770	\$10,995
Drying and baking japans and lacquers.....	\$645,635	\$641,204	\$374,239
Other varnishes.....	\$34,344	\$151,591	\$109,323
Liquid fillers:			
Gallons.....	31,667	59,477	( <sup>2</sup> )
Value.....	\$31,070	\$80,659	( <sup>2</sup> )
Paste fillers, dry fillers, and putty:			
Pounds.....	15,345,833	4,893,145	( <sup>2</sup> )
Value.....	\$98,973	\$59,803	( <sup>2</sup> )
Water paints dry or in paste:			
Pounds.....	5,851,755	272,139	( <sup>2</sup> )
Value.....	\$345,988	\$11,832	( <sup>2</sup> )
All other products.....	\$715,313	\$274,329	\$671,101

<sup>1</sup> Including white lead in oil.

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

<sup>3</sup> Included with white lead, dry.

Oleoresinous varnish was the leading product reported at each of the last three censuses. The totals for this varnish manufactured in New Jersey formed 14.1 per cent of the total quantity and 19.2 per cent of the total value of this class of products for the United States in 1909. Other leading products

named in order of relative importance, were paints in oil, ready mixed for use; dry colors; paints in oil, in paste; white lead, dry and in oil; and water paints, dry or in paste; each of which shows a gain in both quantity and value from 1904 to 1909. The most pronounced increase in both quantity and value is shown for water paints, the output in 1909 being over twenty-one times that reported in 1904, and its value more than twenty-nine times as great.

In addition to the various products reported in the preceding table for 1909, 4,225,085 pounds of dry white lead, 370,154 gallons of varnish, and 417,467 gallons of drying japans and dryers were manufactured and consumed in further processes of manufacture within the establishments reporting.

Paint and varnish to the value of \$819,194 were also manufactured by 11 establishments primarily engaged in other industries. The principal items making up this product were 5,674,890 pounds of dry colors, valued at \$556,518; 221,338 gallons of paints in oil, ready for use, valued at \$108,648; 2,119,220 pounds of paints in oil, in paste, valued at \$105,961; and 30,568 gallons of varnish, valued at \$29,565.

Among the principal materials used in the manufacture of paint and varnish in the state in 1909 were 12,151 tons of pig lead, 56,128 gallons of grain alcohol, and 28,794 gallons of wood alcohol.

**Printing and publishing.**—The newspaper and periodical branch of the printing and publishing industry in New Jersey for the five-year period 1904–1909 shows a decrease in the number of publications and the aggregate circulation.

The following tabular statement shows the number of different newspapers and periodicals published and the aggregate circulation per issue for the census years 1909 and 1904:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.		AGGREGATE CIRCULATION PER ISSUE.	
	1909	1904	1909	1904
<b>Total</b> .....	<b>348</b>	<b>378</b>	<b>1,071,456</b>	<b>1,105,723</b>
Daily.....	54	55	437,144	303,930
Sunday.....	6	7	70,670	73,118
Semiweekly.....	15	4	8,774	4,575
Weekly.....	247	270	333,231	331,246
Monthly.....	28	37	156,862	336,129
All other classes.....	10	5	14,775	6,725

<sup>1</sup> Includes one triweekly.

The total number of all publications decreased 7.9 per cent from 1904 to 1909, and the aggregate circulation per issue decreased 3.1 per cent. The publications included under the head of "All other classes" show the only increase in number, but all except the Sunday publications and the monthlies show an increase in circulation. While there was a decrease of one in the number of dailies, the aggregate circulation per issue increased 133,214, or 43.8 per cent.

In 1909, 18 of the 54 dailies, with an aggregate circulation of 109,659, were issued as morning papers. Of the 348 publications reported in 1909, 37 were

printed in foreign languages. These included 3 dailies and 1 Sunday paper, all of which were in German; 32 weeklies, of which 11 were in German, 11 in Italian, 3 in Dutch, 3 in Polish, 2 in Hungarian, 1 in German and English, and 1 in Italian and English, and 1 monthly in Hungarian. These publications reported an aggregate circulation per issue of 83,507, representing 7.8 per cent of the total for the state.

**Shipbuilding, including boat building.**—This industry includes the building of vessels of steel and of wood, as well as small craft of all kinds, and the repair of such vessels. The number and the tonnage of all vessels launched in 1909, 1904, and 1899 are shown, by classes, in the following table:

CLASS.	1909		1904		1899	
	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.
Vessels, 5 gross tons and over launched during the year..	90	53,261	92	42,061	165	57,166
Steel.....	24	42,949	17	23,450	11	3,928
Steam.....	9	27,280	13	21,083	10	3,426
Unrigged.....	15	15,669	4	2,367	1	500
Wooden.....	66	10,312	75	18,611	154	53,240
Steam.....	1	115	12	477	10	581
Motor.....	23	343	6	41	.....	.....
Sail.....	12	251	20	880	80	357
Unrigged.....	30	9,598	31	17,243	64	52,302
Power boats, less than 5 gross tons.....	338	.....	237	.....	82	.....

The above table shows a decrease of 3,905 gross tons, or 6.8 per cent, in the total tonnage of all vessels of 5 gross tons and over from 1899 to 1909.

It is interesting to note the growth in the construction of steel vessels and the decline in the building of wooden vessels during this period. During the decade the gross tonnage of the steel vessels launched increased 39,023 tons, or nearly one thousand per cent, while that of wooden vessels decreased 42,928 tons, or 80.6 per cent. Of the total tonnage of vessels of 5 tons and over launched in the state in 1909, the tonnage of steel vessels formed 80.6 per cent and that of wooden vessels 19.4 per cent, while in 1899 these proportions were 6.9 per cent and 93.1 per cent, respectively.

Of the 338 power boats of less than 5 tons gross register reported in 1909, 319 were gasoline, 11 electric, and 8 operated by other kinds of power, while of the 237 such craft reported in 1904, 207 were gasoline, 29 electric, and 1 operated by other kind of power. In addition to the vessels shown in the table, the industry includes the construction of sailboats, rowboats, canoes, scows, etc., of less than 5 tons gross register; these, together with the small power boats mentioned, represented a total value of \$394,718 in 1909 and of \$279,947 in 1904.

**Glass.**—The manufacture of glass is still an important industry in New Jersey, although in relative position in the industry among the states, when measured by value of products reported, the state dropped from third place in 1899 to fifth in 1909. The value of products increased \$1,356,373, or 26.6

per cent, from 1899 to 1904 and \$510,893, or 7.9 per cent, during the following five-year period.

The next table shows the quantity of the different materials used and the value of the principal classes of products reported at the censuses of 1909, 1904, and 1899:

MATERIAL OR PRODUCT.	1909	1904	1899
<b>Principal materials:</b>			
Glass sand, tons.....	58,204	53,191	81,260
Soda ash, tons.....	21,723	20,825	20,630
Salt cake, tons.....	271	338	697
Sulfate of soda, tons.....	4,025	816	1,314
Limestone, tons.....	2,428	5,057	8,577
Lime, bushels.....	199,132	145,010	248,654
Arsenic, pounds.....	85,705	119,460	102,490
Carbon, tons.....	10	129	20
Manganese, pounds.....	50,467	174,798	143,405
Litharge and red lead, pounds.....	16,782	33,959	72,049
Potash and pearl ash, pounds.....	63,000	28,382	60,270
Grinding sand, tons.....	203	674	433
<b>Products, total value.....</b>	<b>\$6,961,088</b>	<b>\$6,450,195</b>	<b>\$5,093,822</b>
Pressed and blown glass.....	\$1,019,836	\$181,559	\$21,300
Bottles, jars, etc.....	\$5,884,605	\$6,066,714	\$4,452,219
All other products.....	\$56,647	\$201,922	\$20,303

Pressed and blown glass shows an increase in value from 1904 to 1909 of \$838,277, or 461.7 per cent, while the output of bottles and jars decreased in value \$182,109, or 3 per cent, during the same period.

In 1909 one establishment manufactured building glass; 3, pressed and blown glass; and 19, bottles, jars, etc. Of the establishments which manufactured bottles and jars, 16 made prescription vials and druggists' wares to some extent; 12 made beer, soda, and mineral-water bottles; and 11 made flasks and wares for liquors and patent and proprietary remedies, New Jersey holding the leading position in the production of the first two of these classes of glassware and fourth place in the last-named class.

The output of prescription vials and druggists' wares in 1909 amounted to 1,008,682 gross; that of beer, soda, and mineral-water bottles, to 258,574 gross; and that of liquor bottles and flasks, to 248,825 gross, these figures representing increases of 31.5 per cent, 11.5 per cent, and 10.6 per cent, respectively, over the corresponding figures for 1904.

**Laundries.**—Statistics for steam laundries are not included in the general tables or in the totals for manufacturing industries. The following statement summarizes the statistics for 1909:

Number of establishments.....	112
Persons engaged in the industry.....	3,334
Proprietors and firm members.....	101
Salaried employees.....	249
Wage earners (average number).....	2,984
Primary horsepower.....	3,917
Capital.....	\$2,137,243
Expenses.....	2,187,794
Services.....	1,395,335
Materials.....	439,861
Miscellaneous.....	352,598
Amount received for work done.....	2,779,277

There were 112 steam laundries in the state of New Jersey in 1909, of which there were 17 each in Jersey City and Newark; 8 in Camden; 6 in Paterson; 5 in Trenton; 4 each in Passaic and Plainfield; and 3

each in Asbury Park, Atlantic City, East Orange, Elizabeth, Hoboken, and Orange. No other place having more than 10,000 inhabitants reported as many as 3 laundries.

Sixty-two establishments were operated by individuals, 18 by firms, and 32 by incorporated companies. Twenty-one establishments had receipts for the year's business of less than \$5,000; 47, receipts of \$5,000 but less than \$20,000; 40, receipts of \$20,000 but less than \$100,000; and 4, 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 follows:

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	2,800	85.5	July.....	3,194	97.5
February.....	2,821	86.1	August.....	3,276	100.0
March.....	2,841	86.7	September.....	3,145	96.0
April.....	2,838	86.6	October.....	2,994	91.4
May.....	2,881	87.9	November.....	2,967	90.6
June.....	3,054	93.2	December.....	2,997	91.5

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.	Horse-power.
<b>Primary power, total.....</b>		<b>3,917</b>
<b>Owned:</b>		
Steam.....	102	3,794
Gas.....	2	29
Water wheel.....	1	5
<b>Rented:</b>		
Electric.....	14	63
Other.....		26

The kind and amount of fuel used are shown below:

KIND.	Unit.	Quantity.
Anthracite coal.....	Tons.....	25,969
Bituminous coal.....	Tons.....	4,873
Wood.....	Cords.....	5
Oil.....	Barrels.....	1,921
Gas.....	1,000 feet.....	15,974

**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.....	7	39
Persons engaged in the industry.....	13	65
Proprietors and firm members.....	7	41
Salaried employees.....		1
Wage earners (average number).....	6	23
Primary horsepower.....	213	1,232
Capital.....	\$22,625	\$134,226
Expenses.....	3,178	258,643
Services.....	2,065	9,387
Materials.....	440	1,243,662
Miscellaneous.....	673	5,594
Value of products.....	5,422	1,287,050

<sup>1</sup> Includes estimate of all grain ground. A similar estimate for the value of lumber sawed by custom sawmills is impracticable.

## MANUFACTURES—NEW JERSEY.

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

THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>STATE—All industries</b> .....	1809	8,817	371,265	8,204	36,838	326,223	612,293	\$977,172	\$48,336	\$169,710	\$720,033	\$1,145,529	\$425,496
	1904	7,010	296,262	6,730	23,196	266,336	436,274	715,060	28,957	128,169	470,449	774,369	303,920
	1899	6,415			15,361	213,075	322,503	477,302	19,058	95,165	334,726	553,006	218,280
Agricultural implements.....	1909	10	294	9	61	224	724	771	77	112			
	1904	10	250	9	37	204	403	432	40	90	327	755	428
	1899	11	108	13	8	147	280	250	11	60	118	392	274
Artificial stone.....	1909	97	642	100	54	488	436	913	39	250	294	859	565
	1904	8	68		11	51	35	81	12	33	31	94	63
Belting and hose, woven and rubber....	1909	12	2,583		288	2,295	8,748	9,385	518	1,150	5,971	9,793	3,322
	1904	15	2,704	3	246	2,455	8,211	9,444	536	1,209	6,808	11,068	4,220
	1899	7	853		77	776		2,209	174	398	1,870	2,800	930
Boots and shoes, including cut stock and findings.	1909	53	4,602	46	324	4,232	1,500	4,108	448	1,023	4,727	8,042	3,315
	1904	65	4,838	61	253	4,524	1,598	3,318	292	1,865	4,197	7,588	3,391
	1899	105	5,089	108	350	4,631		3,359	386	1,806	4,467	7,519	3,062
Boxes, fancy and paper.....	1909	46	2,321	36	143	2,142	1,224	1,932	168	704	1,186	2,075	1,489
	1904	36	1,435	41	60	1,334	500	732	54	307	553	1,313	765
	1899	30	1,156	35	41	1,080		517	51	275	398	897	499
Brass and bronze products.....	1909	66	1,488	61	162	1,265	4,431	3,104	250	719	3,355	5,131	1,776
	1904	51	1,246	53	111	1,082	2,682	2,713	150	570	2,354	3,754	1,400
	1899	45			63	1,083		2,422	66	470	2,472	3,320	848
Bread and other bakery products.....	1909	1,217	6,966	1,498	532	4,936	2,184	3,100	403	3,309	12,195	20,086	7,891
	1904	1,000	5,237	1,074	315	3,343	1,127	5,406	199	2,312	8,204	13,502	5,298
	1899	785	3,828	831	296	2,701		3,831	183	1,412	4,562	8,183	3,621
Brick and tile.....	1909	76	3,619	64	150	3,405	11,419	7,355	205	1,625	844	4,073	3,229
	1904	63	2,090	73	70	1,947	5,971	3,040	68	784	337	1,830	1,493
	1899	76	2,525	76	79	2,370	4,798	3,607	83	836	320	1,846	1,526
Brooms and brushes.....	1909	33	1,051	28	108	915	723	1,470	141	363	951	1,905	954
	1904	34	459	40	29	300	180	384	23	158	308	699	391
	1899	32	447	40	42	365		472	37	137	399	803	404
Buttons.....	1909	64	2,433	99	103	2,261	1,232	1,506	149	913	1,183	2,750	1,567
	1904	46	1,496	45	82	1,309	729	842	93	550	634	1,592	958
	1899	34	1,265	43	53	1,169	441	610	50	410	399	1,026	627
Canning and preserving.....	1909	84	2,051	85	148	1,818	2,698	2,765	118	546	2,208	3,664	1,456
	1904	76	1,878	94	84	1,700	2,076	1,948	52	399	1,701	2,093	992
	1899	93			140	2,403		2,275	113	561	2,271	3,521	1,260
Carpets and rugs, other than rag.....	1909	9	939	6	49	884	970	2,511	88	375	898	1,945	1,047
	1904	8	1,203	3	47	1,153	1,268	2,098	90	418	979	1,749	770
	1899	13	1,221	3	47	1,171	1,051	1,487	73	379	868	1,523	655
Carriages and wagons and materials....	1909	256	1,980	301	78	1,601	1,645	2,973	83	1,019	1,280	3,250	1,970
	1904	213	2,338	247	105	1,986	1,631	2,998	116	1,116	1,349	3,480	2,111
	1899	258			112	2,117		3,250	109	1,081	1,612	3,916	2,304
Cars and general shop construction and repairs by steam-railroad companies.	1909	23	7,639		1,035	6,604	7,640	5,452	613	4,175	4,634	9,819	5,185
	1904	21	5,911		355	5,556	5,033	3,510	308	3,220	3,234	6,899	3,665
	1899	18	4,773		179	4,594	2,068	2,820	137	2,400	2,302	5,034	2,732
Cars and general shop construction and repairs by street-railroad companies.	1909	15	878		52	826	2,276	820	53	471	614	1,158	544
	1904	4	376		20	356	445	669	25	225	470	747	277
	1899	8	238		9	229		360	7	146	188	381	193
Cement.....	1909	3	1,616		171	1,445	16,393	10,881	222	845	2,053	3,725	1,672
	1904	6	1,607		171	1,436	12,255	7,128	215	697	1,863	2,925	1,062
Chemicals.....	1909	50	5,937	4	887	5,046	13,880	24,355	1,594	2,895	12,257	22,824	10,567
	1904	47	4,045	26	426	3,597	9,082	16,294	678	1,853	6,630	13,024	6,394
	1899	61	3,488	38	402	3,048	8,147	17,285	577	1,575	6,995	12,207	5,212
Clocks and watches, including cases and materials.	1909	9	2,260	1	130	2,129	1,414	6,795	225	1,120	1,729	3,848	2,119
	1904	9	2,466	3	140	2,353	1,186	5,186	203	1,302	1,583	3,871	2,288
	1899	11	1,268	5	56	1,207		2,467	94	597	915	1,914	999
Clothing, men's, including shirts.....	1909	150	7,680	199	487	6,994	1,351	5,314	435	2,935	5,076	9,865	4,789
	1904	125	6,180	180	336	5,664	923	2,431	207	2,127	3,417	7,428	4,011
	1899	137			142	5,787		2,012	145	1,947	2,459	5,754	3,295
Clothing, women's.....	1909	99	4,691	112	363	4,216	959	2,882	326	1,355	2,855	5,927	3,072
	1904	70	4,192	83	209	3,900	621	1,599	180	1,045	2,174	4,219	2,045
	1899	57	2,606	73	144	2,389	427	1,299	125	644	1,156	2,561	1,405
Coffins, burial cases, and undertakers' goods.	1909	7	261	4	45	212	422	515	56	122	265	521	256
	1904	3	248	3	27	218	328	363	29	112	226	453	227
	1899	4	221	4	13	204		304	16	123	172	394	222
Confectionery.....	1909	71	1,558	70	225	1,263	1,181	2,830	189	456	2,433	4,116	1,683
	1904	38	894	45	75	774	444	1,130	66	273	988	2,043	1,055
	1899	14			42	134		101	23	46	184	355	171
Cooperage and wooden goods, not elsewhere specified.	1909	43	1,162	42	74	1,046	1,013	2,773	102	522	2,328	3,230	902
	1904	35	415	33	18	364	458	453	17	176	427	801	374
	1899	24			18	315		413	28	150	349	707	358

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.

MANUFACTURES—NEW JERSEY.

765

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
STATE—Continued.													
Copper, tin, and sheet-iron products....	1909	175	5,575	162	411	5,002	3,579	\$8,514	\$576	\$2,780	\$6,172	\$11,114	\$4,042
	1904	121	4,485	105	300	4,080	2,771	5,148	415	1,931	2,898	6,267	3,369
	1899	64	.....	.....	127	2,136	.....	2,397	130	816	1,209	2,691	1,482
Cordage and twine and jute and linen goods.	1909	12	3,174	1	148	3,025	6,442	6,598	192	954	3,896	5,527	1,631
	1904	16	2,602	.....	67	2,585	4,310	4,076	100	858	2,000	3,371	1,811
	1899	6	.....	.....	57	2,127	.....	3,413	81	625	1,760	2,956	1,196
Cork, cutting.....	1909	10	466	2	46	418	855	686	54	180	410	791	381
	1904	6	241	3	32	206	320	367	27	71	191	380	189
	1899	8	178	7	14	187	.....	103	11	40	143	234	91
Corsets.....	1909	11	2,013	3	165	1,845	480	1,857	235	628	1,305	3,336	2,031
	1904	10	1,556	4	93	1,459	404	1,259	84	438	682	2,093	1,411
	1899	9	.....	.....	63	1,332	.....	546	62	424	579	1,304	725
Cotton goods, including cotton small wares.	1909	26	6,804	13	243	6,638	17,288	17,824	392	2,577	8,565	13,729	5,164
	1904	17	5,501	4	135	5,362	15,518	14,200	239	2,022	5,143	8,579	3,436
	1899	25	5,849	11	167	5,681	14,317	14,369	269	1,931	3,158	6,931	3,773
Cutlery and tools, not elsewhere specified.	1909	70	2,482	66	208	2,208	2,540	3,003	276	1,069	849	2,735	1,886
	1904	57	1,854	52	135	1,667	2,080	2,242	174	847	661	2,371	1,510
	1899	44	.....	.....	162	1,799	.....	1,762	191	855	835	2,307	1,472
Dairymen's, poulterers', and apjarists' supplies.	1909	7	425	5	124	296	313	1,660	111	181	230	954	724
	1904	4	55	1	8	46	80	141	5	20	41	88	47
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dyeing and finishing textiles.....	1909	67	10,722	32	561	10,129	19,989	23,315	1,033	5,016	6,353	15,796	9,443
	1904	57	8,180	31	552	7,567	12,835	13,069	847	3,466	5,052	11,980	6,928
	1899	59	7,474	47	353	7,074	12,335	11,601	615	3,003	4,514	10,439	5,975
Electrical machinery, apparatus, and supplies.	1909	69	13,024	22	1,903	11,089	11,326	30,229	2,234	5,615	14,426	26,365	13,939
	1904	42	7,291	11	1,012	6,268	6,547	18,458	1,003	2,894	6,873	13,803	6,930
	1899	36	.....	.....	623	3,916	.....	7,909	667	1,903	3,539	7,533	3,994
Fancy articles, not elsewhere specified..	1909	31	1,280	38	130	1,112	730	1,581	167	455	828	1,841	1,013
	1904	21	1,443	20	240	1,183	693	1,543	261	506	863	2,205	1,342
	1899	37	1,950	42	227	1,681	.....	1,428	237	558	1,124	2,391	1,267
Fertilizers.....	1909	22	1,384	17	159	1,208	2,459	7,398	255	541	5,685	7,672	1,987
	1904	25	1,253	23	91	1,139	3,555	6,291	151	637	3,928	5,652	1,724
	1899	28	1,147	30	155	962	2,678	5,690	230	441	3,146	4,291	1,145
Flour-mill and gristmill products.....	1909	238	790	255	82	453	10,768	3,227	58	225	4,561	5,598	977
	1904	182	723	221	48	454	9,612	2,907	37	211	4,522	5,409	847
	1899	166	.....	.....	58	374	.....	2,362	39	185	4,447	5,327	880
Foundry and machine-shop products...	1909	591	32,076	436	3,825	27,815	41,191	87,023	5,249	16,922	29,940	65,598	35,458
	1904	450	29,111	416	2,857	26,938	31,012	64,330	3,407	14,765	20,810	50,553	29,743
	1899	.....	.....	.....	1,526	20,187	.....	34,421	2,024	10,400	17,059	37,042	19,983
Furniture and refrigerators.....	1909	49	1,949	43	151	1,755	2,340	2,685	196	969	1,697	3,614	1,917
	1904	37	971	42	68	861	1,032	1,295	101	480	600	1,557	957
	1899	31	646	31	68	547	.....	681	45	284	348	918	570
Gas and electric fixtures and lamps and reflectors.	1909	28	2,310	16	419	1,884	1,124	5,542	378	824	3,350	5,771	2,421
	1904	21	1,380	14	125	1,241	700	10,383	152	525	2,027	3,509	1,482
	1899	26	.....	.....	100	1,339	.....	2,224	167	495	949	2,569	1,620
Gas, illuminating and heating.....	1909	47	2,304	.....	887	1,917	6,717	15,667	630	353	2,855	9,837	6,982
	1904	38	2,153	.....	786	1,367	2,835	37,596	636	728	1,524	6,372	4,848
	1899	34	.....	.....	347	1,320	1,479	38,872	272	684	786	3,768	2,982
Glass.....	1909	23	6,159	6	502	5,651	3,081	7,415	517	3,340	1,999	6,961	4,962
	1904	22	5,881	5	369	5,507	2,661	6,304	359	3,145	1,856	6,450	4,594
	1899	26	5,718	18	317	5,383	1,756	5,398	285	2,463	1,489	5,094	3,005
Gold and silver, reducing and refining, not from the ore.	1909	8	161	4	45	112	406	1,034	63	86	3,911	4,436	525
	1904	11	146	9	35	102	286	786	50	72	4,835	5,282	447
	1899	12	80	16	24	40	.....	527	25	26	2,092	2,252	160
Hats, fur-felt.....	1909	58	5,104	63	384	4,657	5,046	5,335	478	2,969	4,112	8,825	4,713
	1904	63	6,078	81	292	5,705	5,016	4,331	318	3,276	4,227	9,540	5,313
	1899	59	4,965	66	154	4,745	3,709	2,932	186	2,487	3,637	7,211	3,574
Hosiery and knit goods.....	1909	37	2,658	34	118	2,506	1,477	3,489	210	903	1,826	3,810	1,984
	1904	28	1,840	26	56	1,758	1,077	1,953	67	539	1,382	2,549	1,167
	1899	25	1,938	15	62	1,861	913	1,993	74	451	1,011	1,782	771
Ice, manufactured.....	1909	59	581	27	98	456	10,121	3,643	98	317	386	1,497	1,111
	1904	39	338	18	52	268	6,677	2,740	47	169	172	648	476
	1899	26	247	12	52	183	3,995	1,653	38	94	108	392	284
Iron and steel, steel works and rolling mills.	1909	16	5,228	.....	557	4,671	29,699	28,212	682	2,823	6,635	12,014	5,379
	1904	16	3,901	1	566	3,334	31,626	46,281	805	4,088	12,390	20,066	7,676
	1899	16	7,982	1	282	7,699	29,579	17,717	452	3,601	14,323	21,835	7,512
Jewelry.....	1909	150	4,945	108	769	4,008	1,231	11,088	1,256	2,537	6,294	13,272	6,978
	1904	113	3,550	176	356	2,988	966	7,202	524	1,839	4,647	9,304	4,657
	1899	99	.....	.....	321	2,776	.....	5,523	305	1,562	3,828	7,377	3,549

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

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

<sup>3</sup> Not reported separately.

<sup>4</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.

## MANUFACTURES—NEW JERSEY.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
STATE—Continued.													
Leather goods.....	1909	99	2,133	96	224	1,813	990	\$2,755	\$332	\$920	\$2,140	\$4,005	\$1,865
	1904	75	2,286	80	228	1,978	828	2,570	316	896	2,139	4,212	2,073
	1899	52			113	2,170		1,739	152	893	1,752	3,490	1,738
Leather, tanned, curried, and finished..	1909	86	6,040	71	400	5,500	9,243	18,847	772	3,473	20,198	28,431	8,233
	1904	73	5,358	63	342	4,953	7,495	12,492	501	2,793	15,272	21,405	6,223
	1899	77	4,526	72	276	4,178	4,531	9,906	413	2,057	9,533	13,747	4,214
Liquors, malt.....	1909	33	2,634	3	506	2,125	14,082	40,535	1,202	1,836	4,881	20,184	15,303
	1904	37	2,443	8	477	1,958	10,705	30,336	1,031	1,681	3,801	17,446	13,585
	1899	44			350	1,723	8,566	26,330	819	1,361	2,782	14,386	11,664
Lumber and timber products.....	1909	410	5,745	438	450	4,857	15,760	9,563	469	2,631	8,010	13,511	5,501
	1904	242	4,129	265	272	3,592	10,496	5,875	287	1,850	4,491	7,998	3,507
	1899	260			213	3,256		5,161	222	1,540	3,686	6,997	3,311
Marble and stone work.....	1909	131	1,752	143	130	1,470	2,756	3,117	106	1,329	1,378	3,901	2,523
	1904	104	1,232	63	96	1,073	1,714	1,737	137	819	865	2,440	1,576
	1899	79			87	1,284		1,874	96	735	916	2,312	1,306
Mattresses and spring beds.....	1909	23	600	26	78	496	288	811	93	236	808	1,323	515
	1904	22	313	23	48	242	152	389	56	115	445	728	283
	1899	17			18	190		306	27	69	250	435	185
Millinery and lace goods.....	1909	179	4,589	198	271	4,120	1,380	4,595	321	1,688	3,185	6,395	3,710
	1904	55	1,471	58	68	1,345	417	1,187	72	480	878	1,932	1,059
	1899	17	1,177	19	3	155		103	2	65	68	172	114
Musical instruments and materials, not specified.	1909	7	435	5	45	385	335	1,033	54	181	208	635	427
	1904	7	527	7	55	465	348	892	62	251	318	803	545
	1899	13	784	10	34	740	382	1,110	39	365	365	880	515
Musical instruments, pianos and organs and materials.	1909	18	1,500	6	101	1,393	1,121	2,020	129	721	1,076	2,229	1,163
	1904	14	1,181	6	65	1,110	1,400	1,522	77	560	657	1,477	820
	1899	15	850	16	71	763	745	1,407	44	360	563	1,332	769
Oil, not elsewhere specified.....	1909	23	765	3	343	419	1,824	4,762	474	250	6,196	7,851	1,655
	1904	12	291	3	122	166	616	1,721	185	114	3,078	3,803	725
	1899	11	245	4	104	187		1,122	160	75	1,851	2,342	491
Oilcloth and linoleum.....	1909	10	2,264	6	135	2,123	7,819	8,110	193	1,187	6,698	10,143	3,565
	1904	10	1,551	4	83	1,464	4,994	5,181	112	701	3,666	5,444	1,778
	1899	6	913	2	48	863		2,563	75	465	1,735	2,845	1,110
Paint and varnish.....	1909	63	2,143	41	609	1,493	5,924	11,372	1,100	844	8,226	12,767	4,541
	1904	42	1,404	19	425	960	2,799	5,837	527	4,013	6,967	9,967	2,954
	1899	51	1,260	31	382	847	2,333	6,457	551	476	3,828	6,214	2,388
Paper and wood pulp.....	1909	37	2,445	11	211	2,223	22,996	10,742	456	1,181	4,760	7,554	2,785
	1904	33	1,773	15	129	1,629	17,336	7,123	233	787	3,022	5,043	2,021
	1899	34	1,308	25	93	1,190	12,978	3,671	163	553	1,715	3,195	1,480
Paper goods, not elsewhere specified....	1909	19	659	7	89	563	2,132	2,232	108	276	1,697	2,640	943
	1904	13	324	7	38	279	665	1,051	50	125	837	1,225	338
	1899	15	359	10	43	306		984	55	131	745	1,168	423
Patent medicines and compounds and druggists' preparations.	1909	111	1,424	77	342	1,005	1,478	3,743	488	432	2,089	5,410	3,321
	1904	78	1,228	55	242	931	1,209	2,665	299	330	1,315	3,710	2,395
	1899	38			154	316		1,180	178	128	544	1,674	1,030
Pottery, terra-cotta, and fire-clay products.	1909	83	10,542	38	689	9,815	11,817	22,349	1,036	5,661	3,551	13,139	9,588
	1904	90	10,177	42	648	9,487	13,463	21,047	843	4,722	2,956	11,717	8,761
	1899	81	8,648	67	464	8,117	8,980	15,325	634	3,841	2,384	8,941	6,657
Printing and publishing.....	1909	684	7,364	647	1,266	5,451	5,636	13,816	1,309	3,624	3,472	12,333	8,861
	1904	588	6,001	571	1,063	4,367	4,171	8,732	1,006	2,470	2,285	8,627	6,342
	1899	480	4,881	487	640	3,854		6,386	515	1,923	1,673	6,104	4,431
Rubber goods, not elsewhere specified..	1909	36	4,860	7	598	4,255	12,906	15,766	772	2,300	13,032	19,543	6,511
	1904	24	1,919	6	185	1,728	5,609	3,788	221	846	2,959	4,836	1,877
	1899	37	2,870	7	254	2,609		6,078	378	1,151	5,696	8,458	2,762
Shipbuilding, including boat building..	1909	97	5,533	97	567	4,869	9,904	19,176	603	3,300	4,249	8,841	4,592
	1904	78	5,258	79	316	4,863	7,761	10,891	488	3,033	3,462	7,735	4,273
	1899	68	3,058	61	123	2,874	2,839	3,686	158	1,792	1,950	4,810	2,860
Silk and silk goods, including throwsters.	1909	348	32,365	306	1,774	30,285	22,376	43,615	2,817	13,917	33,265	65,430	32,165
	1904	239	26,986	227	1,278	25,481	16,903	33,645	1,556	9,893	22,339	42,803	20,524
	1899	180	25,313	197	959	24,157	15,964	29,286	1,145	9,233	21,631	39,967	18,336
Silverware and plated ware.....	1909	26	1,564	21	247	1,296	1,211	2,741	270	829	1,133	3,035	1,902
	1904	22	1,601	27	171	1,403	1,570	2,729	175	787	1,137	3,104	1,937
	1899	14	1,054	16	108	930		1,759	113	523	854	2,145	1,281
Slaughtering and meat packing.....	1909	84	2,420	93	510	1,817	3,610	8,182	633	1,286	33,740	37,583	3,543
	1904	48	918	68	105	745	949	2,593	117	488	16,071	17,754	1,633
	1899	50	760	69	100	591		1,676	94	352	12,905	14,215	1,250
Smelting and refining, copper.....	1909	4	2,564		242	2,322	22,320	29,078	366	1,335	118,936	125,651	6,715
	1904	5	1,345		102	1,243	5,295	7,893	129	645	68,812	62,796	3,384
	1899	7	1,783	2	74	1,707	8,320	6,944	139	915	32,545	38,365	5,820

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

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

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



# MANUFACTURES—NEW JERSEY.

767

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
STATE—Continued.													
Smelting and refining, not from the ore.	1909	14	1,194	10	127	1,057	5,931	\$6,651	\$188	\$606	\$7,227	\$9,598	\$2,371
	1904	13	1,104	7	104	992	13,637	5,459	142	387	4,842	7,034	2,132
	1899	8	219	8	10	201		2,182	19	77	268	469	201
Soap.....	1909	21	2,301	10	692	1,599	2,761	8,306	881	796	7,084	13,674	6,590
	1904	14	775	8	148	619	625	1,719	120	287	2,043	4,018	1,076
	1899												
Stoves and furnaces, including gas and oil stoves.	1909	8	893	2	195	696	1,146	1,836	253	607	574	1,688	1,114
	1904	24	720	1	54	665	455	958	131	655	440	1,518	1,078
	1899												
Surgical appliances and artificial limbs..	1909	11	1,784	9	393	1,412	3,188	3,902	455	542	1,249	2,991	1,742
	1904	11	952	8	98	840	1,617	2,327	102	283	1,104	2,108	1,004
	1899	10	484	10	57	417		869	88	134	572	1,200	628
Tobacco manufactures.....	1909	462	10,610	482	692	9,466	3,302	21,164	829	3,156	10,796	24,177	13,381
	1904	554	7,350	570	278	6,508	1,797	20,522	281	2,041	3,808	10,988	7,180
	1899	498	4,346	509	242	3,595	2,213	8,003	228	1,232	3,442	10,436	6,904
Typewriters and supplies.....	1909	8	363		91	272	512	959	90	202	278	740	462
	1904	2	166	2	32	132	228	318	27	80	125	315	190
	1899	5	745	5	91	649	365	1,015	60	340	232	745	513
Wall paper.....	1909	8	894	6	106	782	1,442	3,326	153	369	1,500	2,872	1,372
	1904	4	701	2	84	615	590	2,401	128	299	1,032	2,094	1,062
	1899	5	675	6	60	609		1,428	100	276	1,004	1,508	504
Wall plaster.....	1909	5	203	2	23	178	977	654	42	109	332	613	281
	1904	3	57		11	46	200	114	16	26	109	204	95
	1899												
Wire.....	1909	7	6,255		699	5,646	17,436	21,829	624	2,767	22,298	28,858	6,560
	1904	4	678		59	619	4,150	2,047	86	316	9,889	11,104	1,215
	1899	3	192	1	15	176		1,105	29	122	2,899	3,375	476
Woolen, worsted, and felt goods, and wool hats.	1909	33	13,119	28	439	12,652	20,254	36,391	885	4,964	21,033	33,939	12,906
	1904	35	9,301	38	280	8,983	14,008	18,979	465	2,951	10,628	16,394	5,766
	1899	28	7,235	14	163	7,068	11,326	17,437	303	2,194	7,626	12,270	4,644
All other industries.....	1909	1,321	54,445	1,167	6,091	47,187	113,176	205,722	8,401	25,487	178,837	250,551	71,714
	1904	1,068	47,594	1,013	4,159	42,422	82,099	163,140	5,513	21,382	145,337	204,140	55,803
	1899	1,095			2,650	27,069		95,280	3,076	12,940	104,116	137,304	33,188

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

BAYONNE—All industries....													
	1909	97	8,790	84	1,187	7,519	28,094	\$82,281	\$1,762	\$4,775	\$58,933	\$73,841	\$14,708
	1904	58	7,851	48	748	7,057		50,297	1,087	4,277	46,984	60,634	13,650
	1899	63			248	4,670		26,261	413	2,623	33,794	38,801	4,807
Bread and other bakery products.....													
	1909	17	106	18	13	75	29	159	5	58	207	340	133
	1904	13	86	13	72	73		72		41	156	238	82
	1899	15	65	16	3	46		39	1	23	82	145	63
Foundry and machine-shop products....													
	1909	7	1,234	10	308	916	1,722	10,649	452	636	1,642	4,155	2,513
	1904	24	1,756	2	188	1,566		6,429	245	1,012	1,919	4,371	2,452
	1899	3			3	17		26	2	9	7	24	17
All other industries.....													
	1909	73	7,450	56	866	6,528	26,343	51,473	1,305	4,081	57,084	69,146	12,062
	1904	41	6,009	33	558	5,418		43,796	792	3,224	44,969	56,025	11,116
	1899	45			242	4,607		26,186	410	2,591	33,705	38,432	4,727
CAMDEN—All industries.....													
	1909	365	13,700	315	1,887	16,527	29,056	\$49,158	\$2,406	\$8,607	\$27,384	\$49,138	\$21,754
	1904	298	14,127	265	1,201	12,661		31,992	1,496	6,038	20,423	33,587	13,164
	1899	322			658	7,742		15,593	682	3,217	10,442	17,970	7,523
Boots and shoes, including cut stock and findings.													
	1909	10	456	13	21	422	99	332	22	215	497	845	348
	1904	15	520	20	26	474		310		193	417	759	342
	1899	23	478	20	20	429		318	23	155	365	609	244
Bread and other bakery products.....													
	1909	60	339	61	6	272	94	398	4	154	453	762	309
	1904	57	205	59	10	136		182	5	76	274	448	174
	1899	61	180	62	17	101		120	7	46	164	309	145
Foundry and machine-shop products....													
	1909	25	1,799	17	253	1,529	1,408	4,538	242	910	2,407	3,948	1,541
	1904	38	1,210	6	89	1,115		2,853	79	614	1,086	2,080	694
	1899	18			107	1,076		1,787	116	559	877	2,183	1,206
Leather, tanned, curried, and finished..													
	1909	7	1,171		60	1,111	1,320	3,461	129	612	4,270	5,920	1,650
	1904	4	811		62	749		1,684	71	342	5,095	6,365	670
	1899	3	480		28	452		838	40	188	1,175	1,516	341
Lumber and timber products.....													
	1909	4	150	2	20	128	411	177	17	79	236	362	128
	1904	3	192	3	17	172		301	15	92	548	734	188
	1899	4	138	5	18	115		251	20	61	217	371	154
Printing and publishing.....													
	1909	35	266	32	43	191	139	357	37	105	90	350	260
	1904	23	192	30	34	128		277	33	70	60	285	205
	1899	30	196	31	24	141		261	21	57	53	221	168

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

## MANUFACTURES—NEW JERSEY.

**TABLE I.—COMPARATIVE SUMMARY FOR 1909, 1904, AND 1899—Continued.**  
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horsepower.	Expressed in thousands.					
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).		Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
<b>CAMDEN—Continued.</b>													
Shipbuilding, including boat building..	1909	15	3,682	12	346	3,324	6,098	\$14,124	\$441	\$2,047	\$3,100	\$5,626	\$2,526
	1904	12	3,385	14	225	3,146	.....	7,656	379	1,906	2,533	6,035	2,532
	1899	19	288	10	12	266	.....	220	9	177	143	410	287
Slaughtering and meat packing.....	1909	6	52	10	.....	42	51	147	.....	32	693	763	70
	1904	3	26	6	.....	15	.....	64	.....	9	391	422	31
	1899	13	31	5	.....	25	.....	43	.....	15	423	456	33
Soap.....	1909	5	200	.....	72	188	270	951	146	79	723	1,265	542
	1904	4	89	.....	24	65	.....	387	33	31	189	395	206
	1899	3	53	.....	20	38	.....	433	19	16	97	182	86
Tobacco manufactures.....	1909	25	582	24	26	532	293	270	28	135	258	661	403
	1904	27	602	29	28	545	.....	1,314	19	130	247	576	329
	1899	24	79	26	4	40	.....	29	1	19	26	60	34
Woolen, worsted, and felt goods, and wool hats.	1909	4	1,179	9	21	1,149	2,900	3,248	63	355	2,704	3,608	904
	1904	5	1,022	7	33	982	.....	2,377	67	261	1,855	2,528	673
	1899	5	978	7	13	958	.....	2,693	23	241	1,406	2,091	685
All other industries.....	1909	169	8,773	135	999	7,039	15,973	21,105	1,277	3,884	11,953	25,028	12,075
	1904	127	5,873	91	648	5,134	.....	14,534	770	2,374	7,128	13,980	6,832
	1899	144	.....	.....	385	4,092	.....	8,600	402	1,683	5,406	9,562	4,066
<b>ELIZABETH—All industries...</b>													
	1909	183	13,870	132	801	12,737	20,124	\$26,774	\$1,052	\$7,513	\$16,429	\$29,147	\$12,718
	1904	124	13,175	100	740	12,335	.....	23,564	866	7,398	16,982	28,301	12,319
	1899	141	.....	.....	584	9,498	.....	15,951	801	5,476	12,913	22,881	9,948
Bread and other bakery products.....	1909	31	142	31	.....	111	38	194	.....	69	182	347	165
	1904	27	121	30	.....	87	.....	192	1	56	196	310	114
	1899	35	135	39	.....	95	.....	135	(1)	46	169	288	119
Foundry and machine-shop products...	1909	18	1,095	13	166	916	1,571	2,496	215	604	996	1,877	881
	1904	15	2,633	10	229	2,394	.....	7,436	243	1,561	1,436	3,887	2,451
	1899	16	2,183	12	211	1,960	.....	4,292	297	1,183	2,093	4,444	2,351
Leather, tanned, curried, and finished..	1909	3	207	6	8	193	225	742	12	85	713	991	278
	1904	3	326	3	29	294	.....	310	52	138	104	385	281
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oil, not elsewhere specified.....	1909	5	76	1	32	43	425	553	53	29	797	1,005	206
	1904	3	125	1	54	70	.....	1,101	75	52	2,102	2,388	286
	1899	3	.....	.....	65	55	.....	751	91	35	1,405	1,679	274
Printing and publishing.....	1909	9	548	7	62	479	661	2,306	76	406	166	867	701
	1904	11	152	9	40	103	.....	142	27	59	38	172	134
	1899	10	.....	.....	15	77	.....	109	15	40	33	148	145
All other industries.....	1909	97	11,602	74	533	10,995	17,204	20,483	696	6,320	13,675	24,060	10,485
	1904	65	9,818	47	384	9,387	.....	14,383	468	5,532	18,106	22,159	9,053
	1899	77	.....	.....	292	7,311	.....	10,664	398	4,203	9,213	16,302	7,089
<b>HOBOKEN—All industries.....</b>													
	1909	244	9,339	206	1,033	8,100	11,108	\$19,898	\$1,365	\$4,553	\$9,469	\$20,413	\$10,944
	1904	279	8,230	278	725	7,227	.....	11,777	914	3,573	6,580	14,077	7,497
	1899	194	.....	.....	402	5,712	.....	7,475	495	2,625	5,026	10,483	6,467
Bread and other bakery products.....	1909	36	492	36	35	421	255	420	23	321	873	1,410	637
	1904	43	371	44	13	314	.....	463	13	201	618	1,011	363
	1899	25	216	27	42	147	.....	276	28	90	301	525	224
Copper, tin, and sheet-iron products....	1909	7	132	4	20	108	90	114	24	105	126	301	175
	1904	5	32	6	2	24	.....	34	2	10	24	60	32
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.....	1909	23	957	9	93	855	1,101	1,843	153	558	582	1,808	1,226
	1904	22	1,052	13	96	943	.....	1,635	138	542	737	1,763	1,026
	1899	18	1,103	16	58	1,020	.....	1,359	85	622	347	1,869	1,022
Furniture and refrigerators.....	1909	5	676	4	56	616	625	1,064	86	334	557	1,314	757
	1904	3	349	2	38	309	.....	490	65	146	190	544	354
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leather goods.....	1909	3	274	1	30	243	190	216	73	112	304	507	203
	1904	5	528	6	67	455	.....	588	92	139	468	783	315
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lumber and timber products.....	1909	7	150	6	16	128	293	242	16	100	227	442	215
	1904	6	82	6	9	67	.....	104	9	45	121	201	80
	1899	3	52	3	3	46	.....	122	5	30	61	114	53
Printing and publishing.....	1909	17	344	17	93	234	235	440	108	165	186	577	391
	1904	25	286	24	94	168	.....	328	89	112	109	487	378
	1899	13	122	14	26	82	.....	115	16	55	43	163	120
Silk and silk goods, including throwsters	1909	4	339	1	20	318	133	471	26	143	397	706	309
	1904	3	349	1	22	326	.....	405	24	111	193	456	263
	1899	3	257	9	4	244	.....	239	8	80	96	222	126
All other industries.....	1909	142	5,975	128	670	5,177	8,186	15,088	854	2,715	6,217	13,348	7,131
	1904	167	5,181	176	384	4,221	.....	7,730	482	2,258	4,120	8,778	4,666
	1899	132	.....	.....	209	4,164	.....	5,365	353	1,748	3,678	7,690	3,912

<sup>1</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.  
<sup>2</sup> Figures can not be shown without disclosing individual operations.

**MANUFACTURES—NEW JERSEY.**

769

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>JERSEY CITY—All Industries.</b>	1909 1904 1899	745 628 536	30,239 23,312	614 580	4,171 2,379 1,614	25,454 20,353 17,391	35,917	\$79,794 82,395 78,612	\$5,049 2,990 2,639	\$13,216 10,021 7,965	\$90,317 48,799 50,266	\$128,775 75,741 72,930	\$39,458 26,942 22,664
Boxes, fancy and paper.....	1909 1904 1899	5 4 4	589 488 430	3 2 3	29 20 19	557 466 408	194	365 235 224	42 19 18	166 127 105	238 178 110	527 408 283	289 235 173
Brass and bronze products.....	1909 1904 1899	9 19 8	400 354 173	5 7 7	55 47 17	340 300 149	550	1,277 1,297 960	113 64 16	185 172 84	1,577 1,201 719	2,180 1,730 881	603 529 162
Bread and other bakery products.....	1909 1904 1899	113 113 70	757 625 311	117 121 70	106 24 7	534 380 234	221	954 662 286	74 9 4	387 247 144	1,531 927 382	2,485 1,499 748	954 572 360
Cars and general shop construction and repairs by steam-railroad companies.	1909 1904 1899	4 4 3	2,108 2,482 2,358		288 145 86	1,818 2,337 2,272	927	405 1,440 1,408	191 121 65	1,044 1,280 1,212	1,273 1,160 1,289	2,539 2,593 2,613	1,266 1,433 1,824
Chemicals.....	1909 1904 1899	5 6 9	244 152 300	2 2	49 18 26	195 132 267	657	1,301 866 967	104 41 41	125 87 142	1,067 746 1,683	1,626 1,059 2,079	569 318 396
Confectionery.....	1909 1904 1899	7 4	389 69	2 5	59 6	328 58	493	665 126	47 6	140 19	839 97	1,151 169	312 72
Cooperage and wooden goods, not elsewhere specified.	1909 1904 1899	6 5 5	232 267	3 3	27 10 15	202 254 233	205	424 279 253	36 11 25	99 111 104	351 253 234	547 471 486	196 218 252
Copper, tin, and sheet-iron products...	1909 1904 1899	28 27 13	436 296	24 31	72 32 16	340 233 252	478	802 404 422	74 36 17	241 149 120	732 205 188	1,284 510 407	552 305 210
Electrical machinery, apparatus, and supplies.	1909 1904 1899	10 4 5	663 471 389	6 1	72 47 80	585 424 308	522	933 751 500	85 47 56	293 154 108	596 380 277	1,253 663 546	657 283 269
Foundry and machine-shop products..	1909 1904 1899	49 37 36	2,119 2,122 1,400	27 21 27	302 202 160	1,790 1,899 1,213	2,830	5,784 3,904 3,191	396 239 187	1,236 1,221 707	1,941 1,599 934	4,700 3,858 2,276	2,759 2,259 1,842
Leather goods.....	1909 1904 1899	10 4 3	571 473	11 3	24 33 16	536 437 384	124	592 563 175	65 76 43	228 173 143	575 407 284	986 828 603	411 421 319
Lumber and timber products.....	1909 1904 1899	20 12 9	671 699 665	19 13 6	66 54 45	586 532 514	1,053	1,395 1,188 1,385	80 89 61	329 259 253	936 1,225 747	1,619 1,798 1,390	683 673 643
Millinery and lace goods.....	1909 1904 1899	34 15 7	730 231 80	43 20 10	62 7 1	625 204 60	269	800 158 29	59 8 1	299 78 28	504 116 20	1,085 277 65	551 161 45
Paint and varnish.....	1909 1904 1899	6 3 3	156 67 67	2 1 2	57 14 11	97 52 54	410	571 309 329	78 22 17	63 34 27	556 244 223	882 421 342	326 177 119
Paper and wood pulp.....	1909 1904 1899	4 4 4	171 165 140		14 13 9	157 150 127	1,250	567 482 353	36 31 21	90 78 68	242 202 158	462 430 315	220 228 157
Patent medicines and compounds and druggists' preparations.	1909 1904 1899	13 15 8	142 183	7 12	59 50 31	76 121 61	185	362 300 174	76 54 26	40 51 31	141 231 81	479 623 289	338 302 208
Printing and publishing.....	1909 1904 1899	48 44 24	648 597 651	35 47 24	147 108 45	466 442 582	642	1,166 1,050 700	161 112 61	295 302 290	457 349 250	1,193 1,178 739	736 827 489
Silk and silk goods, including throwsters.	1909 1904 1899	7 6 6	1,093 1,001 900	6 7 7	39 33 20	1,045 961 873	780	1,200 1,416 674	54 42 24	550 417 349	1,002 759 604	2,071 1,466 1,275	1,069 707 671
Slaughtering and meat packing.....	1909 1904 1899	20 9 12	1,124 184 179	13 13 17	255 23 13	856 148 149	945	4,250 349 374	351 31 17	593 106 110	20,537 7,146 5,392	22,314 7,569 5,709	1,777 423 317
Tobacco manufactures.....	1909 1904 1899	51 73 81	2,814 1,610 1,710	50 72 81	187 47 66	2,577 1,491 1,533	1,479	4,959 5,323 5,486	223 45 58	943 373 399	5,886 644 1,947	11,065 2,162 6,037	5,179 1,518 4,090
All other industries.....	1909 1904 1899	286 230 226	14,184 10,976	241 198	2,202 1,446 931	11,741 9,332 7,679	21,703	50,962 61,193 60,722	2,704 1,887 1,281	5,894 4,583 3,541	48,336 30,735 34,744	68,327 46,031 45,847	19,991 15,296 11,103

<sup>1</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.  
<sup>2</sup> Figures can not be shown without disclosing individual operations.  
<sup>3</sup> 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
NEWARK—All industries .....	1909 1904 1899	1,858 1,800 1,873	69,986 57,463	1,704 1,631	8,327 6,685 4,146	59,955 50,897 42,878	78,263	\$154,233 119,026 97,182	\$11,777 6,685 5,256	\$33,076 25,822 20,365	\$114,679 80,689 60,772	\$202,512 150,065 112,728	\$87,833 69,366 51,956
Boots and shoes, including cut stock and findings.	1909 1904 1899	12 15 23	1,585 1,666	8 12	128 84 147	1,449 1,500 1,665	490	1,505 1,172 1,225	174 119 167	704 698 710	1,673 1,470 1,546	2,901 2,732 2,990	1,228 1,202 1,444
Boxes, fancy and paper.	1909 1904 1899	13 11 9	661 410 376	10 10 9	31 16 10	620 384 357	301	294 148 132	35 12 9	187 123 90	261 159 142	648 342 301	387 183 159
Brass and bronze products.	1909 1904 1899	22 21 16	304 203	18 24	45 12 7	241 167 105	264	313 215 493	47 15 5	139 95 88	321 150 246	611 347 421	260 197 175
Bread and other bakery products.	1909 1904 1899	205 163 179	1,357 1,130 1,134	204 102 185	127 185 146	1,026 833 803	566	1,646 1,347 1,340	163 107 107	738 500 433	2,711 1,903 1,498	4,027 3,115 2,540	1,916 1,212 1,642
Buttons.	1909 1904 1899	30 27 25	1,608 1,174 1,113	31 28 31	78 71 49	1,409 1,075 1,033	786	1,018 654 432	122 81 46	625 445 367	866 511 302	1,907 1,282 912	1,051 771 550
Carriages and wagons and materials.	1909 1904 1899	39 44 50	394 737	48 54	22 37 54	324 646 605	277	688 967 1,165	27 54 58	204 369 364	214 431 537	599 1,144 1,243	385 713 706
Chemicals.	1909 1904 1899	9 9 9	1,705 1,557 1,231	3 16 7	228 176 161	1,564 1,365 1,063	4,455	6,629 7,542 7,212	386 269 252	823 630 503	2,404 1,795 1,461	4,806 3,905 3,113	2,401 2,170 1,632
Clocks and watches, including cases and materials.	1909 1904 1899	6 3 8	586 110	1 1	43 12 42	542 97 696	363	1,763 276 1,601	70 19 59	324 61 341	593 65 793	1,179 170 1,389	586 105 596
Clothing, men's, including shirts.	1909 1904 1899	73 48 49	2,177 1,771	91 59	90 50 30	1,996 1,662 1,250	285	1,131 665 359	95 57 44	998 716 455	802 672 319	2,473 1,850 1,143	1,671 1,178 824
Clothing, women's.	1909 1904 1899	30 20 24	2,615 2,044 1,460	30 26 27	265 127 103	2,320 1,891 1,330	382	1,739 936 932	212 121 88	767 488 410	1,569 1,348 716	3,349 2,374 1,643	1,780 1,026 927
Confectionery.	1909 1904 1899	16 11 6	471 307	17 16	73 23 19	381 208 46	252	1,328 409 87	70 18 8	131 96 20	837 387 85	1,635 932 154	798 545 69
Copper, tin, and sheet-iron products.	1909 1904 1899	43 48 27	2,883 2,646	35 42	185 161 53	2,663 2,443 1,081	1,257	3,612 2,759 1,018	281 235 60	1,424 1,067 410	1,800 1,522 520	4,166 3,324 1,245	2,366 1,802 719
Cutlery and tools, not elsewhere specified.	1909 1904 1899	39 32 30	1,759 1,407	38 30	145 97 128	1,576 1,280 1,366	1,616	2,162 1,667 1,239	192 121 147	756 671 628	646 540 615	2,081 1,722 1,686	1,425 1,176 1,071
Electrical machinery, apparatus, and supplies.	1909 1904 1899	21 15 12	3,346 1,533 574	6 5 8	520 155 91	2,820 1,378 476	2,508	7,433 5,177 1,463	658 170 90	1,516 670 264	1,482 845 422	5,617 2,549 1,169	4,135 1,704 747
Fancy articles, not elsewhere specified.	1909 1904 1899	14 11 19	372 1,084	19 6	70 160 182	283 918 794	251	369 1,022 842	52 171 175	137 409 321	155 552 468	439 1,583 1,160	281 1,031 692
Foundry and machine-shop products.	1909 1904 1899	168 159 149	7,585 6,528 4,992	121 137 138	797 523 383	6,667 5,798 4,471	8,923	13,136 9,780 7,083	1,376 883 519	4,228 3,124 2,216	6,661 3,871 3,166	15,482 10,637 7,717	8,821 6,766 4,551
Hats, fur-felt.	1909 1904 1899	35 37 31	2,384 2,795 2,395	47 44 27	179 168 96	2,158 2,583 2,273	2,553	2,176 2,334 1,272	196 167 111	1,419 1,502 1,155	2,074 2,204 1,741	4,433 4,586 3,454	2,359 2,382 1,713
Jewelry.	1909 1904 1899	145 110 98	4,777 3,532 3,254	162 172 165	766 384 321	3,849 2,976 2,768	1,214	11,937 7,133 6,513	1,252 522 395	2,511 1,833 1,556	6,240 4,628 3,823	13,152 9,258 7,364	6,912 4,350 3,541
Leather goods.	1909 1904 1899	46 48 36	865 906	43 54	135 92 78	687 760 1,193	505	1,304 911 1,128	134 96 82	382 379 578	859 907 988	1,666 1,811 2,060	807 904 1,062
Leather, tanned, curried, and finished.	1909 1904 1899	63 52 61	4,149 3,799 3,562	51 48 58	304 227 221	3,794 3,524 3,283	6,786	12,837 9,796 8,087	566 347 338	2,504 2,108 1,661	13,416 8,610 7,392	18,858 13,578 10,867	5,442 4,988 3,465
Liquors, malt.	1909 1904 1899	14 17 16	1,540 1,461 1,180	2 2 6	311 305 204	1,229 1,154 970	8,319	19,928 15,824 12,176	714 607 490	1,041 953 775	2,799 2,337 1,664	12,361 10,917 8,236	6,562 5,580 6,582
Lumber and timber products.	1909 1904 1899	26 27 20	829 774 479	14 25 17	84 53 39	781 696 423	1,413	1,329 665 459	86 53 43	346 303 183	1,076 693 450	1,916 1,253 798	840 560 343
Marble and stone work.	1909 1904 1899	23 23 16	333 412	31 8	31 25 21	271 379 376	696	713 486 436	47 37 34	280 325 247	322 288 325	834 886 728	512 698 398

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

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



## MANUFACTURES—NEW JERSEY.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
			Expressed in thousands.										
<b>PATERSON—Continued.</b>													
Lumber and timber products.....	1909	8	193	5	25	163	361	\$353	\$28	\$99	\$234	\$420	\$186
	1904	16	118	6	31	75	.....	405	22	41	165	259	96
	1899	13	33	2	6	25	.....	111	4	11	72	101	29
Printing and publishing.....	1909	42	425	38	75	312	471	644	73	182	159	610	451
	1904	130	304	27	53	224	.....	530	51	128	120	383	273
	1899	22	224	15	29	180	.....	432	36	108	63	296	233
Silk and silk goods, including throwsters.	1909	276	29,099	250	1,021	18,828	13,361	26,447	1,456	8,872	19,520	40,858	20,838
	1904	190	15,562	190	748	14,624	.....	18,725	883	6,107	13,004	25,433	12,429
	1899	136	16,704	159	602	15,943	.....	19,026	736	6,292	14,106	26,006	11,900
Slaughtering and meat packing.....	1909	6	166	4	47	115	408	578	73	118	2,529	3,003	474
	1904	3	156	1	28	127	.....	600	37	95	1,965	2,207	242
	1899	3	90	4	11	75	.....	400	15	42	1,043	1,370	327
Tobacco manufactures.....	1909	37	208	42	7	159	26	169	10	90	172	333	161
	1904	37	185	36	10	139	.....	124	19	83	113	297	184
	1899	28	103	28	4	71	.....	87	2	38	66	146	80
All other industries.....	1909	153	2,801	145	401	2,255	6,622	13,627	467	1,196	3,026	7,226	4,200
	1904	93	7,055	95	556	6,404	.....	24,107	589	3,426	6,885	14,575	7,690
	1899	133	.....	.....	169	2,965	.....	14,103	249	1,378	2,791	7,139	4,348
<b>TRENTON—All industries.....</b>													
	1909	340	20,679	295	1,841	18,543	29,839	\$46,639	\$2,232	\$9,726	\$27,678	\$49,009	\$21,336
	1904	311	15,435	293	1,012	14,130	.....	40,861	1,311	6,921	17,551	32,360	14,809
	1899	246	.....	.....	739	13,138	.....	24,625	903	6,003	16,581	28,458	11,877
Bread and other bakery products.....	1909	48	442	53	40	349	221	496	29	187	832	1,270	447
	1904	43	369	56	21	282	.....	340	15	144	541	867	326
	1899	45	300	50	21	229	.....	266	13	100	285	550	265
Clothing, men's, including shirts.....	1909	6	240	9	17	214	52	217	22	57	247	375	128
	1904	4	69	7	6	56	.....	41	5	26	86	158	72
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Confectionery.....	1909	10	188	8	37	143	90	190	31	43	189	374	185
	1904	3	53	2	4	47	.....	84	6	21	71	128	57
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products...	1909	28	2,261	21	242	1,998	3,327	4,960	278	1,096	1,785	3,838	2,053
	1904	27	1,095	25	108	962	.....	2,255	122	549	1,142	2,089	947
	1899	17	637	13	40	634	.....	621	57	282	419	894	475
Furniture and refrigerators.....	1909	4	246	3	26	217	282	355	24	131	135	392	257
	1904	3	180	1	13	166	.....	335	18	103	137	344	207
	1899	4	.....	.....	16	95	.....	95	13	41	48	129	81
Pottery, terra-cotta, and fire-clay products.	1909	34	5,347	13	304	5,030	3,113	8,892	451	3,143	2,035	6,998	4,961
	1904	40	4,876	24	281	4,571	.....	8,489	397	2,474	1,446	5,883	4,437
	1899	29	4,521	34	198	4,289	.....	7,097	260	2,344	1,196	4,785	3,539
Printing and publishing.....	1909	35	431	40	67	324	255	641	51	223	188	738	550
	1904	33	320	38	46	236	.....	577	46	172	130	505	375
	1899	20	275	21	36	218	.....	476	26	139	93	382	288
Rubber goods, not elsewhere specified...	1909	8	1,059	1	122	936	2,614	2,930	176	501	3,681	4,969	1,288
	1904	5	391	.....	45	346	.....	789	46	165	715	1,114	399
	1899	6	534	.....	54	530	.....	1,225	90	228	957	1,690	733
Slaughtering and meat packing.....	1909	9	66	10	9	47	104	202	5	30	541	636	95
	1904	4	27	5	1	21	.....	86	1	11	60	90	30
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco manufactures.....	1909	19	1,116	17	71	1,028	120	408	93	287	599	1,528	929
	1904	31	559	29	35	495	.....	1,215	28	119	258	562	304
	1899	20	63	20	1	42	.....	29	(5)	22	27	72	45
All other industries.....	1909	139	9,283	120	906	8,257	19,655	27,348	1,042	4,028	17,441	27,884	10,443
	1904	118	7,506	106	452	6,948	.....	26,650	627	3,135	12,965	20,620	7,655
	1899	105	.....	.....	373	7,101	.....	14,316	444	2,847	13,558	19,956	6,400

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

<sup>2</sup> 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.

<sup>3</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.

<sup>4</sup> Figures can not be shown without disclosing individual operations.

<sup>5</sup> Less than \$500.



MANUFACTURES—NEW JERSEY.

773

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

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

CITY, TOWN, OR BOROUGH.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Asbury Park.....	1909 1904 1899	27	332	28	40	264	392	\$537	\$30	\$175	\$294	\$602	\$308
Atlantic City.....	1909 1904 1899	94 62 36	973 512	94 64	153 67 32	726 381 305	1,718	4,242 1,919 1,332	110 53 20	480 223 165	1,136 365 281	2,260 975 608	1,194 610 327
Bloomfield.....	1909 1904 1899	45 33 39	3,435 2,182	35 28	443 1,893 142	2,957 1,893 1,612	6,031	7,769 4,177 3,194	591 314 221	1,301 1,024 770	2,301 1,750 1,706	5,895 4,645 3,371	3,594 2,895 1,665
Bridgeton.....	1909 1904 1899	74 61 62	2,649 2,492	62 54	200 162 115	2,387 2,276 2,182	2,105	3,302 2,147 2,155	207 128 108	1,163 1,014 749	1,997 1,239 1,043	4,071 2,964 2,259	2,074 1,725 1,216
East Orange.....	1909 1904 1899	42 17 22	1,861 1,251	45 14	430 383 150	1,386 854 690	1,087	3,849 3,048 1,896	264 267 186	858 454 356	1,763 1,108 911	3,725 2,327 2,087	1,957 1,218 1,176
Garfield.....	1900 1904 1899	25	2,661	20	111	2,530	5,416	8,006	205	1,080	5,976	8,894	2,918
Hackensack.....	1909 1904 1899	46 23 21	873 899	44 18	91 69 29	738 812 487	1,021	1,846 2,933 1,509	119 67 22	360 278 173	899 687 371	1,978 1,488 782	1,079 801 411
Harrison.....	1909 1904 1899	54 41 41	7,389 4,472	33 19	806 413 202	6,500 4,040 2,859	8,021	20,602 11,389 5,076	925 524 234	3,672 1,929 1,381	5,413 3,629 3,202	13,142 8,409 6,086	7,729 4,780 2,884
Irrington.....	1900 1904 1899	51	656	40	76	540	967	1,406	108	278	2,343	3,018	675
Kearny.....	1909 1904 1899	18 11 16	3,111 1,362	14 15	277 44 28	2,820 1,303 986	5,879	6,551 2,925 1,983	269 63 43	1,540 505 359	5,263 3,505 984	8,306 4,428 1,607	3,043 923 623
Long Branch.....	1909 1904 1899	34 26 11	562 397	36 36	111 67 23	415 294 96	922	2,362 2,038 1,762	75 40 18	225 155 49	584 207 109	1,117 577 281	533 370 172
Millville.....	1909 1904 1899	39 35 18	3,144 3,022	37 26	346 229 162	2,761 2,767 2,239	3,681	3,578 3,810 3,169	368 236 160	1,424 1,528 1,098	1,599 1,384 919	4,182 3,719 2,513	2,563 2,336 1,594
Montclair.....	1909 1904 1899	23 19 23	321 188	17 17	52 20 12	252 151 169	1,245	1,105 566 505	44 24 14	139 72 86	669 419 386	1,026 621 664	357 202 278
Morristown.....	1909 1904 1899	31 26 22	278 359	32 27	45 25 36	201 307 252	766	948 782 747	39 22 24	130 171 146	369 295 310	724 704 596	355 405 286
New Brunswick.....	1909 1904 1899	93 71 72	5,948 4,991	72 63	612 338 238	5,284 4,500 3,836	6,337	11,189 10,393 6,319	780 400 303	2,020 1,792 1,304	4,549 4,158 2,994	10,005 8,917 5,791	5,456 4,759 2,797
Orange.....	1909 1904 1899	85 66 74	5,054 2,687	65 80	606 157 50	4,383 2,450 1,640	5,962	11,148 3,441 1,360	772 192 46	2,463 1,312 912	3,688 2,642 1,580	9,176 6,151 2,996	5,488 3,506 1,416
Perth Amboy.....	1909 1904 1899	80 53 47	6,595 4,333	55 37	674 346 157	5,866 3,950 2,095	22,314	25,100 11,583 6,374	986 400 185	2,679 1,827 920	63,932 30,316 11,347	78,093 34,800 14,061	9,161 4,484 2,714
Phillipsburg.....	1909 1904 1899	39 32 34	3,753 3,279	27 21	294 110 74	3,432 3,148 2,216	7,061	9,764 6,723 3,308	362 179 104	1,732 1,472 887	4,770 3,566 2,803	9,150 6,684 4,585	4,380 3,118 1,782
Plainfield.....	1900 1904 1899	60 49 32	2,027 2,283	55 51	214 246 121	1,758 1,986 1,384	3,912	6,508 5,101 2,450	281 238 139	968 1,026 761	1,530 1,154 813	3,649 3,572 2,437	2,119 2,418 1,624
Union.....	1909 1904 1899	83 77 67	3,155 2,038	38 78	178 104 92	2,894 1,856 1,376	3,034	10,910 7,295 5,354	230 183 164	1,411 875 665	3,539 1,392 1,408	7,941 3,512 3,403	4,402 2,121 1,995
West Hoboken.....	1909 1904 1899	137 95 65	3,179 3,923	154 102	243 259 172	2,782 3,502 2,733	1,477	4,861 6,018 3,732	268 258 152	1,425 1,276 1,059	2,488 3,122 2,529	5,577 5,947 4,769	3,089 2,825 2,240
West New York.....	1900 1904 1899	66	1,779	70	201	1,508	1,443	4,163	237	729	7,409	9,274	1,865
West Orange.....	1909 1904 1899	10	530	8	46	476	1,032	1,994	44	285	399	748	349

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









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

BAYONNE.

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.									WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.			
					Male.	Female.	Total.	16 and over.	Under 16.		Male.	Female.				
													Male.	Female.		
1 All industries.....	97	8,790	84	208	853	126	7,519	6,624	718	177	8,414	7,419	799	95	101	28,094
2 Bread and other bakery products.....	17	106	18	.....	2	11	75	74	.....	1	81	80	.....	1	.....	29
3 Foundry and machine-shop products.....	7	1,234	10	15	284	0	916	916	.....	.....	1,090	1,090	.....	.....	.....	1,722
4 All other industries <sup>1</sup> .....	73	7,450	56	193	567	106	6,528	5,634	718	176	7,243	6,249	799	94	101	26,343

<sup>1</sup>All other industries embrace: Automobiles, including bodies and parts, 1; brass and bronze products, 1; canning and preserving, 1; carriages and wagons and materials, 1; cars and general shop construction and repairs by steam-railroad companies, 1; chemicals, 2; clothing, men's, including shirts, 4; clothing, women's, 3; cooperage and wooden goods, not elsewhere specified, 3; copper, tin, and sheet-iron products, 3; cutlery and tools, not elsewhere specified, 2; dyeing and finishing textiles, 1; electrical machinery, apparatus, and supplies, 2; engraving and diesinking, 1; fancy articles, not elsewhere specified, 1; furnishing goods, men's, 2; furniture and refrigerators, 1; gas and electric fixtures and lamps and reflectors, 2; hats and caps, other than felt, straw, and wool, 2; instruments, professional and scientific, 1; iron and steel, bolts,

CAMDEN.

1 All industries.....	365	18,709	315	456	1,107	304	18,527	12,923	3,142	462	17,643	13,788	3,375	224	256	29,056
2 Boots and shoes, including out stock and findings.....	10	456	13	12	9	.....	422	225	185	12	442	230	194	7	5	99
3 Bread and other bakery products.....	60	330	61	.....	5	1	272	228	37	7	281	236	38	7	.....	94
4 Foundry and machine-shop products.....	25	1,799	17	40	163	50	1,529	1,508	6	15	1,644	1,621	6	17	.....	1,468
5 Leather, tanned, curried, and finished.....	7	1,171	.....	20	36	4	1,111	1,093	.....	18	1,111	1,093	.....	18	.....	1,320
6 Lumber and timber products.....	4	150	2	11	8	1	128	128	.....	.....	132	132	.....	.....	.....	411
7 Printing and publishing.....	35	266	32	13	17	13	191	167	10	8	193	169	16	8	.....	139
8 Shipbuilding, including boat building.....	15	3,682	12	52	292	2	3,324	3,323	1	.....	3,457	3,456	1	.....	.....	6,098
9 Slaughtering and meat packing.....	0	52	10	.....	.....	.....	42	37	4	1	47	42	4	1	.....	61
10 Soap.....	5	260	.....	13	40	19	188	121	65	2	184	118	64	2	.....	270
11 Tobacco manufactures.....	25	582	24	16	7	3	532	63	414	55	604	71	471	3	59	293
12 Woolen, worsted, and felt goods, and wool hats.....	4	1,179	9	9	10	2	1,149	324	642	183	1,108	313	619	111	65	2,900
13 All other industries <sup>1</sup> .....	169	8,773	135	270	520	209	7,639	5,706	1,772	161	8,440	6,301	1,962	50	127	15,973

<sup>1</sup>All other industries embrace: Artificial stone, 2; automobiles, including bodies and parts, 1; awnings, tents, and sails, 1; bicycles, motorcycles, and parts, 1; blacking and cleansing and polishing preparations, 2; bluing, 1; bone, carbon, and lamp black, 1; boxes, fancy and paper, 2; brass and bronze products, 2; brick and tile, 1; buttons, 1; candles, 1; carpets, rag, 2; carriages and sleds, children's, 1; carriages and wagons and materials, 5; cars and general shop construction and repairs by steam-railroad companies, 2; cars and general shop construction and repairs by street-railroad companies, 1; chemicals, 4; clothing, men's, including shirts, 2; clothing, women's, 4; coffee and spice, roasting and grinding, 3; coke, 1; confectionery, 8; cooperage and wooden goods, not elsewhere specified, 2; copper, tin, and sheet-iron products, 10; cork, cutting, 1; cotton goods, including cotton small wares, 1; drug grinding, 1; dyeing and finishing textiles, 1; dyestuffs and extracts, 1; electrical machinery, apparatus, and supplies, 3; electroplating, 1; emery and other abrasive wheels, 1; fertilizers, 2; flour-mill and gristmill products, 2; food preparations, 3; furniture and refrigerators, 2; gas and electric fixtures and lamps and reflectors, 1; gas, illuminating and heating, 2; glass cutting, staining, and ornamenting, 3; glucose and starch, 1; hair work, 1; hat and cap materials, 1;

ELIZABETH.

1 All industries.....	163	13,670	132	221	472	108	12,737	11,291	1,408	38	13,260	11,757	1,466	9	28	20,124
2 Bread and other bakery products.....	31	142	31	.....	.....	.....	111	100	9	2	113	102	9	1	1	38
3 Foundry and machine-shop products.....	18	1,095	13	34	114	18	916	916	.....	.....	1,028	1,028	.....	.....	.....	1,571
4 Leather, tanned, curried, and finished.....	3	207	6	4	1	3	193	176	17	.....	198	181	17	.....	.....	225
5 Oil, not elsewhere specified.....	5	76	1	15	16	1	43	43	.....	.....	54	54	.....	.....	.....	425
6 Printing and publishing.....	9	548	7	7	46	9	479	380	96	3	555	440	111	4	.....	661
7 All other industries <sup>1</sup> .....	97	11,602	74	161	295	77	10,995	9,676	1,286	33	11,812	9,952	1,329	4	27	17,204

<sup>1</sup>All other industries embrace: Artificial stone, 1; artists' materials, 1; automobiles, including bodies and parts, 1; awnings, tents, and sails, 1; carpets, rag, 1; carriages and wagons and materials, 14; cars and general shop construction and repairs by steam-railroad companies, 1; chemicals, 5; clothing, men's, including shirts, 3; cooperage and wooden goods, not elsewhere specified, 1; copper, tin, and sheet-iron products, 1; cutlery and tools, not elsewhere specified, 2; dairymen's, poultryers', and apiculturists' supplies, 1; electrical machinery, apparatus, and supplies, 1; fertilizers, 1; files, 1; flavoring extracts, 1; food preparations, 2; foundry supplies, 1; gas and electric fixtures and lamps and reflectors, 1; gas, illuminating and heating, 1; hosiery and knit goods, 1; ice, manufactured, 2; kaolin and ground earths, 2; lead, bar, pipe, and sheet, 1;

HOBOKEN.

1 All industries.....	244	9,339	206	300	609	124	8,100	5,919	1,938	243	8,423	6,199	1,978	108	138	11,108
2 Bread and other bakery products.....	36	492	36	7	20	8	421	411	8	2	415	405	8	2	.....	235
3 Copper, tin, and sheet-iron products.....	7	132	4	10	7	3	108	107	1	.....	131	130	1	.....	.....	90
4 Foundry and machine-shop products.....	23	957	9	43	46	4	855	854	1	.....	977	976	1	.....	.....	1,101
5 Furniture and refrigerators.....	5	676	4	11	33	12	616	595	19	2	655	633	20	2	.....	625
6 Leather goods.....	3	274	1	10	17	3	243	92	118	33	244	93	118	10	23	190
7 Lumber and timber products.....	7	150	6	8	5	3	128	128	.....	.....	134	134	.....	.....	.....	293
8 Printing and publishing.....	17	344	17	9	72	12	234	203	30	1	223	194	28	1	.....	235
9 Silk and silk goods, including throwsters.....	4	399	1	8	0	3	318	117	187	14	296	109	174	.....	13	133
10 All other industries <sup>1</sup> .....	142	5,975	128	194	400	76	5,177	3,412	1,574	191	5,348	3,525	1,623	93	102	8,186

<sup>1</sup>All other industries embrace: Artists' materials, 1; automobiles, including bodies and parts, 2; awnings, tents, and sails, 3; baking powders and yeast, 1; baskets and rattan and wicker ware, 1; blacking and cleansing and polishing preparations, 2; boxes, fancy and paper, 2; brass and bronze products, 5; buttons, 1; canning and preserving, 1; card cutting and designing, 1; carriages and wagons and materials, 5; cars and general shop construction and repairs by street-railroad companies, 1; clothing, men's, including shirts, 2; clothing, women's, 9; coffins, burial cases, and undertakers' goods, 1; confectionery, 2; cooperage and wooden goods, not elsewhere specified, 2; cork, cutting, 1; cutlery and tools, not elsewhere specified, 1; dyeing and finishing textiles, 4; electrical machinery, apparatus, and supplies, 2; fancy articles, not elsewhere specified, 3; flags, banners, regalia, society badges, and emblems, 1; food preparations, 2; gas and electric fixtures and lamps and reflectors, 1; gas, illuminating and heating, 2; glass, cutting, staining, and ornamenting, 1; hats, fur-felt, 2; hats, straw, 1; ice, manufactured, 1; ink, printing, 1; instruments, professional and scientific, 1;



**MANUFACTURES—NEW JERSEY.**

779

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.**

**BAYONNE.**

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	\$62,280,685	\$69,354,728	\$698,827	\$1,063,354	\$4,775,257	\$1,847,597	\$57,084,944	\$39,759	\$350,815	\$503,400	\$2,990,775	\$73,640,900	\$14,708,359
2	159,100	282,605	.....	4,796	57,919	6,730	200,006	2,657	1,362	.....	9,135	339,660	132,924
3	10,648,019	3,506,380	82,350	369,325	635,665	82,094	1,559,596	6,447	21,392	472,220	277,285	4,155,110	2,513,420
4	51,472,966	65,565,743	616,471	689,233	4,081,673	1,758,773	55,325,342	30,655	328,061	31,180	2,704,355	69,146,130	12,062,015

nuts, washers, and rivets not made in steel works or rolling mills, 1; kaolin and ground earths, 1; lumber and timber products, 4; mattresses and spring beds, 1; millinery and lace goods, 1; mineral and soda waters, 3; models and patterns, not including paper patterns, 1; oil, essential, 1; oil, not elsewhere specified, 1; paint and varnish, 1; patent medicines and compounds and druggists' preparations, 1; petroleum, refining, 3; printing and publishing, 5; shipbuilding, including boat building, 3; silk and silk goods, including throwsters, 1; smelting and refining, not from the ore, 1; soap, 1; steam packing, 1; sulphuric, nitric, and mixed acids, 2; tobacco manufactures, 4; upholstering materials, 1.

**CAMDEN.**

1	\$49,158,368	\$42,670,240	\$1,237,179	\$1,169,309	\$5,006,648	\$1,680,226	\$25,703,574	\$269,414	\$224,630	\$138,187	\$3,650,073	\$49,137,874	\$21,754,074
2	382,120	747,003	13,440	8,984	214,721	3,409	493,669	1,120	841	4,043	7,836	844,821	347,843
3	368,296	645,610	.....	3,560	164,064	15,708	436,816	7,808	2,543	2,228	22,853	762,271	309,747
4	4,538,084	3,873,361	80,923	161,424	909,724	37,079	2,319,424	11,207	11,609	6,166	285,805	3,948,105	1,541,603
5	3,461,007	5,330,735	93,723	36,251	612,169	39,974	4,229,082	1,824	5,193	.....	812,019	5,920,238	1,650,582
6	177,022	342,577	10,058	7,267	79,279	529	235,621	6,508	1,000	.....	2,320	362,493	126,343
7	356,508	270,063	20,330	17,152	104,676	5,423	84,290	7,725	934	10,060	19,273	349,877	200,104
8	14,123,528	5,713,324	153,767	287,501	2,046,874	91,547	3,008,529	3,945	8,349	.....	112,812	5,625,597	2,525,621
9	147,268	729,582	.....	.....	32,280	1,344	692,098	.....	1,141	.....	2,719	763,409	69,987
10	951,192	1,096,767	75,817	69,688	79,439	12,767	709,932	100	5,206	.....	143,818	1,264,579	541,880
11	270,008	549,331	21,132	6,985	135,194	1,465	256,947	5,152	60,101	.....	62,295	660,691	402,279
12	3,247,965	3,262,617	49,900	13,099	354,600	31,523	2,672,121	375	7,044	27,666	106,199	3,608,131	904,487
13	21,105,312	20,117,310	718,089	558,398	3,883,308	1,389,458	10,564,545	223,655	120,600	88,024	2,571,224	25,027,661	13,073,688

hosiery and knit goods, 1; house-furnishing goods, not elsewhere specified, 1; ice, manufactured, 3; instruments, professional and scientific, 1; iron and steel forgings, 2; kaolin and ground earths, 1; leather goods, 2; lime, 1; liquors, malt, 2; marble and stone work, 3; millinery and lace goods, 5; mineral and soda waters, 12; models and patterns, not including paper patterns, 3; musical instruments and materials, not specified, 2; oilcloth and linoleum, 2; paint and varnish, 6; paper and wood pulp, 1; paper goods, not elsewhere specified, 5; patent medicines and compounds and druggists' preparations, 6; pens, steel, 2; phonographs and gramophones, 1; photo-engraving, 1; pipes, tobacco, 1; pottery, terra-cotta, and fire-clay products, 1; roofing materials, 1; scales and balances, 1; sewing machines, cases, and attachments, 1; show cases, 1; silk and silk goods, including throwsters, 2; smelting and refining, not from the ore, 1; steam packing, 2; stereotyping and electrotyping, 1; surgical appliances and artificial limbs, 1; toys and games, 1; umbrellas and canes, 1; window shades and fixtures, 1; wool scouring, 1.

**ELIZABETH.**

1	\$26,773,807	\$26,560,257	\$522,081	\$530,263	\$7,512,717	\$491,085	\$15,937,484	\$74,252	\$371,543	\$11,049	\$1,109,793	\$29,147,334	\$12,718,765
2	194,136	262,641	.....	.....	69,138	0,154	173,276	4,522	1,652	114	4,785	347,115	164,685
3	2,496,096	2,017,912	85,140	129,547	603,933	32,256	963,578	13,214	14,907	.....	175,337	1,877,113	881,279
4	741,822	828,351	6,369	2,548	84,860	8,419	704,415	2,750	1,172	.....	14,827	991,312	278,478
5	552,755	948,699	39,988	12,924	29,410	7,637	789,080	5,400	1,462	.....	500	1,004,767	208,050
6	2,305,075	757,980	16,200	59,583	406,238	9,726	155,814	14,125	2,673	.....	2,596	866,725	701,185
7	20,483,028	21,744,834	371,393	325,661	6,319,132	423,893	13,151,321	34,241	349,737	7,839	761,617	24,069,302	10,485,088

leather goods, 3; liquors, malt, 2; lumber and timber products, 4; marble and stone work, 1; mattresses and spring beds, 2; mineral and soda waters, 3; models and patterns, not including paper patterns, 2; patent medicines and compounds and druggists' preparations, 2; pottery, terra-cotta, and fire-clay products, 1; rubber goods, not elsewhere specified, 1; sewing machines, cases, and attachments, 1; shipbuilding, including boat building, 1; show cases, 1; silverware and plated ware, 1; slaughtering and meat packing, 1; stationery goods, not elsewhere specified, 1; sulphuric, nitric, and mixed acids, 1; tobacco manufactures, 17; toys and games, 1; umbrellas and canes, 1; upholstering materials, 1; wire, 1.

**HOBOKEN.**

1	\$19,998,095	\$17,735,572	\$674,816	\$690,168	\$4,552,912	\$397,609	\$9,071,499	\$543,065	\$105,342	\$285,749	\$1,434,412	\$20,413,015	\$10,943,907
2	419,745	1,282,830	7,300	15,888	321,351	21,234	851,316	10,915	3,445	.....	42,381	1,410,102	537,552
3	113,711	266,796	17,289	6,302	105,420	3,429	122,156	5,080	295	.....	6,134	301,036	175,451
4	1,843,080	1,597,387	110,235	43,096	557,813	27,784	554,250	30,085	16,672	147,100	101,351	1,807,519	1,225,485
5	1,064,378	1,110,400	30,600	46,033	333,691	7,672	549,488	4,500	4,936	.....	124,489	1,314,162	756,942
6	216,410	517,644	37,760	34,813	112,303	2,336	302,068	1,200	1,491	.....	25,673	506,700	202,296
7	241,887	397,401	11,084	5,208	99,085	4,285	222,418	5,400	1,170	.....	5,717	441,656	214,953
8	440,137	501,543	27,840	80,056	165,274	6,070	179,846	8,909	1,387	.....	3,350	30,811	391,154
9	470,994	629,440	18,600	8,950	143,121	6,248	391,089	9,756	1,104	.....	45,950	706,471	309,134
10	15,057,753	11,432,122	405,056	449,822	2,713,954	318,551	5,898,898	451,220	74,842	62,932	1,056,877	13,348,369	7,130,940

leather, tanned, curried, and finished, 1; liquors, distilled, 1; looking-glass and picture frames, 1; marble and stone work, 3; mattresses and spring beds, 2; millinery and lace goods, 4; mineral and soda waters, 6; mirrors, 1; moving pictures, 1; needles, pins, and hooks and eyes, 1; paint and varnish, 3; paper and wood pulp, 2; paper goods, not elsewhere specified, 1; patent medicines and compounds and druggists' preparations, 8; pencils, lead, 1; shipbuilding, including boat building, 3; signs and advertising novelties, 1; slaughtering and meat packing, 3; smelting and refining, not from the ore, 1; soap, 1; soda-water apparatus, 1; sporting and athletic goods, 1; stationery goods, not elsewhere specified, 1; statutory and art goods, 1; surgical appliances and artificial limbs, 1; tobacco manufactures, 21; toys and games, 1; wall paper, 1; wheelbarrows, 1; wood, turned and carved, 1.

MANUFACTURES—NEW JERSEY.

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. JERSEY CITY.

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	Male.	Female.		Under 16.	Male.	Female.	Male.	Female.		
																Male.	
1 All industries.....	745	30,239	614	966	2,548	657	25,454	18,140	6,866	448	26,721	18,861	7,394	171	295	35,917	
2 Boxes, fancy and paper.....	5	589	3	11	16	2	557	139	376	42	563	141	380	5	37	194	
3 Brass and bronze products.....	9	400	5	19	34	2	340	335	5	5	424	418	33	6	.....	550	
4 Bread and other bakery products.....	113	757	117	8	68	30	534	501	32	1	647	513	83	1	.....	221	
5 Cars and general shop construction and repairs by steam-railroad companies.....	4	2,106	.....	119	162	7	1,818	1,766	52	.....	1,870	1,817	53	.....	.....	927	
6 Chemicals.....	5	244	.....	16	29	4	195	187	6	2	200	192	6	2	.....	657	
7 Confectionery.....	7	389	2	18	30	11	328	156	172	.....	347	165	182	.....	493		
8 Cooperage and wooden goods, not elsewhere specified.....	6	232	3	19	5	3	202	200	2	.....	217	215	2	.....	205		
9 Copper, tin, and sheet-iron products.....	28	436	24	29	28	15	340	336	3	1	372	368	3	1	.....	478	
10 Electrical machinery, apparatus, and supplies.....	10	663	6	37	24	11	585	423	162	.....	633	461	172	.....	822		
11 Foundry and machine-shop products.....	49	2,119	27	83	206	13	1,790	1,785	1	4	1,731	1,726	1	4	.....	2,630	
12 Leather goods.....	10	571	11	5	13	6	536	387	149	.....	566	409	187	.....	124		
13 Lumber and timber products.....	20	671	19	19	41	6	586	582	.....	4	650	646	.....	4	.....	1,053	
14 Millinery and lace goods.....	34	730	43	15	26	21	625	156	460	9	649	162	478	.....	9	269	
15 Paint and varnish.....	6	156	2	12	38	7	97	84	13	.....	98	85	13	.....	410		
16 Paper and wood pulp.....	4	171	.....	10	2	2	157	143	14	.....	154	140	14	.....	1,250		
17 Patent medicines and compounds and druggists' preparations.....	13	142	7	16	26	17	76	36	40	.....	91	43	48	.....	185		
18 Printing and publishing.....	48	648	35	25	94	28	466	393	67	6	482	407	69	6	.....	642	
19 Silk and silk goods, including throwsters.....	7	1,093	6	6	28	5	1,048	486	541	21	1,069	496	552	.....	21	780	
20 Slaughtering and meat packing.....	20	1,124	13	37	186	32	856	788	67	1	805	741	63	1	.....	945	
21 Tobacco manufactures.....	51	2,814	50	82	83	22	2,577	768	1,750	59	3,096	922	2,102	6	66	1,479	
22 All other industries <sup>1</sup> .....	296	14,184	241	380	1,409	413	11,741	8,439	2,959	293	12,157	8,794	3,066	135	182	21,703	

<sup>1</sup> All other industries embrace: Artificial flowers and feathers and plumes, 3; artificial stone, 3; automobiles, including bodies and parts, 2; awnings, tents, and sails, 2; axle grease, 1; bags, other than paper, 1; baking powders and yeast, 1; belting and hose, leather, 1; belting and hose, woven and rubber, 3; billiard tables and materials, 1; blacking and cleansing and polishing preparations, 4; boots and shoes, including cut stock and findings, 2; brushes, 3; buttons, 2; canning and preserving, 4; carpets and rugs, other than rag, 1; carriages and wagons and materials, 27; china decorating, 3; chocolate and cocoa products, 2; clocks and watches, including cases and materials, 1; clothing, men's, including shirts, 2; clothing, women's, 7; coffee and spice, roasting and grinding, 2; coffins, burial cases, and undertakers' goods, 1; cordage and twine and jute and linen goods, 1; cordials and syrups, 2; cork, cutting, 1; corsets, 1; cotton goods, including cotton small wares, 1; crucibles, 1; cutlery and tools, not elsewhere specified, 4; dairymen's, poultryers' and apiculturists' supplies, 1; drug grinding, 1; dyeing and finishing textiles, 7; dyestuffs and extracts, 2; electroplating, 2; engravers' materials, 1; engraving and diesinking, 2; fancy articles, not elsewhere specified, 1; fertilizers, 1; fireworks, 4; flavoring extracts, 2; flags, banners, regalia, society badges, and emblems, 1; flour-mill and gristmill products, 1; food preparations, 8; foundry supplies, 1; fur goods, 2; furnishing goods, men's, 2; furniture and refrigerators, 8; furs, dressed, 1; galvanizing, 2; gas and electric fixtures and lamps and reflectors, 6; gas, illuminating and heating, 4; glass, cutting, staining, and ornamenting, 2; gloves and

NEWARK.

1 All industries.....	1,858	69,986	1,704	2,160	4,548	1,619	59,955	42,877	15,328	1,750	63,981	45,761	16,370	954	896	78,253
2 Boots and shoes, including cut stock and findings.....	12	1,585	8	27	71	30	1,449	1,016	377	56	1,458	1,022	379	31	26	490
3 Boxes, fancy and paper.....	13	661	10	15	8	8	620	144	430	46	673	157	46	7	43	301
4 Brass and bronze products.....	22	304	18	20	18	7	241	225	11	5	278	259	13	6	.....	264
5 Bread and other bakery products.....	205	1,357	204	36	61	30	1,026	908	56	2	1,059	999	58	1	1	566
6 Buttons.....	30	1,308	31	38	22	20	1,409	1,016	418	65	1,552	1,052	433	28	39	786
7 Carriages and wagons and materials.....	39	394	48	13	9	.....	324	323	.....	1	315	314	.....	1	.....	277
8 Chemicals.....	9	1,795	3	48	171	9	1,564	1,215	302	47	1,535	1,102	297	12	34	4,455
9 Clocks and watches, including cases and materials.....	6	586	1	17	16	10	542	450	71	21	1,529	439	70	16	4	363
10 Clothing, men's, including shirts.....	73	2,177	91	27	47	16	1,996	1,004	958	34	2,034	1,048	1,001	15	20	285
11 Clothing, women's.....	30	2,015	30	29	65	171	2,320	155	2,035	130	2,405	161	2,110	6	128	382
12 Confectionery.....	16	471	17	16	36	21	381	154	224	3	364	147	214	.....	3	252
13 Copper, tin, and sheet-iron products.....	43	2,883	35	65	93	27	2,663	1,976	527	160	2,939	2,180	583	107	69	1,237
14 Cutlery and tools, not elsewhere specified.....	39	1,759	38	28	90	27	1,576	1,402	139	35	1,612	1,435	141	33	3	1,016
15 Electrical machinery, apparatus, and supplies.....	21	3,346	6	72	317	181	2,820	1,805	1,012	3	3,374	2,159	1,210	2	3	2,508
16 Fancy articles, not elsewhere specified.....	14	372	19	11	23	37	283	221	51	11	290	227	52	11	.....	251
17 Foundry and machine-shop products.....	168	7,585	121	266	405	126	6,067	6,167	400	100	7,030	6,502	422	88	18	8,923
18 Hats, fur-felt.....	35	2,384	47	51	112	16	2,158	1,601	514	43	2,747	2,040	653	20	34	2,553
19 Jewelry.....	145	4,777	162	218	353	195	3,849	2,752	939	155	4,012	2,870	977	85	80	1,214
20 Leather goods.....	46	865	43	42	71	22	687	578	85	24	689	680	85	23	1	505
21 Leather, tanned, curried, and finished.....	63	4,149	51	127	145	32	3,794	3,703	23	68	4,192	4,091	26	75	.....	6,786
22 Liquors, malt.....	14	1,540	.....	68	238	5	1,229	1,228	.....	1	1,250	1,240	.....	1	.....	8,319
23 Lumber and timber products.....	26	829	14	41	35	8	731	680	49	2	730	679	49	.....	2	1,415
24 Marble and stone work.....	23	333	31	18	11	2	271	271	.....	.....	334	334	.....	.....	.....	696
25 Mattresses and spring beds.....	7	323	10	7	25	11	270	260	10	.....	269	259	10	.....	.....	113
26 Millinery and lace goods.....	9	269	13	4	9	2	241	45	169	24	207	83	187	.....	27	98

**MANUFACTURES—NEW JERSEY.**

781

**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.**

**JERSEY CITY.**

Capital.	EXPENSES.										Value of products.	Value added by manufacture.	
	Total.	Services.			Materials.		Miscellaneous.						
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.			
1	\$79,793,932	\$120,141,941	\$2,276,070	\$2,772,563	\$13,215,567	\$1,898,618	\$87,418,609	\$1,674,572	\$2,749,469	\$657,216	\$7,479,257	\$128,774,978	\$39,487,751
2	364,668	468,479	27,340	14,768	166,093	4,794	233,423	1,800	2,885	2,900	14,476	626,644	288,427
3	1,277,922	1,043,879	74,038	38,484	185,102	23,443	1,553,863	3,021	6,946	.....	53,952	2,180,089	602,783
4	653,751	2,137,109	12,970	61,254	386,500	41,923	1,489,373	39,419	10,733	955	93,792	2,485,417	954,121
5	404,708	2,539,435	87,373	103,219	1,044,310	57,317	1,216,053	.....	5,235	.....	25,928	2,539,435	1,266,065
6	1,300,965	1,396,843	75,305	28,879	124,936	46,589	1,020,720	1,920	5,710	11,431	81,353	1,625,511	558,202
7	665,274	1,105,917	26,300	20,519	145,802	13,205	825,477	11,337	2,925	.....	60,352	1,150,571	411,889
8	423,806	516,147	30,380	5,222	98,823	3,385	347,570	4,200	2,825	.....	28,742	546,653	195,698
9	861,990	1,121,744	46,891	26,956	240,864	9,168	722,941	8,520	4,191	.....	62,213	1,283,684	551,625
10	932,528	1,132,863	50,035	26,112	292,850	16,387	579,411	5,858	4,099	.....	149,111	1,283,122	657,324
11	5,783,655	4,120,194	191,100	205,399	1,235,374	65,402	1,876,188	61,595	17,848	184,942	282,337	4,699,895	2,768,305
12	691,693	977,357	38,920	26,233	228,452	2,217	572,708	1,700	2,257	.....	104,870	986,232	411,307
13	1,394,780	1,398,197	36,694	43,628	320,222	6,962	928,819	6,561	7,933	9,357	29,199	1,610,002	682,221
14	799,714	909,840	22,010	36,620	299,102	13,664	490,704	12,532	2,682	13,860	48,576	1,085,418	531,050
15	571,120	746,238	37,485	40,425	62,540	5,424	550,900	1,300	2,139	.....	36,956	881,867	325,483
16	566,623	410,866	32,608	3,368	90,337	31,662	210,684	6,000	3,323	.....	32,584	462,205	219,859
17	361,893	335,115	33,453	42,591	39,932	3,459	137,548	4,860	2,436	1,500	69,336	478,959	337,952
18	1,166,394	1,010,860	72,280	88,924	294,549	13,439	443,681	15,460	5,822	9,208	67,488	1,193,302	726,182
19	1,199,724	1,921,891	26,180	27,869	550,204	15,833	988,496	5,640	5,137	203,500	101,032	2,071,296	1,068,967
20	4,250,453	22,081,595	99,897	251,539	592,576	74,498	20,462,929	45,085	25,302	68,551	460,748	22,313,974	1,779,547
21	4,050,229	9,975,513	134,900	88,165	943,048	62,785	5,822,946	22,201	2,124,780	19,467	767,632	11,064,778	5,179,947
22	50,903,747	63,891,859	1,111,424	1,592,296	5,894,762	1,387,062	46,946,115	1,415,554	503,761	122,545	4,918,340	68,326,974	19,983,797

mittens, leather, 4; gold and silver, leaf and foil, 7; grease and tallow, 1; hair work, 1; hats and caps, other than felt, straw, and wool, 2; hosiery and knit goods, 5; ink, printing, 1; ink, writing, 2; 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, 1; jewelry, 1; jewelry and instrument cases, 3; leather, tanned, curried, and finished, 2; liquors, distilled, 2; liquors, malt, 2; looking-glass and picture frames, 1; marble and stone work, 1; mattresses and spring beds, 3; mineral and soda waters, 16; mirrors, 1; models and patterns, not including paper patterns, 5; musical instruments and materials, not specified, 1; musical instruments, pianos and organs and materials, 2; oakum, 1; oil, castor, 1; oil, not elsewhere specified, 4; oleomargarine, 1; optical goods, 1; paper goods, not elsewhere specified, 1; paving materials, 2; pencils, lead, 2; petroleum, refining, 1; photographic apparatus and materials, 3; pipes, tobacco, 1; roofing materials, 2; rubber goods, not elsewhere specified, 1; scales and balances, 4; shipbuilding, including boat building, 6; signs and advertising novelties, 1; soap, 3; soda-water apparatus, 1; springs, steel, car and carriage, 1; statuary and art goods, 2; steam packing, 4; stoves and furnaces, including gas and oil stoves, 4; sugar, refining, not including beet sugar, 1; toys and games, 5; type founding and printing materials, 1; umbrellas and canes, 1; waste, 1; window shades and fixtures, 6; wood, turned and carved, 3; wool pulling, 1; woolen, worsted, and felt goods, and wool hats, 1.

**NEWARK.**

1	\$154,232,686	\$181,530,641	\$5,959,917	\$5,817,426	\$33,075,595	\$2,807,267	\$111,872,141	\$2,820,060	\$3,010,478	\$616,463	\$15,551,294	\$202,511,520	\$87,832,112
2	1,504,928	2,754,100	75,335	98,651	704,438	10,461	1,662,391	15,876	3,517	.....	183,431	2,900,697	1,227,845
3	293,958	637,021	23,576	11,081	186,729	4,742	255,814	17,018	1,141	50	36,870	648,232	387,676
4	812,979	541,576	30,393	10,794	138,992	11,180	309,943	7,282	1,086	.....	25,906	611,428	290,305
5	1,646,086	3,908,463	90,080	72,518	737,599	87,970	2,623,326	91,534	12,596	120	192,410	4,637,010	1,918,714
6	1,018,489	1,711,174	95,550	26,930	624,612	23,696	832,497	29,357	2,574	3,170	72,788	1,906,836	1,050,643
7	687,602	477,353	21,050	6,064	204,426	9,431	204,549	12,376	3,761	1,135	14,561	598,915	384,935
8	6,629,087	4,128,893	199,536	186,478	823,185	169,495	2,234,010	7,413	35,823	72,532	400,421	4,805,295	2,401,780
9	1,762,817	1,036,311	53,500	16,052	323,507	12,592	580,496	2,302	3,724	.....	44,078	1,179,158	580,070
10	1,131,020	2,198,865	44,776	50,567	997,846	17,222	784,463	66,338	9,432	86,759	141,462	2,473,483	1,071,798
11	1,739,171	2,813,969	87,834	123,698	707,032	10,346	1,558,459	48,005	3,057	.....	215,508	3,349,187	1,789,352
12	1,327,876	1,317,505	83,269	36,376	131,464	9,855	827,115	12,450	10,583	.....	256,403	1,634,928	797,958
13	3,611,797	3,729,769	153,582	122,892	1,424,232	52,374	1,747,143	21,291	12,169	5,110	185,976	4,165,663	2,366,136
14	2,161,769	1,821,713	74,495	117,836	765,623	43,034	609,079	15,443	9,482	.....	202,671	2,081,125	1,435,012
15	7,432,789	4,648,049	213,494	446,942	1,515,668	54,661	1,428,179	15,103	16,766	.....	513,906	5,617,320	4,135,866
16	368,623	376,447	23,905	28,026	136,998	8,154	146,716	7,976	1,259	203	23,210	488,606	283,736
17	13,136,490	13,863,588	807,627	508,247	4,227,919	258,895	6,402,232	101,823	49,201	17,679	1,430,465	15,481,898	8,821,271
18	2,176,421	3,997,494	93,010	102,923	1,419,337	80,930	1,992,911	12,018	10,345	90,720	189,294	4,453,132	2,359,291
19	11,937,304	11,066,405	672,594	679,319	2,510,625	34,484	6,205,335	126,563	25,050	13,569	895,366	13,182,340	6,912,521
20	1,364,343	1,493,830	71,152	62,374	382,218	11,860	847,877	30,282	6,820	1,607	80,946	1,665,657	800,420
21	12,837,341	17,112,810	389,947	185,510	2,593,998	219,103	13,197,999	35,000	50,679	27,228	513,906	18,888,046	5,441,874
22	19,928,440	10,019,130	379,256	334,866	1,040,671	182,430	2,616,716	.....	1,951,357	.....	3,513,884	12,361,455	9,592,809
23	1,328,766	1,613,558	58,316	27,515	345,827	12,095	1,064,131	12,015	8,709	20,632	68,918	1,916,178	839,952
24	712,555	725,998	34,830	12,031	249,699	7,673	314,171	7,586	3,196	37,964	58,858	833,583	511,739
25	379,002	629,985	24,130	19,748	131,423	1,842	438,902	5,598	250	.....	11,416	664,404	220,960
26	214,950	361,133	4,390	8,102	103,699	2,012	198,859	3,628	1,474	.....	39,069	404,267	203,396

MANUFACTURES—NEW JERSEY.

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.

NEWARK—Continued.

Table with columns for Industry, Persons Engaged in Industry (Total, Proprietors, Salaried officers, Clerks, Wage earners), and Wage Earners (Number Dec. 15, 16 and over, Under 16, Primary horse-power).

All other industries embrace: Artificial flowers and feathers and plumes, 1; artificial stone, 1; artists' materials, 1; automobiles, including bodies and parts, 6; awnings, tents, and sails, 3; axle grease, 1; babbitt metal and solder, 3; baskets, and rattan and willow ware, 1; belting and hose, leather, 6; belting and hose, woven and rubber, 1; billiard tables and materials, 1; blacking and cleansing and polishing preparations, 11; boxes, cigar, 3; brooms, 2; brushes, 6; canning and preserving, 10; carpets, rag, 1; carriages and sleds, children's, 3; cars and general shop construction and repairs by street-railroad companies, 1; chocolate and cocoa products, 1; clothing, men's, buttonholes, 2; coffee and spice, roasting and grinding, 3; coffins, burial cases, and undertakers' goods, 3; cooperage and wooden goods, not elsewhere specified, 8; cordage and twine and jute and linen goods, 1; cordials and syrups, 1; cork, cutting, 4; corsets, 9; cotton goods, including cotton small wares, 1; dairymen's, poulterers', and spirarists' supplies, 1; dentists' materials, 1; dyeing and finishing textiles, 1; dyestuffs and extracts, 6; electroplating, 7; emery and other abrasive wheels, 2; enameling mill and gristmill products, 1; engraving and die-sinking, 7; engraving, wood, 1; fertilizers, 2; files, 4; flags, banners, regalia, society badges, and emblems, 4; flavoring extracts, 3; flour-fixtures and lamps and reflectors, 6; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 16; glue, 1; gold and silver, leaf and foil, 1; gold and silver, reducing and refining, not from the ore, 6; grease and tallow, 2; hand stamps and stencils and brands, 3; hat and cap materials, 9; hats and caps, other than felt, straw, and wool, 1; hats, straw, 1; hones and whetstones, 1; hosiery and knit goods, 7; house-furnishing goods, not elsewhere specified, 2; ice, manufactured, 3; ink, printing, 3;

PASSAIC.

Summary table for Passaic showing industry counts and values across various categories.

All other industries embrace: Artificial stone, 2; belting and hose, woven and rubber, 2; blacking and cleansing and polishing preparations, 2; boxes, fancy and paper, 1; brass and bronze products, 1; carriages and wagons and materials, 1; chemicals, 1; confectionery, 1; copper, tin, and sheet-iron products, 6; dyeing and finishing textiles, 3; electrical machinery, apparatus, and supplies, 1; flour-mill and gristmill products, 1; food preparations, 3; furnishing goods, men's, 6; gas and electric fixtures and lamps and reflectors, 1; glass, cutting, staining, and ornamenting, 1; hosiery and knit goods, 1; instruments, professional and scientific, 3; jewelry, 1; leather goods, 1; liquors

PATERSON.

Summary table for Paterson showing industry counts and values across various categories.

All other industries embrace: Artificial stone, 7; automobiles, including bodies and parts, 2; awnings, tents, and sails, 4; baskets, and rattan and willow ware, 2; blacking and cleansing and polishing preparations, 2; boots and shoes, including cut stock and findings, 2; boxes, cigar, 1; boxes, fancy and paper, 8; brass and bronze products, 2; brooms, 1; brushes, 1; card cutting and designing, 8; carpets and rugs, other than rag, 1; carpets, rag, 1; carriages and wagons and materials, 3; confectionery, 5; cooperage and wooden goods, not elsewhere specified, 4; copper, tin, and sheet-iron products, 7; cutlery and tools, not elsewhere specified, 1; electroplating, 1; engraving and die-sinking, 1; fancy articles, not elsewhere specified, 1; fertilizers, 1; files, 1; flags, banners, regalia, society badges and emblems, 2; food preparations, 1; fur goods, 3; furniture and refrigerators, 1; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 2; hand stamps and stencils and brands, 1; hats, fur-felt, 3; hosiery

TRENTON.

Summary table for Trenton showing industry counts and values across various categories.

All other industries embrace: Agricultural implements, 1; artificial stone, 2; automobiles, including bodies and parts, 4; bags, other than paper, 1; belting and hose, woven and rubber, 3; bluing, 1; boots and shoes, including cut stock and findings, 1; boxes, cigar, 1; boxes, fancy and paper, 1; brass and bronze products, 3; brick and tile, 3; brooms, 1; brushes, 2; canning and preserving, 2; carriages and wagons and materials, 5; cars and general shop construction and repairs by street-railroad companies, 2; china decorating, 3; clocks and watches, including cases and materials, 1; clothing, women's, 5; coffee and spice, roasting and grinding, 4; cooperage and wooden goods, not elsewhere specified, 7; copper, tin, and sheet-iron products, 9; crucibles, 1; cutlery and tools, not elsewhere specified, 3; electrical machinery, apparatus, and supplies, 3; electroplating, 3; engraving and die-sinking, 1; fertilizers, 1; flour-mill and gristmill

**MANUFACTURES—NEW JERSEY.**

783

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.**

**NEWARK—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.			
27	\$1,087,452	\$1,543,268	\$74,609	\$57,903	\$75,849	\$20,032	\$1,195,444		\$4,450		\$114,981	\$1,613,708	\$398,232
28	6,023,021	6,029,747	261,197	508,508	385,191	68,613	4,198,946		\$26,095		\$300	549,115	2,465,734
29	699,593	1,311,466	117,040	71,547	82,659	6,626	365,534		15,991			670,179	1,338,042
30	4,272,651	3,486,535	179,453	269,996	1,184,208	36,766	1,210,124		86,570		87,623	418,374	4,519,359
31	616,600	610,551	15,030	19,104	74,784	6,652	470,053		600			20,667	691,266
32	889,386	4,134,781	21,970	32,940	187,856	18,298	3,741,434		15,981			111,790	4,296,800
33	2,298,245	2,438,256	41,081	104,912	555,584	7,189	995,803		26,568		271	287,651	1,788,316
34	42,759,156	60,090,852	1,437,930	1,552,317	8,161,727	1,307,654	50,622,190		1,944,108		137,785	3,028,424	73,738,905

ink writing, 1; instruments, professional and scientific, 3; 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, doors and shutters, 1; iron and steel forgings, 3; iron and steel pipe, wrought, 1; jewelry and instrument cases, 9; kaolin and ground earths, 2; lapidary work, 3; lasts, 4; lime, 1; looking-glass and picture frames, 3; malt, 1; mineral and soda waters, 23; mirrors, 2; models and patterns, not including paper patterns, 11; mucilage and paste, 1; musical instruments and materials, not specified, 1; musical instruments, pianos and organs and materials, 1; needles, pins, and hooks and eyes, 2; oilcloth and linoleum, 1; optical goods, 3; paper and wood pulp, 2; paper goods not elsewhere specified, 4; paper patterns, 1; pens, fountain, stylographic, and gold, 1; phonographs and graphophones, 3; photographic apparatus and materials, 2; photo-engraving, 1; pipes, tobacco, 1; pottery, terra-cotta, and fire-clay products, 3; roofing materials, 2; saws, 3; scales and balances, 3; screws, machine, 1; sewing machines, cases, and attachments, 1; shipbuilding, including boat building, 2; shoddy, 1; show cases, 6; silk and silk goods, including throwsters, 2; silverware and plated ware, 2; smelting and refining, copper, 1; smelting and refining, not from the ore, 7; soap, 1; soda-water apparatus, 1; sporting and athletic goods, 4; springs, steel, car and carriage, 2; stationery goods, not elsewhere specified, 2; statutory and art goods, 5; stereotyping and electrotyping, 2; stoves and furnaces, including gas and oil stoves, 1; sulphuric, nitric, and mixed acids, 2; surgical appliances and artificial limbs, 3; toys and games, 2; typewriters and supplies, 3; umbrellas and canes, 1; upholstering materials, 5; vault lights and ventilators, 1; wall plaster, 1; window shades and fixtures, 5; wire, 1; wirework, including wire rope and cable, 6; wood preserving, 2; wood, turned and carved, 7; woolen, worsted, and felt goods, and wool hats, 1.

**PASSAIC.**

1	\$42,840,818	\$35,018,909	\$763,612	\$1,020,343	\$6,268,915	\$606,355	\$23,728,490	\$65,091	\$194,368	\$270,348	\$2,101,387	\$41,729,257	\$17,394,412
2	191,529	455,220	3,360	3,320	91,892	10,693	310,566	13,414	1,491		20,544	553,759	232,560
3	3,529,496	3,485,061	71,536	40,301	543,741	45,076	2,498,711	600	8,245		50,129	226,062	3,953,583
4	709,837	623,254	27,970	62,415	132,013	7,297	310,812	1,390	2,885		5,950	72,522	691,823
5	20,839,322	12,993,332	220,866	325,952	2,752,310	222,178	8,721,390	4,590	55,054		840	690,452	16,531,824
6	17,520,684	17,462,102	440,180	588,355	2,748,959	321,171	11,887,011	45,097	126,693	213,429	1,001,207	10,938,268	7,740,086

distilled, 1; liquors, malt, 1; liquors, vinous, 1; lumber and timber products, 1; marble and stone work, 2; matches, 1; mattresses and spring beds, 2; millinery and lace goods, 6; mineral and soda waters, 5; paint and varnish, 1; paper goods, not elsewhere specified, 1; patent medicines and compounds and druggists' preparations, 1; printing and publishing, 18; pumps, not including steam pumps, 1; roofing materials, 1; silk and silk goods, including throwsters, 4; slaughtering and meat packing, 2; soap, 2; stationery goods, not elsewhere specified, 1; tobacco manufactures, 10; upholstering materials, 1; wood, turned and carved, 2.

**PATERSON.**

1	\$66,401,725	\$62,876,266	\$1,693,568	\$1,287,409	\$15,204,544	\$1,081,057	\$33,646,541	\$1,252,600	\$588,930	\$4,208,511	\$3,015,168	\$69,584,351	\$34,856,753
2	388,484	921,291	2,572	8,114	154,610	19,762	671,880	17,696	3,716			42,941	1,010,715
3	2,219,204	3,378,110	90,113	66,786	827,633	17,295	1,998,857	11,739	4,740		265,286	96,161	3,444,928
4	3,670,722	2,703,063	39,170	39,904	575,952	40,690	1,840,946		24,672		369	201,360	2,704,011
5	663,845	344,870	8,725	18,090	78,156	6,518	197,815	5,840	2,090		3,115	24,521	380,253
6	11,047,733	5,304,783	199,993	120,355	1,831,526	252,380	2,506,304	29,994	23,178			431,003	6,206,830
7	6,594,193	3,171,517	156,588	122,925	1,177,717	68,907	1,466,421	45,681	8,265		2,132	104,611	3,796,568
8	353,161	379,647	14,188	14,105	99,330	2,229	232,201	492	2,707			14,395	420,016
9	644,020	472,143	46,281	26,519	183,485	10,123	148,379	7,820	4,137			34,819	609,770
10	26,440,795	36,083,178	844,915	610,938	8,872,288	314,842	19,205,578	481,772	97,618	3,924,410	2,330,822	40,368,271	20,837,851
11	577,920	2,761,788	42,510	30,290	117,856	18,799	2,510,276	10,612	4,371			27,042	3,063,139
12	169,269	326,627	5,489	4,284	89,686	553	171,652	3,275	35,595			15,993	333,223
13	13,626,329	6,279,399	242,956	225,093	1,196,310	328,959	2,696,372	637,679	350,571		979	591,480	7,226,627

and knit goods, 1; house-furnishing goods, not elsewhere specified, 1; iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills, 1; iron and steel forgings, 1; iron and steel pipe, wrought, 1; jewelry, 1; leather goods, 3; liquors, distilled, 2; liquors, malt, 1; locomotives, not made by railroad companies, 2; looking-glass and picture frames, 4; marble and stone work, 2; mattresses and spring beds, 3; mineral and soda waters, 17; models and patterns, not including paper patterns, 1; musical instruments, pianos and organs and materials, 1; oil, not elsewhere specified, 1; optical goods, 3; paper goods, not elsewhere specified, 2; rubber goods, not elsewhere specified, 1; smelting and refining, not from the ore, 1; soap, 2; steam packing, 2; surgical appliances and artificial limbs, 1; wall paper, 1; wirework, including wire rope and cable, 1; wood distillation, not including turpentine and rosin, 1; wood, turned and carved, 6; woolen, worsted, and felt goods, and wool hats, 2.

**TRENTON.**

1	\$46,838,757	\$43,610,937	\$1,117,554	\$1,114,051	\$9,725,718	\$1,316,571	\$26,355,978	\$101,460	\$363,636	\$108,180	\$3,407,789	\$49,098,715	\$21,336,166
2	496,002	1,089,504	9,056	19,757	187,168	24,678	807,768	9,116	3,433			23,528	1,273,826
3	216,983	354,788	14,815	7,474	56,737	3,650	243,482	2,019	365		13,398	12,843	375,211
4	189,790	290,224	8,690	22,353	42,830	3,779	185,716	5,436	1,209		60	20,091	374,382
5	4,959,361	3,360,008	139,117	138,075	1,090,002	76,021	1,708,850	7,239	22,616			171,738	3,838,381
6	355,450	300,328	14,420	10,041	131,152	5,637	120,520		1,214			38,399	2,063,517
7	8,891,752	6,174,892	298,393	152,524	3,143,166	483,268	1,552,074	9,860	39,791	1,391		494,425	6,995,793
8	641,180	564,591	58,144	22,399	223,222	13,098	175,415	11,386	3,686		16,364	40,967	737,732
9	2,930,339	4,590,030	99,882	76,041	500,896	119,369	3,561,425	31,290	6,005			104,652	4,969,250
10	202,105	694,025	416	4,214	30,084	2,778	538,210	780	1,464			636,120	1,287,995
11	407,806	1,249,152	54,346	38,625	287,126	1,763	597,599	4,696	109,865			155,432	1,528,238
12	27,347,480	25,012,200	420,275	621,648	4,027,365	582,120	16,855,919	19,638	174,228		76,967	2,234,040	27,882,656

products, 2; food preparations, 1; furnishing goods, men's, 1; gas and electric fixtures and lamps and reflectors, 3; hats and caps, other than felt, straw, and wool, 1; hosiery and knit goods, 1; house-furnishing goods, not elsewhere specified, 1; ice, manufactured, 3; iron and steel forgings, 1; jewelry, 1; kaolin and ground earths, 2; liquors, malt, 3; lumber and timber products, 5; marble and stone work, 5; mats and matting, 1; mattresses and spring beds, 2; mineral and soda waters, 6; models and patterns, not including paper patterns, 2; mucilage and paste, 1; musical instruments, pianos and organs and materials, 1; optical goods, 2; patent medicines and compounds and druggists' preparations, 4; shipbuilding, including boat building, 2; smelting and refining, zinc, 1; surgical appliances and artificial limbs, 1; wall plaster, 1; wire, 2; wirework, including wire rope and cable, 1; wood, turned and carved, 2; woolen, worsted, and felt goods, and wool hats, 2.

## MANUFACTURES—NEW JERSEY.

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

CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.					
					Male.	Female.	Total.	Male.	Female.		Under 16.	Male.	Female.	Male.	Female.			
																16 and over.		
1 ASBURY PARK.....	27	332	28	11	21	8	264	258	6	.....	244	238	6	.....	.....	.....	392	
2 ATLANTIC CITY.....	94	973	94	43	77	33	726	703	11	12	680	659	10	11	.....	.....	1,718	
3 BLOOMFIELD.....	45	3,435	35	71	256	116	2,957	1,475	1,390	92	3,205	1,698	1,506	46	65	.....	6,031	
4 BRIDGETON.....	74	2,649	62	61	95	44	2,387	1,647	695	45	3,545	2,445	1,032	68	2	.....	2,105	
5 EAST ORANGE.....	42	1,891	45	21	338	76	1,386	1,042	323	21	1,410	1,060	329	10	11	.....	1,067	
6 GARFIELD.....	25	2,661	20	26	62	23	2,530	1,025	1,412	98	2,879	1,166	1,006	48	59	.....	5,416	
7 HACKENSACK.....	46	873	44	21	52	18	738	627	206	5	878	627	245	4	2	.....	1,021	
8 HARRISON.....	54	7,339	33	120	568	112	6,500	4,471	1,075	54	7,059	4,856	2,145	87	18	.....	8,021	
9 IRVINGTON.....	51	656	40	40	29	7	540	436	76	28	617	498	295	18	14	.....	967	
10 KEARNY.....	18	3,111	14	62	205	10	2,820	2,495	295	30	2,817	2,492	295	15	15	.....	4,879	
11 LONG BRANCH.....	34	562	36	20	35	56	415	260	153	2	411	257	152	2	.....	.....	922	
12 MILLVILLE.....	30	3,144	37	39	241	66	2,761	2,206	411	144	3,400	2,718	605	156	21	.....	3,681	
13 MONTCLAIR.....	23	321	17	15	28	9	252	219	32	1	304	264	39	1	.....	.....	1,245	
14 MORRISTOWN.....	31	278	32	23	16	6	201	177	22	2	225	198	25	2	.....	.....	706	
15 NEW BRUNSWICK.....	93	5,948	72	102	344	166	5,264	2,411	2,711	142	5,377	2,462	2,770	61	84	.....	6,337	
16 ORANGE.....	85	5,054	65	120	395	91	4,383	3,872	745	66	5,617	4,580	653	31	53	.....	5,962	
17 PERTE AMBOY.....	80	6,595	55	155	431	88	5,866	4,364	1,355	147	6,344	4,721	1,402	57	104	.....	22,314	
18 PHILLIPSBURG.....	39	3,753	27	107	158	29	3,432	2,718	640	65	3,751	2,971	710	27	43	.....	7,061	
19 PLAINFIELD.....	60	2,027	55	67	121	26	1,758	1,454	292	12	1,976	1,635	327	10	4	.....	3,912	
20 UNION.....	33	3,155	33	99	65	14	2,894	1,340	1,438	116	2,842	1,315	1,414	41	72	.....	3,034	
21 WEST HOBOKEN.....	137	3,179	154	22	196	25	2,782	1,127	1,541	114	2,938	1,190	1,629	28	91	.....	1,477	
22 WEST NEW YORK.....	66	1,779	70	27	161	13	1,508	770	694	44	1,708	873	785	23	27	.....	1,443	
23 WEST ORANGE.....	10	530	8	14	31	1	476	429	47	.....	698	629	69	.....	.....	.....	1,032	



MANUFACTURES—NEW JERSEY.

785

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

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	\$536,853	\$539,492	\$15,792	\$14,584	\$174,881	\$9,870	\$284,594	\$3,807	\$4,567		\$31,397	\$602,194	\$307,730
2	4,241,805	1,977,401	53,839	56,584	480,413	174,322	961,284	23,169	44,327	\$1,861	181,602	2,259,616	1,124,010
3	7,768,644	5,485,678	132,615	408,175	1,300,533	124,187	2,176,586	11,037	27,365	150	1,255,030	5,894,710	3,593,937
4	3,301,730	3,677,563	106,982	99,889	1,163,297	146,507	1,850,912	6,653	16,818		286,565	4,070,508	2,073,089
5	3,849,230	3,296,385	75,940	188,483	857,979	41,728	1,725,872	9,369	11,408	7,219	378,327	3,724,879	1,957,279
6	8,005,510	7,612,011	120,178	85,039	1,080,245	113,186	5,862,322	2,814	18,808	13,120	316,299	8,893,710	2,918,202
7	1,845,897	1,787,311	53,036	64,868	360,170	26,093	873,247	4,774	5,208	108,942	290,373	1,977,966	1,078,620
8	20,602,053	11,241,701	359,906	565,228	3,672,161	340,623	5,072,850	23,900	188,574	9,952	1,008,507	13,142,377	7,728,904
9	1,405,795	2,806,290	74,375	28,281	277,873	39,409	2,303,592	10,543	4,765	17,407	50,045	3,017,824	674,823
10	6,551,151	7,415,452	65,782	203,350	1,540,345	158,797	5,104,265	2,498	40,391	85	299,969	8,306,276	3,043,214
11	2,362,055	939,960	33,785	40,774	225,408	85,660	498,682	2,697	11,704		41,250	1,116,663	532,321
12	3,677,804	3,823,920	146,800	221,045	1,424,231	228,028	1,371,149	3,866	34,398	70,510	323,884	4,181,824	2,582,647
13	1,104,870	982,042	17,306	26,405	138,761	11,738	656,841	29,056	3,844	2,900	95,191	1,025,585	357,006
14	947,532	594,755	26,060	12,107	130,182	28,598	340,075	7,070	4,444	309	45,310	724,233	355,560
15	11,138,972	8,657,819	327,978	461,588	2,020,439	115,826	4,432,939	37,951	232,240	5,890	1,032,962	10,004,802	5,456,037
16	11,147,977	8,362,617	301,640	470,642	2,462,908	135,480	3,552,952	26,911	92,173	23,945	1,295,966	9,175,910	5,487,478
17	25,100,426	69,109,510	496,431	489,570	2,679,329	713,633	63,218,421	24,304	204,401	34,960	1,248,461	73,062,763	0,160,649
18	9,763,750	7,664,870	185,066	177,059	1,731,531	543,018	4,226,646	1,466	30,035	3,780	766,269	9,150,227	4,380,563
19	6,508,056	3,058,155	143,859	186,698	968,274	67,431	1,462,904	40,758	19,757	3,600	214,874	3,648,745	2,118,410
20	10,910,251	6,827,482	141,664	88,005	1,410,816	109,692	3,428,893	25,653	242,288	133,402	1,247,069	7,941,047	4,402,462
21	4,861,242	4,860,311	63,520	204,410	1,424,927	55,744	2,432,281	44,641	132,095	228,490	274,203	5,577,439	3,089,414
22	4,162,662	8,953,573	81,294	155,294	729,238	80,277	7,328,432	42,401	22,808	253,948	259,881	9,273,717	1,865,008
23	1,904,486	818,150	25,799	18,471	285,454	25,531	373,514	10,104	2,980		76,297	747,684	348,639

# NEW MEXICO.

## INDUSTRIES IN GENERAL.

**General character.**—New Mexico, with an area of 122,460 square miles, is the fourth largest among the 49 states and territories embraced in continental United States, being exceeded in size only by Texas, California, and Montana. Its population in 1910 was 327,301, as compared with 195,310 in 1900 and 160,282 in 1890. It ranked forty-fourth among the 49 states and territories as regards population both in 1910 and in 1900. Manufacturing in the territory is still in its infancy. The mining of coal, copper, gold, and silver are of considerable importance, but the principal pursuits are stock raising and agriculture. Fourteen and two-tenths per cent of the entire population of the territory resides in

incorporated cities and towns having a population of 2,500 inhabitants or over, as against 14 per cent in 1900.

Albuquerque, with a population of 11,020, is the only city in the territory having a population of over 10,000. The territory is very sparsely settled, as is indicated by the fact that its density of population is only 2.7 per square mile.

**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.....	313	199	174	57.3	14.4
Persons engaged in manufactures.....	4,766	3,891	(1)	22.5	-----
Proprietors and firm members.....	288	189	(1)	52.4	-----
Salaried employees.....	335	224	88	49.6	154.5
Wage earners (average number).....	4,143	3,478	2,490	19.1	39.7
Primary horsepower.....	15,465	5,948	3,658	160.0	62.6
Capital.....	\$7,743,000	\$4,638,000	\$2,161,000	66.9	114.6
Expenses.....	7,049,000	5,081,000	3,428,000	38.7	48.2
Services.....	2,974,000	2,417,000	1,290,000	23.0	87.4
Salaries.....	383,000	264,000	91,000	45.1	190.1
Wages.....	2,591,000	2,153,000	1,199,000	20.3	79.6
Materials.....	3,261,000	2,236,000	1,999,000	45.8	11.9
Miscellaneous.....	814,000	428,000	139,000	90.2	207.9
Value of products.....	7,898,000	5,706,000	4,061,000	38.4	40.5
Value added by manufacture (value of products less cost of materials).....	4,637,000	3,470,000	2,062,000	33.6	68.3

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

In 1909 New Mexico had 313 manufacturing establishments, which gave employment to an average of 4,766 persons during the year and paid out \$2,974,000 in salaries and wages. Of the persons employed, 4,143 were wage earners. These establishments turned out products to the value of \$7,898,000, to produce which materials costing \$3,261,000 were consumed. The value added by manufacture was thus \$4,637,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

In general, this table brings out the fact that the manufacturing industries of New Mexico as a whole showed a considerable development during each of the five-year periods 1904-1909 and 1899-1904. Dur-

ing the period 1904-1909 the average number of wage earners increased 19.1 per cent, while the value of products increased 38.4 per cent and the value added by manufacture 33.6 per cent. As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume during the period 1904-1909 to the extent indicated by these figures regarding values, since the increase shown is certainly due, in part, to the increase that has taken place in the price of commodities. It will be noticed that for most of the items the percentages of increase from 1899 to 1904 were larger than those from 1904 to 1909.

The relative importance and growth of the leading manufacturing industries of the territory are shown in the table on page 788.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. <sup>1</sup>			
		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.....	313	4,143	100.0	\$7,898,000	100.0	\$4,637,000	100.0	38.4	40.5	38.6	68.8
Cars and general shop construction and repairs by steam-railroad companies.....	11	1,489	35.9	2,251,000	28.5	1,288,000	27.8	-10.3	134.8	-7.0	123.5
Lumber and timber products.....	76	1,475	35.6	2,162,000	27.4	1,584,000	34.2	50.7	212.6	41.9	257.7
Printing and publishing.....	93	283	6.8	589,000	7.5	468,000	10.1	99.7	49.0	65.0	46.3
Flour-mill and gristmill products.....	16	28	0.7	462,000	5.8	108,000	2.3	19.1	-0.8	42.1	-20.0
Bread and other bakery products.....	32	54	1.3	272,000	3.4	118,000	2.5	78.9	23.6	81.5	-4.4
Ice, manufactured.....	10	50	1.2	144,000	1.8	102,000	2.2	71.4	7.7	50.0	7.9
Brick and tile.....	13	92	2.2	123,000	1.6	81,000	2.0	51.9	5.2	44.4	8.6
All other industries.....	62	672	16.2	1,895,000	24.0	878,000	18.9				

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

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

*Cars and general shop construction and repairs by steam-railroad companies.*—This industry represents the work done in the car shops operated by steam-railroad companies and is exclusive of minor repairs in roundhouses. Although there may be a limited amount of new construction, the operations consist almost exclusively of repairs to the rolling stock and equipment of the companies reporting. Although there was a slight decrease shown in the total value of products from 1904 to 1909, in the latter year these shops gave employment to an average of 1,489 wage earners and reported products to the value of \$2,251,000, a greater number of wage earners and a greater value of products than reported for any other manufacturing industry in the territory.

*Lumber and timber products.*—This industry covers the operations of timber camps, sawmills, and planing mills. It gave employment to 1,475 wage earners in 1909, and the value of its products amounted to \$2,162,000.

*Printing and publishing.*—The majority of the establishments in this industry are small newspaper and job printing offices, and although the number of establishments is in excess of that reported for any other industry, the number of wage earners and value of products are not correspondingly large. Employment was given to an average of but 283 wage earners, and the total value of products was \$589,000.

*Flour-mill and gristmill products.*—There were 16 mills reported for this industry, and as a rule were small and located in the rural districts. They gave employment to an average of 28 wage earners and reported \$462,000 as the value of their products.

Measured by value added by manufacture, these industries held a somewhat different rank than when measured by value of products, the lumber industry becoming first in order instead of steam-railroad repair shops, which, in turn, becomes second, while bakery products becomes fourth in order instead of flour-mill and gristmill manufactures, which, in turn, becomes fifth. Owing to the comparatively simple processes involved in the latter 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 or the number of the establishments.

This table shows also the percentages of increase for the leading industries in respect to value of products and value added by manufacture. Of the specified industries, printing and publishing shows the greatest percentage of increase from 1904 to 1909 both in value of products and in value added by manufacture.

In addition to the seven industries presented separately, there are two important industries included in the group "All other industries." One of these is the manufacture of coke, which ranks among the leading industries of the territory, but for which separate figures can not be given without disclosing individual operations. The other is the manufacture of malt liquors, for which comparative figures are not available for prior years, but the 1909 statistics will be found in Table II.

*Persons engaged in manufacturing industries.*—The table following 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.

The average number of persons engaged in manufactures during 1909 was 4,766. Of these, 4,143 were wage earners, 446 were proprietors and officials, and

177 were clerks. Corresponding figures for individual industries will be found in Table II.

CLASS.	PERSONS ENGAGED IN MANUFACTURES.		
	Total.	Male.	Female.
All classes.....	4,766	4,659	107
Proprietors and officials.....	446	440	6
Proprietors and firm members.....	288	282	6
Salaried officers of corporations.....	41	41	.....
Superintendents and managers.....	117	117	.....
Clerks.....	177	161	16
Wage earners (average number).....	4,143	4,058	85
16 years of age and over.....	4,077	3,995	82
Under 16 years of age.....	66	63	3

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

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All industries.....	4,766	9.4	3.7	86.9
Cars and general shop construction and repairs by steam-railroad companies.....	1,594	2.0	4.6	93.4
Flour-mill and gristmill products.....	48	39.6	2.1	58.3
Lumber and timber products.....	1,620	7.3	1.7	91.0
Printing and publishing.....	436	27.3	7.8	64.9
All other industries.....	1,068	14.8	3.9	81.3

Of the total number of persons engaged in manufacturing industries, 9.4 per cent were proprietors and officials, 3.7 per cent clerks, and 86.9 per cent wage earners. In the flour-mill and gristmill 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 the industry falling in the class of proprietors and officials is very much higher than for other industries or for all industries combined. The smallest proportion for this class is shown for steam-railroad repair shops, and is due to the fact that corporations, to which class these establishments belong, report no proprietors, in addition to which general officials are not as a rule assigned to the supervision of this particular branch of work.

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

INDUSTRY.	Average number. <sup>1</sup>	WAGE EARNERS.		
		Per cent of total.		
		16 years of age and over.		Under 16 years of age.
Male.	Female.			
All industries.....	4,143	96.4	2.0	1.6
Cars and general shop construction and repairs by steam-railroad companies.....	1,489	100.0	.....	.....
Flour-mill and gristmill products.....	28	96.4	.....	3.6
Lumber and timber products.....	1,475	97.3	.....	2.7
Printing and publishing.....	283	80.2	14.8	4.9
All other industries.....	368	94.1	4.0	1.3

<sup>1</sup> 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, 96.4 per cent of the average number of wage earners were males over 16 years of age, 2 per cent females over 16 years of age, and 1.6 per cent persons of both sexes under the age of 16. The largest part of the total number of female wage earners is employed in the printing industry. Of the number of employees in that industry, about one-seventh were females 16 years of age and over.

The printing and publishing industry gave employment to the largest proportionate number of wage earners under 16 years of age.

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.....	4,766	100.0	3,881	100.0	
Proprietors and firm members.....	288	6.0	189	4.9	52.4
Salaried employees.....	335	7.0	224	5.8	49.6
Wage earners (average number).....	4,143	86.9	3,478	80.4	19.1

Comparable figures are not obtainable for 1899. The table shows the percentage of increase in the number of wage earners to be much smaller than the percentages of increase in the number of proprietors and firm members and the salaried employees. This was due largely to the increase in the number of the smaller establishments where the proprietors perform most of the work, requiring few or no employees.

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.)

CLASS.	AVERAGE NUMBER OF WAGE EARNERS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	4,143	100.0	3,478	100.0	2,490	100.0
16 years of age and over.	4,077	98.4	3,440	98.9	2,464	99.0
Male.....	3,995	96.4	3,388	97.4	2,403	96.5
Female.....	82	2.0	82	1.5	61	2.4
Under 16 years of age....	66	1.6	38	1.1	26	1.0

This table indicates that, although the proportion of wage earners under 16 years of age was but 1.1 per cent

of all wage earners in 1904 and 1.6 per cent in 1909, there has been a greater relative increase in their employment than in either males or females over that age. The proportion, however, which each class formed of the total number of wage earners reported at the three censuses shows but little variation.

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 796, is shown, for each industry in the territory, the largest number and the smallest number of employees reported for any month. The number for each month relates to the 15th day, or the nearest representative day, of that 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.....	3,660	79.9	1,311	74.1	814	69.2	497	83.8	2,355	80.9
February.....	3,616	78.8	1,303	73.6	842	71.5	461	77.7	2,313	79.4
March.....	3,775	82.2	1,348	76.2	853	72.5	495	83.5	2,427	83.3
April.....	3,965	86.4	1,388	78.4	890	75.0	498	84.0	2,577	88.5
May.....	4,103	89.4	1,435	81.1	954	81.1	481	81.1	2,608	91.6
June.....	4,142	90.2	1,355	76.6	948	80.5	407	68.6	2,787	95.7
July.....	4,389	95.0	1,488	84.1	1,041	88.4	447	75.4	2,901	99.6
August.....	4,582	98.7	1,620	91.5	1,071	91.0	549	92.6	2,912	100.0
September.....	4,591	100.0	1,770	100.0	1,177	100.0	593	100.0	2,821	96.9
October.....	4,346	94.7	1,590	89.8	1,014	86.2	576	97.1	2,756	94.6
November.....	4,320	94.1	1,606	90.7	1,037	88.1	569	96.0	2,714	93.2
December.....	4,273	93.1	1,486	84.0	930	79.0	556	93.8	2,787	95.7

There is no industry of importance in the territory which is distinctively seasonal, but nevertheless the number of wage earners underwent considerable change from month to month. The last six months of the year showed a larger number employed than during the first six months. The number in February, the lowest month, was 78.8 per cent of the number in September.

The lumber industry is the second industry in the territory in respect to number of wage earners employed; and the variation in this number, which is considerable, affects to some extent the totals for all industries combined. This industry gave employment in 1909 to an average of 1,475 wage earners, or 35.6 per cent of the total number employed in all the industries of the territory. Of these wage earners, an average for the year of 964, or 65.4 per cent, were employed in the mills, and 511, or 34.6 per cent, were employed in the logging branch of the

industry. The maximum number of wage earners, both in the mills and in logging, was reached in the month of September, when 1,177 were employed in the former and 593 in the latter branch of the industry. The smallest number employed in the mills, 814, or 69.2 per cent of the maximum, was in January, and the smallest number employed in logging operations, 407, or 68.6 per cent of the maximum, was in June.

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

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.....	4,143	356	294	280	90	3,074	31	25	48
Bread and other bakery products.....	54	10	.....	7	3	31	.....	8	.....
Brick and tile.....	92	9	.....	18	.....	65	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	1,489	.....	265	34	.....	1,190	.....	.....	.....
Flour-mill and gristmill products.....	28	6	.....	.....	.....	10	12	.....	.....
Ice, manufactured.....	50	.....	.....	.....	.....	3	18	.....	29
Lumber and timber products.....	1,475	148	16	19	.....	1,291	1	.....	.....
Printing and publishing.....	283	141	13	79	18	32	.....	.....	.....
All other industries.....	672	42	.....	73	69	452	.....	22	14

It is evident from these figures that for the great majority of wage earners employed in the manufacturing industries of New Mexico the prevailing hours of labor are 60 a week, or 10 a day, only 23.4 per cent of the total being employed in establishments working less than 10 hours a day, and only 2.4 per cent being employed in establishments working more than 10 hours a day.

The railroad repair shops and the establishments manufacturing lumber and timber products are operated principally on a 10-hour-per-day basis. As these two industries gave employment to more than two-thirds of the wage earners reported for the territory, the prevailing hours of labor reported for them largely determine the prevailing hours shown for all industries combined.

Location of establishments.—The next table shows the extent to which the manufacturing industries of the territory are located in the city of Albuquerque. (See Introduction.)

ITEM.	Year.	Total.	LOCATION OF ESTABLISHMENTS.		PER CENT OF TOTAL.	
			Albuquerque.	Outside districts.	Albuquerque.	Outside districts.
Population.....	1910	327,301	11,020	316,281	3.4	96.6
Number of establishments.....	1909	313	31	282	9.9	90.1
Average number of wage earners.....	1909	4,143	587	3,556	14.2	85.8
Value of products.....	1909	\$7,897,756	\$1,238,340	\$6,609,407	16.3	83.7
Value added by manufacture.....	1909	4,636,713	704,525	3,932,188	15.2	84.8

In 1909, of the total number of establishments 9.9 per cent were located in Albuquerque, 16.3 per cent of the total value of products was reported from this city, and 14.2 per cent of the total average number of wage earners were employed there. As separate statistics for Albuquerque are not available for the censuses of 1904 and 1899, no comparison showing the growth of the manufactures of the city can be made.

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 are only presented for two important industries individually. In order to avoid disclosing the operations of individual concerns, it is necessary to omit two 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.
<b>ALL INDUSTRIES:</b>				
1909.....	313	4,143	\$7,897,756	\$4,636,713
1904.....	199	3,478	5,705,880	3,469,946
Individual:				
1909.....	158	490	1,177,829	747,908
1904.....	109	255	761,825	381,202
Firm:				
1909.....	59	262	466,238	291,508
1904.....	37	119	298,455	189,324
Corporation:				
1909 <sup>1</sup> .....	96	3,382	6,253,689	3,597,297
1904 <sup>1</sup> .....	53	3,104	4,645,600	2,899,420
Per cent of total:				
1909.....	100.0	100.0	100.0	100.0
1904.....	100.0	100.0	100.0	100.0
Individual:				
1909.....	50.5	12.0	14.9	16.1
1904.....	54.8	7.3	13.4	11.0
Firm:				
1909.....	18.8	6.3	5.9	6.3
1904.....	18.6	3.4	5.2	5.5
Corporation:				
1909 <sup>1</sup> .....	30.7	81.6	79.2	77.6
1904 <sup>1</sup> .....	26.6	89.2	81.4	83.6
<b>Lumber and timber products,</b>				
1909.....	76	1,475	\$2,162,396	\$1,584,774
Individual.....	38	258	422,208	352,413
Firm.....	22	174	188,169	144,246
Corporation.....	16	1,043	1,552,019	1,088,115
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	50.0	17.5	19.5	22.2
Firm.....	28.9	11.8	8.7	9.1
Corporation.....	21.1	70.7	71.8	68.7
<b>Printing and publishing, 1909..</b>	93	283	\$588,782	\$467,739
Individual.....	56	94	166,019	131,378
Firm.....	12	25	57,126	45,221
Corporation <sup>1</sup> .....	25	164	365,637	291,140
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	60.2	33.2	28.2	28.1
Firm.....	12.9	8.8	9.7	9.7
Corporation <sup>1</sup> .....	26.9	58.0	62.1	62.2

<sup>1</sup> 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, 30.7 per cent of the total number of establishments were in 1909 under corporate ownership, as against 69.3 per cent under all other forms. The corresponding figures for 1904 were 26.6 per cent and 73.4 per cent, respectively. For all industries combined, as measured by value of products and value added by manufacture, relatively, corporations lost ground to a slight extent.



**Size of establishment.**—The tendency for manufacturing to become concentrated in large establishments or the reverse, is a matter of interest from the standpoint of industrial organization. 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 two 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.
<b>ALL INDUSTRIES:</b>				
1909.....	313	4,143	\$7,897,756	\$4,636,713
1904.....	199	3,478	5,705,880	3,469,946
Less than \$5,000:				
1909.....	143	221	329,109	243,159
1904.....	94	100	212,673	159,787
\$5,000 and less than \$20,000:				
1909.....	114	562	1,088,650	689,587
1904.....	63	269	604,205	378,120
\$20,000 and less than \$100,000:				
1909.....	43	778	1,996,506	1,062,426
1904.....	33	537	1,385,931	724,668
\$100,000 and less than \$1,000,000:				
1909.....	13	2,582	4,483,431	2,641,541
1904 <sup>1</sup> .....	9	2,572	3,503,071	2,207,362
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.....	45.7	5.3	4.2	5.2
1904.....	47.2	2.9	3.7	4.6
\$5,000 and less than \$20,000:				
1909.....	36.4	13.6	13.8	14.9
1904.....	31.7	7.7	10.6	10.9
\$20,000 and less than \$100,000:				
1909.....	13.7	18.8	25.3	22.9
1904.....	16.6	15.4	24.3	20.9
\$100,000 and less than \$1,000,000:				
1909.....	4.2	62.3	56.8	57.0
1904 <sup>1</sup> .....	4.5	74.0	61.4	63.6
Average per establishment:				
1909.....		13	\$25,232	\$14,814
1904.....		17	28,673	17,437
<b>Lumber and timber products,</b>				
1909.....	76	1,475	\$2,182,396	\$1,584,774
Less than \$5,000.....	34	92	77,300	60,093
\$5,000 and less than \$20,000.....	27	223	247,686	189,654
\$20,000 and less than \$100,000.....	10	170	408,299	247,540
\$100,000 and less than \$1,000,000.....	5	990	1,429,111	1,087,487
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	44.7	6.2	3.8	3.8
\$5,000 and less than \$20,000.....	35.5	15.1	11.5	12.0
\$20,000 and less than \$100,000.....	13.2	11.5	18.9	15.6
\$100,000 and less than \$1,000,000.....	6.6	67.1	66.1	68.6
Average per establishment.....		19.0	\$28,453	\$20,852
<b>Printing and publishing, 1909..</b>	93	288	\$588,782	\$487,739
Less than \$5,000.....	63	78	145,055	119,695
\$5,000 and less than \$20,000.....	24	113	205,044	159,714
\$20,000 and less than \$100,000.....	6	92	238,683	188,330
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	67.7	27.6	24.6	25.6
\$5,000 and less than \$20,000.....	25.8	39.9	34.8	34.1
\$20,000 and less than \$100,000.....	6.5	32.5	40.5	40.3
Average per establishment.....		3	\$6,331	\$5,029

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

This table shows that, in 1909, of the 313 establishments, only 13, or 4.2 per cent, had a value of product exceeding \$100,000. These 13 establishments, however, had an average number of wage earners of 2,582, or 62.3 per cent of the total number in all establishments, and reported 56.8 per cent of the total value of

products and 57 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 (45.7 per cent) of the total number of establishments, but the value of their product amounted to only 4.2 per cent of the total. The bulk of the manufacturing was carried on in establishments having a product of not less than \$100,000.

The fact that the average number of wage earners per establishment decreased from 17 in 1904 to 13 in 1909 and the average value of products from \$28,673 to \$25,232 is to be explained, at least in part, by the fact that the increase in the number of establishments from 1904 to 1909 is largely in those establishments having less than \$20,000 worth of products. Out of a total increase of 114 establishments, only 14 reported more than \$20,000 worth of products. The table shows further that when the size of establishments is measured by value of products the printing and publishing industry is conducted mainly in the smaller establishments, and the lumber and timber industry mainly in establishments producing between \$100,000 and \$1,000,000 each.

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 four important industries, and gives not only the number of establishments falling in each group but also the average number of wage earners employed.

The per cent distribution of the number of establishments is not shown in this table; of the 313 establishments reported for all industries combined, 91.7 per cent employed either no wage earners or under 21 wage earners each. The most numerous single group consists of the 202 establishments employing 1 to 5 wage earners, the next being the group employing from 6 to 20 wage earners, with 54 establishments. There were 2 establishments that employed over 250 wage earners; 1 employed over 500.

Of the total number of wage earners, 57.6 per cent were in establishments employing over 100 wage earners. The single group having the largest number of employees was the group employing from 101 to 250 wage earners. This group employed 1,039 wage earners, or 25.1 per cent of the total. The railroad repair shop industry is one in which comparatively large establishments do most of the business, as appears from the classification according to number of wage earners. The reverse is true of the flour-mill and gristmill industry, in which all the establishments employed less than 6 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.....	318	31	202	54	11	6	6	2	1	.....
Cars and general shop construction and repairs by steam-railroad companies.....	11			1	1	4	3	2		.....
Flour-mill and gristmill products.....	16	2	14							.....
Lumber and timber products.....	76		44	24	6		1		1	.....
Printing and publishing.....	93	20	61	11	1					.....
All other industries.....	117	9	83	18	3	2	2			.....
AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	4,143		476	527	367	389	1,039	662	683	.....
Cars and general shop construction and repairs by steam-railroad companies.....	1,489			15	34	269	509	662		.....
Flour-mill and gristmill products.....	28		28							.....
Lumber and timber products.....	1,475		123	246	237		181		683	.....
Printing and publishing.....	233		143	109	28					.....
All other industries.....	368		172	157	70	120	349			.....
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.										
All industries.....	100.0		11.5	12.7	8.9	9.4	25.1	16.0	16.5	.....
Cars and general shop construction and repairs by steam-railroad companies.....	100.0			1.0	2.3	18.1	34.2	44.5		.....
Flour-mill and gristmill products.....	100.0		100.0							.....
Lumber and timber products.....	100.0		8.7	16.7	16.1		12.3		46.3	.....
Printing and publishing.....	100.0		52.3	38.5	9.2					.....
All other industries.....	100.0		19.8	18.1	8.1	13.8	40.2			.....

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 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.....	5.4	36.8	46.3	11.5
Cars and general shop construction and repairs by steam-railroad companies.....	5.2	50.5	42.8	1.4
Flour-mill and gristmill products.....	1.2	4.4	91.1	3.3
Lumber and timber products.....	4.8	37.9	30.6	26.8
Printing and publishing.....	16.0	39.7	27.7	16.5
All other industries.....	4.9	28.3	59.7	9.2

This table shows that, for all industries combined, 46.3 per cent of the total expenses was incurred for materials, 42.2 per cent for services—that is, salaries and wages—and but 11.5 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries.

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

the censuses of 1909, 1904, and 1899. It also shows separately the number and horsepower of electric motors, including those operated by current generated in the manufacturing establishments.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899 <sup>(1)</sup>	1909	1904	1899 <sup>(1)</sup>	1909	1904	1899
Primary power, total.....	348	109	105	15,465	5,948	3,858	100.0	100.0	100.0
Owned.....	206	109	105	12,220	5,680	3,650	79.0	95.5	99.8
Steam engines.....	159	74	85	11,781	5,097	3,283	76.2	85.7	89.7
Gas and oil engines.....	43	23	11	365	114	64	2.4	1.9	1.7
Water wheels.....	4	6	9	74	136	153	0.5	2.3	4.2
Water motors.....		6			13			0.2	
Other.....					320	160		5.4	4.1
Rented.....	142	(?)	(?)	3,245	268	8	21.0	4.5	0.2
Electric motors.....	142	(?)	(?)	3,245	203	8	21.0	3.4	0.2
Other.....		(?)			65			1.1	
Electric motors.....	212	1	(?)	4,536	233	8	100.0	100.0	100.0
Run by current generated by establishment.....	70	1		1,341	30		29.2	12.9	
Run by rented power.....	142	(?)	(?)	3,245	203	8	70.8	87.1	100.0

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

This table shows that the increase in primary power was principally in power generated by steam engines. A slight increase in the number and horsepower of gas engines is also shown. The figures also show that the practice of renting power is greatly on the increase, 21 per cent of the total power being rented in 1909, as compared with but 4.5 per cent in 1904 and with 0.2 per cent in 1899. The use of electric motors for the purpose of applying the power generated within the

establishments is also shown as becoming more common, the horsepower of such motors increasing from 30 in 1904 to 1,341 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. By far the greater part of the fuel used in the territory was consumed in the manufacture of coke and brick and tile, and is included under "All other industries" in the following table, which shows the quantity of each kind of fuel used in 1909.

INDUSTRY.	An-thra-cite coal (tons).	Bitu-minous coal (tons).	Coke (tons).	Wood (cords).	Oil, in-cluding gaso-line (bar-rels).	Gas (1,000 feet).
All industries.....	498	854,622	888	27,447	14,012	225
Cars and general shop construction and repairs by steam-railroad companies.....		40,712	110	20,800	1,944	
Flour-mill and gristmill products.....		1,359		786	91	
Lumber and timber products.....		6,997		5	49	
Printing and publishing.....	42	455		120	159	213
All other industries.....	456	805,399	778	5,780	11,707	12

NOTE.—In addition, there were 2 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 schedule. Data for one of these industries in New Mexico are here presented.

Lumber and timber products.—This industry, which is second in importance in value of products and average number of wage earners, is carried on largely in comparatively small plants, 34 out of the total of 76 establishments having products valued at less than \$5,000 each. The following statement gives the kind and quantity of the principal products of the sawmill branch of the industry for 1909 and 1899:

PRODUCT.	QUANTITY.	
	1909	1899
Rough lumber.....M feet b. m. . . . .	91,987	30,850
Lath.....thousands..	10,571	2,165
Shingles.....thousands..	150	4,800

The table shows a large increase in the production of rough lumber and lath, but a considerable decrease in the quantity of shingles manufactured.

Laundries.—Statistics for steam laundries are not included in the general tables. In 1909 there were eight such establishments in the territory of New Mexico, two of which were in Albuquerque.

The following statement summarizes the statistics:

Number of establishments.....	8
Persons engaged in the industry.....	168
Proprietors and firm members.....	6
Salaried employees.....	16
Wage earners (average number).....	146
Primary horsepower.....	146
Capital.....	\$164,187
Expenses.....	128,344
Services.....	77,698
Materials.....	20,481
Miscellaneous.....	30,165
Amount received for work done.....	156,419

Of the eight establishments reported, four were operated by individuals, three by corporations, and one by a general partnership. Six establishments had receipts for the year's business of \$5,000 but less than \$20,000; and two over \$20,000 but less than \$100,000.

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

MONTH.	WAGE EARNERS.		MONTH.	WAGE EARNERS.	
	Number.	Per cent of maximum.		Number.	Per cent of maximum.
January.....	134	81.7	July.....	148	90.2
February.....	133	81.1	August.....	143	87.2
March.....	139	84.8	September.....	148	90.2
April.....	139	84.8	October.....	164	100.0
May.....	151	92.1	November.....	155	95.1
June.....	148	90.2	December.....	145	88.4

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

KIND.	Number of engines.	Horse-power.
Primary power, total.....		146
Owned—Steam.....	5	87
Rented—Electric.....	11	59

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

KIND.	Unit.	Quantity.
Bituminous coal.....	Tons.....	1,690
Oil.....	Barrels.....	31
Gas.....	1,000 feet.....	33

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

Number of establishments.....	19
Persons engaged in the industry.....	37
Proprietors and firm members.....	29
Wage earners (average number).....	8
Primary horsepower.....	1,255
Capital.....	\$118,509
Expenses.....	118,678
Services.....	3,896
Materials.....	113,179
Miscellaneous.....	1,603
Value of products.....	141,653

<sup>1</sup> Includes estimate of all grain ground.

# MANUFACTURES—NEW MEXICO.

795

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

INDUSTRY AND CITY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaries employees.	Wage earners (average number).							
			Expressed in thousands.										
<b>TERRITORY—All industries.....</b>	1909	313	4,766	288	335	4,143	15,465	\$7,743	\$383	\$2,591	\$3,261	\$7,898	\$4,637
	1904	199	3,891	189	224	3,478	5,948	4,638	264	2,153	2,236	5,706	3,470
	1899	174	.....	.....	88	2,480	3,658	2,161	91	1,189	1,999	4,061	2,062
Bread and other bakery products.....	1909	32	94	37	3	54	26	100	2	43	154	272	118
	1904	27	62	28	1	33	6	64	(1)	21	87	162	65
	1899	18	72	24	6	42	.....	52	4	23	55	123	68
Brick and tile.....	1909	13	112	9	11	92	688	330	13	42	92	123	91
	1904	10	79	11	4	64	163	42	4	31	18	81	63
	1899	10	101	16	4	81	255	30	4	34	19	77	58
Cars and general shop construction and repairs by steam-railroad companies.	1909	11	1,594	.....	105	1,489	3,059	1,652	118	1,138	963	2,251	1,288
	1904	10	1,736	.....	69	1,667	822	937	91	1,229	1,125	2,510	1,385
	1899	7	1,080	.....	19	1,001	760	387	19	555	403	1,069	606
Flour-mill and gristmill products.....	1909	16	48	13	7	28	532	257	5	17	354	462	108
	1904	13	45	14	2	29	399	139	2	14	312	333	76
	1899	16	.....	.....	2	35	.....	167	2	20	296	391	95
Ice, manufactured.....	1909	10	69	4	15	50	1,378	424	16	33	42	144	102
	1904	7	32	5	4	23	452	190	5	20	16	84	68
	1899	4	27	3	2	22	75	118	2	15	15	78	63
Lumber and timber products.....	1909	76	1,620	84	61	1,475	4,885	2,374	90	714	578	2,162	1,584
	1904	31	1,280	32	78	1,170	3,140	1,945	93	565	319	1,435	1,116
	1899	33	.....	.....	9	637	.....	214	6	198	147	459	312
Printing and publishing.....	1909	93	436	84	69	283	1,230	516	70	174	121	589	408
	1904	56	239	55	35	149	103	277	29	93	55	295	240
	1899	35	195	36	17	142	45	163	19	75	34	198	164
All other industries.....	1909	62	793	57	64	672	3,687	2,090	69	430	1,017	1,895	878
	1904	45	418	44	31	343	853	1,044	40	180	304	751	457
	1899	51	.....	.....	29	470	.....	1,030	35	249	970	1,656	696

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

Albuquerque.....	1900	31	686	32	67	537	1,626	\$847	\$71	\$489	\$584	\$1,288	\$704
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<sup>1</sup> Less than \$500.  
<sup>2</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.  
<sup>3</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—NEW MEXICO.

TABLE II.—DETAIL STATEMENT FOR THE

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.				
					Male.	Female.	Average number.	Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	313	4,788	288	168	181	16	4,143	Se 4,591	Fe 3,816	(1)	(1)	(1)	(1)	15,465			
2 Artificial stone.....	4	19	5				14	My <sup>2</sup> 15	No <sup>2</sup> 13	15	15						
3 Bread and other bakery products.....	32	94	37	1			54	Fe <sup>2</sup> 55	Au <sup>2</sup> 53	55	52	2	1				
4 Brick and tile.....	13	112	9	10	1		92	Jy 130	Mh 44	188	184		2				
5 Cars and general shop construction and repairs by steam-railroad companies.....	11	1,594		32	73		1,439	De 1,637	Fe 1,322	1,637	1,637						
6 Flour-mill and gristmill products.....	16	43	13	6	1		28	De 42	My 15	47	46			1			
7 Foundry and machine-shop products.....	4	49	9	1	1		38	No 46	Ja 31	44	44						
8 Ice, manufactured.....	10	69	4	9	6		50	Jy 78	Fe 21	39	30						
9 Jewelry.....	5	17	6				11	Se <sup>2</sup> 12	Mh <sup>2</sup> 9	12	11			1			
10 Lime.....	5	23	3	2			18	My 32	Se <sup>2</sup> 8	32	32						
11 Liquors, malt.....	3	37	1	3	3		30	Jy 44	Ja <sup>2</sup> 21	23	23						
12 Lumber and timber products.....	76	1,620	84	34	23	4	1,475	Se 1,770	Fe 1,303	1,672	1,627		45				
13 Printing and publishing.....	93	436	84	35	26	8	283	De 289	Mh 277	283	227		42	12			
14 All other industries <sup>2</sup> .....	41	648	33	25	27	2	561							2			

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

Brooms.....	2	Carriages and wagons and materials.....	2	Food preparations.....	1
Butter, cheese, and condensed milk.....	2	Coke.....	2	Gas, illuminating and heating.....	2
Canning and preserving.....	1	Copper, tin, and sheet-iron products.....	2	Leather goods.....	1

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

CITY.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	16 and over.			Under 16.	Male.	Female.	Male.	Female.		
								Male.	Female.								
1 ALBUQUERQUE.....	31	686	32	22	40	5	587	576	5	6	632	621	5	6	1,626		

MANUFACTURES—NEW MEXICO.

797

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 \$7,742,617	\$7,048,788	\$288,225	\$145,031	\$2,591,379	\$853,054	\$2,407,989	\$31,386	\$61,512	\$125,405	\$594,817	\$7,897,756	\$4,636,713
2 12,080	27,296	.....	.....	13,090	.....	13,645	125	101	.....	335	31,850	18,205
3 100,160	211,579	900	1,200	42,563	8,346	145,430	5,588	987	100	6,465	272,403	118,627
4 329,771	98,784	12,870	425	41,764	25,911	5,934	105	537	4,200	7,038	122,551	90,706
5 1,652,406	2,250,921	53,542	64,417	1,137,086	41,088	921,740	.....	7,110	.....	25,329	2,250,920	1,288,083
6 250,766	388,392	3,940	600	17,168	11,073	342,817	1,390	2,023	.....	9,381	461,621	107,731
7 109,176	66,882	1,400	1,200	30,538	3,883	26,564	225	481	.....	2,591	71,962	41,515
8 424,336	111,344	10,872	5,166	32,605	32,977	9,124	50	4,155	22	16,373	144,164	102,063
9 13,000	19,768	.....	.....	5,678	284	12,760	744	52	.....	260	24,970	11,926
10 32,200	15,335	1,410	.....	6,700	2,900	2,970	5	50	550	660	18,750	12,790
11 201,743	84,126	3,300	3,480	21,616	9,141	29,577	.....	12,163	.....	4,849	107,101	68,353
12 2,374,496	1,885,834	66,081	23,570	714,022	15,302	582,320	2,454	21,255	119,608	361,222	2,162,396	1,584,774
13 516,469	436,608	41,172	28,677	173,551	9,206	111,837	15,713	4,159	.....	51,368	588,782	467,739
14 1,718,414	1,451,929	42,738	16,296	354,398	692,853	223,262	4,987	8,439	.....	108,956	1,640,286	724,171

\* All other industries embrace—Continued.  
 Mineral and soda waters..... 14 Pottery, terra-cotta, and fire-clay products..... 2 Wall plaster..... 3  
 Patent medicines and compounds and druggists' preparations..... 1 Salt..... 1 Wool scouring..... 3  
 Tobacco manufactures..... 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 \$847,142	\$1,214,456	\$26,523	\$44,696	\$489,169	\$39,988	\$543,836	\$7,685	\$23,141	\$1,015	\$38,403	\$1,288,349	\$704,525



# NEW YORK.

## INDUSTRIES IN GENERAL.

**General character of the state.**—New York, with a gross area of 49,204 square miles, of which 1,550 square miles represent water surface, ranks twenty-ninth in size among the states of the Union. Its population in 1910 was 9,113,614, as compared with 7,268,894 in 1900 and 6,003,174 in 1890. It has ranked first among the states and territories as regards population since 1820. In density of population New York is the fifth state in the Union, having 191.2 persons per square mile in 1910, the corresponding figure for 1900 being 152.5. Seventy-eight and eight-tenths per cent of the entire population of the state in 1910 resided in incorporated places having a population of 2,500 or over, as against 72.9 per cent in 1900.

In 1910 the following 9 cities in the state had a population of over 50,000: New York City, 4,766,883; Buffalo 423,715; Rochester, 218,149; Syracuse, 137,249; Albany 100,253; Yonkers, 79,803; Troy, 76,813; Utica, 74,419; and Schenectady, 72,826. There were also 42 cities and villages having a population of over 10,000 but less than 50,000.<sup>1</sup> The 51 cities and villages having more than 10,000 inhabitants contained 74.3 per cent of the total population of the state, while only 4.5 per cent resided in incorporated places having between 2,500 and 10,000 inhabitants.

The geographic position and topography of New York, as well as the abundant natural wealth of its fields, forests, mines, and quarries, have contributed to its industrial development and have been instrumental in making it the leading manufacturing state of the Union. The Mohawk, upper Hudson, Black, and Genesee Rivers and Niagara Falls furnish the major part of the water power, which, either directly or through the agency of transmitted electric current, serves a large percentage of the manufacturing establishments of the state. The Hudson River, the Erie Canal, connecting Lake Erie with the Hudson River, and a system of canals which connect Lake Ontario with the Erie Canal and Lake Champlain with the Hudson River, form a network of inland waterways for the exchange of various commodities within the state and furnish excellent communication by water from Duluth and Chicago in the West and from various points in Canada on the north to New York City, thereby affording an outlet for coastwise and foreign commerce through the most important seaport in the United States. A large majority of the commercial and manufacturing centers of the state are located on

these waterways or on the connecting waterways which border the state. The 8,448 miles<sup>2</sup> of steam-railway trackage within the state also afford excellent transportation facilities.

**Importance and growth of manufactures.**—Although New York has important interests in agriculture and mining, its predominance is most marked in manufacturing. Since the completion of the Erie Canal in 1825, New York has held the foremost rank in this respect, though since 1849, when the first authoritative census of manufactures was taken, the proportion which the state has contributed to the total value of manufactured products in the entire United States has decreased somewhat. This proportion was 23.3 per cent in 1849 and only 16.3 per cent in 1909.

In 1849 the total value of the manufactured products of New York, including those of the neighborhood and hand industries, amounted to \$237,597,249, while in 1909, exclusive of the value of the products of the neighborhood and hand industries, it reached a total of \$3,369,490,192, or more than fourteen times that in 1849. During the same period the population of the state increased 194.2 per cent. In 1849 an average of 199,349 wage earners, representing 6.4 per cent of the total population were employed in manufactures, while in 1909 an average of 1,003,981 wage earners, or 11 per cent of the total population, were so engaged. During this period the gross value of products per capita of the total population of the state increased from \$77 to \$370.

The table on page 800 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 New York had 44,935 manufacturing establishments, which gave employment to an average of 1,203,241 persons during the year and paid out \$743,263,000 in salaries and wages. Of the persons employed, 1,003,981 were wage earners. These establishments turned out products to the value of \$3,369,490,000, to produce which materials costing \$1,856,904,000 were utilized. The value added by manufacture was thus \$1,512,586,000, which figure, as explained in the Introduction, best represents the net wealth created by manufacturing operations during the year.

The totals presented in the table on page 800 do not include the statistics for five establishments operated by

<sup>1</sup> For the names and the population of these cities and villages, see the table on p. 814.

<sup>2</sup> Interstate Commerce Commission, Statistics of Railways in the United States, 1909.

the Federal Government—the United States Naval Clothing Factory and the United States navy yard at Brooklyn, the United States Lighthouse Establishment at Tompkinsville, the Watervliet Arsenal, and the West Point gas plant. In 1909 these plants employed an average of 4,095 wage earners and reported products valued at \$9,330,918.

In general, this table shows that the manufacturing industries of New York as a whole developed at about the same rate during each of the two five-year periods covered by the table. The earlier five-year period, 1899–1904, shows the larger percentages of increase in value added by manufacture and in number of wage

earners, but the later period, 1904–1909, shows the greater gains in number of establishments and in value of products. During this latter period the number of establishments increased 20.8 per cent and the average number of wage earners 17.2 per cent, while the value of products increased 35.4 per cent and the value added by manufacture 32.7 per cent.

As pointed out in the Introduction, it would be improper to infer that manufactures increased in volume to the full extent indicated by these figures relating to values, since the increase shown is certainly due, in part, to the increase that has taken place in the prices of commodities.

	NUMBER OR AMOUNT.			PER CENT OF INCREASE.	
	1909	1904	1899	1904–1909	1899–1904
Number of establishments.....	44,935	37,194	35,957	20.8	3.4
Persons engaged in manufactures.....	1,203,241	996,725	(1)	20.7	.....
Proprietors and firm members.....	47,569	41,766	(1)	13.9	.....
Salaried employees.....	151,691	98,012	68,030	54.8	44.1
Wage earners (average number).....	1,003,981	856,947	726,909	17.2	17.9
Primary horsepower.....	1,997,662	1,516,592	1,099,931	31.7	37.9
Capital.....	\$2,779,497,000	\$2,031,460,000	\$1,523,503,000	36.8	33.3
Expenses.....	2,986,241,000	2,191,339,000	1,617,605,000	36.3	35.5
Services.....	743,263,000	541,160,000	414,064,000	37.3	30.7
Salaries.....	186,032,000	111,145,000	76,740,000	67.4	44.8
Wages.....	557,231,000	430,015,000	337,324,000	29.6	27.5
Materials.....	1,856,904,000	1,348,603,000	1,018,377,000	37.7	32.4
Miscellaneous.....	386,074,000	301,576,000	185,164,000	28.0	62.9
Value of products.....	3,369,490,000	2,488,346,000	1,871,831,000	35.4	32.9
Value added by manufacture (value of products less cost of materials).....	1,512,586,000	1,139,743,000	853,454,000	32.7	33.5

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

The relative importance and growth of the leading manufacturing industries of the state are shown in the table on pages 801 and 802.

It should be borne in mind, in considering that 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.

The table referred to gives separate statistics for 139 industries or industry groups for which products valued at more than \$1,000,000 were reported in 1909. These industries include 12, with products exceeding \$50,000,000 in value; 20, with products between \$25,000,000 and \$50,000,000 in value; and 26, with products between \$10,000,000 and \$25,000,000, making an aggregate of 58 industries with a value of products in excess of \$10,000,000 each. The other industries shown separately comprise 30 with products between \$5,000,000 and \$10,000,000 in value, and 51 with products between \$1,000,000 and \$5,000,000.

In addition to the industries presented separately in the table, there were 32 other industries in the state which reported products in 1909 to the value of \$1,000,000 or over, comprising 5, with products exceeding \$10,000,000 in value; 2, with products between \$5,000,000 and \$10,000,000 in value; and 25, with products between \$1,000,000 and \$5,000,000 in value. These industries are included under the head

of "All other industries" in the table, in some instances, because the operations of individual establishments would be disclosed if they were shown separately; in others, because 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 others, because comparative statistics can not be presented for either 1904 or 1899 on account of changes in classification or because such figures would disclose the operations of individual establishments.<sup>1</sup> Of the industries which are not presented separately in this table, the refining of cane sugar is of special importance, as New York contributed over one-third of the total value of products for the industry in 1909. The 1909 statistics for the manufacture of moving pictures and of signs and advertising novelties are presented separately in Table II, page 878.

<sup>1</sup> These industries are:

Awnings, tents, and sails.  
Baking powders and yeast.  
Belting and hose, woven and rubber.  
Billiard tables and materials.  
Coke.  
Flavoring extracts.  
Glucose and starch.  
Glue.  
Grease and tallow.  
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.  
Iron and steel, doors and shutters.  
Iron and steel forgings.  
Labels and tags.  
Liquors, distilled.  
Locomotives, not made by railroad companies.

Matches.  
Mineral and soda waters.  
Moving pictures.  
Mucilage and paste.  
Oil, not elsewhere specified.  
Paving materials.  
Pencils, lead.  
Petroleum, refining.  
Roofing materials.  
Signs and advertising novelties.  
Smelting and refining, copper.  
Sporting and athletic goods.  
Sugar refining, not including beet sugar.  
Sulphuric, nitric, and mixed acids.  
Tin foil.  
Upholstering materials.  
Waste.

MANUFACTURES—NEW YORK.

801

There are a large number of industries in New York which are of considerable importance, not only in the state, but in the United States. Furthermore, it will be seen from the following table, or still more clearly from Table II, where figures are given separately for an even larger number of industries, that there is a

wide diversity in the manufacturing activities of the state. With the exception of Pennsylvania, the diversity is greater in New York than in any other state in the Union. Of the 264 classifications used in the presentation of the 1909 manufactures, statistics for the country as a whole, 243 were represented in New York.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. <sup>1</sup>			
		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.....	44,935	1,003,981	100.0	\$3,369,490,000	100.0	\$1,512,568,000	100.0	35.4	32.9	32.7	33.5
Clothing, women's.....	3,083	98,104	9.8	272,518,000	8.1	124,376,000	8.2	57.0	62.4	52.0	63.5
Clothing, men's, including shirts.....	2,983	91,363	9.1	266,075,000	7.9	130,748,000	8.6	42.0	25.9	41.3	25.4
Printing and publishing.....	4,426	63,120	6.3	216,946,000	6.4	160,452,000	10.6	31.6	39.6	28.0	44.0
Foundry and machine-shop products.....	1,872	64,066	6.4	154,370,000	4.6	92,749,000	6.1	20.7	-0.2	18.2	11.7
Slaughtering and meat packing.....	238	6,110	0.6	127,130,000	3.8	16,962,000	1.1	68.3	29.4	93.4	21.3
Bread and other bakery products.....	3,978	21,357	2.1	86,233,000	2.6	33,495,000	2.2	41.3	41.8	35.9	26.4
Liquors, malt.....	184	8,731	0.9	77,720,000	2.3	58,837,000	3.9	25.4	10.4	27.6	3.1
Tobacco manufactures.....	3,371	30,019	3.0	76,662,000	2.3	45,321,000	3.0	16.9	22.2	12.3	16.8
Lumber and timber products.....	2,263	27,471	2.7	72,530,000	2.2	30,825,000	2.0	17.6	16.9	5.5	30.9
Flour-mill and gristmill products.....	983	2,990	0.3	99,802,000	2.1	9,332,000	0.6	28.0	51.8	30.1	47.2
Hosiery and knit goods.....	360	35,950	3.6	67,130,000	2.0	28,453,000	1.9	44.9	28.6	57.1	14.9
Millinery and lace goods.....	931	21,078	2.1	52,106,000	1.5	24,971,000	1.6	58.6	55.1	56.5	61.8
Electrical machinery, apparatus, and supplies.....	217	18,972	1.9	49,290,000	1.5	21,807,000	1.4	39.4	55.8	24.6	72.3
Paper and wood pulp.....	178	12,973	1.2	48,800,000	1.4	17,093,000	1.1	29.4	41.3	14.4	23.0
Boots and shoes, including out stock and findings.....	296	21,627	2.2	48,186,000	1.4	19,211,000	1.3	28.4	33.4	27.0	39.9
Butter, cheese, and condensed milk.....	1,552	2,860	0.3	42,458,000	1.3	6,297,000	0.4	36.7	16.9	48.0	4.5
Gas, illuminating and heating.....	141	6,422	0.6	42,347,000	1.3	27,329,000	1.8	19.9	68.8	12.1	61.9
Furnishing goods, men's.....	375	18,186	1.8	42,197,000	1.3	20,621,000	1.4	48.8	.....	40.6	.....
Furniture and refrigerators.....	676	20,281	2.0	41,923,000	1.2	22,773,000	1.5	43.0	18.9	34.3	18.7
Fur goods.....	863	8,244	0.8	41,301,000	1.2	17,161,000	1.1	57.4	65.8	55.9	55.1
Iron and steel, steel works and rolling mills.....	25	10,091	1.0	39,532,000	1.2	13,643,000	0.9	89.2	140.9	71.2	71.6
Copper, tin, and sheet-iron products.....	686	14,689	1.5	38,452,000	1.1	17,417,000	1.2	40.8	41.6	27.1	36.2
Patent medicines and compounds and druggists' preparations.....	743	4,728	0.5	37,343,000	1.1	24,754,000	1.6	30.4	7.9	24.8	21.0
Chemicals.....	74	5,746	0.6	35,346,000	1.0	16,637,000	1.0	53.5	43.9	55.4	37.4
Musical instruments, pianos and organs and materials.....	184	11,938	1.2	33,680,000	1.0	16,185,000	1.1	44.0	58.6	30.1	52.0
Automobiles, including bodies and parts.....	113	9,861	1.0	30,980,000	0.9	16,972,000	1.1	627.2	834.2	583.0	731.4
Paint and varnish.....	147	3,047	0.3	28,659,000	0.8	10,664,000	0.7	13.7	33.1	29.2	25.4
Leather, tanned, curried, and finished.....	109	5,688	0.6	27,642,933	0.8	6,701,000	0.4	27.7	-6.7	24.8	-7.2
Iron and steel, blast furnaces.....	9	2,298	0.2	26,621,000	0.8	5,704,000	0.4	208.3	71.1	152.3	47.0
Silk and silk goods, including throwsters.....	170	12,903	1.3	20,519,000	0.8	12,570,000	0.8	31.4	58.8	29.7	57.9
Carpets and rugs, other than rag.....	16	11,898	1.2	25,606,000	0.8	12,291,000	0.8	32.0	29.1	48.6	12.6
Confectionery.....	249	8,570	0.9	25,540,000	0.8	9,896,000	0.7	40.0	34.0	29.0	41.5
Woolen, worsted, and felt goods, and wool hats.....	64	9,460	0.9	23,738,000	0.7	8,995,000	0.6	21.9	23.4	2.7	23.4
Soap.....	67	2,976	0.3	29,583,000	0.7	7,971,000	0.5	76.0	.....	59.7	.....
Brass and bronze products.....	247	6,651	0.7	22,184,000	0.7	9,045,000	0.6	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	69	16,454	1.6	21,726,000	0.6	11,638,000	0.8	21.5	10.4	27.8	24.5
Artificial flowers and feathers and plumes.....	319	8,493	0.8	21,162,000	0.6	8,904,000	0.6	429.4	-20.3	251.4	-10.0
Leather goods.....	483	7,586	0.8	20,997,000	0.6	9,365,000	0.6	21.9	42.5	19.2	41.3
Jewelry.....	479	5,379	0.5	20,363,000	0.6	9,930,000	0.7	64.8	20.6	59.2	29.4
Cotton goods, including cotton small wares.....	47	10,663	1.1	20,352,000	0.6	8,626,000	0.6	51.5	24.5	80.1	-5.5
Canning and preserving.....	790	7,075	0.7	19,040,000	0.6	7,371,000	0.5	13.2	34.5	5.4	46.6
Photographic apparatus and materials.....	42	4,088	0.4	18,764,000	0.6	13,797,000	0.9	97.0	127.4	103.5	187.0
Marble and stone work.....	655	6,939	0.7	17,921,000	0.5	10,845,000	0.7	10.1	11.9	2.9	16.8
Coffee and spices, roasting and grinding.....	90	1,519	0.2	17,430,000	0.5	4,776,000	0.3	-35.4	20.1	11.5	-1.3
Food preparations.....	177	3,023	0.3	17,324,000	0.5	7,664,000	0.5	51.9	50.4	61.6	49.9
Oil, linseed.....	6	566	0.1	15,392,000	0.5	2,764,000	0.2	55.4	17.6	58.9	109.3
Agricultural implements.....	57	5,717	0.6	14,971,000	0.4	8,556,000	0.6	14.8	23.8	16.1	29.0
Gloves and mittens, leather.....	225	6,287	0.6	14,336,000	0.4	6,313,000	0.4	44.1	-8.3	48.5	-6.1
Boxes, fancy and paper.....	315	11,538	1.1	14,234,000	0.4	8,121,000	0.5	11.7	52.1	13.0	42.8
Carriages and wagons and materials.....	610	6,116	0.6	13,298,000	0.4	7,484,000	0.5	-9.2	4.6	-11.4	4.4
Gas and electric fixtures and lamps and reflectors.....	183	6,017	0.6	13,010,000	0.4	7,598,000	0.5	45.2	44.4	42.1	38.9
Cordage and twine and jute and linen goods.....	16	5,952	0.6	12,215,000	0.4	4,626,000	0.3	-23.0	35.9	-12.0	26.4
Paper goods, not elsewhere specified.....	107	4,303	0.4	12,111,000	0.4	5,325,000	0.4	59.7	24.8	57.6	26.5
Shipbuilding, including boat building.....	255	5,644	0.6	11,417,000	0.3	7,492,000	0.5	1.3	30.3	9.0	31.5
Malt.....	32	524	0.1	11,051,000	0.3	2,179,000	0.1	57.0	27.1	80.9	25.5
Typewriters and supplies.....	43	4,538	0.5	10,298,000	0.3	8,417,000	0.6	92.4	40.0	87.5	42.9
Hats, fur-felt.....	44	5,013	0.5	10,219,000	0.3	4,813,000	0.3	32.0	38.2	12.9	42.3
Wire.....	7	1,439	0.1	10,065,000	0.3	2,241,000	0.1	7.1	4,745.0	60.5	3,002.2
Dyeing and finishing textiles.....	81	5,252	0.5	9,673,000	0.3	5,534,000	0.4	121.8	20.3	83.1	35.9
Buttons.....	165	6,126	0.6	9,373,000	0.3	5,205,000	0.3	143.5	62.3	120.5	65.3
Smelting and refining, not from the ore.....	15	284	(?)	9,018,000	0.3	751,000	(?)	74.1	141.6	61.9	-30.6
Stoves and furnaces, including gas and oil stoves.....	58	4,247	0.4	8,974,000	0.3	5,432,000	0.4	62.4	.....	51.4	.....
Rubber goods, not elsewhere specified.....	53	2,060	0.2	8,784,000	0.3	3,125,000	0.2	6.3	55.8	-4.3	41.6
Lapidary work.....	43	499	(?)	8,689,000	0.3	2,341,000	0.2	17.3	34.2	82.5	30.1
Brick and tile.....	205	8,080	0.8	8,433,000	0.2	6,716,000	0.4	13.5	30.7	10.8	32.5
Fancy articles, not elsewhere specified.....	182	3,490	0.3	7,862,000	0.2	4,541,000	0.3	54.6	21.0	51.1	24.3
Hair work.....	132	2,313	0.2	7,861,000	0.2	3,361,000	0.2	676.8	25.2	515.6	6.0
Silverware and plated ware.....	53	3,065	0.3	7,859,000	0.2	4,270,000	0.3	19.4	23.1	21.3	14.1
Hats and caps, other than felt, straw, and wool.....	244	3,348	0.3	7,826,000	0.2	3,951,000	0.3	13.6	-17.5	10.3	-11.6
House-furnishing goods, not elsewhere specified.....	99	1,812	0.2	7,789,000	0.2	2,099,000	0.1	22.2	14.3	11.7	22.3

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

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

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		PER CENT OF INCREASE. <sup>1</sup>			
		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
Hats, straw.....	46	2,508	0.2	\$7,617,000	0.2	\$3,624,000	0.2	190.2	.....	186.3	.....
Cooperage and wooden goods, not elsewhere specified..	364	2,611	0.3	7,520,000	0.2	2,595,000	0.2	0.4	32.7	-3.3	17.9
Cars and general shop construction and repairs by street-railroad companies.....	62	4,480	0.4	6,640,000	0.2	3,460,000	0.2	71.1	10.4	34.0	23.9
Umbrellas and canes.....	142	1,919	0.2	6,427,000	0.2	2,290,000	0.2	35.4	-9.8	23.8	2.9
Belting and hose, leather.....	28	604	0.1	6,420,000	0.2	2,319,000	0.2	11.7	74.6	16.8	122.3
Brooms and brushes.....	171	2,897	0.3	6,290,000	0.2	3,110,000	0.2	16.4	24.6	21.8	23.4
Cutlery and tools, not elsewhere specified.....	161	4,478	0.4	6,218,000	0.2	4,365,000	0.3	35.8	81.8	31.3	81.0
Clocks and watches, including cases and materials.....	27	2,467	0.2	6,184,000	0.2	3,903,000	0.3	50.1	-16.5	106.9	-5.9
Babbitt metal and solder.....	24	192	( <sup>2</sup> )	6,123,000	0.2	1,082,000	0.1	23.3	61.4	59.6	84.1
Cars, steam-railroad, not including operations of railroad companies.....	4	2,887	0.2	5,940,000	0.2	2,514,000	0.2	39.7	-18.7	68.0	0.9
Mattresses and spring beds.....	168	1,621	0.2	5,899,000	0.2	2,488,000	0.2	28.7	24.3	37.5	4.4
Wirework, including wire rope and cable.....	106	1,649	0.2	5,875,000	0.2	2,000,000	0.1	61.4	50.1	-5.5	78.0
Chocolate and cocoa products.....	10	755	0.1	5,823,000	0.2	1,656,000	0.1	42.8	50.2	17.9	86.0
Bags, paper.....	20	1,032	0.1	5,613,000	0.2	1,680,000	0.1	96.4	68.6	57.6	85.1
Window shades and fixtures.....	76	911	0.1	5,476,000	0.2	1,530,000	0.1	89.9	-2.1	72.1	11.5
Wall paper.....	13	1,602	0.2	5,277,000	0.2	2,803,000	0.2	-5.7	16.3	( <sup>2</sup> )	23.0
Corsets.....	47	2,436	0.2	5,161,000	0.2	2,677,000	0.2	208.1	4.4	163.0	22.3
Dentists' materials.....	15	266	( <sup>2</sup> )	5,114,000	0.2	537,000	( <sup>2</sup> )	40.1	505.1	-42.1	201.6
Bags, other than paper.....	21	1,000	0.1	4,986,000	0.1	870,000	0.1	36.7	62.1	36.8	16.2
Glass, cutting, staining, and ornamenting.....	156	3,118	0.3	4,847,000	0.1	3,178,000	0.2	14.0	16.5	8.3	30.3
Glass.....	24	3,114	0.3	4,599,000	0.1	3,350,000	0.2	5.4	55.2	16.8	54.4
Dyestuffs and extracts.....	18	418	( <sup>2</sup> )	4,505,000	0.1	1,635,000	0.1	66.5	28.1	55.4	24.3
Wall plaster.....	31	1,387	0.1	4,494,000	0.1	2,060,000	0.1	20.3	.....	26.1	.....
Fertilizers.....	15	968	0.1	4,251,000	0.1	1,506,000	0.1	104.2	-33.9	113.4	-39.6
Dairymen's, poultryers', and apiculturists' supplies.....	31	802	0.1	4,213,000	0.1	2,928,000	0.2	67.8	.....	130.6	.....
Ink, printing.....	29	525	0.1	4,059,000	0.1	2,181,000	0.1	75.0	63.6	79.2	68.3
Optical goods.....	51	2,047	0.2	3,996,000	0.1	2,771,000	0.2	113.7	6.2	132.5	-0.2
Blackening and cleansing and polishing preparations.....	88	658	0.1	3,836,000	0.1	2,009,000	0.1	41.1	42.1	54.4	84.8
Hat and cap materials.....	32	965	0.1	3,835,000	0.1	1,060,000	0.1	13.4	93.1	0.3	113.5
Ice, manufactured.....	89	1,124	0.1	3,808,000	0.1	2,764,000	0.2	117.7	66.4	135.8	49.9
Coffins, burial cases, and undertakers' goods.....	34	1,235	0.1	3,785,000	0.1	1,714,000	0.1	2.9	36.1	-4.4	28.2
Steam packing.....	36	901	0.1	3,783,000	0.1	1,812,000	0.1	61.0	270.5	27.1	336.1
Looking-glass and picture frames.....	140	1,491	0.1	3,555,000	0.1	2,092,000	0.1	28.2	-10.7	14.5	0.1
Oilcloth and linoleum.....	4	1,102	0.1	3,522,000	0.1	1,356,000	0.1	.....	.....	.....	.....
Pottery, terra-cotta, and fire-clay products.....	39	2,367	0.2	3,403,000	0.1	2,528,000	0.2	3.5	37.7	4.6	20.5
Wood distillation, not including turpentine and rosin..	29	503	0.1	3,402,000	0.1	883,000	0.1	1.3	.....	0.7	.....
Stationery goods, not elsewhere specified.....	55	1,243	0.1	3,344,000	0.1	1,734,000	0.1	32.1	18.2	19.3	16.5
Instruments, professional and scientific.....	87	1,964	0.2	3,308,000	0.1	2,333,000	0.2	62.0	23.2	50.6	27.0
Mirrors.....	47	983	0.1	3,262,000	0.1	1,263,000	0.1	12.8	-26.7	25.0	-30.1
Pens, fountain, stylographic, and gold.....	30	730	0.1	3,219,000	0.1	1,656,000	0.1	65.5	64.6	54.9	56.7
Pipes, tobacco.....	30	1,663	0.2	3,212,000	0.1	1,780,000	0.1	70.8	11.2	86.0	8.4
Photo-engraving.....	66	1,395	0.1	2,908,000	0.1	2,353,000	0.2	46.3	68.6	40.4	64.9
Salt.....	33	1,625	0.2	2,897,000	0.1	1,702,000	0.1	-8.5	17.3	-14.1	13.8
Gold and silver, reducing and refining, not from the ore.	10	42	( <sup>2</sup> )	2,603,000	0.1	207,000	( <sup>2</sup> )	-31.1	-16.6	137.9	-59.3
Emery and other abrasive wheels.....	10	719	0.1	2,561,000	0.1	1,481,000	0.1	3,360.8	.....	2,642.6	.....
Cordials and syrups.....	38	294	( <sup>2</sup> )	2,513,000	0.1	1,023,000	0.1	127.4	250.9	143.0	198.6
Models and patterns, not including paper patterns.....	136	1,082	0.1	2,461,000	0.1	1,841,000	0.1	95.2	28.2	96.1	24.5
Wood, turned and carved.....	159	1,279	0.1	2,422,000	0.1	1,503,000	0.1	86.5	-15.6	74.8	16.5
Cement.....	15	1,443	0.1	2,409,000	0.1	1,609,000	0.1	-23.2	.....	-24.2	.....
Firearms and ammunition.....	8	1,781	0.2	2,374,000	0.1	1,866,000	0.1	37.5	-12.3	33.5	-7.5
Vinegar and cider.....	277	529	0.1	2,246,000	0.1	766,000	( <sup>2</sup> )	17.5	50.1	-16.2	66.8
Boxes, cigar.....	56	1,531	0.2	2,234,000	0.1	1,108,000	0.1	-4.7	52.5	-10.4	59.2
Stereotyping and electrotyping.....	47	905	0.1	2,228,000	0.1	1,602,000	0.1	39.0	46.5	29.7	42.8
Paper patterns.....	16	761	0.1	2,166,000	0.1	1,648,000	0.1	-3.4	476.3	-14.0	532.4
Lead, bar, pipe, and sheet.....	9	185	( <sup>2</sup> )	2,069,000	0.1	848,000	0.1	-37.0	85.3	-16.3	36.8
Baskets, and rattan and willow ware.....	169	1,237	0.1	1,947,000	0.1	1,127,000	0.1	-0.1	94.5	-13.2	121.5
Flags, banners, regalia, society badges, and emblems.....	64	813	0.1	1,864,000	0.1	972,000	0.1	93.4	4.7	100.8	8.3
Toys and games.....	67	1,197	0.1	1,849,000	0.1	1,002,000	0.1	12.5	90.1	19.9	60.2
Cork, cutting.....	32	835	0.1	1,817,000	( <sup>2</sup> )	647,000	( <sup>2</sup> )	171.2	43.5	102.2	81.8
Liquors, vinous.....	41	271	( <sup>2</sup> )	1,817,000	( <sup>2</sup> )	1,036,000	0.1	-19.2	138.5	-21.6	136.1
Jewelry and instrument cases.....	67	1,172	0.1	1,781,000	( <sup>2</sup> )	1,103,000	0.1	24.4	89.4	25.5	80.9
Candles.....	9	347	( <sup>2</sup> )	1,670,000	( <sup>2</sup> )	571,000	( <sup>2</sup> )	25.4	.....	43.1	.....
Surgical appliances and artificial limbs.....	72	464	( <sup>2</sup> )	1,490,000	( <sup>2</sup> )	983,000	0.1	23.1	40.2	10.2	32.7
Artificial stone.....	176	711	0.1	1,357,000	( <sup>2</sup> )	834,000	0.1	45.9	.....	28.7	.....
Furs, dressed.....	52	755	0.1	1,240,000	( <sup>2</sup> )	968,000	0.1	-11.4	80.2	-4.8	81.9
Scales and balances.....	16	453	( <sup>2</sup> )	1,180,000	( <sup>2</sup> )	760,000	( <sup>2</sup> )	36.6	19.8	26.7	19.0
Bicycles, motorcycles, and parts.....	20	558	0.1	1,165,000	( <sup>2</sup> )	643,000	( <sup>2</sup> )	53.5	-30.2	56.1	-79.3
Electroplating.....	130	652	0.1	1,116,000	( <sup>2</sup> )	874,000	0.1	-5.8	3.0	6.6	9.9
Cloth, sponging and refinishing.....	25	604	0.1	1,030,000	( <sup>2</sup> )	970,000	0.1	37.5	95.1	34.2	93.8
All other industries.....	2,262	40,369	4.0	314,400,000	9.3	78,300,000	5.2	.....	.....	.....	.....

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

Some of the most important of the industries listed in the above table, together with certain groups of industries formed by combining two or more of those shown in the tables, are given special consideration, as follows.

*Clothing.*—The women's clothing and men's clothing industries combined gave employment in 1909 to an average of 189,467 wage earners, and the total output was valued at \$538,593,000, being 18.9 per cent and 16 per cent of the respective totals for all manufac-

turing industries in the state; whereas in 1904, with 138,952 wage earners and \$360,957,000 as the value of products, the corresponding proportions were 16.2 per cent and 14.5 per cent, respectively. The increase in the value of clothing manufactured in New York from 1904 to 1909 was \$177,636,000, or 49.2 per cent, and that from 1899 to 1904 was \$105,221,000, or 41.1 per cent, percentages which were greater than those for all manufacturing industries in the state combined. The manufacture of clothing under the factory system in New York began about 1835, but the early development of the industry was associated particularly with the invention of the sewing machine about 1846. In 1849 there were 976 establishments in the state manufacturing ready-made clothing, which gave employment to an average of 41,071 wage earners and turned out products valued at \$16,008,000. The introduction about 1870 of the cutting machine, by which many garments could be cut at one operation, had a stimulating effect upon this industry. At the census of 1889, when the first attempt was made to segregate the statistics for establishments manufacturing clothing under the factory system from establishments doing custom tailoring and dressmaking, there were 3,843 establishments in which ready-made clothing was manufactured, which employed an average of 96,822 wage earners and turned out products valued at \$159,452,000.

The value of products of the clothing industries in New York has not only increased remarkably during the last 20 years, but at each succeeding census it has formed a greater proportion of the aggregate value reported for the clothing industries in the United States, this proportion being 45.2 per cent in 1889 and 56.5 per cent in 1909. Measured by value of products, the women's clothing branch shows the greatest progress, surpassing the men's clothing branch in this respect for the first time in 1909. The total value of products for the former branch was \$45,087,000 in 1889, \$106,892,000 in 1899, and \$272,518,000 in 1909, an increase of \$61,805,000, or 137.1 per cent, from 1889 to 1899, and of \$165,626,000, or 154.9 per cent, from 1899 to 1909. The proportion which the value of women's clothing formed of the combined value of products reported for the two branches increased from 41.8 per cent in 1899 to 48.1 per cent in 1904, and to 50.6 per cent in 1909.

*Printing and publishing.*—This industry includes the printing and publishing of books, newspapers and periodicals, and music, job printing, bookbinding and blank-book making, plate printing, and lithographing. New York led all the states in the industry as a whole and in each of its branches, with combined products valued at \$216,946,000 in 1909, this amount representing 29.4 per cent of the total value of products for the industry in the United States. Printing and publishing was the first industry in the state both in number of establishments, with 4,426, or 9.8 per cent

of the total number shown for all manufacturing industries, and in value added by manufacture, with \$160,452,000, or 10.6 per cent of the state total. Although the proportions shown for wage earners (6.3 per cent) and value of products (6.4 per cent) were not so great, decided increases occurred in both of these items during each five-year period, the gains during the more recent period, 1904–1909, being 9,684, or 18.1 per cent, and \$52,112,000, or 31.6 per cent, respectively.

*Textiles.*—The textile industries of New York—comprising the manufacture of hosiery and knit goods; silk and silk goods; carpets and rugs, other than rag; woolen, worsted, and felt goods, and wool hats; cotton goods, including cotton small wares; cordage and twine and jute and linen goods; and fur-felt hats—considered as a unit, rank high among the manufacturing industries of the state when measured by value of products. Combined, the seven allied branches gave employment in 1909 to an average of 91,839 wage earners and manufactured products to the value of \$185,780,000, these figures representing increases over 1904 of 11,233, or 13.9 per cent, in the number of wage earners and of \$43,358,000, or 30.4 per cent, in value of products. In 1909 the textile industries employed 9.1 per cent of the total number of wage earners engaged in the manufacturing industries of the state, and contributed 5.5 per cent of the total value of manufactured products. The corresponding proportions for 1904 were 9.4 per cent and 5.7 per cent, respectively. New York was the third state in the Union in the production of all textiles combined, of silk and silk goods, and of fur-felt hats, first in the manufacture of hosiery and knit goods and of carpets and rugs, other than rag, and second in that of cordage and twine and jute and linen goods. It ranked fifth in the production of woolen, worsted, and felt goods, and wool hats, and eleventh in that of cotton goods, including cotton small wares.

*Foundry and machine-shop products.*—All foundries and machine shops except those which manufacture a distinctive product covered by some other designation, such as agricultural implements, cash registers and calculating machines; sewing machines and attachments, or electrical machinery, are included in this classification. Establishments engaged in the manufacture of bells, gas machines and gas and water meters, hardware, cast-iron and cast-steel pipe, plumbers' supplies, steam fittings and heating apparatus, and structural ironwork, the majority of which were reported under separate classifications at previous censuses, are included in this industry. A number of the most important establishments are engaged in the manufacture of typesetting machines, steam-heating apparatus, electric elevators, locomotive, tender, and car brakes, metal-working machinery, pumps and pumping machinery, and structural ironwork. Although the industry was practically at a standstill from 1899 to 1904, the value of products increased from

\$127,915,000 in 1904 to \$154,370,000 in 1909, or 20.7 per cent. New York was the second state of the Union in this industry at all three censuses.

*Slaughtering and meat packing.*—This classification includes establishments doing wholesale slaughtering and meat packing, and those engaged in the manufacture of sausage only. It does not include the numerous retail butcher shops, which slaughter a large number of animals. The value of products for this industry in New York increased from \$58,403,000 in 1899 to \$75,550,000 in 1904 and \$127,130,000 in 1909, when the total was \$68,727,000, or 117.7 per cent, greater than in 1899. The percentage of increase during the five-year period 1904–1909 in value of products was more than twice, and in value added by manufacture more than four times as great, as during the preceding five-year period, 1899–1904. Of the 238 establishments reported for the industry as a whole in 1909, 76 were engaged in wholesale slaughtering only, 74 in both wholesale slaughtering and wholesale meat packing, and 88 in the manufacture of sausage only, the value of the output of these three branches representing 51.2 per cent, 47.2 per cent, and 1.6 per cent, respectively, of the total for the combined industry. For the last three censuses, New York has ranked third among the states in this industry.

*Liquors.*—The manufacture of malt, distilled, and vinous liquors forms a very important group of industries in New York. The value of the combined output for 1909 can not be given, however, because the statistics for the distilled-liquor industry can not be presented separately without disclosing the operations of individual establishments. The manufacture of malt liquors was by far the most important of the three industries comprising this group. The total output of this industry in 1909 was valued at \$77,720,000, an increase over 1904 of \$15,762,000, or 25.4 per cent, which was considerably more than double the gain for the preceding five-year period. The figures for both value of products and value added by manufacture in the case of the brewery industry include \$12,666,000 paid to the Federal Government as internal-revenue tax, and are therefore to that extent misleading as an indication of the relative importance of this industry from a purely manufacturing standpoint. The distilled-liquor industry shows a substantial increase from 1904 to 1909 in all items covered in the preceding table except number of establishments, which decreased from 18 to 13. The value of products for the vinous-liquor industry, the least important of the liquor group, was \$1,817,000 in 1909, representing a decrease of \$432,000, or 19.2 per cent, as compared with 1904. At the census of 1909 New York ranked first among the states of the Union in the manufacture of malt liquors, sixth in that of distilled liquors, and second in that of vinous liquors.

*Tobacco manufactures.*—While this designation covers in general the manufacture of cigars, cigarettes, chewing and smoking tobacco, and snuff, the industry in New York was confined largely to the manufacture of

cigars and cigarettes, 3,284 of the 3,371 establishments reported in 1909 being engaged in this branch, the value of the output of such establishments representing 98 per cent of the total for the industry. The total value of tobacco manufactures for New York in 1909 was \$76,662,000, an increase over 1904 of \$11,065,000, or 16.9 per cent, whereas from 1899 to 1904 the gain was \$11,936,000, or 22.2 per cent. New York leads all other states of the Union in this industry.

*Lumber and timber products.*—This classification includes logging operations, sawmills, planing mills, and establishments engaged in the manufacture of wooden packing boxes. It does not include those mills, however, which are engaged exclusively in custom sawing for local consumption, the statistics for which are shown separately on page 849. This industry in the state in 1909 was represented by 674 independent planing mills, 1,389 sawmills and logging plants, and 200 packing-box factories, which reported 65.9 per cent, 20.7 per cent, and 13.4 per cent, respectively, of the total value of products for the industry. The corresponding percentages for 1899 were 56.4, 28.7, and 14.9, respectively. The value of the output of the sawmills and logging plants of the state was \$15,131,000 in 1899, \$13,310,000 in 1904, and \$15,036,000 in 1909. The industry as a whole shows an increase in value of products from \$52,738,000 in 1899 to \$61,677,000 in 1904 and to \$72,530,000 in 1909, an increase for the decade of \$19,792,000, or 37.5 per cent, and for the more recent five-year period, of \$10,853,000, or 17.6 per cent. It is apparent, therefore, that the growth of the entire industry was due very largely to the increase in the production of the planing mills. Measured by value of products, New York ranked second in 1909 among the states of the Union in the lumber industry.

*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 being presented separately on page 849. This is one of the oldest industries in the state, probably dating from the latter part of the seventeenth century. It is said that the first gristmill in America was a horsepower mill located on the island of Manhattan. The industry developed gradually, but was especially prosperous during the years immediately following the opening of the Erie Canal in 1825, which greatly extended the sources of grain supply for the state. New York led all other states of the Union in the milling industry until 1889, since when it has held second place, having been displaced by Minnesota. The total value of flour-mill and gristmill products reported for New York was \$35,930,000 in 1899 and \$69,802,000 in 1909, representing 7.2 per cent and 7.9 per cent, respectively, of the total value of such products reported for the United States for these two census years.



*Iron and steel, steel works and rolling mills and blast furnaces.*—Combined, these two allied industries gave employment in 1909 to an average of 12,389 wage earners, and the value of their products amounted to \$66,153,000. These figures represent increases over 1899 of 6,971, or 128.7 per cent, in number of wage earners, and \$52,295,000, or 377.4 per cent, in value of products. The classification "Steel works and rolling mills" includes establishments engaged in the manufacture of steel or the hot rolling of iron and steel. It also includes the making of forgings and castings and the manufacture of rolled iron and steel into more highly finished forms when conducted as a part of the rolling-mill operations, as well as the few extant forges and bloomeries. It does not, however, include the making of cold-rolled products, nor of forgings, castings, and manufactures of iron and steel by establishments not equipped with steel-making furnaces or hot trains of rolls. The output of the steel works and rolling mills in 1909 was valued at \$39,532,000, representing an increase over 1904 of \$18,305,000, or 86.2 per cent. This gain, although pronounced, was not so great relatively as the increase of \$12,415,000, or 140.9 per cent, shown for the preceding five-year period. The blast furnaces include the establishments engaged in the manufacture of pig iron from the ore. In 1909 the products of the blast furnaces were valued at \$26,621,000, showing the remarkable gain over 1904 of \$17,986,000, or 208.3 per cent. Measured by value of products, New York ranked fourth in the manufacture of iron and steel and in each of the two branches in 1909.

*Millinery and lace goods.*—This industry includes all establishments engaged primarily in the manufacture of muslin and lace curtains; dress, cloak, and millinery trimmings; embroideries and crocheted goods; hat and bonnet frames; ladies' belts, collars, neckwear, and handkerchiefs; hats, trimmed and untrimmed; laces; pleating and puffs; ruching and ruffing; and veilings. In 1909 the value of products was \$52,106,000, as compared with \$32,844,000 in 1904, a gain of \$19,262,000, or 58.6 per cent, for the five-year period. The relative gain in this respect from 1899 to 1904 was slightly less, but the actual increase was only a little over one-half as great. New York led all other states of the Union in this industry, and of the aggregate value of millinery and lace goods produced in the United States, New York contributed 60.7 per cent in 1909, 64.7 per cent in 1904, and 71.4 per cent in 1899.

*Electrical machinery, apparatus, and supplies.*—The exceptionally rapid extension during recent years of the use of electricity has created a demand for electrical appliances. The industry in New York, therefore, shows decided development during the past decade, the value of products increasing from \$22,695,000 in 1899 to \$49,290,000 in 1909. Although New York retained the lead among the states in this industry,

the proportion which it contributed of the total value of products for the industry in the United States, which increased from 24.6 per cent in 1899 to 25.1 per cent in 1904, decreased to 22.3 per cent in 1909.

*Paper and wood pulp.*—Mills which manufacture paper exclusively, pulp exclusively, or both paper and pulp are included in this classification. The mills engaged in the production of paper predominated largely in New York in 1909. In 1849 there were 106 establishments reported for the state, which employed an average of 1,267 wage earners and manufactured products valued at \$1,638,579. The growth of the industry since that time has been rapid, but during the decade 1899–1909 it was particularly noteworthy, the value of products increasing from \$26,716,000 in 1899 to \$48,860,000 in 1909, a gain of \$22,144,000, or 82.9 per cent. Although the actual gain in this respect for the 10 years was about equally divided between the two five-year periods, the percentage of increase from 1904 to 1909 (29.4) was considerably less than that from 1899 to 1904 (41.3). New York led all other states in this industry at the last three censuses, the value of the output for the state forming 18.3 per cent of the total for the United States in 1909, 20 per cent in 1904, and 21 per cent in 1899.

*Boots and shoes, including cut stock and findings.*—Of the 296 establishments in the state included in this classification in 1909, 21 were engaged primarily in the manufacture of boot and shoe cut stock, 56 in the production of boot and shoe findings, and 219 in the manufacture of boots and shoes. There is some overlapping of these three branches which makes it desirable to combine them in presenting the statistics. With products valued at \$28,117,000 in 1899 and \$37,521,000 in 1904, New York held second place at both censuses among the states of the Union, but in 1909, when products valued at \$48,186,000 were reported, it had dropped to third place. The proportions which New York contributed of the total value of products for the industry in the United States in the respective years were, however, comparatively small, owing to the fact that the state first in rank manufactured so large a percentage of the products as to dwarf, in a measure, all others. These proportions were 9.4 per cent in 1909, 10.5 per cent in 1904, and 9.7 per cent in 1899.

*Butter, cheese, and condensed milk.*—Of the 1,552 establishments included in this industry in 1909, 426 were engaged primarily in the manufacture of butter, 1,090 in the manufacture of cheese, and 36 in the manufacture of condensed milk, the value of the output of these three branches representing 41 per cent, 35.6 per cent, and 23.4 per cent, respectively, of the total for the entire industry. Of the 1,766 establishments reported for 1904, 543 manufactured butter as a chief product, 1,198 cheese, and 25 condensed milk, and the proportions which each class of establishments contributed of the total value of products

reported for the entire industry were 41.1 per cent, 36.7 per cent, and 22.1 per cent, respectively. The number of establishments in the butter and cheese branches of the industry decreased during the five-year period 1904-1909, but the value of products for each of the three branches increased, the condensed-milk branch making the greatest relative gain. The value of products for the industry as a whole in New York increased from \$26,558,000 in 1899 to \$42,458,000 in 1909, a gain of 59.9 per cent. As measured by value of products, New York was the leading state of the Union in this industry in 1899 and in 1904, but dropped to second place in 1909, having been displaced by Wisconsin. The proportion which New York contributed of the total value of products for the industry in the United States decreased during the decade, being 20.3 per cent in 1899, 18.5 per cent in 1904, and 15.5 per cent in 1909.

*Gas, illuminating and heating.*—This industry includes all establishments engaged in the manufacture of gas for illuminating or heating purposes from coal, coke, oil, benzine, gasoline, or calcium carbide, or from a combination of two or more of these materials. The industry in New York dates from about 1823, when lighting by gas was introduced into New York City. The industry as a whole did not, however, receive its first real impetus until 1873, when the Lowe process for the manufacture of water gas was introduced. The total value of gas manufactured for sale in New York was \$8,513,000 in 1869, \$18,717,000 in 1889, and \$42,347,000 in 1909. Of the total quantity of all classes of gas manufactured in the state in 1909, namely, 45,768,354,000 cubic feet, 75.9 per cent was carbureted water gas, 10.1 per cent mixed coal and water gas, and 13.7 per cent coal gas. New York held first rank in the manufacture of illuminating and heating gas at the last three censuses, reporting 25.4 per cent of the total value of products for the industry in the United States in 1909, 28.2 per cent in 1904, and 27.6 per cent in 1899.

*Furnishing goods, men's.*—The 375 establishments reported for this industry in the state in 1909 included, in addition to 241 engaged primarily in the manufacture of a general line of men's furnishings, such as neckwear, belts, and handkerchiefs, 100 which manufactured suspenders, garters, and elastic woven goods as their leading products and 34 which made collars and cuffs. Of the value of products reported for the entire industry in 1909, \$15,897,000 represented the value of collars and cuffs, constituting 92.3 per cent of the total value of collars and cuffs manufactured in the United States. The value of products for the industry as a whole increased from \$29,337,000 in 1904 to \$42,197,000 in 1909, the proportions which these figures represented of the corresponding totals for the industry in the United States being 59.8 per cent and 48.1 per cent, respectively. New York not only outranked all other states in the industry as a

unit, but also in each of the three branches except the manufacture of suspenders, garters, and elastic woven goods, in which it ranked second.

*Furniture and refrigerators.*—This industry embraces the manufacture of wood and metal furniture of all kinds, refrigerators and ice boxes, and store and office fixtures, with the exception of products such as show cases, which are provided for by a distinct classification. This industry ranks eleventh among those shown separately in the preceding table in average number of wage earners, thirteenth in value added by manufacture, and nineteenth in value of products. The value of the output of the furniture and refrigerator factories of New York increased from \$24,658,000 in 1899 to \$29,326,000 in 1904 and \$41,929,000 in 1909, which figures represented 18.9 per cent, 16.5 per cent, and 17.5 per cent of the respective totals for the United States. For several decades New York has led all other states in this industry.

*Fur goods.*—Those establishments engaged primarily in the manufacture of garments in which fur is the chief material, such as coats, cloaks, capes, muffs, scarfs, and robes, and gloves, mittens, and trimmings, are included in this classification. It does not include establishments engaged mainly in tanning and dyeing skins with the fur on. The value of products increased from \$15,829,000 in 1899 to \$26,244,000 in 1904 and \$41,301,000 in 1909. New York outranked all other states at each of the three censuses in the manufacture of fur goods, the value of its output constituting 73.8 per cent of the total for the United States in 1909, 70.7 per cent in 1904, and 61.1 per cent in 1899.

*Copper, tin, and sheet-iron products.*—This classification comprises the manufacture of sheet-metal products of copper, tin, and sheet iron, including the preparation of copper, tin, and sheet-iron material for building construction. The 686 establishments reported for this industry in 1909 included 61 in which stamped and enameled ware was manufactured and 69 in which tinware was produced. The value of the stamped and enameled ware was \$13,140,000, and that of tinware was \$10,386,000, which amounts represent 34.2 per cent and 27 per cent, respectively, of the total value of products for the industry. New York ranked first among the states of the Union in the manufacture of copper, tin, and sheet-iron products at each of the three censuses, with \$38,452,000 as the total value of such products in 1909, \$27,314,000 in 1904, and \$19,287,000 in 1899.

*Patent medicines and compounds and druggists' preparations.*—Under this head are included the manufacture of so-called patent medicines, and of some compounds that are not used for medicinal purposes, and also the manufacture of capsules, extracts, tinctures, and other pharmaceuticals, and of perfumery and cosmetics. Of the 743 establishments reported in 1909, 509 were engaged primarily in the manufacture of patent medicines and compounds, the value of

which represented 56.6 per cent of the total for the industry. New York led all other states of the Union in the industry as a whole at each of the last three censuses, the total output being valued at \$37,343,000 in 1909, \$28,646,000 in 1904, and \$26,538,000 in 1899.

*Chemicals.*—This industry includes the manufacture of acids (except sulphuric, nitric, and mixed acids, for which there is a separate classification), sodas, pot-ashes, alums, coal-tar products, cyanides, bleaching materials, plastics, compressed or liquefied gases, alkalis, gold, silver, and platinum salts, chloroform, ether, glycerin, Epsom salts, copperas, blue vitriol, and other bases and salts, when they are made as a chief product by the establishment reporting. It does not include, however, the manufacture of chemicals as by-products in establishments classified in the census reports under a different head. In the production of chemicals New York held first rank among the states at each of the last three censuses, the value of its output constituting 30 per cent of the total for the United States in 1909, 30.6 per cent in 1904, and 25.5 per cent in 1899. The total value of products of the chemical industry in New York in 1909 was \$35,346,000, an increase over 1904 of \$12,324,000, or 53.5 per cent, and over 1899 of \$19,352,000, or 121 per cent.

*Musical instruments, pianos and organs and materials.*—Of the 184 establishments included in this classification in 1909, 117 were engaged primarily in the manufacture of pianos, 19 in the manufacture of organs, and 48 in the manufacture of piano and organ materials. The output of the piano establishments represented 79.1 per cent of the \$33,680,000 reported as the total value of products for the industry as a whole. At each of the last three censuses New York outranked all other states of the Union in the manufacture of pianos and organs and materials, contributing 37.5 per cent of the total value of the output for the United States in 1909, 35.4 per cent in 1904, and 35.9 per cent in 1899. The value of products for the industry in the state considerably more than doubled during the decade.

*Automobiles, including bodies and parts.*—The manufacture of automobiles in New York began only a few years before 1899, in which year there were 15 establishments in operation in the state, reporting products valued at \$456,000, and the state ranked fifth among the states in the industry. The development of the industry thereafter was remarkable, for by 1904 New York had become third in the manufacture of automobiles, which position it retained in 1909. In 1899 New York contributed 9.6 per cent of the total value of products for this industry in the country as a whole, and in 1904 the proportion had increased to 14.2 per cent, but in 1909 it had dropped to 12.4 per cent. The total value of products for 1909 was \$30,980,000, which was more than seven times the amount reported for 1904. This classification also includes the manufacture of automobile parts and accessories, but this branch of the industry has become

so interwoven with such industries as the foundry and machine-shop industry and the manufacture of rubber goods, electrical machinery, apparatus, and supplies, and brass and bronze products that it is impossible to determine to what extent the statistics presented under this head cover the actual production of parts and accessories.

*Manufactures from precious metals.*—The manufacture of jewelry is allied closely with the production of silverware and plated ware, and the reduction and refining of gold and silver from clippings, sweepings, and scrap. In 1909 these three industries combined employed an average of 8,486 wage earners and turned out products valued at \$30,825,000.

*Paint and varnish.*—Of the 147 establishments included in this classification in 1909, 104 were engaged primarily in the manufacture of paint, with products valued at \$20,557,000, representing 72 per cent of the total for the industry as a whole. The value of paint and varnish manufactured in New York was \$25,121,000 in 1904 and \$28,559,000 in 1909, an increase of \$3,438,000, or 13.7 per cent, for the five-year period. In value of products New York led all other states in this industry at each of the last three censuses, reporting 22.9 per cent of the total for the United States in 1909, as compared with 27.7 per cent in 1904 and 27.1 per cent in 1899.

*Leather, tanned, curried, and finished.*—Establishments which were engaged primarily in the manufacture of leather, as well as those which treated hides and skins for others, are included in this classification. The cost of materials and the value of products, however, do not include the value of the hides or skins treated for others under contract. New York ranked third among the states in the manufacture of leather in 1899, with a value of products amounting to \$23,206,000. In 1904, however, the value of products had decreased to \$21,643,000 and the state fell to fourth place, while in 1909, though the value of the products increased to \$27,642,000, the state had dropped to fifth place.

In 14 of the less important industries shown separately in the table, New York led all other states of the Union in value of products in 1909 and contributed more than half of the value of products reported for each in the United States. These industries, together with the percentages of the value of products contributed by the state, were as follows: Lapidary work, 94.4; artificial flowers and feathers and plumes, 88.2; photographic apparatus and materials, 83.2; paper patterns, 83; hair work, 70.1; pens, fountain, stylographic, and gold, 67.9; cloth, sponging and refinishing, 66.7; gloves and mittens, leather, 60.7; pipes, tobacco, 60.5; hats and caps, other than felt, straw, and wool, 57.2; jewelry and instrument cases, 57.1; candles, 53.4; typewriters and supplies, 52.2; furs, dressed, 51.9.

It will be seen from the table on page 801 that some of the industries that hold a very high rank in the gross value of products rank comparatively low in the number of wage earners employed and in value added by

manufacture. Where this is the case, it indicates that the cost of materials represents a large proportion of the total value of products, and that therefore the value added by manufacture, of which wages constitute usually the largest item, is only a small proportion of the total value of products. Thus the slaughtering and meat-packing industry, which ranks fifth in gross value of products, and the flour-mill and gristmill industry, which ranks tenth in that respect, rank comparatively low with regard to number of wage earners and value added by manufacture. Other important industries which rank much higher in gross value of products than in the number of wage earners or the value added by manufacture are the butter, cheese, and condensed-milk industry; the tanning, currying, and finishing of leather; the blast furnaces; the roasting and grinding of coffee and spice; and the manufacture of linseed oil.

On the other hand, there are several industries the rank of which according to the number of wage earners or the value added by manufacture is considerably higher than the rank according to the value of products; in other words, the cost of materials is relatively a smaller part of the total value of products for these industries than for most others. Among the important industries of this class are the manufacture of furniture and refrigerators, the steam-railroad repair shops, and marble and stone work. Four of the textile industries—the manufacture of hosiery and knit goods, silk goods, carpets and rugs, and cotton goods—also rank much higher in number of wage earners, and somewhat higher in value added by manufacture, than in value of products.

The table on page 801 shows very great differences among the several industries with respect to the percentages of increase or decrease in the value of products and the value added by manufacture, although the great majority of the industries show an increase in both items for each of the five-year periods. The reduction and refining of gold and silver from sweepings, clippings, and scrap, however, shows a decrease in value of products for both five-year periods, while 13 other industries show decreases from 1904 to 1909 and 15 decreases from 1899 to 1904. None of the industries presented separately in the table show decreases in value added by manufacture for both five-year periods, but 16 show decreases from 1904 to 1909, and 14 show decreases from 1899 to 1904. Of the 58 industries for which products valued at more than \$10,000,000 were reported in 1909, two—the manufacture of carriages and wagons and of cordage and twine and jute and linen goods—show decreases in both value of products and value added by manufacture since 1904, while one other—the roasting and grinding of coffee and spice—shows a decrease in value of products.

The manufacture of emery and other abrasive wheels shows the highest percentage of increase in both value

of products and value added by manufacture between 1904 and 1909, the gross value of the products of this industry being nearly thirty-five times as great in 1909 as in 1904 and the value added by manufacture over twenty-seven times as great. Other industries which show exceptionally large increases during the same five-year period in both items are the hair-work and the automobile industries, the manufacture of artificial flowers and feathers and plumes, the blast furnaces, and the manufacture of corsets, in which the value of products in 1909 was from three to seven times that in 1904. The manufacture of lead bars, lead pipe, and sheet lead shows the largest relative decrease in value of products for this period, 37 per cent, and the manufacture of dentists' materials the largest in value added by manufacture, 42.1 per cent.

Of the 12 industries shown in the table for which products valued at more than \$50,000,000 were reported in 1909, five—the making of men's clothing, the foundries and machine shops, the brewery industry, slaughtering and meat packing, and the manufacture of hosiery and knit goods—show greater percentages of increase in both value of products and value added by manufacture for the five-year period 1904-1909 than for the period 1899-1904.

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.
<b>All classes</b> .....	<b>1,203,241</b>	<b>869,434</b>	<b>333,807</b>
Proprietors and officials.....	78,874	75,389	3,485
Proprietors and firm members.....	47,569	45,429	2,140
Salaried officers of corporations.....	12,916	12,481	435
Superintendent and managers.....	18,389	17,479	910
Clerks.....	120,386	87,404	32,982
Wage earners (average number).....	1,003,981	706,641	297,340
16 years of age and over.....	996,162	702,637	293,525
Under 16 years of age.....	7,819	4,004	3,815

The average number of persons engaged in manufactures during 1909 was 1,203,241, of whom 1,003,981 were wage earners. Of the remainder, 78,874 were proprietors and officials and 120,386 were clerks. Corresponding figures for individual industries will be found in Table II, page 878.

The table on the following page 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 58 important industries individually.

INDUSTRY.	PERSONS ENGAGED IN MANUFACTURES.			
	Total number.	Per cent of total.		
		Proprietors and officials.	Clerks.	Wage earners (average number).
All Industries.....	1,203,241	6.6	10.0	83.4
Agricultural implements.....	6,851	4.9	11.7	83.4
Artificial flowers and feathers and plumes.....	9,813	5.7	7.7	86.5
Automobiles, including bodies and parts.....	11,610	3.6	11.5	84.9
Boots and shoes, including cut stock and findings.....	23,815	3.3	5.8	90.8
Boxes, fancy and paper.....	12,702	5.1	4.0	90.8
Brass and bronze products.....	7,596	6.1	6.4	87.6
Bread and other bakery products.....	29,039	15.6	10.8	73.5
Butter, cheese, and condensed milk.....	4,930	35.6	6.3	58.1
Canning and preserving.....	8,818	13.3	6.5	80.2
Carpets and rugs, other than rag.....	12,272	0.7	2.4	97.0
Carriages and wagons and materials.....	7,333	12.1	4.5	83.4
Cars and general shop construction and repairs by steam-railroad companies.....	18,003	3.0	5.6	91.4
Chemicals.....	6,369	3.6	12.8	83.7
Clothing, men's, including shirts.....	104,567	5.1	7.5	87.4
Clothing, women's.....	114,925	5.2	9.5	85.4
Coffee and spice, roasting and grinding.....	2,394	8.0	28.6	63.4
Confectionery.....	10,116	4.8	10.5	84.7
Copper, tin, and sheet-iron products.....	17,153	6.8	7.6	85.6
Cordage and twine and jute and linen goods.....	6,230	1.1	3.3	95.5
Cotton goods, including cotton small wares.....	11,032	1.4	2.0	96.7
Electrical machinery, apparatus, and supplies.....	22,819	4.2	12.6	83.1
Flour-mill and gristmill products.....	6,120	27.8	13.8	58.4
Food preparations.....	4,163	8.0	10.4	72.6
Foundry and machine-shop products.....	75,746	5.6	9.8	84.6
Fur goods.....	11,268	13.3	13.5	73.2
Furnishing goods, men's.....	20,758	3.6	8.8	87.6
Furniture and refrigerators.....	23,195	6.0	6.5	87.4
Gas and electric fixtures and lamps and reflectors.....	7,188	5.6	10.7	83.7
Gas, illuminating and heating.....	9,221	4.5	25.9	69.6
Gloves and mittens, leather.....	7,195	6.2	6.4	87.4
Hats, fur-felt.....	5,379	2.2	4.6	93.2
Hosiery and knit goods.....	37,673	2.1	2.5	95.4
Iron and steel, blast furnaces.....	2,562	1.5	8.8	89.7
Iron and steel, steel works and rolling mills.....	11,080	1.6	7.4	91.0
Jewelry.....	7,146	10.9	13.8	75.3
Leather goods.....	9,283	9.0	9.3	81.7
Leather, tanned, curried, and finished.....	6,278	4.2	5.2	90.6
Liquors, malt.....	10,705	6.2	12.2	81.6
Lumber and timber products.....	32,458	10.9	4.5	84.6
Malt.....	645	9.8	9.0	81.2
Marble and stone work.....	8,409	13.1	5.0	81.9
Millinery and lace goods.....	25,360	6.8	10.1	83.1
Musical instruments, pianos and organs and materials.....	13,102	3.6	5.3	91.1
Oil, linseed.....	601	4.5	13.6	81.9
Paint and varnish.....	4,741	8.1	27.7	64.3
Paper and wood pulp.....	13,018	3.7	3.5	92.7
Paper goods, not elsewhere specified.....	5,267	4.5	13.6	81.9
Patent medicines and compounds and druggists' preparations.....	8,566	13.7	31.1	55.2
Photographic apparatus and materials.....	5,186	2.9	18.3	78.8
Printing and publishing.....	94,893	8.2	25.3	66.5
Shipbuilding, including boat building.....	6,230	6.1	3.3	90.6
Silk and silk goods, including throwsters.....	14,136	2.9	5.8	91.3
Slaughtering and meat packing.....	7,583	5.5	13.9	80.6
Soap.....	3,924	5.3	18.9	75.8
Tobacco manufactures.....	36,197	11.8	5.3	82.9
Typewriters and supplies.....	5,160	3.1	9.0	87.9
Wire.....	1,521	1.4	3.9	94.6
Woolen, worsted, and felt goods, and wool hats.....	9,907	2.2	2.3	95.5
All other industries.....	203,337	7.0	9.6	83.4

Of the total number of persons engaged in all manufacturing industries, 6.6 per cent were proprietors and officials, 10 per cent clerks, and 83.4 per cent wage earners. The highest percentage of proprietors and officials shown for any industry, 35.6, is for the manufacture of butter, cheese, and condensed milk. In this, as well as in the flour-mill and gristmill industry, 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 in other individual industries or in all industries combined. Similar conditions

prevail to some extent in the bakery industry, in canning and preserving, in the manufacture of carriages and wagons, fur goods, and patent medicines and compounds and druggists' preparations, in marble and stone work, and in tobacco manufactures, where the proportions of proprietors and officials ranged from 15.6 per cent to 11.8 per cent of the total number of persons engaged in each industry. On account of the large average number of wage earners employed in the establishments manufacturing carpets and rugs, cordage and twine, and cotton goods, and in the blast furnaces, steel works and rolling mills, and wire-works, these industries show the smallest proportions of proprietors and officials of any given in the table. The largest proportion of wage earners, 97 per cent, was reported for the carpet and rug industry, while the smallest, 55.2 per cent, was for the manufacture of patent medicines and compounds and druggists' preparations. Among the industries presented separately in the above table, however, the patent-medicine industry shows the largest proportion of clerks.

The first table on the following page shows, for 1909, in percentages, for all industries combined, the distribution of the average number of wage earners by age periods, and for those 16 years of age and over by sex, calculated in the manner described in the Introduction. It also shows, for some of the important industries separately, a similar distribution of the wage earners 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, 70 per cent of the average number of wage earners in 1909 were males 16 years of age and over; 29.2 per cent, females 16 years of age and over; and eight-tenths of 1 per cent, children under the age of 16. The larger part of the total number of female wage earners 16 years of age and over was made up of those employed in the clothing, textile, millinery and lace goods, tobacco manufactures, and men's furnishing goods industries; the industry having the largest proportion of women, however, was the manufacture of artificial flowers and feathers and plumes, in which such wage earners formed 84.2 per cent of the total. In the manufacture of men's furnishing goods, and of millinery and lace goods, over three-fourths of the wage earners were women 16 years of age and over; in the hosiery and knit goods, fancy and paper box, and silk and silk goods industries, over three-fifths; and in seven other industries shown in the table the proportion was over one-half.

The textile, clothing, printing and publishing, boot and shoe, fancy and paper box, and millinery and lace goods industries employed the larger part of the wage earners under 16 years of age. The proportion of such wage earners was largest (2.9 per cent) in the manufacture of fancy and paper boxes, while



in the cotton-goods industry they formed 2.8 per cent of the total number, and in the silk-goods industry 2.5 per cent. The proportion was also relatively high in the manufacture of artificial flowers and feathers and plumes, jewelry, boots and shoes, confectionery, and woolen goods, in each of which children under 16 years of age formed at least 2 per cent of the total number of wage earners.

INDUSTRY.	WAGE EARNERS.			
	Average number. <sup>1</sup>	Per cent of total.		
		16 years of age and over.		Under 16 years of age.
		Male.	Female.	
<b>All industries</b> .....	1,003,981	70.0	29.2	0.8
Agricultural implements.....	5,717	98.7	1.1	0.2
Artificial flowers and feathers and plumes.....	8,493	13.5	84.2	2.3
Automobiles, including bodies and parts.....	9,861	98.7	1.2	0.1
Boots and shoes, including cut stock and findings.....	21,027	63.6	34.3	2.0
Boxes, fancy and paper.....	11,538	34.2	62.9	2.9
Brass and bronze products.....	6,651	94.4	5.3	0.3
Bread and other bakery products.....	21,357	86.2	13.3	0.5
Butter, cheese, and condensed milk.....	2,866	90.7	8.8	0.5
Canning and preserving.....	7,075	43.8	55.1	1.0
Carpets and rugs, other than rag.....	11,898	55.0	44.3	0.6
Carriages and wagons and materials.....	6,116	98.3	1.7	.....
Cars and general shop construction and repairs by steam-railroad companies.....	16,454	99.9	0.1	(2)
Chemicals.....	5,746	96.9	2.9	0.2
Clothing, men's, including shirts.....	61,363	58.2	41.1	0.4
Clothing, women's.....	93,104	42.3	57.3	0.5
Coffee and spice, roasting and grinding.....	1,519	69.3	30.6	0.1
Confectionery.....	3,870	40.5	58.0	2.0
Copper, tin, and sheet-iron products.....	14,689	37.5	11.9	0.0
Cordage and twine and jute and linen goods.....	5,952	46.4	52.8	0.8
Cotton goods, including cotton small wares.....	10,663	55.3	42.0	2.8
Electrical machinery, apparatus, and supplies.....	18,972	86.0	13.8	0.2
Flour-mill and gristmill products.....	2,900	95.6	4.2	0.2
Food preparations.....	3,023	61.5	37.3	1.2
Foundry and machine-shop products.....	64,066	98.0	1.8	0.2
Fur goods.....	8,244	67.3	32.5	0.3
Furnishing goods, men's.....	18,186	22.4	77.2	0.5
Furniture and refrigerators.....	20,281	96.9	2.6	0.6
Gas and electric fixtures and lamps and reflectors.....	6,017	93.2	6.5	0.3
Gas, illuminating and heating.....	6,422	99.7	0.2	0.1
Gloves and mittens, leather.....	6,287	49.2	40.1	1.6
Hats, fur-felt.....	5,013	60.4	32.8	0.8
Hosiery and knit goods.....	35,950	34.6	63.6	1.8
Iron and steel, blast furnaces.....	2,298	99.9	0.1	.....
Iron and steel, steel works and rolling mills.....	10,091	99.0	0.9	0.1
Jewelry.....	5,379	84.8	13.1	2.2
Leather goods.....	7,586	81.2	17.8	1.0
Leather, tanned, curried, and finished.....	5,688	97.3	2.3	0.4
Liquors, malt.....	8,731	99.9	0.1	.....
Lumber and timber products.....	27,471	99.1	0.7	0.3
Malt.....	524	100.0	.....	.....
Marble and stone work.....	6,939	98.9	1.0	0.1
Millinery and lace goods.....	21,078	21.5	77.1	1.4
Musical instruments, pianos and organs and materials.....	11,938	94.6	4.3	1.1
Oil, linseed.....	566	100.0	.....	.....
Paint and varnish.....	3,047	91.6	8.1	0.4
Paper and wood pulp.....	12,073	96.6	3.4	.....
Paper goods, not elsewhere specified.....	4,303	45.0	53.1	1.0
Patent medicines and compounds and druggists' preparations.....	4,728	46.1	53.2	0.7
Photographic apparatus and materials.....	4,088	72.7	26.5	0.9
Printing and publishing.....	63,120	76.9	22.2	1.0
Shipbuilding, including boat building.....	5,644	99.8	0.1	0.1
Silk and silk goods, including throwsters.....	12,903	35.1	62.4	2.5
Slaughtering and meat packing.....	6,110	97.2	2.7	0.1
Soap.....	2,976	77.8	22.1	0.1
Tobacco manufactures.....	30,019	48.5	50.6	0.9
Typewriters and supplies.....	4,538	85.9	13.9	0.2
Wire.....	1,439	90.8	8.8	0.4
Woolen, worsted, and felt goods, and wool hats.....	9,460	55.6	42.4	2.0
All other industries.....	169,534	80.7	18.4	0.9

<sup>1</sup> For method of estimating the distribution, by sex and age periods, of the average number in all industries combined, see Introduction.  
<sup>2</sup> Less than one-tenth 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 Intro-

duction.) The following table makes this comparison according to occupational status:

CLASS.	PERSONS ENGAGED IN MANUFACTURES.				Per cent of increase, 1904-1909.
	1909		1904		
	Number.	Percent distribution.	Number.	Percent distribution.	
<b>Total</b> .....	1,203,241	100.0	986,725	100.0	20.7
Proprietors and firm members.....	47,569	4.0	41,766	4.2	13.9
Salaried employees.....	151,691	12.6	98,012	9.8	54.8
Wage earners (average number).....	1,003,981	83.4	856,947	86.0	17.2

Comparable figures are not obtainable for 1899. Salaried employees show the greatest percentage of increase and the only gain in relative numerical importance.

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.	Percent distribution.	Number.	Percent distribution.	Number.	Percent distribution.
<b>Total</b> .....	1,003,981	100.0	856,947	100.0	726,909	100.0
16 years of age and over.....	998,162	99.2	848,968	99.1	714,508	98.3
Male.....	702,637	70.0	603,519	70.4	503,674	69.3
Female.....	293,525	29.2	245,449	28.6	210,834	29.0
Under 16 years of age.....	7,819	0.8	7,979	0.9	12,401	1.7

This table indicates that for all industries combined there has been both an absolute and a relative decrease during the 10 years in the employment of children under 16 years of age. Although the number of each class of wage earners 16 years of age and over shows a decided increase during the same period, the proportions of such employees remained practically the same. In 1909 males 16 years of age and over formed 70 per cent of all wage earners in the manufacturing industries, as compared with 70.4 per cent in 1904 and 69.3 per cent in 1899.

**Wage earners employed, by months.**—The first table on the following page 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 878, 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.....	945,356	88.9	July.....	977,203	91.9
February.....	971,236	91.4	August.....	998,896	94.0
March.....	991,633	93.3	September.....	1,041,333	97.9
April.....	989,498	93.1	October.....	1,063,162	100.0
May.....	983,987	92.6	November.....	1,059,852	99.7
June.....	980,503	92.2	December.....	1,045,110	98.8

There were no seasonal industries of importance in New York, nor did any of the more important industries show very great fluctuations from month to month in the number of wage earners employed. Among the seasonal industries the greatest relative variations took place in canning and preserving and in the manufacture of brick and tile, but the numbers of wage earners employed in these industries were not large enough to affect very greatly the totals for the entire state. There was a larger absolute variation in the number of wage earners engaged in the women's

clothing industry than in either of the seasonal industries mentioned, but these fluctuations were due mainly to trade conditions which affected to a less extent many other industries, and through them the totals for the state as a whole. In all manufacturing industries combined, the smallest number of wage earners, 945,356, were employed in the month of January, and the largest number, 1,063,162, in the month of October, the difference between these figures being 117,806, or 11.1 per cent of the maximum.

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.
<b>All industries.....</b>	<b>1,003,981</b>	<b>102,279</b>	<b>173,887</b>	<b>169,492</b>	<b>290,905</b>	<b>225,930</b>	<b>21,397</b>	<b>10,544</b>	<b>9,547</b>
Agricultural implements.....	5,717	20	132	132	3,540	2,016			
Artificial flowers and feathers and plumes.....	8,493	1,914	4,658	1,480	297	144			
Artificial stone.....	711	186	88	189	32	215			
Automobiles, including bodies and parts.....	9,861	86	1,625	4,068	2,248	1,982		1	
Babbitt metal and solder.....	192	18	13	3	94	64		2	
Bags, other than paper.....	1,000	2	171	2	678	147			
Bags, paper.....	1,082		26	34	493	479			
Baskets, and rattan and willow ware.....	1,237	56	69	64	250	747	18	25	8
Belting and hose, leather.....	604	97	247	208	31	21			
Bicycles, motorcycles, and parts.....	558	1	4	3	39	509	2		
Blackening and cleansing and polishing preparations.....	658	65	63	172	114	235			
Boots and shoes, including out stock and findings.....	21,627	77	1,110	4,851	10,657	5,441	85	2	4
Boxes, cigar.....	1,531	65	21	205	708	532			
Boxes, fancy and paper.....	11,538	354	2,095	2,021	3,959	2,342			167
Brass and bronze products.....	6,651	230	487	2,049	1,701	2,184			
Bread and other bakery products.....	21,357	1,133	694	2,886	1,980	13,345	1,054	176	89
Brick and tile.....	8,080	1,467	121	1,449	258	4,667	49	57	12
Brooms and brushes.....	2,897	147	375	471	1,275	627			
Butter, cheese, and condensed milk.....	2,866	169	63	98	398	608	1,436	2	92
Buttons.....	6,126	113	583	370	4,453	601	6		
Candles.....	347		63	37	247				
Canning and preserving.....	7,075	381	279	191	735	5,209	156	56	8
Carpets and rugs, other than rag.....	11,898		124	6,463	742	4,569			
Carriages and wagons and materials.....	6,116	224	1,410	1,329	1,235	1,918			
Cars and general shop construction and repairs by steam-railroad companies.....	10,454	374	1,137	2,188	3,946	2,488	5,124		1,197
Cars and general shop construction and repairs by street-railroad companies.....	4,480			84	1,400	2,362	608		26
Cars, steam-railroad, not including operations of railroad companies.....	2,387			956		1,431			
Cement.....	1,443			3	298	498	360		285
Chemicals.....	5,746	38	100	61	3,599	1,324	37	122	375
Chocolate and cocoa products.....	755		142	1	47	565			
Clocks and watches, including cases and materials.....	2,467	14	45	376	1,950	82			
Cloth, sponging and refinishing.....	604	32	306	167	9				
Clothing, men's, including shirts.....	91,363	9,044	13,328	12,772	46,713	9,002	441	54	9
Clothing, women's.....	98,104	3,898	48,982	20,101	18,097	5,475	820	82	40
Coffee and spice, roasting and grinding.....	1,510	128	170	132	937	151			
Coffins, burial cases, and undertakers' goods.....	1,235	10	217	90	411	507			
Confectionery.....	8,570	152	855	914	3,803	2,810	17	10	
Cooperage and wooden goods, not elsewhere specified.....	2,611	118	113	273	1,110	989	5	3	
Copper, tin, and sheet-iron products.....	14,680	2,918	625	1,440	6,530	3,176			
Cordage and twine and jute and linen goods.....	5,622			3	3,269	2,680			
Cordials and sirups.....	294	58	29	36	1	161	9		
Cork, cutting.....	835	22	128	11	666	8			
Corsets.....	2,436	192	364	1,441	436	3			
Cotton goods, including cotton small wares.....	10,663		247	17	1,277	9,122			
Cutlery and tools, not elsewhere specified.....	4,478	131	550	378	1,192	2,227			
Dairymen's, poultryers', and apiarists' supplies.....	802	136		480	80	106			
Dentists' materials.....	266	7	186	17	56				
Dyeing and finishing textiles.....	5,252	65	816	197	2,830	1,324	20		
Dyestuffs and extracts.....	418	39	6	2	34	337			
Electrical machinery, apparatus, and supplies.....	18,972	164	2,769	2,170	13,048	821			
Electroplating.....	652	32	165	147	207	101			
Emery and other abrasive wheels.....	719	1			608	110			

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.
Fancy articles, not elsewhere specified	3,430	187	773	338	1,796	336			
Fertilizers	908	11			1	578	258	60	
Firearms and ammunition	1,781		2	2	1,308	469			
Flags, banners, regalia, society badges, and emblems	813	109	87	527	80	10			
Flour-mill and gristmill products	2,990	79	12	539	57	1,839	119	335	10
Food preparations	3,023	117	151	328	736	1,356	335		
Foundry and machine-shop products	64,066	2,001	7,087	23,062	15,091	16,605	160		
Fur goods	8,244	518	4,213	2,370	544	95	4		
Furnishing goods, men's	18,186	866	3,658	2,070	11,307	283		2	
Furniture and refrigerators	20,281	1,999	1,460	1,098	6,441	9,272	11		
Furs, dressed	755	28	73	98	311	245			
Gas and electric fixtures and lamps and reflectors	6,017	87	1,453	1,702	1,906	864	5		
Gas, illuminating and heating	6,422	22		2	100	400	888	1,061	3,349
Glass	3,114	369	776	280	328	1,361			
Glass, cutting, staining, and ornamenting	3,118	598	907	122	1,358	133			
Gloves and mittens, leather	6,287	115	241	193	5,490	248			
Gold and silver, reducing and refining, not from the ore	42	10	27	5					
Hair work	2,313	162	361	1,143	70	62	25		
Hat and cap materials	965	50	151	14	747	3			
Hats and caps, other than felt, straw, and wool	3,348	55	1,473	682	825	291	22		
Hats, fur-felt	5,013	672	1,060	36	3,236	9			
Hats, straw	2,508	236	1,126	258	354	504			
Hosiery and knit goods	35,950	427	1,812	454	7,945	24,934	878		
House-furnishing goods, not elsewhere specified	1,812	121	959	397	63	253	10		
Ice, manufactured	1,124	91		76	65	107	225	26	534
Ink, printing	525	110	31	64	264	56			
Instruments, professional and scientific	1,964	65	350	407	1,072	10			
Iron and steel, blast furnaces	2,268		67	423		101	374	335	1,488
Iron and steel, steel works and rolling mills	10,061		67	423	1,095	4,745		3,161	
Jewelry	5,370	282	2,543	1,376	728	50			
Jewelry and instrument cases	1,172	86	346	162	200	378			
Lapidary work	499	274	138	83	4				
Lead, bar, pipe, and sheet	185			38		93			
Leather goods	7,584	179	788	1,019	4,245	1,324	9	1	21
Leather, tanned, curried, and finished	5,688	18	226	211	2,470	2,768			
Liquors, malt	8,731	1,528	292	5,176	314	758	663		
Liquors, vinous	271	2	45			222	2		
Looking-glass and picture frames	1,491	74	282	105	456	484			
Lumber and timber products	27,471	1,878	1,336	3,822	5,049	14,105	381		
Malt	524	16	4	22	27	77	378		
Marble and stone work	6,939	4,377	256	590	684	1,004	19		
Mattresses and spring beds	1,621	65	167	252	692	421	22	2	
Millinery and lace goods	21,078	1,471	10,562	4,786	3,970	289			
Mirrors	983	53	587	201	72	70			
Models and patterns, not including paper patterns	1,082	62	458	180	320	62			
Musical instruments, pianos and organs and materials	11,938	364	1,481	6,067	649	2,477			
Oil, linseed	566			7		275	35	249	
Oilcloth and linoleum	1,102			20	310	772			
Optical goods	2,047	25	101	1,400	490	11			
Paint and varnish	3,047	121	651	512	844	619			
Paper and wood pulp	12,073	1,295	1,070	279	502	2,656	2,563	2,500	299
Paper goods, not elsewhere specified	4,303	332	1,095	608	1,372	296			
Paper patterns	761	666	80	6					
Patent medicines and compounds and druggists' preparations	4,728	1,633	1,762	491	692	239	3	8	
Pens, fountain, stylographic, and gold	730	41	104	429	156				
Photographic apparatus and materials	4,088	59	98	3,753	178				
Photo-engraving	1,395	432	895	65	3				
Pipes, tobacco	1,663	39	1,344	135	113	32			
Pottery, terra-cotta, and fire-clay products	2,367	234	423	570	617	451		72	
Printing and publishing	63,120	34,754	15,083	8,512	4,081	670	18	1	1
Rubber goods, not elsewhere specified	2,066	101	82	88	939	856			
Salt	1,525			238	16	984	205	20	2
Scales and balances	453	3	9	120	214	107			
Shipbuilding, including boat building	5,644	2,271	882	2,000	160	331			
Silk and silk goods, including throwsters	12,908	32	1,305	1,042	7,753	2,771			
Silverware and plated ware	3,065	99	331	1,135	1,275	225			
Slaughtering and meat packing	6,110	549	326	718	450	3,995	50	22	
Smelting and refining, not from the ore	284	3			95	143	43		
Soap	2,976	20	315	1,152	753	736			
Stationery goods, not elsewhere specified	1,243	42	166	742	235	28			
Steam packing	901	35	143	40	622	55			
Stereotyping and electrotyping	905	769	95	48	3				
Stoves and furnaces, including gas and oil stoves	4,247	373	1,05	811	1,543	1,347	68		
Surgical appliances and artificial limbs	464	97	162	110	72	23			
Tobacco manufactures	30,019	10,419	5,252	1,132	10,542	2,657	16		1
Toys and games	1,197	161	308	26	666	35		1	
Typewriters and supplies	4,638	123	181	125	3,563	546			
Umbrellas and canes	1,919	50	331	234	1,112	133			
Vinegar and cider	520	14	4	14	9	484	2	1	1
Wall paper	1,602	1	12		613	976			
Wall plaster	1,337	52		8	6	1,271			
Window shades and fixtures	911	114	122	119	227	328			
Wire	1,439				640	799			
Wirework, including wire rope and cable	1,649	10	104	424	820	291			
Wood distillation, not including turpentine and rosin	693					117	182	125	169
Wood, turned and carved	1,279	215	118	160	492	279	15		
Woolen, worsted, and felt goods, and wool hats	9,460	30	649		4,570	4,211		1,368	1,369
All other industries	40,369	2,964	3,774	6,592	11,594	9,644	3,074	1,368	1,369

More than two-thirds of the wage earners employed in the manufacturing industries of New York in 1909 worked from 54 to 60 hours a week, while more than one-fourth (27.5 per cent) were employed in establishments where the usual hours were less than 54 a week, and only 4.1 per cent of the total were employed in establishments where more than 60 hours prevailed. The largest number was reported for establishments where the prevailing hours were more than 54 and less than 60 per week.

It will be noted that in most of the larger industries the employment was confined mainly to a week of from 54 to 60 hours. Over two-thirds of the wage earners in the cotton-goods, canning and preserving, and hosiery and knit-goods industries, and more than half of those in the slaughtering and meat-packing, bakery, brick and tile, and lumber industries, however, were

employed in establishments where the usual hours were 60 per week. The majority of the wage earners engaged in the blast-furnace and in the gas industries worked more than 72 hours per week, while in marble and stone work, in printing and publishing, and in several smaller industries the prevailing hours of labor for a majority of the wage earners were 48 or less per week.

**Location of establishments.**—The following table shows the extent to which the manufactures of New York are centralized in cities or villages of 10,000 inhabitants or over. (See Introduction.) Statistics for Lackawanna, a city having over 10,000 inhabitants, whose manufactures are practically all carried on by a single corporation, are included with those for the sections of the state outside of such cities and villages, so as to avoid the disclosure of individual operations.

ITEM.	Year.	Aggregate.	CITIES AND VILLAGES HAVING A POPULATION OF 10,000 AND OVER.								DISTRICTS OUTSIDE OF CITIES AND VILLAGES 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.		
Population.....	1910 1900	9,113,614 7,268,894	6,756,593 4,917,781	74.1 67.7	425,022 446,342	4.7 6.1	685,322 410,868	7.5 5.7	5,646,249 4,090,571	62.0 55.9	2,357,021 2,351,113	25.9 32.3
Number of establishments.....	1909 1899	44,935 35,957	34,436 26,467	76.6 73.6	1,915 2,073	4.3 5.8	2,494 1,822	5.6 5.1	30,027 22,572	66.8 62.8	10,499 9,490	23.4 26.4
Average number of wage earners.	1909 1899	1,003,981 726,909	856,875 605,358	85.3 83.3	67,243 72,177	6.7 9.9	117,101 70,462	11.7 9.7	672,531 462,719	67.0 63.7	147,106 121,551	14.7 16.7
Value of products.....	1909 1899	\$3,369,490,192 1,871,830,872	\$2,925,071,637 1,613,789,902	86.8 86.2	\$170,359,667 124,970,992	5.3 6.7	\$312,278,868 124,106,211	.3 6.6	\$2,433,433,102 1,864,712,699	72.2 72.9	\$444,418,555 258,040,970	13.2 13.8
Value added by manufacture..	1909 1899	1,512,585,850 853,453,686	1,338,483,993 743,566,680	88.5 87.1	75,178,787 56,794,694	5.0 6.7	141,536,506 63,000,045	9.4 7.4	1,121,768,700 623,771,341	74.2 73.1	174,101,857 109,887,006	11.5 12.9

In 1909, 86.8 per cent of the total value of products for all manufacturing industries in the state was reported from cities and villages having over 10,000 inhabitants, and 85.3 per cent of the average number of wage earners were employed in such cities and villages. While comparatively little change occurred during the decade, the industries located in incorporated places of this size were somewhat more important relatively and those located outside of such places somewhat less important in 1909 than in 1899.

It should be borne in mind, in considering this table, that the increase in the population of certain cities and villages between 1900 and 1910 has caused considerable change in the make-up of some of the groups shown in the table. Eleven places—White Plains, Olean, Port Chester, North Tonawanda, Batavia, Cortland, Ossining, Hudson, Plattsburg, Rensselaer, and Fulton—which had more than 10,000 inhabitants in 1910, had less than that number in 1900, so that for 1899 their statistics are not included with those for incorporated places having a population above that limit. The total value of products reported for these 11 places in 1909 was \$55,595,612, or 1.6 per cent of the total shown for the entire state. If the figures for these places were subtracted from those shown in the table for cities and villages of 10,000 inhabitants or over for 1909 and added to those for the remainder of the state,

the proportion for the former would be 85.2 per cent and for the latter 14.8 per cent of the aggregate. These percentages would therefore represent the proportions of the total value of products in 1909 reported for the same areas for which statistics are given for 1899. In 1900 Jamestown, Amsterdam, Mount Vernon, Niagara Falls, New Rochelle, Poughkeepsie, Newburgh, Watertown, and Kingston were cities of the first group—10,000 to 25,000 inhabitants—but during the following decade the population of each so increased that in 1910 all were cities of the second group—25,000 to 100,000 inhabitants. Albany was a city of the second group in 1900, but by 1910 the increase in the population enabled it to be classed in the third group—100,000 inhabitants or over.

Each of the three groups into which the incorporated places of 10,000 inhabitants or over are divided in the table shows a substantial increase in number of manufacturing establishments, average number of wage earners, value of manufactured products, and value added by manufacture in 1909 as compared with 1899, except that the group comprising the cities and villages having between 10,000 and 25,000 inhabitants shows a decrease in number of establishments and average number of wage earners, due principally to the changes in its composition which have already been referred to.

Of the total value of products reported for the state in 1909, 5.3 per cent was reported from the 29 cities and villages having between 10,000 and 25,000 inhabitants, 9.3 per cent from the 16 cities having between 25,000 and 100,000 inhabitants, 72.2 per cent from the 5 cities having more than 100,000 inhabitants, and 13.2 per cent from the remainder of the state.

The population in 1910 and 1900 of the 51 cities and villages which had 10,000 inhabitants or over in 1910 is given in the following statement:

CITY OR VILLAGE.	1910	1900	CITY OR VILLAGE.	1910	1900
New York City	4,766,883	3,437,202	Dunkirk	17,221	11,616
Buffalo	423,715	352,387	White Plains	15,949	7,599
Rochester	213,149	162,603	Ogdensburg	15,933	12,633
Syracuse	137,249	103,374	Middletown	15,313	14,522
Albany	100,253	94,151	Peekskill	15,245	10,358
Yonkers	79,803	47,931	Glens Falls	15,243	12,613
Troy	76,413	175,057	Watervliet	15,074	14,321
Utica	74,119	50,383	Ithaca	14,802	13,136
Schenectady	72,826	31,632	Olean	14,743	9,402
Binghamton	48,443	39,647	Lackawanna <sup>2</sup>	14,540	.....
Elmira	37,176	35,672	Corning	13,730	11,001
Auburn	34,663	30,345	Hornell	13,617	11,613
Jamestown	31,297	22,892	Port Chester	12,809	7,440
Amsterdam	31,267	20,929	Saratoga Springs	12,693	12,409
Mount Vernon	30,919	21,228	Geneva	12,446	10,433
Niagara Falls	30,445	19,457	Little Falls	12,273	10,381
New Rochelle	25,867	14,720	North Tonawanda	11,955	9,009
Poughkeepsie	27,936	24,029	Batavia	11,613	9,180
Newburgh	27,805	24,943	Cortland	11,504	9,014
Watertown	26,730	21,695	Ossining	11,480	7,939
Kingston	25,908	24,535	Hudson	11,417	9,523
Cohoes	24,709	23,910	Plattsburg	11,138	8,434
Oswego	23,368	22,199	Rensselaer	10,711	7,400
Gloversville	20,642	18,349	Fulton	10,480	8,206
Rome	20,497	15,343	Johnstown	10,447	10,130
Lockport	17,970	16,581			

<sup>1</sup> Includes population of parts of the towns of Brunswick, Lansingburg, and North Greenbush, annexed in 1900.  
<sup>2</sup> Incorporated from part of West Seneca town in 1909. Manufacturing statistics for this city can not be shown separately without disclosing individual operations.  
<sup>3</sup> Includes population of Oswego Falls, annexed in 1902.

The relative industrial importance of these cities and villages is shown in the next 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 figures are available. Lackawanna is not included in that table, for reasons already referred to.

Every city or village for which comparative statistics are available shows an increase in value of products, and all but seven an increase in the number of wage earners, for the decade 1899-1909. For the five-year period 1904-1909 all except five—Dunkirk, Hudson, Ithaca, Watervliet, and Corning—show increases in value of products, and all except nine increases in the number of wage earners. The largest decrease in value of products during this period, \$3,333,596, or 33.6 per cent, took place in Dunkirk, and was the result of the decline in the output of the locomotive works, which constituted the leading industry in that city. The decrease in Hudson was due mainly to the decline in the production of cement, while the loss in Corning was chiefly in the value of foundry and machine-shop products, two plants engaged in this branch of manufacture having moved to Rochester since 1904, and one having gone out of business. The other two cities showing losses in value of products are comparatively small industrial centers whose manufactures cover many industries. The largest

relative increase for the five-year period, 196.9 per cent, was made by Plattsburg, and was due largely to the establishment of an automobile factory there since 1904. The next largest relative gain, 113.9 per cent, was made by Olean, and was due in part to the resumption of business by a steam-railroad repair shop and a petroleum refinery in that city, both of which were idle in 1904. Other noteworthy gains occurred in Little Falls (89.2 per cent), principally as a result of the increased production of hosiery and knit goods and of leather; in Mount Vernon (79.8 per cent), mainly on account of the establishment of new industries since 1904; in Yonkers (76.9 per cent), largely as the result of the gains in the output of refined sugar, carpets and rugs, and fur-felt hats; and in Glens Falls (72.6 per cent), chiefly because of the growth of the manufacture of men's clothing (including shirts) and of cement, and the starting of new industries there since 1904.

CITY OR VILLAGE.	AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.		
	1909	1904	1899	1909	1904	1899
New York City	554,002	464,716	388,586	\$2,029,602,576	\$1,526,523,006	\$1,172,370,261
<i>Boroughs:</i>						
Manhattan	385,358	339,221	285,205	1,388,408,005	1,043,251,923	810,307,076
Bronx	14,434	( <sup>1</sup> )	( <sup>1</sup> )	42,680,793	( <sup>1</sup> )	( <sup>1</sup> )
Brooklyn	123,883	104,095	87,445	417,222,770	373,482,980	313,617,489
Queens	23,891	14,905	10,684	151,680,120	92,041,158	35,427,561
Richmond	6,430	5,595	5,192	20,700,888	16,866,995	13,017,236
Buffalo	51,412	43,567	34,275	218,803,094	147,877,873	105,827,182
Rochester	39,108	31,779	28,040	112,676,215	81,109,485	59,683,959
Yonkers	12,711	9,779	7,555	59,333,865	33,548,688	17,303,090
Syracuse	18,148	14,554	11,809	49,434,015	34,687,109	26,540,297
Schenectady	14,931	14,318	8,494	38,164,699	33,084,451	17,604,859
Troy	20,020	19,114	22,933	37,079,988	31,860,398	28,738,800
Utica	13,153	10,852	8,898	31,199,261	22,880,317	16,479,327
Niagara Falls	6,089	4,574	2,840	28,651,918	16,915,786	8,540,184
Albany	6,861	8,976	8,106	22,625,702	20,208,715	17,268,990
Amsterdam	10,284	7,993	6,240	12,449,057	16,007,276	10,643,310
Binghamton	6,823	6,836	5,011	17,114,214	13,907,493	10,539,242
Auburn	6,947	6,660	5,895	15,991,022	13,429,363	9,575,006
Cohoes	8,200	6,919	6,273	14,830,752	10,289,822	11,611,169
Jamestown	6,789	5,237	4,528	14,720,240	10,840,752	7,731,083
Rome	3,033	3,209	2,274	14,423,437	8,631,427	5,548,622
Gloversville	5,741	5,048	7,813	14,170,682	9,840,765	9,070,520
Oswego	3,817	3,740	3,457	10,412,888	7,562,128	7,486,637
Olean	2,259	1,175	1,793	10,005,443	4,877,477	6,210,156
Newburgh	4,844	4,013	3,074	9,928,146	7,085,527	5,357,742
North Tonawanda	2,824	2,025	1,650	6,599,776	6,499,312	6,293,666
Poughkeepsie	3,299	3,775	2,810	7,206,914	7,206,914	5,576,566
Watertown	3,291	3,020	3,223	8,527,418	7,250,744	6,887,531
Little Falls	4,211	2,621	2,980	8,460,488	4,471,080	4,030,686
Lockport	2,138	2,323	2,359	6,168,450	5,807,980	5,552,669
Elmira	3,647	3,208	3,570	6,037,208	6,307,795	6,596,603
Peekskill	2,055	1,957	1,281	7,839,183	7,251,897	1,783,977
Fulton	2,799	( <sup>3</sup> )	( <sup>3</sup> )	7,807,114	( <sup>3</sup> )	( <sup>3</sup> )
Dunkirk	2,750	3,395	2,533	6,575,664	9,909,260	5,225,096
Johnstown	2,589	2,429	3,095	6,573,528	4,543,272	5,123,376
Cortland	2,350	2,282	1,412	6,394,624	4,574,191	3,093,828
Port Chester	2,122	( <sup>3</sup> )	( <sup>3</sup> )	6,243,051	( <sup>3</sup> )	( <sup>3</sup> )
Kingston	3,281	2,636	2,042	5,985,738	4,811,850	3,932,340
Geneva	1,526	1,580	1,180	6,183,926	4,951,964	2,716,145
Ogdensburg	1,259	929	809	4,947,976	3,057,271	2,260,889
Glens Falls	2,774	2,052	3,101	4,870,786	2,924,376	3,963,034
Middletown	1,733	1,596	1,396	4,668,240	3,353,330	2,154,742
Batavia	2,007	1,603	1,573	4,400,774	3,589,406	2,573,132
Hornell	2,183	2,200	1,549	3,647,630	3,162,677	2,430,996
Hudson	1,802	1,524	1,332	3,566,504	4,115,525	2,803,677
Mount Vernon	1,207	970	621	3,376,415	1,877,508	909,718
Plattsburg	1,049	750	621	3,137,523	1,043,136	1,043,136
Corning	2,074	2,355	1,600	3,050,410	3,083,516	2,272,864
Saratoga Springs	833	590	402	2,338,579	1,739,073	1,384,329
Rensselaer	703	( <sup>3</sup> )	( <sup>3</sup> )	2,296,089	( <sup>3</sup> )	( <sup>3</sup> )
Ithaca	873	873	861	1,919,968	2,080,002	1,600,604
New Rochelle	735	517	198	1,668,724	1,102,317	508,162
Watervliet	753	1,111	1,000	1,668,579	1,738,302	1,507,299
Ossining	350	( <sup>3</sup> )	( <sup>3</sup> )	1,328,925	( <sup>3</sup> )	( <sup>3</sup> )
White Plains	249	( <sup>3</sup> )	( <sup>3</sup> )	815,789	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Included in Manhattan Borough.  
<sup>2</sup> 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.  
<sup>3</sup> Figures not available.

New York City is not only the leading city and the commercial center of the United States, but also the industrial metropolis, holding first place in the total value of manufactured products as well as in many individual industries. In 1909 the population of New York City was practically equal to that of the state of Ohio, and exceeded only by Pennsylvania, Illinois, and New York itself, but the value of its manufactured products exceeded that reported by any state except Pennsylvania and New York. This predominance in manufactures is connected closely with the abundant supply of labor, its large immigrant population being in particular an influential factor in causing manufacturing enterprises to locate there. New York City is the chief center of trade between the United States and Europe and also one of the principal distributing points for domestic trade. This commercial importance has also contributed greatly to the high rank of the city in manufacturing industries and to making New York the financial center of the United States, thereby rendering it easy to obtain capital for the establishment and extension of such industries.

Measured by the increase in value of manufactured products, the industrial development of New York City from 1904 to 1909 was greater than from 1899 to 1904, the increase being \$503,169,570, or 33 per cent, for the period 1904-1909, and \$353,652,745, or 30.2 per cent, for the period 1899-1904. During the more recent five-year period the average number of wage earners in the manufacturing industries of the city increased 89,286, or 19.2 per cent, as compared with an increase of 76,130, or 19.6 per cent, for the earlier period. Of the 44,935 manufacturing establishments reported for the state in 1909, 25,938, or 57.7 per cent, were located in this city; the proportion for 1904 was 56 per cent, and for 1899, 53.5 per cent.

The establishments in New York City reported 55.2 per cent of the wage earners and 60.2 per cent of the value of products for the state in 1909, as compared with 54.2 per cent and 61.3 per cent, respectively, in 1904. The value of the city's manufactures represented 9.8 per cent of the total value of manufactured products for the United States in 1909 and 10.3 per cent in 1904. Of the 243 industry classifications employed in compiling the 1909 statistics for manufactures of the state, 217 were represented in this city, 131 of which covered industries with products valued at more than \$1,000,000.

There were 21 industries in New York City in 1909 for which a value of products in excess of \$20,000,000 was reported. For 2 of these industries, the refining of cane sugar and the smelting and refining of copper, statistics can not be presented separately without disclosing the operations of individual establishments. The other 19 industries, arranged in order of value of products, are indicated in the following tabular state-

ment, which shows the absolute and relative increase in this respect between 1904 and 1909, and also the percentage which the value of products for each industry represents of the corresponding total for the state:

INDUSTRY.	VALUE OF PRODUCTS: 1909.			
	Amount.	Per cent of total for the state.	Increase over 1904.	
			Amount.	Per cent.
Clothing, women's.....	\$266,477,000	97.8	\$98,058,000	58.2
Clothing, men's, including shirts.....	218,411,000	82.1	68,927,000	40.1
Printing and publishing.....	183,509,000	84.6	45,007,000	32.5
Slaughtering and meat packing.....	95,802,000	75.4	39,924,000	71.4
Foundry and machine-shop products.....	63,853,000	41.4	5,916,000	10.2
Tobacco manufactures.....	62,488,000	81.5	11,968,000	23.7
Bread and other bakery products.....	61,904,000	71.8	17,904,000	40.7
Liquors, malt.....	53,469,000	68.8	10,301,000	23.9
Millinery and lace goods.....	51,239,000	98.3	18,896,000	58.4
Fur goods.....	39,874,000	96.5	14,588,000	57.7
Gas, illuminating and heating.....	34,117,000	80.6	4,402,000	14.8
Paint and varnish.....	26,664,000	93.4	3,834,000	16.8
Musical instruments, pianos and organs and materials.....	25,510,000	75.8	6,888,000	34.8
Furnishing goods, men's.....	25,490,000	60.4	8,888,000	53.5
Patent medicines and compounds and druggists' preparations.....	24,984,000	66.9	6,868,000	37.9
Lumber and timber products.....	24,122,000	33.3	2,903,000	13.7
Copper, tin, and sheet-iron products.....	23,303,000	60.6	5,914,000	34.0
Artificial flowers and feathers and plumes.....	21,068,000	99.7	17,132,000	432.0
Confectionery.....	20,062,000	78.6	6,017,000	42.8

It will be noted that for five of the industries included in the preceding tabular statement more than 90 per cent of the total value of products for the state was reported from New York City, the proportion rising as high as 99.7 per cent in the case of the manufacture of artificial flowers and feathers and plumes. In seven other industries the establishments located in New York City contributed more than three-fourths of the total value of products for the state. For only two industries included in the table—the foundry and machine-shop and the lumber industries—was less than one-half of the total value of products for the state reported from New York City.

The leading industries in New York City in 1909 were the making of women's clothing and of men's clothing. There were 5,521 establishments in the two industries combined, which gave employment to an average of 161,400 wage earners and manufactured products valued at \$484,888,000. The printing and publishing industry was next in importance, with 2,883 establishments, 48,322 wage earners, and products valued at \$183,509,000. The value of the products of the three industries just mentioned represented 32.9 per cent of the total value of manufactured products for the city, and they employed 37.9 per cent of the average number of wage earners engaged in all manufacturing industries.

In addition to the 118 industries presented separately for New York City in Table I, page 858, there were 99 others which, for various reasons, are included under the head of "All other industries." Some of these industries were among the most impor-

tant in the city, 36 reporting products in 1909 exceeding \$1,000,000 in value.<sup>1</sup> Of these, 4 reported products valued at \$10,000,000 or over; 6, products between \$5,000,000 and \$10,000,000 in value; and 26, products between \$1,000,000 and \$5,000,000 in value.

Of the five boroughs which form New York City, the Borough of Manhattan is the most important industrially, the value of the manufactured products reported by the establishments within its limits in 1909 constituting 68.4 per cent of the total for the entire city. The proportions of the total contributed by the other boroughs in that year were as follows: Brooklyn, 20.6 per cent; Queens, 7.5 per cent; the Bronx, 2.1 per cent; and Richmond, 1.5 per cent. Each borough made substantial gains from 1904 to 1909 in all items covered by the manufactures statistics, with the single exception that the Borough of Richmond shows a decrease in the number of proprietors and firm members. The relative increase in value of products was much greater in the boroughs of Richmond and Queens, however, than in the city as a whole, while in the Borough of Brooklyn it was considerably less, the percentages of increase being as follows: New York City, 33; Borough of Richmond, 76.1; Borough of Queens, 63.2; Borough of Brooklyn, 11.7; and the boroughs of Manhattan and the Bronx combined, 37.2. The leading industries in the Borough of Manhattan were to a large extent the same as those previously enumerated for the city as a whole, while in the Borough of Brooklyn refined sugar was the leading product; in the Borough of Queens, smelted and refined copper; in the Borough of the Bronx, pianos and organs and materials; and in the Borough of Richmond, soap.

The totals presented for New York City do not include the statistics for three establishments operated by the Federal Government, namely, the United States navy yard, with 3,622 wage earners and products valued at \$7,032,416 in 1909; the United States Naval Clothing Factory, with 96 wage earners and products valued at \$670,198, located in Brooklyn; and the United States Lighthouse Establishment, with 60 wage earners and products, such as illuminating and signal apparatus and machinery and other lighthouse supplies, valued at \$995,745, located at Tompkinsville, in the Borough of Richmond.

<sup>1</sup> These industries are:

Awning, tents, and sails.  
Babbitt metal and solder.  
Bags, other than paper.  
Baking powders and yeast.  
Billiard tables and materials.  
Chocolate and cocoa products.  
Cloth, sponging and refinishing.  
Cordials and sirups.  
Cork, cutting.  
Dentists' materials.  
Dyestuffs and extracts.  
Flavoring extracts.  
Flour-mill and gristmill products.  
Glue.  
Grease and tallow.  
Hat and cap materials.  
Hats, straw.  
Iron and steel, steel works and rolling mills.

Iron and steel forgings.  
Labels and tags.  
Lapidary work.  
Liquors, distilled.  
Mineral and soda waters.  
Moving pictures.  
Mucilage and paste.  
Oil, linseed.  
Oil, not elsewhere specified.  
Oillecloth and linoleum.  
Paper patterns.  
Pencils, lead.  
Petroleum, refining.  
Signs and advertising novelties.  
Smelting and refining, copper.  
Sugar, refining, not including beet sugar.  
Tin foil.  
Wire.

Buffalo, the second city of importance in the state, shows an increase from 1904 to 1909 of \$71,426,121, or 48.5 per cent, in value of products, and of 7,845, or 18 per cent, in the average number of wage earners. Ranked by value of products, Buffalo was ninth among the cities of the United States in 1909, as compared with eleventh in 1904. In 1909 the average number of wage earners employed in manufacturing industries in Buffalo represented 5.1 per cent, and the value of its manufactured products, 6.5 per cent, of the respective totals for the state.

The leading industries of Buffalo, arranged in the order of value of products, are indicated in the following tabular statement, which shows the absolute and relative increase in this respect between 1904 and 1909, and also the percentage which the value of products for each industry represents of the corresponding total for the state:

INDUSTRY.	VALUE OF PRODUCTS: 1909.			
	Amount.	Per cent of total for the state.	Increase over 1904.	
			Amount.	Per cent.
Slaughtering and meat packing.....	\$25,416,000	20.0	\$9,196,000	56.7
Foundry and machine-shop products....	20,775,000	13.5	6,218,000	42.7
Flour-mill and gristmill products.....	19,942,000	23.6	10,134,000	103.3
Automobiles, including bodies and parts.....	9,598,000	31.0	8,212,000	592.5
Soap.....	8,653,000	36.7	3,860,000	80.5
Printing and publishing.....	7,679,000	3.5	1,233,000	19.1
Malt.....	7,095,000	64.2	4,059,000	133.7

The blast-furnace industry, the manufacture of linseed oil, and the smelting and refining of copper, which are also among the principal industries of the city, are not included in the above table, since statistics for these three industries can not be presented separately without disclosing the operations of individual establishments. More than one-half of the value of the linseed oil manufactured in New York in 1909 was, however, reported from Buffalo.

In addition to the 43 industries shown separately for Buffalo in Table I, page 856, and the 3 industries referred to in the preceding paragraph, there were a number of others which, for reasons similar to those given in the discussion of the corresponding group for the state as a whole (p. 800), are included under the head of "All other industries" in Table I. Some of these industries were among the more important in the city; in fact, 13 reported products between \$1,000,000 and \$5,000,000 in value for 1909.<sup>2</sup>

Rochester shows an increase in 1909, as compared with 1904, of \$31,566,780, or 38.9 per cent, in value of

<sup>2</sup> These industries are:

Agricultural implements.  
Belting and hose, woven and rubber.  
Boxes, fancy and paper.  
Cars, steam-railroad, not including operations of railroad companies.  
Fertilizers.  
Food preparations.  
Iron and steel, steel works and rolling mills.

Musical instruments, pianos and organs and materials.  
Paint and varnish.  
Petroleum, refining.  
Rubber goods, not elsewhere specified.  
Sulphuric, nitric, and mixed acids.  
Wood distillation, not including turpentine and rosin.



products, and 7,329, or 23.1 per cent, in the average number of wage earners. It ranked twentieth in 1909 and twenty-first in 1904 among the manufacturing cities of the United States, as measured by value of products. The average number of wage earners and the total value of products reported from this city in 1909 formed 3.9 per cent and 3.3 per cent, respectively, of the corresponding totals for the state. The leading industries of the city, named in the order of the value of their products, are the making of men's clothing, the manufacture of photographic apparatus and materials, the manufacture of boots and shoes, the foundry and machine-shop industry, and printing and publishing. The larger part of the photographic apparatus and materials manufactured in New York are made in Rochester, while 27.9 per cent of the value of products for the boot and shoe industry of the state in 1909, over one-half of that for the optical-goods industry, and 19.4 per cent of that for the button industry were reported from this city.

In addition to the 40 industries shown separately for Rochester in Table I, page 871, there were 12 other industries having a value of products in excess of \$500,000 in 1909 which are included under the head of "All other industries,"<sup>1</sup> some of these being among the most important industries of the city.

The manufacturing activities of Yonkers were confined largely to five industries which, named in order of their relative importance as measured by value of products, were as follows: Sugar refining, not including beet sugar; carpets and rugs, other than rag; fur-felt hats; foundry and machine-shop products; and rubber goods, "not elsewhere specified." With the exception of the foundry and machine-shop industry, less than three establishments were reported for each of these industries, so that their statistics can not be presented separately without disclosing the operations of individual establishments.

The factories of Syracuse in 1909 showed an increase over 1904 of 3,594, or 24.7 per cent, in the number of wage earners, and of \$14,747,506, or 42.5 per cent, in value of products. This city has a considerable number of important industries, 14 of which had a value of products in 1909 exceeding \$1,000,000. The most important of these were the manufacture of automobiles, the foundry and machine-shop industry, the manufacture of typewriters and typewriter supplies, and the making of men's clothing.

Schenectady owes its importance largely to the manufacture of electrical machinery, apparatus, and

supplies and the construction of steam-railroad locomotives. Three establishments were reported for the former industry and one for the latter, but the statistics for these industries can not be presented separately without disclosing the operations of individual establishments. It may be stated, however, that these two industries contributed the bulk of the total value of products shown for all manufacturing industries in the city combined. The city as a whole shows an increase in 1909, as compared with 1904, of \$5,080,248, or 15.4 per cent, in value of products and 615, or 4.3 per cent, in the average number of wage earners.

Troy, which shows an increase for the five years from 1904 to 1909 of \$6,119,157, or 19.2 per cent, in value of products, and of 906, or 4.7 per cent, in the average number of wage earners, owes its importance in manufactures mainly to the collar and cuff branch of the men's furnishing-goods industry, the men's clothing industry, and the output of the steel works and rolling mills, breweries, foundries and machine shops, and knitting mills. These 6 industries combined reported products in 1909 valued at \$29,252,466, or 77 per cent of the total value of products for the city. Troy is known throughout the country as a center for the manufacture of collars and cuffs. The 21 establishments which were engaged in this branch of manufacturing in Troy during 1909 reported products valued at \$13,638,745, which represented 85.8 per cent of the total value of such products for the state and 79.2 per cent of the total for the United States.

Utica is one of the leading cities of the state in the manufacture of textiles. During 1909 there were 15 knitting mills, 3 cotton mills, 1 worsted mill, and 1 cordage and twine mill in operation in the city, which together gave employment to an average of 7,725 wage earners and reported products valued at \$15,977,371, representing 58.7 per cent and 51.2 per cent of the respective totals for the city. Other industries of particular importance, as measured by value of products, were the making of men's clothing and the foundry and machine-shop, brewery, and lumber industries. For all industries combined the increases in 1909 over 1904 were \$8,318,944, or 36.4 per cent, in value of products, and 2,271, or 20.9 per cent, in average number of wage earners.

Niagara Falls is the center of the chemical industry in the state, the value of its chemical products in 1909 amounting to \$11,996,726, which was 33.9 per cent of the total for the industry in the state, and also represented 41.9 per cent of the total value of products for all manufacturing industries of the city combined. Furthermore, Niagara Falls far outranks all other cities of the United States in the manufacture of chemical substances by electrolytic processes, this branch of the chemical industry having developed very rapidly as a

<sup>1</sup> These industries, named in order of the value of products, are:

Photographic apparatus and materials.	Cordials and sirups.
Petroleum, refining.	Automobiles, including bodies and parts.
Optical goods.	Blacking and cleansing and polishing preparations.
Copper, tin, and sheet-iron products.	Leather goods.
Canning and preserving.	Hosiery and knit goods.
Stationery goods, not elsewhere specified.	
Gas, illuminating and heating.	

result of the utilization of the water power of the falls for the generation of electric current. Other industries of importance in 1909 were the manufacture of food preparations, the flour-mill and gristmill industry, and the manufacture of paper and wood pulp, silverware and plated ware, and emery and other abrasive wheels.

Albany shows an increase in 1909 over 1904 of \$2,616,987, or 12.9 per cent, in value of products, and 885, or 9.9 per cent, in the average number of wage earners. The manufacturing interests of this city include a considerable number of industries, the most important of which were printing and publishing, breweries, steam-railroad repair shops, foundries and machine shops, bakeries, and hosiery and knitting mills.

Gloversville is the center of the leather glove and mitten industry not only in the state but also in the United States. Of the 225 establishments reported for the state in 1909, 87 were located in this city, the total value of their products being \$8,869,706, or 61.9 per cent of the total for the industry in the state and 62.6 per cent of the total value reported for all industries in the city. Johnstown, with 54 establishments manufacturing leather gloves and mittens in 1909, reported a product valued at \$3,258,362, which was nearly one-half the amount reported for all the manufacturing industries of the city.

The following tabular statement shows the principal industry or industries, as measured by value of products, in each of the remaining cities and villages having 10,000 inhabitants or over:

CITY OR VILLAGE.	Principal industry.	CITY OR VILLAGE.	Principal industry.
Amsterdam.....	Carpets and rugs, other than rag. Hosiery and knit goods.	Kingston.....	Tobacco manufactures.
Binghamton.....	Tobacco manufactures.	Geneva.....	Malt.
Auburn.....	Agricultural implements. Cordage and twine.	Ogdensburg.....	Lumber and timber products. Flour-mill and gristmill products.
Cohoes.....	Hosiery and knit goods.	Glens Falls.....	Clothing, men's, including shirts.
Jamestown.....	Worsted goods. Furniture and refrigerators.	Middletown.....	Cars and general shop construction and repairs by steam-railroad companies. Condensed milk.
Rome.....	Brass and bronze products.	Batavia.....	Leather, tanned, curried, and finished.
Oswego.....	Matches. Starch.	Hornell.....	Agricultural implements. Cars and general shop construction and repairs by steam-railroad companies.
Olean.....	Petroleum, refining.	Hudson.....	Hosiery and knit goods.
Newburgh.....	Clothing, men's, including shirts.	Mount Vernon.....	Brass and bronze products.
North Tonawanda.....	Lumber and timber products. Iron and steel, blast furnaces.	Plattsburg.....	Automobiles.
Poughkeepsie.....	Dairymen's, poulters', and apiarists' supplies.	Corning.....	Glass.
Watertown.....	Foundry and machine-shop products.	Saratoga Springs.....	Druggists' preparations.
Little Falls.....	Hosiery and knit goods.	Rensselaer.....	Felt goods.
Lockport.....	Flour-mill and gristmill products.	Ithaca.....	Printing and publishing.
Elmira.....	Foundry and machine-shop products. Lumber and timber products.	New Rochelle.....	Printing and publishing.
Peekskill.....	Liquors, distilled.	Watervliet.....	Foundry and machine-shop products. Collars and cuffs.
Fulton.....	Worsted goods.	Ossining.....	Patent medicines and compounds.
Dunkirk.....	Locomotives, not made by railroad companies.	White Plains.....	Planing mills. Bread and other bakery products.
Cortland.....	Iron and steel, steel works and rolling mills.		
Port Chester.....	House-furnishing goods, not elsewhere specified.		

The totals presented for Watervliet in Table I do not include the statistics for the arsenal in that city, operated by the Federal Government. In 1909 this plant employed an average of 308 wage earners and manufactured products valued at \$619,124.

Lackawanna is the center of the iron and steel industry in the state. The manufactures of the city are almost exclusively confined to that industry, which is represented mainly by two establishments, and for this reason the statistics for the city can not be presented separately, for to do so would disclose the operations of these establishments.

**Character of ownership.**—The table on page 819 has for its purpose the presentation of conditions in respect to the character of ownership, or legal organization, of manufacturing enterprises. For all industries combined comparative figures are given covering the censuses of 1909 and 1904. Comparative data for 1899 are not available. Figures for 1909 only are presented for several important industries individually. In order to avoid disclosing the operations of individual concerns it is necessary to omit several important industries from this table and the one following. The most important distinction shown is that be-

tween corporate and all other forms of ownership. For all industries combined, 20.8 per cent of the total number of establishments were in 1909 under corporate ownership, as against 79.2 per cent under all other forms. The corresponding figures for 1904 were 16.4 per cent and 83.6 per cent, respectively. Of the total value of products, however, the establishments operated by corporations reported 62.6 per cent in 1909, as against 37.4 per cent reported by those under all other forms of ownership, while in 1904 the corresponding figures were 56.1 per cent and 43.9 per cent, respectively. The greatest decrease in relative numerical importance from 1904 to 1909 is shown for establishments operated by individuals, which represented 56.5 per cent of the total number of establishments in 1909, as compared with 59.4 per cent in 1904. Among the industries given separately in the table, the gas industry shows the greatest proportion of the total value of products reported by establishments under the corporate form of ownership, namely, 99.9 per cent. The largest percentage for establishments operated by firms was 55.7 per cent, in the manufacture of men's clothing, and for those owned by individuals, 33.4 per cent, in the carriage and wagon industry.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
<b>ALL INDUSTRIES:</b>					<b>Clothing, women's, 1909...</b>				
1909.....	44,935	1,003,981	\$3,369,490,192	\$1,512,585,850	Individual.....	3,083	98,104	\$272,517,792	\$124,375,317
1904.....	37,194	856,947	2,488,345,579	1,139,742,293	Firm.....	1,470	33,552	89,237,856	40,725,856
<b>Individual:</b>					Corporation <sup>1</sup> .....	1,344	48,496	137,676,990	62,150,256
1909.....	25,407	194,240	552,350,324	264,480,758	.....	269	10,110	45,602,946	21,499,205
1904.....	22,081	186,317	443,142,687	215,989,876	Per cent of total.....	100.0	100.0	100.0	100.0
<b>Firm:</b>					Individual.....	47.7	34.2	32.7	32.7
1909.....	9,822	218,203	698,928,348	304,973,706	Firm.....	43.6	49.4	50.5	50.0
1904.....	8,737	214,520	641,741,427	279,059,847	Corporation <sup>1</sup> .....	8.7	16.4	16.7	17.3
<b>Corporation:</b>					<b>Confectionery, 1909.....</b>				
1909.....	9,345	589,771	2,108,026,670	940,082,508	Individual.....	249	8,570	\$25,540,394	\$9,896,318
1904.....	6,086	454,396	1,396,924,211	642,475,934	Individual.....	105	2,043	6,101,430	1,888,700
<b>Other:</b>					Firm.....	58	1,922	6,203,654	2,229,893
1909.....	361	1,767	10,184,850	3,048,878	Corporation.....	86	4,605	13,235,310	5,777,725
1904.....	290	1,714	6,537,254	2,216,636	Per cent of total.....	100.0	100.0	100.0	100.0
Per cent of total:					Individual.....	42.2	23.8	23.9	19.1
1909.....	100.0	100.0	100.0	100.0	Firm.....	23.3	22.4	24.3	22.5
1904.....	100.0	100.0	100.0	100.0	Corporation.....	34.5	53.7	51.8	58.4
<b>Individual:</b>					<b>Copper, tin, and sheet-iron products, 1909.....</b>				
1909.....	56.5	19.3	16.4	17.5	Individual.....	686	14,689	\$38,452,127	\$17,417,341
1904.....	59.4	21.7	17.8	19.0	Individual.....	357	2,176	5,723,130	3,164,499
<b>Firm:</b>					Firm.....	144	1,647	3,914,233	2,151,314
1909.....	21.9	21.7	20.7	20.2	Corporation.....	185	10,866	28,814,764	12,101,528
1904.....	23.5	25.0	25.8	24.5	Per cent of total.....	100.0	100.0	100.0	100.0
<b>Corporation:</b>					Individual.....	52.0	14.8	14.9	13.2
1909.....	20.8	58.7	62.6	62.2	Firm.....	21.0	11.2	10.2	12.4
1904.....	16.4	58.0	56.1	58.4	Corporation.....	27.0	74.0	74.9	69.5
<b>Other:</b>					<b>Flour-mill and gristmill products, 1909.....</b>				
1909.....	0.8	0.2	0.3	0.2	Individual.....	983	2,990	\$69,802,278	\$9,331,977
1904.....	0.8	0.2	0.3	0.2	Individual.....	591	771	12,859,782	1,929,975
<b>Agricultural implements, 1909.....</b>					Firm.....	271	468	8,929,954	1,112,740
Individual.....	57	5,717	\$14,970,980	\$8,556,330	Corporation.....	121	1,761	48,012,542	6,089,262
Individual.....	19	145	271,450	160,578	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	10	63	245,308	153,821	Individual.....	60.1	25.8	18.4	20.7
Corporation.....	28	5,519	14,454,222	8,230,931	Firm.....	27.6	15.7	12.8	14.1
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	12.3	58.6	68.8	65.3
Individual.....	33.3	2.5	1.8	1.9	<b>Food preparations, 1909.....</b>				
Firm.....	17.5	0.9	1.6	1.9	Individual.....	177	3,023	\$17,324,076	\$7,663,823
Corporation.....	49.1	96.5	96.5	96.8	Individual.....	88	263	1,630,683	629,713
<b>Automobiles, including bodies and parts, 1909.....</b>					Firm.....	36	589	2,006,644	933,983
Individual.....	113	9,861	\$30,979,527	\$16,071,425	Corporation.....	53	2,171	13,686,749	6,100,127
Individual.....	23	413	1,003,804	604,838	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	17	258	686,829	382,063	Individual.....	49.7	8.7	9.4	8.2
Corporation.....	73	9,190	29,288,894	15,083,624	Firm.....	20.3	19.5	11.6	12.2
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	29.9	71.8	79.0	79.6
Individual.....	20.4	4.2	3.2	3.8	<b>Foundry and machine-shop products, 1909.....</b>				
Firm.....	15.0	2.6	2.2	2.4	Individual.....	1,872	64,068	\$154,370,346	\$92,749,146
Corporation.....	64.6	93.2	94.5	93.9	Individual.....	731	6,809	14,728,284	8,876,449
<b>Boots and shoes, including out stock and findings, 1909.....</b>					Firm.....	329	6,047	12,765,821	7,947,174
Individual.....	296	21,627	\$48,185,914	\$19,211,403	Corporation.....	812	51,210	126,936,241	75,925,523
Individual.....	148	2,602	5,359,600	2,290,683	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	61	7,155	17,534,152	6,306,057	Individual.....	39.0	10.6	9.5	9.6
Corporation.....	87	11,870	25,292,162	10,554,663	Firm.....	17.6	9.4	8.2	8.6
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	43.4	79.9	82.2	81.9
Individual.....	50.0	12.0	11.1	11.9	<b>Furnishing goods, men's, 1909.....</b>				
Firm.....	20.6	33.1	36.4	33.1	Individual.....	375	18,186	\$42,197,117	\$20,620,777
Corporation.....	29.4	54.9	62.5	54.9	Individual.....	201	2,474	8,180,665	3,246,180
<b>Carriages and wagons and materials, 1909.....</b>					Firm.....	118	4,457	13,918,011	5,993,274
Individual.....	610	6,116	\$13,292,531	\$7,483,813	Corporation.....	56	11,255	20,098,441	11,411,323
Individual.....	414	2,116	4,434,217	2,661,493	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	131	916	1,605,750	1,057,207	Individual.....	53.6	13.6	19.4	15.7
Corporation.....	65	3,084	7,252,564	3,765,113	Firm.....	31.5	24.5	33.0	28.9
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	14.9	61.9	47.6	55.3
Individual.....	67.9	34.6	33.4	35.0	<b>Gas, illuminating and heating, 1909.....</b>				
Firm.....	21.5	15.0	12.1	14.1	Individual.....	141	6,422	\$42,346,726	\$27,328,320
Corporation.....	10.7	50.4	54.6	50.3	Individual.....	8	7	18,405	7,875
<b>Chemicals, 1909.....</b>					Corporation <sup>2</sup> .....	130	6,413	42,321,805	27,319,387
Individual.....	74	5,748	\$35,346,072	\$15,637,618	Other.....	3	2	6,516	1,058
Individual.....	12	105	749,025	303,022	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	4	12	74,218	46,259	Individual.....	5.7	0.1	( <sup>3</sup> )	( <sup>3</sup> )
Corporation.....	58	5,629	34,522,829	15,288,237	Corporation <sup>2</sup> .....	92.2	99.9	99.9	100.0
Per cent of total.....	100.0	100.0	100.0	100.0	Other.....	2.1	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Individual.....	16.2	1.8	2.1	1.9	<b>Hats, fur-felt, 1909.....</b>				
Firm.....	5.4	0.2	0.2	0.3	Individual.....	44	5,013	\$10,218,680	\$4,812,395
Corporation.....	78.4	98.0	97.7	97.8	Individual.....	24	423	1,558,550	659,556
<b>Clothing, men's, including shirts, 1909.....</b>					Firm.....	9	641	1,630,879	852,768
Individual.....	2,983	91,363	\$266,075,427	\$130,748,784	Corporation.....	11	3,949	7,029,231	3,400,071
Individual.....	1,648	30,630	51,761,642	32,264,669	Per cent of total.....	100.0	100.0	100.0	100.0
Firm.....	1,119	37,820	148,106,755	65,952,806	Individual.....	54.5	8.4	15.3	11.6
Corporation.....	216	22,913	66,207,030	32,531,309	Firm.....	20.5	12.8	16.0	17.7
Per cent of total.....	100.0	100.0	100.0	100.0	Corporation.....	25.0	78.8	68.8	70.7
Individual.....	55.2	33.5	19.5	24.7					
Firm.....	37.5	41.4	55.7	50.4					
Corporation.....	7.2	25.1	24.9	24.9					

<sup>1</sup> Includes the group "Other," to avoid disclosure of individual operations.  
<sup>2</sup> Includes the group "Firm," to avoid disclosure of individual operations.  
<sup>3</sup> Less than one-tenth of 1 per cent.

INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND CHARACTER OF OWNERSHIP.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
<b>Hosiery and knit goods, 1909.</b>					<b>Musical instruments, pianos and organs and materials, 1909.</b>				
Individual	360	35,950	\$67,130,296	\$28,452,925	Individual	184	11,938	\$38,678,953	\$18,185,206
Firm	131	3,634	7,360,501	3,012,405	Firm	55	1,744	5,744,549	2,462,897
Corporation	73	7,231	13,969,732	6,087,870	Corporation	26	1,612	2,801,625	1,719,915
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	103	8,582	25,073,570	12,002,304
Individual	36.4	10.1	11.0	10.6	Individual	29.9	14.6	17.1	15.2
Firm	20.3	20.1	20.8	21.4	Firm	14.1	13.5	8.5	10.6
Corporation	43.3	69.8	68.2	68.0	Corporation	56.0	71.9	74.4	74.2
<b>Leather goods, 1909.</b>					<b>Paint and varnish, 1909.</b>				
Individual	483	7,586	\$20,996,602	\$9,364,501	Individual	147	3,047	\$28,559,474	\$10,664,108
Firm	272	2,223	5,883,479	2,501,382	Firm	36	402	3,799,050	1,229,900
Corporation	137	2,763	7,812,400	3,414,884	Corporation	17	196	2,047,538	813,220
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	94	2,449	22,711,977	8,923,988
Individual	56.3	29.3	28.0	26.7	Individual	24.5	13.2	13.3	100.0
Firm	28.4	36.4	37.2	36.5	Firm	11.6	6.4	7.2	11.5
Corporation	15.3	34.3	34.8	36.8	Corporation	63.9	80.4	79.5	78.9
<b>Leather, tanned, curried, and finished, 1909.</b>					<b>Paper and wood pulp, 1909.</b>				
Individual	109	5,688	\$27,642,383	\$6,701,650	Individual	173	12,073	\$48,859,610	\$17,092,322
Firm	41	1,133	3,783,188	1,188,789	Firm	21	273	957,261	371,027
Corporation	35	1,728	9,202,647	1,892,428	Corporation	16	280	975,251	376,378
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	141	11,520	40,927,098	16,344,622
Individual	37.6	19.9	13.7	17.7	Individual	11.8	2.3	2.0	2.2
Firm	32.1	30.4	33.3	28.2	Firm	9.0	2.3	2.0	2.2
Corporation	30.3	49.7	53.0	54.0	Corporation	79.2	95.4	96.0	95.6
<b>Liquors, malt, 1909.</b>					<b>Printing and publishing, 1909.</b>				
Individual	184	8,731	\$77,720,045	\$58,837,018	Individual	4,426	63,120	\$216,946,482	\$160,452,222
Firm	24	1,145	10,989,705	8,069,890	Firm	2,309	10,736	34,420,640	25,878,131
Corporation	17	223	1,280,179	887,985	Corporation	648	6,683	18,983,100	13,606,595
Per cent of total	100.0	100.0	100.0	100.0	Other	1,841	45,044	161,017,212	110,154,288
Individual	13.0	13.1	14.1	13.7	Per cent of total	128	657	2,525,530	1,813,228
Firm	9.2	2.6	1.7	1.5	Individual	52.2	17.0	15.9	16.1
Corporation	77.7	84.3	84.2	84.8	Firm	14.6	10.0	8.8	8.5
<b>Lumber and timber products, 1909.</b>					<b>Slaughtering and meat packing, 1909.</b>				
Individual	2,263	27,471	\$72,529,813	\$30,824,722	Individual	238	6,110	\$127,130,051	\$16,961,817
Firm	1,440	7,141	10,730,064	8,258,813	Firm	146	949	17,134,093	2,191,403
Corporation	409	5,622	13,731,620	5,952,774	Corporation	60	937	25,164,429	2,510,493
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	42	4,224	84,830,920	12,289,801
Individual	63.9	26.0	23.1	26.8	Individual	61.3	15.5	13.5	12.9
Firm	20.7	20.1	18.9	19.3	Firm	21.0	15.3	19.8	14.8
Corporation	15.4	53.9	58.0	53.9	Corporation	17.6	69.1	66.7	72.3
<b>Malt, 1909.</b>					<b>Soap, 1909.</b>				
Individual	32	524	\$11,051,078	\$2,178,636	Individual	67	2,976	\$23,582,977	\$7,970,695
Firm	12	106	1,174,874	318,155	Firm	27	423	2,932,231	663,718
Corporation	3	9	159,193	31,170	Corporation	31	310	1,942,807	711,631
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	31	2,243	18,707,939	6,205,346
Individual	37.5	20.2	10.6	14.6	Individual	40.3	14.2	12.4	12.1
Firm	9.4	1.7	1.4	1.4	Firm	13.4	10.4	8.2	8.9
Corporation	53.1	78.1	87.9	84.0	Corporation	46.3	75.4	79.3	79.0
<b>Marble and stone work, 1909.</b>					<b>Tobacco manufactures, 1909.</b>				
Individual	655	6,939	\$17,921,285	\$10,645,761	Individual	3,371	30,019	\$76,661,552	\$45,320,146
Firm	375	1,968	4,908,149	3,043,484	Firm	2,026	9,160	18,038,101	11,024,114
Corporation	174	1,461	3,978,056	2,523,665	Corporation	325	6,003	10,464,876	9,562,638
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	120	14,286	42,158,876	24,733,894
Individual	57.3	28.4	27.7	28.1	Individual	86.8	30.5	23.5	24.3
Firm	26.0	21.1	22.2	23.3	Firm	9.6	22.0	21.5	21.1
Corporation	16.2	50.6	50.1	48.7	Corporation	3.6	47.5	55.0	54.6
<b>Millinery and lace goods, 1909.</b>					<b>Woolen, worsted, and felt goods, and wool hats, 1909.</b>				
Individual	931	21,078	\$52,106,200	\$24,971,417	Individual	64	9,460	\$23,739,421	\$8,995,393
Firm	461	6,773	16,495,172	8,070,934	Firm	14	96	200,029	104,695
Corporation	342	9,565	22,996,632	10,964,273	Corporation	17	1,433	3,773,116	1,594,913
Per cent of total	100.0	100.0	100.0	100.0	Per cent of total	33	7,931	19,760,270	7,385,785
Individual	49.5	32.1	31.7	32.3	Individual	21.9	1.0	0.8	1.2
Firm	36.7	45.4	44.1	43.9	Firm	26.6	15.1	15.9	16.7
Corporation	13.7	22.5	24.2	23.8	Corporation	51.6	83.8	83.3	82.1

<sup>1</sup> 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 page 821 groups the establishments according to the value of their products. The table also shows the average size of establish-

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

Table with columns: Industry and Value of Products, Number of establishments, Average number of wage earners, Value of products, Value added by manufacture, Industry and Value of Products, Number of establishments, Average number of wage earners, Value of products, Value added by manufacture. Rows include ALL INDUSTRIES, Chemicals, Clothing (men's and women's), Confectionery, Copper, tin, and sheet-iron products, Flour-mill and gristmill products, Food preparations, and various other categories.

1 Loss.

2 Less than one-tenth of 1 per cent.





INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.	INDUSTRY AND VALUE OF PRODUCTS.	Number of establishments.	Average number of wage earners.	Value of products.	Value added by manufacture.
<b>Paper and wood pulp, 1909</b> .....	178	12,073	\$48,859,610	\$17,092,327	<b>Soap, 1909</b> .....	67	2,976	\$23,582,977	\$7,970,595
Less than \$5,000.....	9	17	28,036	13,578	Less than \$5,000.....	18	16	49,280	25,753
\$5,000 and less than \$20,000.....	10	85	134,463	63,779	\$5,000 and less than \$20,000.....	15	44	174,857	78,843
\$20,000 and less than \$100,000.....	58	1,186	3,255,305	1,350,946	\$20,000 and less than \$100,000.....	18	179	1,064,936	390,079
\$100,000 and less than \$1,000,000.....	90	7,400	28,781,527	10,160,593	\$100,000 and less than \$1,000,000.....	10	521	4,303,259	1,382,516
\$1,000,000 and over.....	11	3,435	16,660,279	5,503,431	\$1,000,000 and over.....	6	2,216	17,990,645	6,112,794
Per cent of total.....	100.0	100.0	100.0	100.0	Less than \$5,000.....	26.9	0.5	0.2	0.3
Less than \$5,000.....	5.1	0.1	0.1	0.1	\$5,000 and less than \$20,000.....	22.4	1.5	0.7	1.0
\$5,000 and less than \$20,000.....	5.6	0.7	0.3	0.4	\$20,000 and less than \$100,000.....	26.9	6.0	4.5	4.9
\$20,000 and less than \$100,000.....	32.6	9.4	6.7	7.9	\$100,000 and less than \$1,000,000.....	14.9	17.5	18.2	17.1
\$100,000 and less than \$1,000,000.....	50.6	61.2	58.9	59.4	\$1,000,000 and over.....	9.0	74.5	76.3	76.7
\$1,000,000 and over.....	6.2	28.5	34.1	32.2	Average per establishment.....		44	\$351,985	\$118,964
Average per establishment.....		68	\$274,492	\$96,024	<b>Tobacco manufactures, 1909</b> .....	3,371	30,019	\$76,661,552	\$45,320,146
<b>Printing and publishing, 1909</b> .....	4,426	63,120	\$216,946,482	\$160,452,222	Less than \$5,000.....	2,468	1,862	4,723,167	3,015,897
Less than \$5,000.....	1,559	1,881	4,074,169	3,176,631	\$5,000 and less than \$20,000.....	596	2,854	5,408,991	3,367,618
\$5,000 and less than \$20,000.....	1,672	7,063	15,845,601	12,497,692	\$20,000 and less than \$100,000.....	208	4,405	8,392,863	5,068,237
\$20,000 and less than \$100,000.....	930	14,132	40,601,847	30,284,593	\$100,000 and less than \$1,000,000.....	38	11,795	25,424,502	14,579,257
\$100,000 and less than \$1,000,000.....	333	25,931	90,743,703	66,924,150	\$1,000,000 and over.....	11	9,103	32,712,029	19,289,137
\$1,000,000 and over.....	32	14,113	65,681,162	47,509,156	Per cent of total.....	100.0	100.0	100.0	100.0
Per cent of total.....	100.0	100.0	100.0	100.0	Less than \$5,000.....	73.2	6.2	6.2	6.7
Less than \$5,000.....	35.2	3.0	1.9	2.0	\$5,000 and less than \$20,000.....	17.7	9.5	7.1	7.4
\$5,000 and less than \$20,000.....	35.5	11.2	7.3	7.8	\$20,000 and less than \$100,000.....	6.2	14.7	10.9	11.2
\$20,000 and less than \$100,000.....	21.0	22.4	18.7	18.9	\$100,000 and less than \$1,000,000.....	2.6	39.3	33.2	32.2
\$100,000 and less than \$1,000,000.....	7.5	41.1	41.8	41.7	\$1,000,000 and over.....	0.3	30.3	42.7	42.6
\$1,000,000 and over.....	0.7	22.4	30.3	29.6	Average per establishment.....		89	\$22,741	\$13,444
Average per establishment.....		14	\$49,016	\$36,252	<b>Woolen, worsted, and felt goods, and wool hats, 1909</b> .....	64	9,460	\$23,739,421	\$8,995,393
<b>Slaughtering and meat packing, 1909</b> .....	238	6,110	\$127,130,051	\$16,961,817	Less than \$5,000.....	10	11	19,664	10,061
Less than \$5,000.....	20	12	43,462	17,070	\$5,000 and less than \$20,000.....	3	38	35,739	18,058
\$5,000 and less than \$20,000.....	53	86	626,413	161,251	\$20,000 and less than \$100,000.....	16	415	732,866	327,360
\$20,000 and less than \$100,000.....	67	295	3,086,392	651,420	\$100,000 and less than \$1,000,000.....	30	4,695	12,654,411	4,768,879
\$100,000 and less than \$1,000,000.....	74	1,259	25,250,030	3,143,123	\$1,000,000 and over.....	5	4,331	10,296,741	3,871,035
\$1,000,000 and over.....	24	4,458	98,123,754	12,988,953	Per cent of total.....	100.0	100.0	100.0	100.0
Per cent of total.....	100.0	100.0	100.0	100.0	Less than \$5,000.....	15.6	0.1	0.1	0.1
Less than \$5,000.....	8.4	0.2	( <sup>1</sup> )	0.1	\$5,000 and less than \$20,000.....	4.7	0.4	0.2	0.2
\$5,000 and less than \$20,000.....	22.3	1.4	0.5	1.0	\$20,000 and less than \$100,000.....	25.0	4.4	3.1	3.6
\$20,000 and less than \$100,000.....	28.2	4.8	2.4	3.8	\$100,000 and less than \$1,000,000.....	46.9	49.3	53.3	53.0
\$100,000 and less than \$1,000,000.....	31.1	20.6	19.9	18.5	\$1,000,000 and over.....	7.8	45.8	43.4	43.0
\$1,000,000 and over.....	10.1	73.0	77.2	76.6	Average per establishment.....		148	\$370,928	\$140,553
Average per establishment.....		26	\$534,160	\$71,268					

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

This table shows that in 1909 of the 44,935 establishments only 470, or 1 per cent, had a value of products exceeding \$1,000,000. These establishments, however, employed an average of 255,383 wage earners, or 25.4 per cent of the total number in all establishments, and reported 37 per cent of the total value of products and 31 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 (27.3 per cent) of the total number of establishments, but the value of their products amounted to only nine-tenths of 1 per cent of the total. The great bulk of the manufacturing was done in establishments having products valued at \$100,000 or over.

It will be seen from the above 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 valued at \$1,000,000 or over—and a slight decrease in that of all other classes.

The fact that the average value of products per establishment increased from \$66,902 to \$74,986, and the average value added by manufacture from \$30,643 to \$33,662, can not be taken as in itself indicating a tendency toward concentration. These increased

values may be, and probably are, due in part to the increase that has taken place in the prices of commodities. The average number of wage earners per establishment decreased from 23 to 22.

This table shows further that when the size of the establishments is measured by the average value of products per establishment, the chemical, brewery, and slaughtering and meat-packing industries were conducted in comparatively large establishments, while the carriage and wagon, marble and stone work, tobacco manufactures, and lumber industries were conducted in rather small establishments.

Of the industries shown separately, slaughtering and meat packing had the largest establishments, with an average value of products amounting to \$534,160, and the carriage and wagon industry the smallest, with products valued on the average at \$21,791 per establishment.

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 the following page shows, for 1909, such a classification for all industries combined and for 58 important industries individually, and gives not only the number of establishments in each group, but also the average number of wage earners employed.

INDUSTRY.	ESTABLISHMENTS EMPLOYING—									
	Total.	No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
<b>All industries.....</b>	<b>44,835</b>	<b>4,667</b>	<b>20,789</b>	<b>10,524</b>	<b>5,057</b>	<b>2,050</b>	<b>1,253</b>	<b>384</b>	<b>143</b>	<b>58</b>
Agricultural implements.....	57	2	22	9	13	4	1	2		1
Artificial flowers and feathers and plumes.....	319	7	72	115	87	23	14	1	3	
Automobiles, including bodies and parts.....	113	2	27	29	24	13	10	3	2	3
Boots and shoes, including cut stock and findings.....	296	10	94	72	39	29	30	11	10	1
Boxes, fancy and paper.....	315	1	42	115	94	39	22	1		
Brass and bronze products.....	247	12	110	77	20	12	11	4	1	
Bread and other bakery products.....	3,978	291	2,991	595	59	26	10	5		1
Butter, cheese, and condensed milk.....	1,552	234	1,249	42	21	5	1			1
Canning and preserving.....	790	9	579	129	47	17	8		1	
Carpets and rugs, other than rag.....	16			4	1	4	1	2	1	3
Carriages and wagons and materials.....	610	55	349	154	26	18	7	1		
Cars and general shop construction and repairs by steam-railroad companies.....	69		3	12	10	13	11	8	11	1
Chemicals.....	74		22	17	15	8	8	2	1	1
Clothing, men's, including shirts.....	2,983	93	640	1,140	755	210	92	33	12	2
Clothing, women's.....	3,083	44	494	1,145	895	324	154	25	2	
Coffee and spice, roasting and grinding.....	90	8	36	35	7	1	2		1	
Confectionery.....	249	9	103	61	37	16	17	4	2	
Copper, tin, and sheet-iron products.....	686	22	304	189	55	29	15	8	3	1
Cordage and twine and jute and linen goods.....	16		3		2	1	5	2	1	2
Cotton goods, including cotton small wares.....	47	1	2	9	8	8	9	2	2	3
Electrical machinery, apparatus, and supplies.....	217	4	86	64	28	16	15	1	1	2
Flour-mill and gristmill products.....	983	156	702	47	13	3	1		1	
Food preparations.....	177	16	105	31	9	8	7	1		
Foundry and machine-shop products.....	1,872	81	701	549	208	138	88	32	11	4
Fur goods.....	803	53	428	292	72	13	6			
Furnishing goods, men's.....	375	19	125	125	55	21	19	6	4	1
Furniture and refrigerators.....	676	14	237	194	120	70	31	10	2	
Gas and electric fixtures and lamps and reflectors.....	183	3	64	52	35	13	14	2		
Gas, illuminating and heating.....	141	27	56	27	12	5	8	4		2
Gloves and mittens, leather.....	225	17	78	69	23	23	11	4		
Hats, fur-felt.....	44	4	13	8	9	4		4	1	1
Hosiery and knit goods.....	360	7	44	107	57	44	68	21	9	3
Iron and steel, blast furnaces.....	9					3	2	3	1	
Iron and steel, steel works and rolling mills.....	25		2	1	3	4	4	2	2	3
Jewelry.....	479	53	228	137	45	12	2	6		
Leather goods.....	483	20	219	144	70	21	7	2		
Leather, tanned, curried, and finished.....	109	4	21	23	28	18	12	3		
Liquors, malt.....	184	2	15	47	67	35	15	3		
Lumber and timber products.....	2,203	105	1,301	506	177	68	37	7	2	
Malt.....	32		10		2					
Marble and stone work.....	655	37	382	145	69	10	6			
Millinery and lace goods.....	931	30	244	304	197	65	29	2		
Musical instruments, pianos and organs and materials.....	184	1	32	51	40	27	23	7	3	
Oil, linseed.....	6			1	1	2	1	1		
Paint and varnish.....	147	2	78	31	19	9	8			
Paper and wood pulp.....	178		11	44	52	38	24	8	1	
Paper goods, not elsewhere specified.....	107	3	36	32	14	9	9	4		
Patent medicines and compounds and druggists' preparations.....	743	156	423	109	37	13	5			
Photographic apparatus and materials.....	42	2	16	10	8	3	2			1
Printing and publishing.....	4,426	1,261	1,771	885	286	111	72	25	11	4
Shipbuilding, including boat building.....	255	37	121	61	17	13	2	2	1	1
Silk and silk goods, including throwsters.....	170	3	19	38	37	32	28	11	2	
Slaughtering and meat packing.....	238	15	129	49	25	9	5	4	2	
Soap.....	67	8	28	15	7	1	5	2		1
Tobacco manufactures.....	3,371	1,066	1,794	294	95	36	33	13	6	4
Typewriters and supplies.....	43	1	18	12	4	2	2	1	1	2
Wire.....	7		1	1		1	2	1	1	
Woolen, worsted, and felt goods, and wool hats.....	64	5	7	9	11	0	12	7	3	1
All other industries.....	8,011	225	3,932	1,985	830	325	211	68	26	9

AVERAGE NUMBER OF WAGE EARNERS.

INDUSTRY.	Total.	No wage earners.	1 to 5 wage earners.	6 to 20 wage earners.	21 to 50 wage earners.	51 to 100 wage earners.	101 to 250 wage earners.	251 to 500 wage earners.	501 to 1,000 wage earners.	Over 1,000 wage earners.
<b>All industries.....</b>	<b>1,003,981</b>	<b>48,402</b>	<b>121,330</b>	<b>162,696</b>	<b>145,116</b>	<b>189,485</b>	<b>132,046</b>	<b>98,443</b>	<b>106,463</b>	
Agricultural implements.....	5,717	53	125	485	321	150	688	2,130	1,785	
Artificial flowers and feathers and plumes.....	8,493	218	1,390	2,829	1,698	2,027	331			
Automobiles, including bodies and parts.....	9,861	75	380	773	934	1,672	984	1,520	3,523	
Boots and shoes, including cut stock and findings.....	21,027	260	865	1,313	2,194	4,890	3,790	7,156	1,159	
Boxes, fancy and paper.....	11,638	136	1,460	2,969	2,692	3,230	313	788		
Brass and bronze products.....	6,651	304	910	582	789	1,691	1,301	984		
Bread and other bakery products.....	21,357	7,659	5,285	1,876	1,870	1,539	1,541		1,629	
Butter, cheese, and condensed milk.....	2,806	1,366	402	673	321	104				
Canning and preserving.....	7,075	1,112	1,308	1,580	1,303	1,183		520	9,084	
Carpets and rugs, other than rag.....	11,898		46	47	324	225	718	554		
Carriages and wagons and materials.....	6,110		913		819	1,288	1,116	368		
Cars and general shop construction and repairs by steam-railroad companies.....	10,454		12	170	400	985	1,714	3,007	8,215	1,951
Chemicals.....	5,746		74	222	546	537	1,490	600	714	1,473
Clothing, men's, including shirts.....	91,363		1,733	14,679	24,132	14,880	13,822	11,624	8,407	2,086
Clothing, women's.....	98,104		1,589	14,707	28,779	22,099	22,135	7,688	1,107	

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.
AVERAGE NUMBER OF WAGE EARNERS—continued.									
Coffee and spice, roasting and grinding.....	1,519	76	386	179	55	316	507		
Confectionery.....	8,570	236	722	1,225	1,107	2,091	1,446	1,143	
Copper, tin, and sheet-iron products.....	14,689	940	1,976	1,718	2,018	2,212	2,494	1,910	1,421
Cordage and twine and jute and linen goods.....	5,952	6	66	80	744	840	827	837	3,389
Cotton goods, including cotton small wares.....	10,663	7	109	269	621	1,232	1,695	1,135	5,595
Electrical machinery, apparatus, and supplies.....	18,972	224	677	848	1,147	2,327	457	638	12,654
Flour-mill and gristmill products.....	2,990	1,255	448	399	190	194		504	
Food preparations.....	3,023	228	340	293	664	1,149	349		
Foundry and machine-shop products.....	64,066	1,875	6,278	8,756	9,699	13,187	10,988	7,973	5,310
Fur goods.....	8,244	1,291	3,004	2,250	805				
Furnishing goods, men's.....	18,186	345	1,452	1,845	1,556	2,767	1,998	2,663	5,560
Furniture and refrigerators.....	20,281	651	2,264	3,930	4,990	4,700	3,746		
Gas and electric fixtures and lamps and reflectors.....	6,017	176	639	1,118	934	2,496	654		
Gas, illuminating and heating.....	6,422	150	285	383	313	1,145	1,367		2,779
Gloves and mittens, leather.....	6,287	208	84	726	1,656	1,486	1,370		
Hats, fur-felt.....	5,013	37	109	257	279		1,521	527	2,283
Hosiery and knit goods.....	35,950	133	1,409	1,912	3,298	10,326	8,167	6,451	4,254
Iron and steel, blast furnaces.....	2,298				281	348	1,149	520	
Iron and steel, steel works and rolling mills.....	10,091	5	12	118	291	588	2,219	1,573	5,285
Jewelry.....	5,379	571	1,536	1,503	839	299	631		
Leather goods.....	7,586	529	1,718	2,191	1,520	1,027	601		
Leather, tanned, curried, and finished.....	5,688	51	306	810	1,338	1,953	1,230		
Liquors, malt.....	5,731	47	620	2,341	2,452	2,165	1,106		
Lumber and timber products.....	27,471	2,696	5,613	5,583	4,813	5,930	2,002	1,374	
Malt.....	524	37	203	47	237				
Marble and stone work.....	6,939	931	1,631	2,261	1,148	968			
Millinery and lace goods.....	21,078	750	4,373	6,379	4,612	4,209	725		
Musical instruments, pianos and organs and materials.....	11,938	71	655	1,343	1,981	3,655	2,363	1,870	
Oil, linseed.....	696	7	35	146	103	275			
Paint and varnish.....	3,447	195	319	625	649	1,259			
Paper and wood pulp.....	12,073	28	587	1,709	2,808	3,884	2,556	501	
Paper goods, not elsewhere specified.....	4,308	116	401	445	608	1,344	1,389		
Patent medicines and compounds and druggists' preparations.....	4,728	862	1,288	1,172	909	547			
Photographic apparatus and materials.....	4,088	47	130	276	223	228			3,184
Printing and publishing.....	63,120	4,638	9,574	9,231	8,089	10,884	8,543	7,250	4,011
Shipbuilding, including boat building.....	5,644	264	724	600	934	348	584	548	1,642
Silk and silk goods, including throwsters.....	12,903	61	482	1,190	2,255	4,170	3,703	1,042	
Slaughtering and meat packing.....	6,110	310	548	770	607	808	1,361	1,706	
Soap.....	2,376	70	156	102	60	777	610		1,102
Tobacco manufactures.....	30,019	3,236	3,021	2,894	2,554	4,984	4,133	4,077	5,120
Typewriters and supplies.....	4,538	64	155	123	154	272	323	512	2,935
Wire.....	1,439	1	18		60	387	409	564	
Woolen, worsted, and felt goods, and wool hats.....	9,460	21	116	344	711	2,067	2,290	2,260	1,651
All other industries.....	169,534	9,419	22,627	26,595	23,172	32,027	23,559	18,317	13,816

PER CENT OF AVERAGE NUMBER OF WAGE EARNERS.

INDUSTRY.	100.0	4.8	12.1	16.2	14.5	18.9	13.2	9.8	10.6
All industries.....	100.0	4.8	12.1	16.2	14.5	18.9	13.2	9.8	10.6
Agricultural implements.....	100.0	0.9	2.2	8.5	5.6	2.6	12.0	37.3	30.9
Artificial flowers and feathers and plumes.....	100.0	2.6	16.4	33.3	20.0	23.9	3.9		
Automobiles, including bodies and parts.....	100.0	0.8	3.9	7.8	9.5	17.0	10.0	15.4	35.7
Boots and shoes, including cut stock and findings.....	100.0	1.2	4.0	6.1	10.1	22.6	17.5	33.1	5.4
Boxes, fancy and paper.....	100.0	1.2	12.7	25.7	23.3	28.0	2.7	6.4	
Brass and bronze products.....	100.0	4.6	13.7	8.8	11.9	25.4	20.9	14.8	
Bread and other bakery products.....	100.0	35.9	24.7	8.5	8.8	7.2	7.2		7.6
Butter, cheese, and condensed milk.....	100.0	47.7	14.0	23.5	11.2	8.6			
Canning and preserving.....	100.0	15.7	19.3	22.3	18.5	16.7		7.4	
Carpets and rugs, other than rag.....	100.0		0.4	0.4	2.7	1.9	6.0	4.7	83.9
Carriages and wagons and materials.....	100.0	14.9	26.4	13.4	21.1	18.2	6.0		
Cars and general shop construction and repairs by steam-railroad companies.....	100.0	0.1	1.0	2.4	6.0	10.4	18.3	49.9	11.9
Chemicals.....	100.0	1.3	3.9	9.5	9.3	25.9	12.0	12.4	25.6
Clothing, men's, including shirts.....	100.0	1.9	10.1	26.4	16.3	15.1	12.7	9.2	2.3
Clothing, women's.....	100.0	1.6	15.0	29.3	22.5	22.6	7.8	1.1	
Coffee and spice, roasting and grinding.....	100.0	5.0	25.4	11.8	3.6	20.8		33.4	
Confectionery.....	100.0	2.8	8.4	14.3	12.9	31.4	16.9	15.3	
Copper, tin, and sheet-iron products.....	100.0	6.4	13.5	11.7	13.7	15.1	17.0	13.0	9.7
Cordage and twine and jute and linen goods.....	100.0	0.1		1.1	1.3	12.5	14.1	13.9	56.9
Cotton goods, including cotton small wares.....	100.0	0.1	1.0	2.5	5.8	11.6	15.9	10.6	52.5
Electrical machinery, apparatus, and supplies.....	100.0	1.2	3.6	4.5	6.0	12.3	2.4	3.4	66.7
Flour-mill and gristmill products.....	100.0	42.0	15.0	13.3	6.4	8.5		16.9	
Food preparations.....	100.0	7.5	11.2	9.7	22.0	38.0	11.5		
Foundry and machine-shop products.....	100.0	2.9	9.8	13.7	15.1	20.6	17.2	12.4	8.3
Fur goods.....	100.0	15.7	36.4	27.3	9.8	10.8			
Furnishing goods, men's.....	100.0	1.9	8.0	10.1	8.6	15.2	11.0	14.6	30.6
Furniture and refrigerators.....	100.0	3.2	11.2	19.4	24.6	23.2	18.5		
Gas and electric fixtures and lamps and reflectors.....	100.0	2.9	10.6	18.6	15.5	41.5	10.9		
Gas, illuminating and heating.....	100.0	2.3	4.4	6.0	4.9	17.8	21.3		43.3
Gloves and mittens, leather.....	100.0	3.3	13.4	11.5	26.3	23.6	21.8		

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.
PER CENT OF AVERAGE NUMBER OF WAGE EARNERS—continued.										
Hats, fur-felt.....	100.0	0.7	2.2	5.1	5.6	28.7	30.3	10.5	45.5	
Hosiery and knit goods.....	100.0	0.4	3.9	5.3	9.2	23.7	22.7	17.9	11.8	
Iron and steel, blast furnaces.....	100.0				12.2	15.1	50.0	22.6		
Iron and steel, steel works and rolling mills.....	100.0	( <sup>1</sup> )	0.1	1.2	2.9	5.8	22.0	15.6		
Jewelry.....	100.0	10.6	28.6	27.9	15.6	5.6	11.7			
Leather goods.....	100.0	7.0	22.6	28.9	20.0	13.5	7.9			
Leather, tanned, curried, and finished.....	100.0	0.9	5.4	14.2	23.5	34.3	21.6			
Liquors, malt.....	100.0	0.5	7.1	26.8	28.1	24.8	12.7			
Lumber and timber products.....	100.0	9.8	20.4	20.3	17.5	19.4	7.5	5.0		
Malt.....	100.0	7.1	38.7	9.0	45.2					
Marble and stone work.....	100.0	13.4	23.5	32.6	16.5	14.0				
Millinery and lace goods.....	100.0	3.7	20.7	30.3	21.9	20.0	3.4			
Musical instruments, pianos and organs and materials.....	100.0	0.6	5.5	11.2	16.6	30.6	19.3	15.7		
Oil, linseed.....	100.0		1.2	6.2	25.8	18.2	48.6			
Paint and varnish.....	100.0	6.4	10.5	20.5	21.3	41.3				
Paper and wood pulp.....	100.0	0.2	4.9	14.2	23.3	32.2	21.2	4.1		
Paper goods, not elsewhere specified.....	100.0	2.7	9.3	10.3	14.1	31.2	32.3			
Patent medicines and compounds and druggists' preparations.....	100.0	18.2	26.2	24.8	19.2	11.6				
Photographic apparatus and materials.....	100.0	1.1	3.2	6.8	5.5	5.6				
Printing and publishing.....	100.0	7.3	15.2	14.6	12.8	17.2	13.5	11.5	77.9	7.8
Shipbuilding, including boat building.....	100.0	4.7	12.8	10.6	16.5	6.2	10.3	9.7	29.1	
Silk and silk goods, including throwsters.....	100.0	0.5	3.7	9.2	17.5	32.3	28.7	8.1		
Slaughtering and meat packing.....	100.0	5.1	9.0	12.6	9.9	13.2	22.3	27.0		
Soap.....	100.0	2.4	5.2	6.5	2.3	26.1	20.5			
Tobacco manufactures.....	100.0	10.8	10.1	9.6	8.5	16.6	13.8	13.6	37.0	17.1
Typewriters and supplies.....	100.0	1.4	3.4	2.7	3.4	6.0	7.1	11.3	64.7	
Wire.....	100.0	0.1	1.2		4.2	26.0	28.4	39.2		
Woolen, worsted, and felt goods, and wool hats.....	100.0	0.2	1.2	3.6	7.5	21.8	24.2	23.9	17.5	
All other industries.....	100.0	5.6	13.3	15.7	13.7	18.9	13.9	10.8	8.2	

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

Of the 44,935 establishments reported for all industries, 10.4 per cent employed no wage earners; 46.2 per cent, from 1 to 5; 23.4 per cent, 6 to 20; and 11.3 per cent, 21 to 50. The most numerous single group consists of the 20,799 establishments employing from 1 to 5 wage earners, and the next of the 10,524 establishments employing from 6 to 20 wage earners. There were 585 establishments that employed over 250 wage earners; 58 of these employed over 1,000, of which 4 each were engaged in the foundry and machine-shop and printing and publishing industries, and tobacco manufactures, and 3 each in the automobile, carpet and rug, cotton-goods, hosiery and knit-goods, and steel works and rolling-mill industries.

Of the total number of wage earners, 33.6 per cent were in establishments employing over 250 wage earners. The single group having the largest number of wage earners was the group comprising the establishments employing from 101 to 250. This group employed 189,485 wage earners, or 18.9 per cent of the total number. In 21 of the 58 industries listed separately in the table, establishments employing more than 250 wage earners reported more than one-half of the total number employed in each industry. In 11 of these industries, establishments employing over 500 wage earners reported more than one-half of the total number, while in 7, establishments employing over 1,000 wage earners reported more than one-half of the total. The highest proportion (83.9 per cent)

of wage earners employed by establishments reporting an average of more than 1,000 was in the manufacture of carpets and rugs.

**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 expense which make up the total. The first table on the following page 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 878.

This table shows that, for all industries combined, 62.2 per cent of the total expenses were incurred for materials, 24.9 per cent for services—that is, salaries and wages—and 12.9 per cent for other purposes. As would be expected, these proportions vary greatly in the different industries. The largest proportions shown for the various classes of expenses in the industries presented separately are as follows: For salaries, 17.7 per cent, in printing and publishing; for wages, 45.1 per cent, in the steam-railroad repair shops; for materials, 92.6 per cent, in the flour mills and gristmills; and for miscellaneous expenses (which in this case include internal-revenue taxes), 50.4 per cent, in the breweries.

INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.				INDUSTRY.	PER CENT OF TOTAL EXPENSES REPORTED.			
	Salaries.	Wages.	Materials.	Miscellaneous expenses.		Salaries.	Wages.	Materials.	Miscellaneous expenses.
All industries.....	6.2	18.7	62.2	12.9	Hats, fur-felt.....	4.1	28.3	56.2	11.4
Agricultural implements.....	8.3	26.7	52.3	12.8	Hosiery and knit goods.....	3.4	24.8	64.7	7.0
Artificial flowers and feathers and plumes.....	5.6	19.0	67.4	8.0	Iron and steel, blast furnaces.....	1.7	7.4	88.0	2.9
Automobiles, including bodies and parts.....	5.9	25.6	54.5	14.0	Iron and steel, steel works and rolling mills.....	3.7	18.2	74.7	3.3
Boots and shoes, including cut stock and findings.....	5.0	23.8	64.5	6.7	Jewelry.....	7.0	22.5	61.4	9.2
Boxes, fancy and paper.....	7.3	33.9	48.6	10.2	Leather goods.....	6.7	21.7	61.8	9.8
Brass and bronze products.....	5.2	19.9	66.3	8.6	Leather, tanned, curried, and finished.....	2.7	11.3	81.1	4.9
Bread and other bakery products.....	3.6	18.4	69.8	8.2	Liquors, malt.....	8.0	11.6	30.0	50.4
Butter, cheese, and condensed milk.....	1.3	4.1	91.9	2.8	Lumber and timber products.....	4.3	23.2	64.1	8.3
Canning and preserving.....	5.4	15.1	69.0	10.5	Malt.....	2.1	4.0	88.3	5.5
Carpets and rugs, other than rag.....	3.2	27.1	61.4	8.3	Marble and stone work.....	6.5	26.6	45.9	10.9
Carriages and wagons and materials.....	6.4	32.9	51.1	9.5	Millinery and lace goods.....	7.2	21.6	60.8	10.4
Cars and general shop construction and repairs by steam-railroad companies.....	5.7	45.1	46.4	2.8	Musical instruments, pianos and organs and materials.....	6.1	25.4	57.2	11.3
Chemicals.....	5.9	12.3	71.7	10.1	Oil, linseed.....	3.4	2.4	90.0	4.3
Clothing, men's, including shirts.....	4.5	20.0	56.2	19.3	Paint and varnish.....	9.0	7.3	69.9	13.8
Clothing, women's.....	5.0	22.7	61.3	10.4	Paper and wood pulp.....	3.4	15.4	72.6	8.7
Coffee and spice, roasting and grinding.....	5.4	4.8	83.1	6.8	Paper goods, not elsewhere specified.....	9.7	15.9	61.3	13.1
Confectionery.....	0.8	13.3	67.6	12.3	Patent medicines and compounds and druggists' preparations.....	14.3	7.7	43.8	34.2
Copper, tin, and sheet-iron products.....	6.0	24.3	60.9	8.9	Photographic apparatus and materials.....	10.0	22.3	45.5	22.2
Cordage and twine and jute and linen goods.....	3.3	18.9	66.3	11.5	Printing and publishing.....	17.7	23.1	30.0	29.2
Cotton goods, including cotton small wares.....	3.2	22.7	64.0	10.1	Shipbuilding, including boat building.....	5.6	33.8	40.3	15.3
Electrical machinery, apparatus, and supplies.....	9.3	25.6	56.3	8.9	Silk and silk goods, including throwsters.....	6.3	22.6	58.5	12.7
Flour-mill and gristmill products.....	1.5	2.6	92.6	3.4	Slaughtering and meat packing.....	1.4	3.6	91.1	3.9
Food preparations.....	8.1	8.8	63.6	19.6	Soap.....	4.1	7.1	77.5	11.3
Foundry and machine-shop products.....	9.9	30.4	46.1	13.6	Tobacco manufactures.....	4.9	20.8	47.6	26.7
Fur goods.....	5.0	16.3	69.1	9.6	Typewriters and supplies.....	11.3	42.5	26.5	19.7
Furnishing goods, men's.....	7.0	21.2	59.1	12.6	Wire.....	2.3	8.1	83.9	5.6
Furniture and refrigerators.....	7.5	31.0	51.0	10.5	Woolen, worsted, and felt goods, and wool hats.....	3.8	19.4	69.0	7.8
Gas and electric fixtures and lamps and reflectors.....	11.8	28.9	45.2	14.1	All other industries.....	5.4	15.2	69.6	9.7
Gas, illuminating and heating.....	10.4	15.2	52.4	22.0					
Gloves and mittens, leather.....	4.8	22.1	62.4	10.7					

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 in the lower part of the table 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 <sup>1</sup>	1909	1904	1899 <sup>1</sup>	1909	1904	1899
	<b>Primary power, total.....</b>	<b>67,137</b>	<b>19,032</b>	<b>19,699</b>	<b>1,997,662</b>	<b>1,516,592</b>	<b>1,099,931</b>	<b>100.0</b>	<b>100.0</b>
Owned.....	21,239	19,032	19,699	1,579,977	1,345,697	1,017,392	79.1	88.7	92.5
Steam.....	12,538	12,215	13,346	1,080,877	850,497	659,702	54.1	56.1	60.0
Gas.....	4,656	2,928	1,944	99,899	44,288	16,221	5.0	2.9	1.5
Water wheels.....	3,789	3,629	4,409	304,221	445,197	335,411	19.7	29.4	30.5
Water motors.....	250	260	( <sup>2</sup> )	1,397	937	( <sup>2</sup> )	0.1	0.1	( <sup>2</sup> )
Other.....				3,583	4,778	6,058	0.2	0.3	0.6
Rented.....	45,898	( <sup>2</sup> )	( <sup>2</sup> )	417,685	170,895	82,539	20.9	11.3	7.5
Electric.....	45,898	( <sup>2</sup> )	( <sup>2</sup> )	389,945	95,284	47,768	19.5	6.3	4.3
Other.....				27,740	75,611	34,771	1.4	5.0	3.2
<b>Electric motors.....</b>	<b>66,979</b>	<b>3,422</b>	<b>2,323</b>	<b>689,976</b>	<b>222,111</b>	<b>77,598</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Run by current generated by establishment.....	21,081	3,422	2,323	300,031	126,327	29,830	43.5	57.1	38.4
Run by rented power.....	45,898	( <sup>2</sup> )	( <sup>2</sup> )	389,945	95,284	47,768	56.5	42.9	61.6

<sup>1</sup> Includes the neighborhood industries and hand trades, omitted in 1904 and 1909.

<sup>2</sup> Not reported.

This table indicates that the total primary power increased 481,070 horsepower, or 31.7 per cent, from 1904 to 1909, and 416,661 horsepower, or 37.9 per cent, from 1899 to 1904. The greater part of the increase for the more recent period was in steam and rented electric power. In 1909, as in 1904 and 1899, steam power formed the major part of the primary power, but notwithstanding an increase of 421,175 horsepower during the decade the proportion which such power formed of the total primary power decreased from 60 per cent in

1899 to 56.1 per cent in 1904 and 54.1 per cent in 1909. The more general use of gas engines in recent years is shown by the fact that 4,656 such engines, with an indicated capacity of 99,899 horsepower, were reported in 1909, as against 2,928 engines, with 44,288 horsepower, in 1904 and 1,944 engines, with 16,221 horsepower, in 1899. The figures also show that the practice of renting electric power is increasing rapidly, the horsepower having increased from 95,284 in 1904 to 389,955 in 1909, and 19.5 per cent of the total primary

power having been of this character in 1909, as compared with 6.3 per cent in 1904 and 4.3 per cent in 1899. This condition was due in great measure to the utilization of the electrical energy developed at Niagara Falls, by the establishments located within the considerable area for which this current is made available by transmission.

The use of electric motors for the purpose of applying the power generated within the establishments is shown also to be rapidly becoming more common, the horse-

power of such motors having increased from 29,830 in 1899 to 126,827 in 1904 and 300,031 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).
<b>All industries.....</b>	<b>4,021,671</b>	<b>7,687,039</b>	<b>2,644,148</b>	<b>306,593</b>	<b>3,095,260</b>	<b>5,123,045</b>
Agricultural implements.....	5,651	58,063	10,745	1,595	43,191	27,910
Artificial flowers and feathers and plumes.....	1,294	33	98	11	.....	12,841
Automobiles, including bodies and parts.....	5,046	33,557	5,207	2	4,590	70,739
Boots and shoes, including cut stock and findings.....	22,552	13,103	.....	52	185	23,062
Boxes, fancy and paper.....	7,065	5,188	.....	39	162	80,327
Brass and bronze products.....	24,198	34,580	6,307	1,043	13,015	34,196
Bread and other bakery products.....	151,844	10,878	30,983	11,281	194	298,584
Butter, cheese, and condensed milk.....	23,216	99,204	59	33,808	1,236	13,206
Canning and preserving.....	26,979	34,934	727	693	2,134	21,383
Carpets and rugs, other than rag.....	8,400	100,693	.....	1	16	145
Carrriages and wagons and materials.....	5,705	28,110	301	1,123	2,087	22,511
Cars and general shop construction and repairs by steam-railroad companies.....	89,602	183,584	170	120	25,222	1,610
Chemicals.....	366,505	105,056	3,514	54	6,872	220,978
Clothing, men's, including shirts.....	29,108	6,546	799	383	350	280,352
Clothing, women's.....	14,120	1,886	3	28	407	271,692
Coffee and spice, roasting and grinding.....	32,307	7,491	1	.....	3	13,068
Confectionery.....	40,063	9,728	1,199	19	40	30,684
Copper, tin, and sheet-iron products.....	21,497	40,518	3,345	228	57,256	78,198
Cordage and twine and jute and linen goods.....	26,748	32,532	.....	.....	.....	377
Cotton goods, including cotton small wares.....	39,624	85,025	.....	13	43	3,963
Electrical machinery, apparatus, and supplies.....	44,898	139,883	5,303	36	34,005	80,966
Flour-mill and gristmill products.....	7,515	93,485	60	1,370	7,372	630,395
Food preparations.....	13,600	25,130	162	1	106	29,961
Foundry and machine-shop products.....	137,241	252,022	108,607	9,731	39,487	224,142
Fur goods.....	1,607	952	13	8	4	10,759
Furnishing goods, men's.....	9,118	6,064	.....	.....	1,794	27,695
Furniture and refrigerators.....	22,462	73,829	5,300	2,395	233	31,404
Gas and electric fixtures and lamps and reflectors.....	6,942	4,782	864	17	302	26,106
Gas, illuminating and heating.....	485,900	832,970	119,602	120	3,430,773	.....
Gloves and mittens, leather.....	1,382	3,474	.....	127	112	8,983
Hats, fur-felt.....	4,465	7,790	.....	9	.....	5,525
Hosiery and knit goods.....	36,435	139,876	285	15	220	18,373
Iron and steel, blast furnaces.....	1,317	74,586	2,155,893	940	.....	.....
Iron and steel, steel works and rolling mills.....	9,106	709,404	32,673	6,015	71,404	831,417
Jewelry.....	288	260	31	1	6	26,308
Leather goods.....	2,442	3,201	1	39	2,391	22,486
Leather, tanned, curried, and finished.....	25,327	78,802	30	59	248	19,430
Liquors, malt.....	227,666	229,195	014	35	92	73,001
Lumber and timber products.....	20,829	82,258	1,520	5,551	2,998	41,298
Malt.....	35,676	12,031	170	.....	.....	2,891
Marble and stone work.....	24,461	20,511	738	39	1,192	25,895
Millinery and lace goods.....	4,582	340	13	6	4	49,088
Musical instruments, pianos and organs and materials.....	23,062	26,120	1,338	83	19	4,673
Oil, linseed.....	4,000	20,684	.....	48	.....	.....
Paint and varnish.....	37,408	23,408	4,518	11	331	8,634
Paper and wood pulp.....	173,387	872,378	.....	2,775	176	.....
Paper goods, not elsewhere specified.....	21,534	2,508	40	1	65	5,576
Patent medicines and compounds and druggists' preparations.....	20,072	5,286	707	106	18	16,825
Photographic apparatus and materials.....	2,268	39,212	.....	.....	1	7,382
Printing and publishing.....	75,871	20,814	244	629	1,840	235,216
Shipbuilding, including boat building.....	6,247	30,881	100	272	1,626	3,782
Silk and silk goods, including throwsters.....	16,140	20,357	3,601	6	114	36,591
Slaughtering and meat packing.....	71,124	83,556	152	1,328	566	13,473
Soap.....	22,441	83,609	80	24	.....	2,049
Tobacco manufactures.....	11,818	2,754	31	136	55	25,766
Typewriters and supplies.....	6,091	10,066	575	2	2,880	12,068
Wire.....	18,356	23,880	7,059	50	4,891	.....
Woolen, worsted, and felt goods, and wool hats.....	30,072	99,821	.....	153	18	889
All other industries.....	1,410,108	2,579,181	70,283	223,936	231,403	954,898

NOTE.—In addition, there were 7,165 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 28 important industries in New York are here presented.

Printing and publishing.—Though the printing and publishing industry in New York as a whole shows considerable growth during the last five years when measured by the financial statistics, the growth in the newspaper and periodical branch has been slight, neither the number of publications nor the aggregate circulation showing any considerable increase.

The following table shows the number of the different classes of newspapers and periodicals published in the state in 1909, 1904, and 1899, together with the aggregate circulation per issue for each class:

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1909	1904	1899	1909	1904	1899
Total.....	1,953	1,933	1,526	43,953,617	42,640,395	30,216,095
Daily.....	231	217	207	5,253,521	4,573,640	3,896,967
Sunday.....	48	44	49	2,957,727	3,061,565	(1)
Semiweekly and tri-weekly.....	56	63	60	250,403	362,797	607,042
Weekly.....	975	981	872	6,756,243	5,336,435	6,997,099
Monthly.....	521	521	272	25,635,615	23,217,126	15,277,062
Quarterly.....	54	53	35	2,437,289	909,317	2,126,625
All other classes.....	68	54	31	662,819	179,515	1,311,300

<sup>1</sup> Included in circulation of dailies.

New York ranks first among the states in the number of newspapers and periodicals published as well as in the circulation of such publications. The number of publications increased 20, or 1 per cent, from 1904 to 1909, and, 407, or 26.7 per cent, from 1899 to 1904, while the aggregate circulation increased 1,313,222, or 3.1 per cent, during the more recent period, and 12,424,300, or 41.1 per cent, during the earlier period. From 1904 to 1909 the number of each class of publications increased, with the exception of the semi-weeklies and triweeklies, and the weeklies, which decreased, and of the monthlies, the number of which was the same in both years. There was a decrease of 112,394 in the circulation of the semiweeklies and triweeklies and of 2,581,511 in that of the monthlies, while the circulation of the weeklies shows an increase. The Sunday publications show a decrease of 103,838 in circulation, although there was an increase of 4 in the number of such publications. The largest increase in number shown for any class of publications is that of 14 for the dailies, while the largest increase in circulation, 1,527,972, was in that of the quarterly publications. Of the 231 dailies, in 1909, 84, with an aggregate circulation of 2,168,690, were morning papers.

The following table shows the number and circulation of the different classes of publications in English and in foreign languages, respectively, for 1909 and 1904:

PERIOD OF ISSUE.	Census.	TOTAL.		IN ENGLISH.		IN FOREIGN LANGUAGES.	
		Num-ber.	Aggregate circulation per issue.	Num-ber.	Aggregate circulation per issue.	Num-ber.	Aggregate circulation per issue.
Total.....	1909	1,953	43,953,617	1,753	41,656,507	200	2,297,110
	1904	1,933	42,640,395	1,784	40,520,198	169	2,120,197
Daily and Sunday.....	1909	279	8,211,248	228	6,858,818	51	1,352,430
	1904	261	7,635,205	221	6,737,055	40	893,120
Semiweekly and triweekly.....	1909	56	250,403	45	206,203	11	44,200
	1904	63	362,797	48	326,412	15	36,385
Weekly.....	1909	975	6,756,243	881	6,338,749	94	417,494
	1904	981	5,336,435	910	4,955,985	71	380,450
Monthly.....	1909	521	25,635,615	486	25,251,499	35	384,116
	1904	521	23,217,126	492	27,984,084	29	233,042
Quarterly.....	1909	54	2,437,289	52	2,424,789	2	12,500
	1904	53	909,317	48	365,817	5	543,500
All other.....	1909	68	662,819	61	576,449	7	86,370
	1904	54	179,515	45	150,815	9	28,700

In 1909 as well as in 1904 the largest class of publications in foreign languages consisted of the weeklies, but the daily and Sunday papers had the largest circulation during both years. With the exception of quarterlies, each class of the publications in foreign languages increased in circulation from 1904 to 1909.

The following tabular statement distributes the publications in foreign languages in 1909 according to the language in which printed:

LANGUAGE.	NUMBER OF PUBLICATIONS.					
	All classes.	Daily and Sunday publications.	Semi-weeklies and tri-weeklies.	Week-lies.	Month-lies.	All other classes.
Total.....	200	51	11	94	35	9
German.....	60	21	3	23	10	13
Italian.....	27	7	.....	10	1	.....
Yiddish.....	19	7	.....	9	2	21
German and English.....	12	.....	.....	5	6	31
Polish.....	12	3	.....	9	.....	.....
Spanish.....	11	.....	.....	2	8	31
Swedish.....	6	.....	.....	5	1	.....
Bohemian.....	4	4	.....	.....	.....	.....
Croatian.....	4	2	1	.....	.....	41
French.....	4	2	.....	1	1	.....
Hungarian.....	4	2	2	.....	.....	.....
Russian.....	4	.....	.....	4	.....	.....
Ruthenian.....	3	.....	1	1	1	.....
Spanish and English.....	3	.....	.....	1	2	.....
Syrian.....	3	.....	1	2	.....	.....
Danish.....	2	.....	.....	2	.....	.....
All other.....	22	53	63	711	83	92

<sup>1</sup> Two semimonthlies and 1 published every two weeks. <sup>3</sup> Quarterly.  
<sup>2</sup> Published every two weeks. <sup>4</sup> Semimonthly.  
<sup>5</sup> Includes 1 each in Arabic, Greek, and Slovenic.  
<sup>6</sup> Includes 1 each in Arabic, Chinese, and Slovak.  
<sup>7</sup> Includes 1 each in Armenian, Chinese, Estonian, Finnish, Dutch, Irish and English, Japanese and English, Norwegian, Servian, Slovak, and Welsh.  
<sup>8</sup> Includes 1 in German, French, and English; 1 in German, French, Spanish, and English; and 1 in Spanish and Portuguese.  
<sup>9</sup> Includes 1 published every two weeks in Russian and English, and 1 semi-annual in German, French, Spanish, and English.

In 1909 a total of 1,080 publications, with an aggregate circulation of 10,116,760 copies per issue, were devoted to politics and family news; 135, with a circulation of 4,037,905, were religious in character; and 112, with a circulation of 12,664,213, were devoted to general literature. The circulation for 1909 of the first class increased 56.8 per cent and that of the last class shows but a slight increase over that reported for 1904, while the circulation of the second class in 1909 was more than two and one-half times that reported for 1904.

**Textiles.**—The relative importance of the principal textile industries of New York, as measured by value of products, is shown in the following table, which presents the total value of products reported for each industry at the last three censuses:

INDUSTRY.	VALUE OF PRODUCTS.		
	1909	1904	1899
Total.....	\$185,780,000	\$142,422,000	\$107,612,000
Hosiery and knit goods.....	67,130,000	46,320,000	36,028,000
Silk and silk goods, including throwsters.....	20,519,000	20,181,000	12,706,000
Carpets and rugs, other than rag.....	25,800,000	19,404,000	15,029,000
Woolen, worsted, and felt goods, and wool hats.....	23,739,000	19,477,000	15,784,000
Cotton goods, including cotton small wares.....	20,352,000	13,434,000	10,788,000
Cordage and twine and jute and linen goods.....	12,215,000	15,866,000	11,675,000
Hats, fur-felt.....	10,219,000	7,740,000	5,602,000

The progress of the textile industries is shown by the increase in the number of spindles, looms, knitting machines, and other equipment. The following table shows the number of the principal machines used in four important textile industries combined and in each of those industries separately in 1909, 1904, and 1899:

MACHINE.	Cen-sus.	Total.	Cotton goods, including cotton small wares.	Woolen, worsted, and felt goods, and wool hats.	Hosiery and knit goods.	Silk and silk goods, including throwsters.
Producing spindles...	1909	1,395,482	778,036	154,359	303,528	159,559
	1904	1,228,699	704,634	177,487	225,237	121,341
	1899	1,127,149	720,268	152,309	191,026	63,486
Looms.....	1909	24,698	14,088	3,035	.....	7,575
	1904	23,246	13,358	2,899	.....	6,989
	1899	23,038	14,737	3,033	.....	5,268
Knitting machines....	1909	15,047	.....	.....	15,047	.....
	1904	12,666	.....	.....	12,666	.....
	1899	11,666	.....	.....	11,666	.....
Woolen cards (sets)...	1909	821	.....	364	457	.....
	1904	959	.....	452	507	.....
	1899	1,147	.....	473	674	.....
Wool-combing machines.	1909	89	.....	89	.....	.....
	1904	62	.....	62	.....	.....
	1899	66	.....	66	.....	.....

The total number of producing spindles reported for the four industries covered by the table shows an increase from 1904 to 1909 of 166,783, or 13.6 per cent; that of looms, an increase of 1,452, or 6.2 per cent; that of knitting machines, an increase of 2,381, or 18.8 per cent; and that of wool-combing machines, an increase of 27, or 43.5 per cent. The number of sets of woolen cards decreased 138, or 14.4 per cent. The relative

increases in the number of spindles, looms, and knitting machines were much greater than the gains shown for the previous five-year period, 1899-1904, which were 9 per cent, nine-tenths of 1 per cent, and 8.6 per cent, respectively. During the period from 1904 to 1909 the number of spindles used in the cotton mills increased 73,402, or 10.4 per cent, the number in the hosiery and knitting mills, 78,291, or 34.8 per cent, and the number in the silk mills, 38,218, or 31.5 per cent, while the number used in the woolen and worsted mills decreased 23,128, or 13 per cent. During the preceding five-year period, 1899-1904, the number in the cotton mills decreased, while the number in each of the other three classes of mills increased. Each of the three industries in the table for which looms are reported shows a larger number for 1909 than for 1904, the greatest relative increase being 8.4 per cent in the silk mills.

**Hosiery and knit goods.**—The manufacture of hosiery and knit goods as a factory industry in New York had its beginning in Cohoes in 1832, with the founding of a factory in which power was for the first time successfully used in the making of knit goods. (See History of Cohoes, by Masten, pp. 61, 62, and 77.) In 1849 there were only 3 knitting mills in the state, the value of their products amounting to only \$37,000, but in 1859 there were 22 mills in operation and the total production was valued at \$1,944,000. The industry has continued this rapid development, the value of products in 1909 being more than thirty-four times the value reported in 1859.

The following table shows the quantity and cost of the different materials used in 1909, 1904, and 1899:

MATERIAL.	1909	1904	1899
Total cost.....	\$38,677,371	\$28,210,100	\$20,285,993
Cotton:			
Domestic—			
Pounds.....	33,041,401	23,841,021	.....
Cost.....	\$3,779,496	\$2,747,412	24,337,305
Foreign—			
Pounds.....	1,623,562	629,569	.....
Cost.....	\$234,371	\$109,954	\$1,068,014
Wool:			
Foreign (in condition purchased)—			
Pounds.....	164,014	439,929	710,834
Cost.....	\$109,190	\$239,281	\$396,246
Domestic (in condition purchased)—			
Pounds.....	1,803,323	4,537,860	4,817,405
Cost.....	\$840,659	\$1,969,081	\$1,663,529
Wool waste and noils:			
Pounds.....	4,398,579	2,735,224	2,922,562
Cost.....	\$1,429,402	\$947,962	\$817,562
Shoddy:			
Pounds.....	5,410,605	4,444,951	2,105,354
Cost.....	\$551,877	\$444,165	\$199,137
Yarns, not made in mill:			
Cotton—			
Pounds.....	36,076,623	56,512,123	59,112,590
Cost.....	\$13,824,123	\$11,788,385	\$8,517,651
Woolen—			
Pounds.....	3,186,332	1,742,576	902,234
Cost.....	\$2,077,718	\$1,080,369	\$423,411
Worsted—			
Pounds.....	3,232,368	2,340,773	1,585,842
Cost.....	\$3,078,048	\$1,799,171	\$1,221,820
Merino—			
Pounds.....	925,440	1,022,189	562,040
Cost.....	\$693,536	\$425,956	\$232,011
Silk and spun-silk—			
Pounds.....	423,230	137,369	142,559
Cost.....	\$1,644,056	\$615,511	\$542,344
All other yarns—			
Pounds.....	11,296	35,124	105,782
Cost.....	\$9,206	\$30,843	\$102,109
Chemicals and dyostuffs.....	\$363,607	\$284,958	\$211,687
Fuel and rent of power.....	\$648,583	\$465,438	\$293,582
All other materials.....	\$9,386,614	\$6,201,614	\$3,976,860

At each of the three censuses raw cotton and cotton yarn were by far the most important materials reported, both as respects quantity and as respects cost, with the exception that in 1899 the cost of the wool consumed was somewhat greater than that of the raw cotton. There was an increase of 10,194,463 pounds, or 41.7 per cent, in the quantity of raw cotton consumed and of \$1,157,001, or 40.5 per cent, in its cost, from 1904 to 1909, as compared with increases of 133,285 pounds, or one-half of 1 per cent, in quantity and \$1,189,352, or 71.3 per cent, in cost from 1899 to 1904. The very great increase in cost shown in 1904 as compared with 1899 was due chiefly to the higher prices of cotton prevailing in 1904. Cotton yarns show an increase of 30,164,500 pounds, or 53.4 per cent, in quantity and \$2,035,738, or 17.3 per cent, in cost for the period 1904-1909, while for the period 1899-1904 a decrease of 2,600,467 pounds, or 4.4 per cent, in quantity and an increase of \$3,270,734, or 38.4 per cent, in cost were reported. All other materials for which figures as to both quantity and cost are given show increases in both respects from 1904 to 1909, with the exception of foreign and domestic wool, and the yarns included under the head of "All other yarns," which decreased in both respects, and of merino yarn, which shows a decrease in quantity only. The gains in the quantity and cost of silk and spun-silk yarns are particularly noteworthy, as the quantity more than trebled and the cost very nearly trebled during the five years.

The quantity and value of the various products reported at the last three censuses were as follows:

PRODUCT.	1909	1904	1899
Total value.....	\$87,130,296	\$46,320,311	\$36,028,114
Hose:			
Dozen pairs.....	251,269	167,965	103,300
Value.....	\$493,041	\$286,712	\$234,652
Half hose:			
Dozen pairs.....	104,418	65,732	50,972
Value.....	\$146,144	\$113,950	\$93,547
Shirts and drawers:			
Merino—			
Dozens.....	1,162,148	1,171,123	1,779,339
Value.....	\$7,718,492	\$6,737,966	\$8,394,455
Cotton—			
Dozens.....	11,238,711	8,974,308	6,636,642
Value.....	\$29,577,805	\$24,212,845	\$17,006,721
All other—			
Dozens.....	74,063	204,993	804,538
Value.....	\$914,211	\$1,535,884	\$2,880,118
Combination suits:			
Merino—			
Dozens.....	52,254	27,297	54,153
Value.....	\$500,830	\$313,855	\$378,258
Cotton—			
Dozens.....	938,554	655,324	288,079
Value.....	\$4,238,442	\$2,030,831	\$904,154
All other—			
Dozens.....	(1)	9,934	13,315
Value.....	(1)	\$101,427	\$82,110
Gloves and mittens:			
Dozen pairs.....	1,195,140	750,662	567,720
Value.....	\$4,270,020	\$2,067,185	\$1,570,406
Hoods, scarfs, nubias, etc.:			
Dozens.....	124,301	255,857	171,060
Value.....	\$440,411	\$920,071	\$533,527
Cardigan jackets, sweaters, fancy jackets, etc.:			
Dozens.....	1,656,336	540,236	451,262
Value.....	\$13,915,043	\$4,780,750	\$2,564,713
Cotton yarn:			
Pounds.....	2,499,483	902,834	211,000
Value.....	\$519,454	\$154,842	\$33,200
All other products.....	\$4,396,403	\$3,063,995	\$1,352,253

<sup>1</sup> Included with "All other products," to avoid disclosure of individual operations.

From 1904 to 1909 there was a general increase in the quantity and the value of all products, with the exception of the shirts and drawers included under the head of "All other," and of hoods, scarfs, and nubias, which decreased in both respects, and of merino shirts and drawers, which decreased in quantity only. The output and the value of merino and "All other" shirts and drawers and of merino combination suits were less in 1904 than in 1899, and the output of "All other" combination suits also shows a decrease for that period. The most important products were cotton shirts and drawers, the value of which formed 44.1 per cent of the total value of products for the industry in 1909, 52.3 per cent in 1904, and 47.2 per cent in 1899. The largest increase in output from 1904 to 1909 was that of 2,264,343 dozens, or 25.2 per cent, in the quantity of cotton shirts and drawers, and the largest increase in value that of \$9,134,293, or 191.1 per cent, in the value of cardigan jackets, sweaters, fancy jackets, etc.

Silk and silk goods, including throwsters.—This industry had its beginning in the state in 1830, when the manufacture of dress trimmings was commenced in New York City. At the census of 1869, 14 establishments were reported, which employed 739 wage earners and manufactured products valued at \$1,826,000. In 1909 the manufacture of silk goods, with a value of products amounting to \$26,519,000, was second in importance among the textile industries in the state. The development during the decade 1899-1909 was remarkable, the value of products more than doubling.

The statement following shows the quantity and cost of the chief materials used in the industry, as reported for 1909, 1904, and 1899:

MATERIAL.	1909	1904	1899
Total cost.....	\$13,948,589	\$10,400,474	\$6,570,037
Silk:			
Raw—			
Pounds.....	1,817,329	1,006,793	914,265
Cost.....	\$7,092,171	\$3,934,433	\$3,814,768
Spun—			
Pounds.....	315,622	249,806	283,200
Cost.....	\$759,710	\$734,099	\$562,322
Artificial—			
Pounds.....	616,439	289,282	5,350
Cost.....	\$1,309,400	\$1,039,783	\$6,790
Organzine and tram—			
Pounds.....	335,003	603,623	197,781
Cost.....	\$1,471,824	\$2,919,456	\$839,657
Fringe and floss, including waste, noils, etc.—			
Pounds.....	515,545	17,080	20,606
Cost.....	\$326,691	\$28,475	\$88,813
Yarns, other than silk:			
Cotton—			
Pounds.....	2,018,612	1,197,943	1,556,545
Cost.....	\$757,470	\$401,841	\$359,716
Mercerized cotton—			
Pounds.....	483,627	101,943	51,560
Cost.....	\$359,315	\$74,770	\$42,432
Woolen and worsted—			
Pounds.....	94,622	184,340	45,527
Cost.....	\$114,829	\$191,816	\$36,040
Mohair—			
Pounds.....	52,521	14,511	29,697
Cost.....	\$47,408	\$15,264	\$28,776
All other—			
Pounds.....	113,855	71,436	24,167
Cost.....	\$170,491	\$30,959	\$14,364
Chemicals and dyestuffs.....	\$78,107	\$52,066	(2)
Fuel and rent of power.....	\$249,977	\$167,911	\$96,286
All other materials.....	\$1,211,196	\$899,501	\$679,473

<sup>1</sup> Does not include waste, noils, etc.

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

The cost of the materials used in the silk industry slightly more than doubled during the decade 1899-1909, that of silk in its various forms representing about four-fifths of the total at each census. Raw silk, which is by far the most important single item, as measured by cost, increased 810,536 pounds, or 80.5 per cent, in quantity, and \$3,157,738, or 80.3 per cent, in cost, from 1904 to 1909. The consumption of artificial silk, of which only a small amount was reported in 1899, more than doubled between 1904 and 1909, though the increase in cost was only 25.9 per cent. Organzine and tram purchased, on the other hand, show a marked falling off for the same period, the quantity and cost reported for 1909 being only a little more than half as great as for 1904. Among the materials other than silk, cotton yarns, especially mercerized yarns, show a very rapid increase for the period 1904-1909, while woolen and worsted yarns show a decided loss, amounting to 48.7 per cent in quantity and 40.1 per cent in cost.

The next table shows the quantity and value of the different products reported for 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
<b>Total value</b> .....	\$26,518,821	\$20,181,212	\$12,706,246
<b>Broad silks (all silk and silk mixed):</b>			
Yards.....	15,217,298	10,896,809	7,545,505
Value.....	\$9,042,488	\$6,382,758	\$4,333,114
<b>Plain and fancy—</b>			
Yards.....	7,898,355	5,354,400	4,906,159
Value.....	\$5,554,402	\$3,620,021	\$3,074,800
<b>Jacquard—</b>			
Yards.....	434,600	1,260,680	169,836
Value.....	\$394,466	\$842,948	\$134,258
<b>Piece-dyed—</b>			
Yards.....	6,884,253	4,275,669	2,469,570
Value.....	\$3,093,560	\$1,910,789	\$1,124,050
<b>Ribbons</b> .....	\$6,261,289	\$4,983,712	\$4,833,011
Laces, nets, veils, vellings, etc.	\$794,040	\$291,400	\$377,047
Embroideries.....	\$272,746	\$105,500	\$23,092
Fringes and gimps.....	\$500,027	\$544,544	\$195,528
Braids and bindings.....	\$2,568,881	\$2,042,365	\$388,591
Ladies' dress trimmings.....	\$946,293	\$967,143	\$389,510
Millinery trimmings.....	\$740,785	\$703,742	\$231,000
<b>Organzine and tram for sale:</b>			
Pounds.....	330,026	99,866	48,263
Value.....	\$1,354,540	\$420,718	\$207,500
<b>All other products</b> .....	\$3,364,122	\$3,471,078	\$1,439,835
Amount received for contract work.....	\$806,010	\$268,252	\$238,218

With the exception of Jacquard broad silks, ladies' dress trimmings, and the products included under the head of "All other products," the value of each class of products shown in the table increased from 1904 to 1909. The most pronounced decrease was in Jacquard silks, amounting to \$448,482, or 53.2 per cent, owing to the removal from the state of two establishments in which such fabrics were manufactured extensively in 1904. Ribbons, although the leading class of products next to broad silks in 1904 and 1909, have represented a smaller proportion of the total value of products at each succeeding census since 1899. The proportions which the value of broad silks, the class of products first in importance in 1909 and 1904, formed of the total for all products were 34.1 per cent in 1899, 31.6 per cent in 1904, and 34.1 per cent in 1909. Striking gains occurred during the decade in the production of organzine and tram for sale, both the quantity and the value of this class of products more than doubling

from 1899 to 1904, and both more than trebling from 1904 to 1909. The amount reported as received for contract work was but little more in 1904 than in 1899, but during the next five years it more than doubled. This item represents mainly the receipts for commission throwing.

In 1909 a total of 936,754 pounds of silk were thrown for other establishments under contract, of which 495,053 pounds were thrown into organzine and 441,701 pounds into tram. The corresponding figures for 1904 were 359,248 pounds and 345,830 pounds, respectively, representing a total of 705,078 pounds of silk thrown under contract in that year.

**Carpets and rugs, other than rag.**—The quantity and cost of the different materials and the quantity and value of the chief products reported for this industry in 1909, 1904, and 1899 are given in the following table:

MATERIAL OR PRODUCT.	1909	1904	1899
<b>Materials used, total cost</b> .....	\$13,315,172	\$11,133,063	\$7,661,087
<b>Wool, in condition purchased:</b>			
Pounds.....	36,177,487	23,552,683	23,297,198
Cost.....	\$6,250,326	\$4,707,215	\$3,876,638
<b>Animal hair:</b>			
Pounds.....	3,105,707	( <sup>1</sup> )	1,325,814
Cost.....	\$277,281	( <sup>1</sup> )	\$99,973
<b>Yarns, purchased:</b>			
Pounds.....	41,498,384	37,147,701	27,287,378
Cost.....	\$4,806,400	\$4,813,950	\$2,501,066
<b>Woolen—</b>			
Pounds.....	564,024	4,239,395	1,594,801
Cost.....	\$137,408	\$921,373	\$266,998
<b>Worsted—</b>			
Pounds.....	1,638,596	1,653,638	281,330
Cost.....	\$779,688	\$800,865	\$113,638
<b>Cotton—</b>			
Pounds.....	6,599,109	4,801,611	3,617,216
Cost.....	\$1,141,669	\$879,580	\$443,351
<b>Linen—</b>			
Pounds.....	4,858,864	5,049,746	5,382,255
Cost.....	\$860,837	\$819,971	\$732,307
<b>Jute and other vegetable fiber—</b>			
Pounds.....	27,836,891	21,499,311	16,411,276
Cost.....	\$1,880,798	\$1,391,061	\$944,901
<b>Chemicals and dyestuffs</b> .....	\$417,770	\$468,372	\$384,835
<b>Fuel and rent of power</b> .....	\$309,335	\$224,235	\$113,706
<b>All other materials</b> .....	\$1,248,060	\$919,291	\$705,645
<b>Products, total value</b> .....	\$25,000,262	\$19,404,133	\$15,029,218
<b>Carpets and rugs:</b>			
Square yards.....	20,973,631	22,559,873	21,894,155
Value.....	\$25,477,756	\$19,194,104	\$14,825,420
<b>Carpets—</b>			
Square yards.....	17,430,969	19,206,368	16,038,562
Value.....	\$16,177,227	\$15,700,173	\$11,530,425
<b>Rugs, woven whole—</b>			
Square yards.....	9,542,662	3,353,505	5,765,693
Value.....	\$9,300,529	\$3,427,931	\$3,294,995
<b>All other products</b> .....	\$128,506	\$210,029	\$208,798

<sup>1</sup> Included under "All other materials," to avoid disclosure of individual operations.

The chief material used in each of the three census years was wool, the cost of which formed 47 per cent of the total for all materials combined in 1909, 42.3 per cent in 1904, and 50.5 per cent in 1899. The quantity of wool used increased 12,624,804 pounds, or 53.6 per cent, from 1904 to 1909, and the cost \$1,549,111, or 32.9 per cent. Jute and other vegetable fiber yarns constituted the class second in importance, showing an increase for the five-year period 1904-1909 of 6,433,580 pounds, or 30.1 per cent, in quantity and \$489,137, or 35.1 per cent, in cost. The amount of woolen yarn purchased in 1909, however, was little more than one-eighth that reported for 1904, owing largely to the purchase of the fiber in the raw state instead of in yarn.

Carpets and rugs, taken together, show an increase for the period 1904-1909 of 4,413,758 square yards, or 19.6 per cent, in quantity and \$6,283,652, or 32.7 per cent, in value, and for the period 1899-1904 an increase of 755,718 square yards, or 3.5 per cent, in quantity and \$4,368,684, or 29.5 per cent, in value. In 1909 seamless rugs constituted 35.4 per cent of the total output of carpets and rugs, as compared with 14.9 per cent in 1904 and 26.4 per cent in 1899.

Axminster and moquette carpets formed the leading class of carpets manufactured in 1909, with tapestry Brussels, tapestry velvet, and Brussels following in the order named. In 1904 and 1899, however, tapestry Brussels was the leading variety.

Woolen, worsted, and felt goods, and wool hats.—The 64 establishments reported for this industry in 1909, classified according to their products of chief value, comprised 30 woolen mills, 15 worsted mills, 12 felt mills, and 7 wool-hat factories.

The quantity and cost of the different materials reported for 1909, 1904, and 1899 are given in the following table:

MATERIAL.	1909	1904	1899
Total cost.....	\$14,744,028	\$10,715,224	\$8,663,510
Wool, in condition purchased:			
Pounds.....	26,051,580	26,056,151	20,942,082
Cost.....	\$8,462,790	\$6,826,833	\$4,877,605
Domestic—			
Pounds.....	22,362,412	22,456,770	18,692,443
Cost.....	\$6,754,854	\$5,769,932	\$4,182,727
Foreign—			
Pounds.....	4,289,168	3,599,381	2,249,639
Cost.....	\$1,707,936	\$1,056,901	\$694,878
Equivalent in scoured condition, pounds.....	15,858,034	15,610,370	11,830,350
Animal hair and fur:			
Pounds.....	3,588,381	1,537,450	\$87,316
Cost.....	\$747,128	\$203,612	\$48,772
Tailors' clippings, rags, etc.:			
Pounds.....	1,234,161	1,332,056	(1)
Cost.....	\$68,197	\$77,716	\$43,697
Shoddy, mungo, and wool extract:			
Pounds.....	939,539	2,209,909	641,709
Cost.....	\$135,921	\$271,709	\$116,107
Waste and noils of wool, mohair, etc.:			
Pounds.....	2,908,092	1,716,008	1,923,179
Cost.....	\$960,028	\$512,751	\$569,815
Cotton:			
Pounds.....	599,698	1,326,455	1,009,766
Cost.....	\$83,276	\$175,076	\$84,585
Yarns, purchased:			
Pounds.....	2,829,606	1,594,097	3,465,476
Cost.....	\$1,718,630	\$695,487	\$1,208,732
Worsted—			
Pounds.....	1,412,237	318,244	626,031
Cost.....	\$1,227,155	\$237,531	\$541,901
Cotton—			
Pounds.....	990,264	937,927	2,427,270
Cost.....	\$300,706	\$240,824	\$361,791
Silk and spun-silk—			
Pounds.....	13,913	21,018	13,173
Cost.....	\$49,493	\$61,627	\$51,217
All other—			
Pounds.....	413,192	316,908	399,002
Cost.....	\$141,276	\$55,605	\$223,823
Wool hat bodies and hats in the rough:			
Dozens.....	16,057	(2)	2,676
Cost.....	\$47,616	(2)	\$9,618
Chemicals and dyestuffs.....	\$623,270	\$561,490	\$491,373
Fuel and rent of power and heat.....	\$370,969	\$285,388	\$201,066
All other materials.....	\$1,625,603	\$1,204,562	\$1,032,140

earlier period. The cost of this material represented 57.4 per cent of the total cost reported for all materials in 1909, 63.7 per cent in 1904, and 56.2 per cent in 1899. Worsted yarns purchased show larger relative gains from 1904 to 1909 than any other class of materials, the quantity reported in 1909 being more than four times as great as in 1904, and the cost more than five times as great, while from 1899 to 1904 shoddy, mungo, and wool extract show the largest relative gain in quantity, and animal hair and fur the largest relative gain in value. For the five-year period 1904-1909 tailors' clippings, raw cotton, shoddy, and silk and spun-silk yarns all show a decrease in both quantity and cost, while domestic wool shows a decrease in quantity only.

The quantity and value of the chief products reported for the industry in 1909, 1904, and 1899 are shown in the following table:

PRODUCT.	1909	1904	1899
Total value.....	\$23,739,421	\$19,476,686	\$15,784,121
All-wool woven goods:			
Square yards.....	17,243,627	12,459,972	9,464,705
Value.....	\$12,830,093	\$10,532,885	\$6,558,458
Wool cloths, doeskins, cassimeres, chevils, etc.:			
Square yards.....	1,762,748	4,427,304	2,026,590
Value.....	\$1,450,578	\$3,857,000	\$2,042,342
Worsted coatings, serges, and suitings—			
Square yards.....	6,823,830	3,195,395	3,132,310
Value.....	\$6,420,800	\$3,694,589	\$2,637,159
Worsted dress goods, cashmeres, serges, etc.—			
Square yards.....	5,375,780	3,857,323	740,724
Value.....	\$2,728,242	\$2,162,435	\$368,314
All other—			
Square yards.....	3,281,239	979,950	2,965,072
Value.....	\$2,230,343	\$818,261	\$1,510,643
Cotton-mixed and cotton-warp goods:			
Square yards.....	7,065,151	8,139,033	9,804,480
Value.....	\$2,487,564	\$3,031,000	\$3,589,355
Worsted-filling dress goods—			
Square yards.....	3,376,396	1,518,326	4,914,479
Value.....	\$1,056,731	\$540,078	\$1,700,998
All other—			
Square yards.....	3,688,755	6,621,307	4,890,001
Value.....	\$1,430,833	\$2,540,922	\$1,888,357
Felt goods:			
Felt cloths, trimming and lining felts, felt skirtings, table covers, and saddle felts—			
Square yards.....	2,892,196	1,129,082	941,056
Value.....	\$976,342	\$590,585	\$361,168
Endless belts—			
Pounds.....	1,881,047	1,100,579	1,026,857
Value.....	\$1,989,988	\$1,101,743	\$617,881
All other—			
Pounds.....	\$1,326,638	\$1,130,625	\$685,337
Hats, wool-felt:			
Dozens.....	133,678	136,481	284,494
Value.....	\$1,185,298	\$950,347	\$1,218,498
Worsted yarn, for sale:			
Pounds.....	1,237,092	1,051,528	2,980,510
Value.....	\$1,184,521	\$793,285	\$701,166
Noils, for sale:			
Pounds.....	1,793,580	858,972	526,925
Value.....	\$531,897	\$261,055	\$165,567
Waste, for sale:			
Pounds.....	838,887	852,243	281,804
Value.....	\$145,921	\$128,750	\$36,900
All other products.....	\$1,081,169	\$900,350	\$1,848,791

<sup>1</sup> Square yards.

<sup>2</sup> Includes tops.

The output of all-wool woven goods reported in 1909 was 17,243,627 square yards, as compared with 12,459,972 square yards in 1904 and 9,464,705 square yards in 1899, the gain in 1909 as compared with 1904 being 4,783,655 square yards, or 38.4 per cent, and that in 1904 as compared with 1899 being 2,995,267 square yards, or 31.6 per cent. The very considerable gain in the output and value of worsted-filling dress goods between 1904 and 1909 was more than offset by a decline

<sup>1</sup> Not reported separately.  
<sup>2</sup> Included with "All other materials," to avoid disclosure of individual operations.

The total quantity of all classes of wool purchased was 26,651,580 pounds in 1909, 26,056,151 pounds in 1904, and 20,942,082 pounds in 1899, an increase of 595,429 pounds, or 2.3 per cent, for the later five-year period, and 5,114,069 pounds, or 24.4 per cent, for the

in the manufacture of other woven goods containing cotton. The output of felt cloth in 1909 was more than double that in 1904. The total value of the worsted yarns manufactured for sale was \$1,184,521 in 1909, as compared with \$793,285 in 1904 and \$701,166 in 1899. To the extent that the partly manufactured products, such as yarn, noils, and waste, were sold by the establishments producing them to other establishments in the state engaged in the woolen industry for use as materials in their manufacturing processes, the value of such materials represents a duplication in the total cost of materials and value of products for the industry.

**Cotton goods, including cotton small wares.**—The quantity and cost of the principal materials used in this industry and the quantity and value of the chief products reported for 1909, 1904, and 1899 are given in the following table:

MATERIAL OR PRODUCT.	1909	1904	1899
<b>Materials used, total cost.....</b>	<b>\$11,726,489</b>	<b>\$8,644,726</b>	<b>\$5,718,205</b>
Cotton:			
Pounds.....	68,766,704	51,835,100	52,243,040
Cost.....	\$5,088,203	\$0,190,179	\$3,743,267
Cotton yarn:			
Pounds.....	5,849,677	5,583,162	4,207,084
Cost.....	\$1,472,313	\$1,363,793	\$1,083,604
Starch.....	\$70,581	\$33,094	\$27,465
Chemicals and dyestuffs.....	\$150,405	\$105,294	\$77,884
Fuel and rent of power.....	\$407,128	\$330,290	\$228,577
All other materials.....	\$1,537,799	\$622,074	\$557,493
<b>Products, total value.....</b>	<b>\$20,351,555</b>	<b>\$13,433,004</b>	<b>\$10,788,003</b>
Plain cloths for printing or converting:			
Square yards.....	\$6,800,075	70,321,095	80,123,110
Value.....	\$3,537,860	\$2,883,012	\$2,829,674
Cotton towels and toweling:			
Square yards.....	1,055,625	1,255,460	(1)
Value.....	\$430,393	\$178,687	(1)
All other woven goods:			
Square yards.....	58,313,842	40,951,177	50,788,768
Value.....	\$7,095,170	\$4,317,437	\$3,615,851
Yarns, for sale:			
Pounds.....	31,765,481	24,943,995	17,922,997
Value.....	\$6,745,518	\$5,102,181	\$2,782,105
Cotton waste:			
Pounds.....	7,170,930	5,396,761	6,554,045
Value.....	\$250,037	\$177,890	\$126,419
All other products.....	\$2,292,577	\$774,697	\$1,533,894

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

The quantity of raw cotton used increased 16,931,604 pounds, or 32.7 per cent, from 1904 to 1909, although from 1899 to 1904 it decreased 407,949 pounds, or eight-tenths of 1 per cent. The cost of this material, however, increased more rapidly from 1899 to 1904 than it did from 1904 to 1909. The cost of cotton yarn, the material next in importance, increased from census to census, but much less rapidly than that of raw cotton. The cost of all the other classes of materials shown in the table likewise increased during both five-year periods.

On the basis of value, the products included under the head of "All other woven goods," which consisted mainly of brown or bleached sheetings and shirtings, corduroy, cotton velvet and plush, lace and lace curtains, mosquito and other netting, and twills and sateens, constituted the most important class of products in 1909 and 1899, while in 1904 yarns for sale formed the leading class. The output of plain cloth decreased between 1899 and 1904, but this decrease

was more than counterbalanced by an increase during the next five years. The value of each class of products shown separately in the table, however, increased during both five-year periods.

To the extent that cotton yarn and waste made in the state were sold by the establishments producing them to other establishments in New York engaged in the cotton-goods industry for use as material in their manufacturing processes, their value represents a duplication in both the total cost of materials and the total value of products for the state.

**Fur-felt hats.**—This industry includes the manufacture of derbies and soft felt hats, and of felt hats for women's wear, from rabbit, coney, and nutria fur. The quantity and cost of materials used and the number and value of fur-felt hats manufactured in 1909, 1904, and 1899 are shown in the following table:

MATERIAL OR PRODUCT.	1909	1904	1899
<b>Materials used, total cost.....</b>	<b>\$5,406,265</b>	<b>\$3,478,454</b>	<b>\$2,607,454</b>
Hatters' fur:			
Pounds.....	1,883,207	1,563,680	1,281,462
Cost.....	\$1,800,052	\$1,265,877	\$1,163,940
Fur-felt hat bodies and hats in the rough:			
Dozens.....	194,268	92,984	24,620
Cost.....	\$1,250,824	\$627,040	\$171,660
Chemicals and dyestuffs.....	\$100,407	\$160,305	\$117,681
All other materials.....	\$2,194,982	\$1,425,232	\$1,164,778
<b>Products, total value.....</b>	<b>\$10,218,660</b>	<b>\$7,739,774</b>	<b>\$5,602,458</b>
Fur-felt hats:			
Dozens.....	776,258	631,374	228,061
Value.....	\$9,465,282	\$6,852,797	\$5,062,570
All other products.....	\$753,378	\$886,977	\$549,888

In 1909 the cost of hat bodies and hats in the rough was over two-thirds as great as that of hatters' fur, having made the remarkable increase from \$171,660 to \$1,250,824 during the last decade.

The number of hats manufactured increased 144,884 dozens, or 22.9 per cent, from 1904 to 1909, and 405,313 dozens, or 179.3 per cent, from 1899 to 1904. The increase in the value of the hats was \$2,612,485, or 38.1 per cent, for the later five-year period, and \$1,800,227, or 35.6 per cent, for the earlier five-year period. The figures for 1909 represent 26 per cent of the number and 21.8 per cent of the value of all fur-felt hats produced in the United States in that year, the corresponding proportions in 1904 being 24.2 per cent and 20 per cent, respectively. In addition to those shown in the above table, fur-felt hats to the value of \$433,391 were made in 18 establishments engaged primarily in the manufacture of other kinds of hats, such as wool and straw.

**Slaughtering and meat packing.**—The first table on the following page gives the quantity and cost of the different materials used in the industry during the census years 1909, 1904, and 1899.

There were 189,731, or 39.6 per cent, more heaves slaughtered in 1909 than in 1904; 83,370, or 28.4 per cent, more calves; 381,084, or 24.8 per cent, more sheep; and 178,911, or 11 per cent, more hogs. The cost re-



ported for each class of animals also increased during the same period, and even more rapidly than the number. The cost of dressed meat purchased, however, which more than doubled between 1904 and 1909, shows a higher rate of increase for that period than any other item presented in the table.

MATERIAL.	1909	1904	1899
Total cost.....	\$110,168,234	\$66,777,802	\$51,173,032
Beeves slaughtered:			
Number.....	608,447	478,716	378,833
Cost.....	\$47,746,152	\$29,799,375	\$21,492,495
Calves slaughtered:			
Number.....	377,121	298,751	277,016
Cost.....	\$4,406,391	\$2,611,331	\$2,203,940
Sheep slaughtered:			
Number.....	1,918,721	1,537,637	1,487,157
Cost.....	\$10,437,800	\$7,436,390	\$5,975,165
Hogs slaughtered:			
Number.....	1,802,660	1,623,758	1,701,096
Cost.....	\$23,802,670	\$14,124,703	\$12,566,633
Dressed meat, purchased.....	\$14,156,721	\$6,786,824	\$5,395,265
Fuel and rent of power.....	\$507,268	\$288,206	\$168,307
All other materials.....	\$9,111,292	\$5,730,880	\$3,371,227

The following table shows the products reported for this industry at the last three censuses:

PRODUCT.	1909	1904	1899
Total value.....	\$127,130,051	\$75,549,917	\$58,403,452
Beef, fresh:			
Pounds.....	429,981,714	310,605,538	252,508,996
Value.....	\$41,428,480	\$26,119,579	\$20,045,478
Beef, salted or cured:			
Pounds.....	26,460,602	15,145,733	10,659,190
Value.....	\$3,086,410	\$759,210	\$790,594
Veal, fresh:			
Pounds.....	36,610,306	26,400,486	25,179,357
Value.....	\$4,316,843	\$2,605,948	\$2,404,942
Mutton, fresh:			
Pounds.....	80,774,979	63,435,207	61,858,172
Value.....	\$9,539,554	\$5,991,233	\$5,163,001
Pork, fresh:			
Pounds.....	123,540,054	123,177,569	107,993,721
Value.....	\$12,665,175	\$9,130,070	\$7,340,461
Pork, salted or cured:			
Pounds.....	134,425,208	106,495,914	122,217,119
Value.....	\$17,804,064	\$10,712,616	\$9,374,335
Sausage, fresh or cured.....	\$6,461,809	\$3,359,825	\$2,195,581
All other fresh meat:			
Pounds.....	6,983,008	2,828,915	615,500
Value.....	\$127,106	\$237,168	\$61,430
Lard:			
Pounds.....	47,042,820	35,098,711	31,522,702
Value.....	\$5,514,101	\$2,413,755	\$2,044,099
Tallow, oleo stock, and stearin:			
Pounds.....	51,948,253	(1)	(1)
Value.....	\$4,472,789	(1)	(1)
Oleo oil:			
Gallons.....	3,149,093	3,578,246	1,660,099
Value.....	\$2,692,932	\$2,035,419	\$954,064
Fertilizers and fertilizer materials:			
Tons.....	16,928	10,740	5,605
Value.....	\$435,900	\$233,562	\$104,532
Hides:			
Number.....	899,790	607,034	590,824
Pounds.....	49,577,570	36,802,215	26,522,241
Value.....	\$7,105,591	\$3,748,693	\$2,475,993
Sheep pelts:			
Number.....	1,913,895	2,269,553	(1)
Value.....	\$1,389,474	\$1,101,878	(1)
Wool:			
Pounds.....	6,605,170	5,187,937	2,625,676
Value.....	\$2,249,241	\$1,997,334	\$787,269
All other products, including amount received for custom or contract work.....	\$7,241,582	\$5,103,027	\$4,155,703

<sup>1</sup> Figures not available.  
<sup>2</sup> Includes pelts purchased for wool pulling.

With the exception of the quantity of oleo oil and the number of sheep pelts, the output of each of the different products shown separately increased both in quantity and in value from 1904 to 1909, but the percentages of increase in the value of meat products were considerably larger than those in quantity owing to the generally higher prices that prevailed in 1909.

The increase in quantity, however, which is not influenced by such external conditions as changing prices, indicates more accurately the actual growth of the industry

The largest relative increase in quantity was that of 146.8 per cent for the products included under the head of "All other fresh meat," while the largest relative increase in value was that of 306.4 per cent for salted and cured beef. The output of fresh beef increased 119,376,176 pounds, or 38.4 per cent, from 1904 to 1909; that of salted and cured beef, 11,314,869 pounds, or 74.7 per cent; that of fresh veal, 10,209,820 pounds, or 38.7 per cent; that of fresh mutton, 17,339,772 pounds, or 27.3 per cent; that of fresh pork, 362,495 pounds, or three-tenths of 1 per cent; and that of salted and cured pork, 27,929,294 pounds, or 26.2 per cent. The total output of these products increased 186,532,426 pounds, or 28.9 per cent, while its value increased \$33,520,270, or 60.6 per cent, during the same period.

The value of all meat products, including sausage and "All other fresh meats," represented 75.3 per cent of the total value of all products for the industry in 1909, as compared with 78 per cent in 1904. The advance in price, as affecting the gain in value, seems to have been most pronounced in the case of salted and cured beef, whose value per pound in 1909 was more than double that in 1904. In the case of lard, the value increased 140.9 per cent, while the output increased only 34 per cent.

Lumber and timber products.—According to some authorities the first sawmills operated in the territory now comprised within the limits of the United States were erected at New Amsterdam and Fort George on the Hudson River early in the seventeenth century. Lumbering has been one of the leading industries in New York state from the beginning, and while its maximum annual production was reached and passed more than a decade ago, the industry still ranks ninth among the industries of the state in value of products and seventh in average number of wage earners employed.

The following statement shows the quantity of rough lumber, lath, and shingles produced by the sawmills of the state in 1909 and 1899:

PRODUCT.	QUANTITY.	
	1909	1899
Rough lumber..... M feet b. m.....	681,440	878,448
Lath..... thousands..	70,878	66,468
Shingles..... thousands..	91,886	160,294

As indicated by the figures, the quantity of lumber cut in New York decreased 22.4 per cent from 1899 to 1909, and the output of shingles 42.7 per cent, while there was an increase of 6.6 per cent in the production of lath. In 1899 about three-fourths of all the lumber

cut in the state was softwood, while in 1909 the softwood varieties constituted only 59.4 per cent of the total. In 1909 more lumber was sawed from hemlock than from any other species, the quantity being 162,784 M feet board measure, or 23.9 per cent of the entire production. Spruce and white pine were next in order, with 127,864 M feet and 104,658 M feet, respectively. While 11 varieties of hardwood lumber were reported in 1909, maple, beech, oak, and basswood, ranking in the order named, were the species cut in largest quantities, and together contributed 68.6 per cent of the total output of hardwood lumber in New York in that year.

**Flour-mill and gristmill products.**—New York ranks first among the states in the quantity of corn, buckwheat, and oats ground during 1909, third in that of wheat and rye, and sixth in that of barley. The following table shows the quantity and value of the different products for 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$69,802,278	\$54,546,435	\$35,030,493
Wheat flour:			
White—			
Barrels.....	6,671,722	5,637,588	
Value.....	\$35,530,639	\$27,993,201	5,107,418
Graham—			\$18,569,427
Barrels.....	24,906	41,155	
Value.....	\$129,252	\$184,502	
Corn meal and corn flour:			
Barrels.....	2,090,537	3,004,226	2,937,282
Value.....	\$5,907,943	\$6,923,206	\$5,630,454
Rye flour:			
Barrels.....	226,992	332,719	236,495
Value.....	\$970,797	\$1,424,315	\$770,651
Buckwheat flour:			
Pounds.....	66,632,357	66,234,663	37,364,585
Value.....	\$1,724,854	\$1,639,873	\$811,200
Barley meal:			
Pounds.....	1,530,356	7,005,960	5,191,778
Value.....	\$25,587	\$96,844	\$66,491
Hominy and grits:			
Pounds.....	19,534,650	32,614,004	607,400
Value.....	\$280,941	\$857,957	\$6,389
Feed:			
Tons.....	637,270	401,727	451,309
Value.....	\$18,745,100	\$10,354,492	\$3,233,479
Offal:			
Tons.....	219,653	220,375	113,927
Value.....	\$4,090,333	\$4,210,280	\$1,705,932
All other products.....	\$1,427,832	\$856,585	\$231,410

Wheat flour, which contributed slightly more than one-half of the total value of all products at each census, shows an increase of 17.9 per cent in quantity and 26.6 per cent in value for the period 1904-1909, as compared with an increase of 11.2 per cent in quantity and 51.7 per cent in value for the period 1899-1904. The output of offal, which consists mainly of bran and middlings, the by-products from the flour mills, decreased three-tenths of 1 per cent in quantity from 1904 to 1909, but increased 18.5 per cent in value; for the earlier five-year period, however, it shows an increase of 93.4 per cent in quantity and 146.8 per cent in value. Feed, which consists largely of corn and oats ground together, was the second product in importance at each census, and shows an increase of 58.6 per cent in quantity and 81 per cent in value for the period 1904-1909; between 1899 and 1904, however, there was a decrease in the output, though its value increased 25.7 per cent. The output of corn meal and corn flour increased in both quantity and value during the earlier five-year period, but decreased

in both respects during the later period. Buckwheat flour shows an increase in both quantity and value of output for both periods, while the remaining products presented separately in the table show gains in both quantity and value for the period 1899-1904 and losses for the period 1904-1909, the greatest decreases being those shown for barley meal, amounting to 78.2 per cent in quantity and 73.6 per cent in value.

Of the 983 mills reported in 1909, 270 were engaged in milling wheat flour. Of these, 105 produced less than 1,000 barrels during the year; 86, from 1,000 to 4,999 barrels; 49, from 5,000 to 19,999 barrels; 19, from 20,000 to 99,999 barrels; and 11, 100,000 barrels or over. The equipment reported in 1909 consisted mainly of 3,873 pairs of rolls and 1,111 runs of stone and steel burrs. In 1904 there were 4,200 pairs of rolls and 1,326 runs of stone and steel burrs. Barrels were manufactured by 9 of the establishments reported in 1909.

**Paper and wood pulp.**—Of the total of 178 paper and pulp mills in the state in 1909, 27 were engaged exclusively in the manufacture of wood pulp, 100 made paper only, and 51 produced both pulp and paper. The wood pulp manufactured in mills producing pulp exclusively was used largely as material by the paper mills of the state, and to the extent that it was so used its value represents a duplication both in the total cost of materials and in the total value of products shown for the industry.

The following table gives the quantity and cost of the principal materials used in the industry during 1909, 1904, and 1899:

MATERIAL.	1909	1904	1899
Total cost.....	\$31,767,283	\$22,805,751	\$14,563,222
Pulp wood.....	\$9,607,765	\$6,530,006	\$3,208,622
Wood pulp, purchased:			
Tons.....	331,143	264,862	189,510
Cost.....	\$10,075,720	\$7,012,081	\$4,595,014
Ground:			
Tons.....	150,844	111,032	93,749
Cost.....	\$3,202,648	\$1,942,151	\$1,485,176
Sulphite fiber—			
Tons.....	162,847	145,974	66,769
Cost.....	\$6,157,218	\$4,801,033	\$2,519,066
Other chemical fiber—			
Tons.....	17,452	7,806	29,001
Cost.....	\$715,893	\$268,867	\$590,772
Rags, including cotton and flax waste and sweepings:			
Tons.....	27,800	21,056	17,899
Cost.....	\$493,271	\$335,503	\$420,370
Old or waste paper:			
Tons.....	155,436	101,472	51,091
Cost.....	\$2,000,335	\$1,167,502	\$564,463
Manila stock, including jute bagging, rope, waste, threads, etc.:			
Tons.....	11,952	23,119	23,673
Cost.....	\$420,368	\$554,335	\$646,770
Fuel and rent of power.....	\$3,028,118	\$2,293,285	\$1,438,952
All other materials.....	\$6,072,697	\$4,012,940	\$3,683,625

The cost of pulp wood shows an increase of \$3,137,759, or 48.1 per cent, for the five-year period 1904-1909, as compared with an increase of \$3,321,484, or 103.5 per cent, between 1899 and 1904; these figures, however, do not afford an entirely satisfactory index of the increase in the amount of wood consumed, as the price of wood advanced materially during the decade. In 1909 a total of 921,882 cords

of pulp wood were used in the industry, of which imported spruce formed 44.3 per cent; domestic spruce, 41.7 per cent; domestic poplar, 5.7 per cent; and imported poplar, 1.9 per cent.

The wood pulp purchased increased 66,281 tons, or 25 per cent, in quantity and \$3,063,648, or 43.7 per cent, in cost from 1904 to 1909. In addition to the pulp purchased, 399,659 tons in 1909, 370,572 tons in 1904, and 180,336 tons in 1899 were used in the mills where manufactured. A substantial increase between 1904 and 1909 was reported in the cost of all the other classes of materials shown in the table, with the exception of manila stock, which was the only class to show a decrease in quantity.

The quantity and value of the different products manufactured during the last three census years are shown in the following table:

PRODUCT.	1909	1904	1899
<b>Total value</b> .....	\$48,859,610	\$37,750,605	\$26,715,628
<b>News paper:</b>			
Tons.....	374,808	347,546	204,957
Value.....	\$14,602,245	\$13,465,093	\$6,879,013
<b>In rolls—</b>			
Tons.....	355,155	330,423	162,153
Value.....	\$13,842,076	\$12,719,853	\$5,405,452
<b>In sheets—</b>			
Tons.....	19,653	17,123	42,804
Value.....	\$819,569	\$745,240	\$1,473,561
<b>Book, cover, plate, and coated paper:</b>			
Tons.....	68,717	33,507	31,461
Value.....	\$4,567,173	\$2,381,336	\$2,029,074
<b>Wrapping paper:</b>			
Tons.....	150,098	157,186	157,385
Value.....	\$7,724,244	\$7,180,993	\$7,400,185
<b>Manila (rope, jute, tag, etc.)—</b>			
Tons.....	17,347	20,888	22,760
Value.....	\$1,045,375	\$980,273	\$1,419,659
<b>Heavy (mill wrappers, etc.)—</b>			
Tons.....	18,951	12,741	38,556
Value.....	\$695,468	\$406,846	\$2,164,495
<b>Bogus or wood manila—</b>			
Tons.....	79,952	75,202	74,724
Value.....	\$4,206,208	\$3,359,980	\$3,092,370
<b>All other—</b>			
Tons.....	33,848	48,295	21,345
Value.....	\$1,777,193	\$2,373,894	\$789,661
<b>Boards:</b>			
Tons.....	141,467	90,094	40,394
Value.....	\$5,105,735	\$3,347,317	\$1,308,585
<b>Wood pulp—</b>			
Tons.....	23,757	11,011	12,133
Value.....	\$948,796	\$508,000	\$411,655
<b>News—</b>			
Tons.....	5,477	7,230	3,775
Value.....	\$144,844	\$255,843	\$103,316
<b>All other—</b>			
Tons.....	112,233	71,853	24,480
Value.....	\$4,012,095	\$2,583,474	\$853,614
<b>Tissues:</b>			
Tons.....	30,049	18,101	8,415
Value.....	\$2,786,101	\$1,704,911	\$708,945
<b>Hanging papers:</b>			
Tons.....	62,179	42,722	39,593
Value.....	\$2,805,839	\$1,078,650	\$1,562,465
<b>Building, roofing, asbestos, and sheathing paper:</b>			
Tons.....	21,743	10,963	8,044
Value.....	\$825,681	\$352,521	\$260,651
<b>All other paper products:</b>			
Tons.....	41,187	19,861	15,163
Value.....	\$1,344,042	\$1,229,579	\$1,083,967
<b>Wood pulp made for sale or for consumption in mills other than where produced:</b>			
Tons.....	279,875	235,442	214,299
Value.....	\$8,820,696	\$5,621,342	\$5,232,451
<b>Ground—</b>			
Tons.....	100,383	128,695	122,607
Value.....	\$1,859,391	\$1,921,371	\$1,896,783
<b>Sulphite fiber—</b>			
Tons.....	146,256	89,368	76,658
Value.....	\$5,586,136	\$3,076,740	\$2,779,922
<b>Soda fiber—</b>			
Tons.....	33,236	17,379	15,034
Value.....	\$1,375,169	\$623,231	\$555,746
<b>All other products.....</b>	\$157,854	\$428,863	\$64,892
<b>Wood pulp produced (including that used in mills where manufactured), total, tons.....</b>	679,534	606,014	394,635
Ground, tons.....	405,376	379,029	245,293
Sulphite fiber, tons.....	234,717	200,019	124,896
Soda fiber, tons.....	39,441	26,966	24,346

News paper was the principal product of the industry in 1909 and 1904, its value constituting 30 per cent of the total for all products in 1909, 35.7 per cent in 1904, and 25.7 per cent in 1899. Among the different paper products, the largest increase in value from 1899 to 1904 was that of \$6,586,080 reported for news paper, whereas from 1904 to 1909 the largest gain was that of \$2,185,837 in the value of book, cover, plate, and coated paper. Of the total output of news paper manufactured in 1899, 79.2 per cent was in rolls, while in 1904 and 1909 the proportions were 95.1 per cent and 94.8 per cent, respectively. News boards and the wrapping paper included under the head of "All other" are the only paper products which show losses in both quantity and value from 1904 to 1909, although the output of manila wrapping paper shows a decrease in quantity alone. In 1909 New York contributed 31.3 per cent of the total value of the news paper manufactured in the United States, 21.3 per cent of the value of the bogus or wood manila wrapping paper, and 32.6 per cent of the value of the tissues.

Of the total quantity of wood pulp manufactured in the state in 1909, including that used in the mills where it was made, 59.7 per cent was ground wood pulp, 34.5 per cent sulphite fiber, and 5.8 per cent soda fiber, while in 1899, 62.2 per cent of the total quantity was ground wood pulp, 31.7 per cent was sulphite fiber, and 6.2 per cent soda fiber, a comparison of the figures showing a slight increase in the proportion of sulphite fiber during the decade. Fifty-eight and eight-tenths per cent of the pulp manufactured in 1909 was used in the mills where it was made, as compared with 61.1 per cent in 1904 and 45.7 per cent in 1899. Of the pulp manufactured for sale or for use in other mills in 1909, 35.9 per cent was ground wood pulp, while 52.3 per cent was sulphite fiber, and 11.9 per cent was soda fiber. In 1904 and 1899, however, ground wood pulp constituted more than one-half the total quantity of pulp manufactured for sale. The figures given in the table show that there has been a marked increase, especially since 1904, in the amount of sulphite and soda fiber manufactured for sale, and a considerable decrease in the amount of ground wood pulp, though the total amount of each kind of pulp manufactured shows an increase throughout the decade. The value of sulphite fiber constituted more than one-half the total value of pulp manufactured for sale in each census year, amounting in 1909 to 63.3 per cent.

The first table on the following page shows the number and capacity of the Fourdrinier and cylinder machines used in the paper mills, and of the grinders and digesters used in the pulp mills in 1909, 1904, and 1899.

The number of paper machines increased from 290 in 1904 to 331 in 1909, while their annual capacity increased 215,174 tons, or 24.4 per cent, during the

same time; from 1899 to 1904 the increase in the number of machines was relatively small, but their capacity increased 44.1 per cent. Fourdrinier machines formed more than half the total number in 1904 and 1899, but in 1909 they were considerably outnumbered by the cylinder machines, which are generally used in the manufacture of tissue paper, boards, and certain other special kinds of paper. The average capacity of the Fourdrinier machines, however, was more than twice as great as that of the cylinder machines, so that the former still represented in 1909 more than two-thirds of the total paper-making capacity. The number of pulp grinders decreased somewhat from 1904 to 1909, but their yearly capacity increased 118,733 tons, or 21 per cent; the number of sulphite digesters increased from 84 to 93, and their capacity increased 75,338 tons, or 32.3 per cent; and the number of soda digesters remained unchanged, while their capacity increased 12,161 tons, or 37.4 per cent.

MACHINE.	1909	1904	1899
<b>Paper machines:</b>			
Total number.....	331	200	266
Capacity, yearly, tons.....	1,000,094	880,920	611,170
<b>Fourdrinier</b>			
Number.....	153	155	139
Capacity per 24 hours, tons.....	2,475	2,230	( <sup>1</sup> )
<b>Cylinder</b>			
Number.....	178	135	127
Capacity per 24 hours, tons.....	1,124	815	( <sup>1</sup> )
<b>Pulp equipment:</b>			
Grinders, number.....	500	535	449
Digesters, total number.....	114	105	82
Sulphite, number.....	93	84	( <sup>2</sup> )
Soda, number.....	21	21	( <sup>2</sup> )
Capacity, yearly, tons of pulp, total.....	1,038,741	832,509	495,668
Ground.....	685,436	566,703	( <sup>2</sup> )
Sulphite.....	308,622	233,284	( <sup>2</sup> )
Soda.....	44,683	32,522	( <sup>2</sup> )

<sup>1</sup> Not reported.<sup>2</sup> Not reported separately.

**Boots and shoes.**—The following table shows the number of pairs of the various kinds of boots and shoes manufactured during 1909, 1904, and 1899:

KIND.	NUMBER OF PAIRS.		
	1909	1904	1899
Boots and shoes.....	20,105,346	19,010,064	16,521,347
Men's.....	3,853,855	5,576,787	3,870,221
Boys' and youths'.....	745,527	1,265,183	1,402,068
Women's.....	10,141,133	7,174,049	5,896,367
Misses' and children's.....	5,364,831	4,993,445	5,352,693
Slippers.....	2,518,469	2,037,412	1,667,410
Men's, boys', and youths'.....	701,356	393,908	435,215
Women's, misses', and children's.....	1,817,113	1,648,444	1,232,195
Infants' shoes and slippers.....	3,797,675	( <sup>1</sup> )	( <sup>1</sup> )
All other kinds of footwear.....	2,116,961	2,779,814	1,265,166

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

This table indicates that 20,105,346 pairs of boots and shoes and 2,518,469 pairs of slippers, or 8.1 per cent and 14.4 per cent of the respective totals for the United States, were manufactured in New York in 1909, these figures representing increases of 5.8 per cent and 23.6 per cent, respectively, as compared with 1904. The production of women's boots and shoes increased 41.3 per cent between 1904 and 1909, and that of misses' and children's boots and shoes 7.4 per

cent. On the other hand, a decrease of 30.9 per cent occurred in the output of men's boots and shoes, and a decrease of 41.1 per cent in that of boys' and youths' boots and shoes. With the exception of the footwear included under the head of "All other kinds of footwear," which comprises, for the most part, sandals and bath slippers, the remaining classes in the table show substantial gains for this period.

The following table shows the number of pairs of the various kinds of footwear made in 1909, classified according to the methods used in their manufacture:

KIND.	NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.				
	Total.	Machine or hand welt.	Turned.	McKay.	All other methods. <sup>1</sup>
Boots and shoes.....	20,105,346	7,399,540	5,070,057	5,374,211	2,261,538
Men's.....	3,853,855	1,128,506	( <sup>2</sup> )	707,943	2,017,406
Boys' and youths'.....	745,527	204,562	( <sup>2</sup> )	296,833	244,132
Women's.....	10,141,133	4,905,261	2,330,233	2,905,039	.....
Misses' and children's.....	5,364,831	1,161,211	2,739,824	1,463,796	.....
Slippers.....	2,518,469	300,670	621,300	1,523,174	13,325
Men's, boys', and youths'.....	701,356	73,847	146,995	479,856	1,268
Women's, misses', and children's.....	1,817,113	286,823	474,905	1,043,318	12,067
Infants' shoes and slippers.....	3,797,675	291,842	3,446,029	22,203	37,611
All other kinds of footwear.....	2,116,961	780,192	163,066	763,103	401,600

<sup>1</sup> Includes wire-screw or metal-fastened, and wooden-pegged.<sup>2</sup> Included under "All other methods."

Of the total number of pairs of boots and shoes manufactured in New York in 1909, 36.8 per cent were machine or hand welt sewed, 26.7 per cent were McKay sewed, 25.2 per cent were turned, and 11.2 per cent manufactured by other methods, the latter class comprising wire-screw or metal-fastened, and wooden-pegged shoes. More than half of the total number of men's boots and shoes were of the last-mentioned types. About two-fifths of the boys' and youths' boots and shoes and more than half of the slippers were manufactured by the McKay process. Almost half of the women's boots and shoes were made by the machine or hand welt process, and more than half of the misses' and children's boots and shoes, together with nearly all of the infants' shoes and slippers, were turned.

**Butter, cheese, and condensed milk.**—The quantity of milk used in this industry increased from 2,309,599,597 pounds in 1899 to 2,722,580,187 pounds in 1904, but decreased to 2,422,727,788 pounds in 1909, whereas the quantity of cream used increased from 2,496,730 pounds in 1899 to 6,176,069 pounds in 1904 and 17,842,320 pounds in 1909. Owing to the importance of the condensed-milk branch of the industry in the state, the quantity of milk used by all branches of the industry combined has not decreased as rapidly since 1904 as it has done in most other states. The quantity of milk used in the butter-making branch of the industry, however, has decreased decidedly on account of the radical change in the method of handling milk which has taken place in the last decade. Formerly it was a common practice for the farmer to sell

the whole milk to the creamery, but now the milk is usually separated on the farm and only the cream is sold. Of the 1,552 establishments included in this industry in 1909, 512 used separators, whereas 705 of the 1,766 plants in operation during 1904 reported such machinery. The number of separators in these establishments in 1909 was 1,065, as against 1,219 in 1904.

The quantity and value of the different products for 1909, 1904, and 1899 are presented in the following table:

PRODUCT.	1909	1904	1899
Total value.....	\$42,458,345	\$31,047,776	\$26,557,888
Butter:			
Pounds.....	45,807,216	58,256,504	40,693,846
Value.....	\$13,471,482	\$12,316,059	\$8,087,210
Packed solid—			
Pounds.....	31,481,823	46,208,732	33,068,820
Value.....	\$9,127,057	\$9,522,572	\$6,471,515
Prints or rolls—			
Pounds.....	14,415,383	12,047,772	7,625,026
Value.....	\$4,344,425	\$2,793,487	\$1,615,695
Cheese:			
Pounds.....	105,194,893	132,836,482	127,386,032
Value.....	\$14,266,924	\$10,812,747	\$12,226,783
Full-cream—			
Pounds.....	89,055,411	( <sup>1</sup> )	( <sup>1</sup> )
Value.....	\$12,502,997	( <sup>1</sup> )	( <sup>1</sup> )
Part-cream—			
Pounds.....	7,171,305	( <sup>1</sup> )	( <sup>1</sup> )
Value.....	\$778,770	( <sup>1</sup> )	( <sup>1</sup> )
Skimmed—			
Pounds.....	4,455,681	( <sup>1</sup> )	( <sup>1</sup> )
Value.....	\$291,240	( <sup>1</sup> )	( <sup>1</sup> )
Other kinds—			
Pounds.....	4,512,441	( <sup>1</sup> )	( <sup>1</sup> )
Value.....	\$693,911	( <sup>1</sup> )	( <sup>1</sup> )
Condensed milk:			
Pounds.....	120,601,999	102,480,355	75,447,148
Value.....	\$9,428,283	\$6,718,380	\$4,801,223
Sweetened—			
Pounds.....	87,658,031	78,149,508	75,447,148
Value.....	\$7,575,213	\$5,433,608	\$4,801,223
Unsweetened—			
Pounds.....	32,943,968	24,330,847	.....
Value.....	\$1,853,065	\$1,284,712	.....
Cream sold:			
Pounds.....	27,078,783	5,072,920	11,943,408
Value.....	\$3,481,296	\$428,941	\$784,623
Casein:			
Pounds.....	6,712,971	6,730,506	6,223,085
Value.....	\$482,308	\$310,953	\$154,272
All other products <sup>2</sup> .....	\$1,328,052	\$480,066	\$503,777

<sup>1</sup> Not reported separately.  
<sup>2</sup> Includes skimmed milk sold and whey.

Cheese was the most important product, as measured by value, in 1909 and 1899, and butter the leading product in 1904. The total value of cheese represented 33.6 per cent of the total value of products for the industry in 1909, and that of butter 31.7 per cent; for 1904 the corresponding percentages were 34.8 and 39.7, while for 1899 they were 46 and 30.5, respectively.

The output of cheese increased in quantity but decreased in value from 1899 to 1904, while from 1904 to 1909, though it decreased 20.8 per cent in quantity it increased 31.9 per cent in value. From 1899 to 1904 both the total quantity and the total value of butter increased decidedly, but from 1904 to 1909 its value increased much less rapidly and its quantity decreased more than one-fifth. The total output of condensed milk increased substantially in both quantity and value during the decade.

The proportions which the values of these three classes of products for the state formed of the corresponding totals for the United States in 1909 were as

follows: Cheese, 33 per cent; butter, 7.5 per cent; and condensed milk, 28.1 per cent. Measured by value of products, New York held first place among the states in the manufacture of condensed milk, second in the manufacture of cheese, and fourth in the manufacture of butter.

Gas, illuminating and heating.—The following table shows the quantity and cost of the different materials used in the gas industry during 1909 and 1904:

MATERIAL.	1909	1904
Total cost.....	\$15,018,406	\$10,940,401
Coal:		
Tons.....	1,275,404	1,159,196
Cost.....	\$4,305,405	\$3,934,231
Coke:		
Tons.....	101,012	37,274
Cost.....	\$330,388	\$77,052
Oil:		
Gallons.....	171,212,040	128,365,316
Cost.....	\$5,578,560	\$5,509,761
Calcium carbide:		
Pounds.....	897,350	31,600
Cost.....	\$27,489	\$1,251
Gas, purchased.....	\$2,965,563	\$62,151
Fuel for boilers and retorts.....	\$384,712	\$338,370
Lamps and appliances.....	\$986,370	( <sup>1</sup> )
All other materials.....	\$439,969	\$967,585

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

Oil was the most important material used, both in 1909 and in 1904, contributing 37.1 per cent of the total cost of materials for the industry in the later year and 50.4 per cent in the earlier. Although the quantity used in 1909 was practically one-third more than in 1904, the cost was but slightly greater. The material next in importance was coal, the cost of which represented 28.7 per cent of the cost of all materials in 1909 and 36 per cent in 1904. The quantity used increased 116,208 tons, or 10 per cent, and its cost \$371,174, or 9.4 per cent, during the five-year period. Although contributing a very small proportion of the total cost of materials, calcium carbide, which is used in the manufacture of acetylene gas, shows the greatest relative gain in quantity, and also, with the exception of gas purchased, in cost. A number of companies manufacturing gas within the state purchase considerable quantities of gas for distribution from other New York gas companies, such purchases amounting in 1909 to 6,289,180,000 cubic feet and costing \$2,965,563. These figures, in a measure, represent the extent of duplication in the industry for the year. The decrease in cost shown for "All other materials" is due largely to the fact that in 1904 this class included lamps and appliances, which were reported separately in 1909.

The quantity and value of the different products manufactured during 1909 and 1904 are shown in the first table on the following page.

The total quantity of all kinds of gas reported in 1909 was 45,768,354,000 cubic feet, valued at \$34,851,565, as compared with 34,180,625,000 cubic feet, valued at \$33,483,741, in 1904, an increase of 11,587,729,000 cubic feet, or 33.9 per cent, in quantity, and an increase of \$1,367,824, or 4.1 per cent, in value.

PRODUCT.	1909	1904
<b>Total value.....</b>	<b>\$42,346,728</b>	<b>\$35,314,903</b>
<b>Gas:</b>		
Cubic feet, thousands.....	45,708,354	34,180,025
Value.....	\$34,851,595	\$33,493,741
<b>Straight coal—</b>		
Cubic feet, thousands.....	6,258,297	2,277,537
Value.....	\$4,267,355	\$2,084,077
<b>Carbureted water—</b>		
Cubic feet, thousands.....	34,759,676	22,336,001
Value.....	\$26,704,625	\$18,569,697
<b>Mixed—</b>		
Cubic feet, thousands.....	4,603,866	9,261,881
Value.....	\$3,490,211	\$12,518,259
<b>Oil—</b>		
Cubic feet, thousands.....	134,167	303,186
Value.....	\$322,878	\$306,270
<b>Acetylene—</b>		
Cubic feet, thousands.....	3,483	128
Value.....	\$48,837	\$2,014
<b>All other—</b>		
Cubic feet, thousands.....	8,360	1,392
Value.....	\$17,659	\$3,424
<b>Coke:</b>		
Bushels.....	17,509,858	11,839,567
Value.....	\$1,163,500	\$732,712
<b>Tar:</b>		
Gallons.....	15,304,307	13,334,182
Value.....	\$312,740	\$317,214
<b>All other products.....</b>	<b>\$4,984,977</b>	<b>\$152,823</b>
<b>Receipts from sales of lamps and appliances.....</b>	<b>\$1,033,926</b>	<b>\$628,413</b>

<sup>1</sup> In addition, 6,439,901 gallons were reported without value.

Carbureted water gas formed more than three-fourths of the total quantity of gas reported in 1909, its production having increased 12,423,675,000 cubic feet, or 55.6 per cent, from 1904 to 1909; the value of this gas constituted 52.6 per cent of the total value of all products in the former year, and 63.1 per cent in the latter. Straight coal gas was second in importance in 1909, although in 1904 mixed gas ranked second in both quantity and value. During this period the output of straight coal gas increased 3,980,760,000 cubic feet, or 174.8 per cent, and its value \$2,183,278, or 104.8 per cent. The quantity of mixed gas and of oil gas decreased more than one-half from 1904 to 1909; acetylene gas, on the other hand, shows a remarkable increase, although the output was comparatively small even in 1909. There was a substantial increase during the five years in the output of coke produced for sale, and of tar, the former increasing 5,670,291 bushels, or 47.9 per cent, and the latter 1,970,125 gallons, or 14.8 per cent.

**Iron and steel, steel works and rolling mills.**—The next table shows the quantity and the cost of the principal classes of materials and the quantity and value of the main groups of products reported by the steel works and rolling mills of New York for 1909, 1904, and 1899.

Pig iron and ferroalloys (spiegeleisen, ferromanganese, etc.), constituted the most important group of materials used in 1909 and 1904, as regards both the tonnage and cost, but a slightly larger cost was reported for scrap iron in 1899. The cost of pig iron and the other materials included in this group formed 58.3 per cent of the total cost of materials used in 1909, as compared with 51.3 per cent in 1904 and 29.2 per cent in 1899. From 1904 to 1909 there was a general increase in the tonnage of each of the three main groups of materials used, as well as in the cost of each class of materials shown in the table, the

largest relative gains in both respects being shown for the group comprising ingots, blooms, etc. In addition to the scrap iron and steel shown in the table, which was acquired from outside sources, a little over 200,000 tons produced in the works themselves during 1909 were charged back into the furnaces.

Rolled, forged, and other classified products, which contributed 85.8 per cent of the total value of products for the industry in both 1909 and 1904, and 88.6 per cent in 1899, show an increase from 1904 to 1909 of 486,645, or 85.5 per cent, in tonnage, and \$15,705,046, or 86.2 per cent, in value. The total production of steel in the state in 1909 was 1,115,250 tons and in 1904 474,258 tons, a little more than half being manufactured by the Bessemer process. Of the steel product for 1909, 1,088,840 tons were in ingots, of which 1,087,518 tons were converted into rolled forms in the works where produced, and 26,410 tons were in castings.

MATERIAL OR PRODUCT.	1909	1904	1899
<b>Materials, total cost.....</b>	<b>\$25,889,170</b>	<b>\$13,260,039</b>	<b>\$4,168,055</b>
<b>Pig iron and ferroalloys—spiegeleisen, ferromanganese, etc.:</b>			
Tons.....	947,541	506,902	69,290
Cost.....	\$15,087,647	\$6,800,549	\$1,216,071
<b>Scrap, purchased, including old rails not intended for re-rolling:<sup>1</sup></b>			
Tons.....	183,112	156,985	68,058
Cost.....	\$3,230,711	\$2,181,434	\$1,237,237
<b>Ingots, blooms, billets, slabs, muck and scrap bar, rails for re-rolling, and sheet and tin-plate bars:</b>			
Tons.....	66,601	24,811	25,697
Cost.....	\$1,874,919	\$676,995	\$605,835
<b>Fuel and rent of power.....</b>	<b>2,170,165</b>	<b>1,577,541</b>	<b>471,663</b>
<b>All other materials.....</b>	<b>3,516,728</b>	<b>2,023,520</b>	<b>523,249</b>
<b>Products, total value.....</b>	<b>\$39,532,414</b>	<b>\$21,227,399</b>	<b>\$8,812,468</b>
<b>Rolled, forged, and other classified products:</b>			
Tons.....	1,055,968	509,323	137,981
Value.....	\$33,921,048	\$18,216,002	\$7,800,118
<b>All other products, including value added to rolling-mill products by further manufacture.....</b>	<b>\$5,611,366</b>	<b>\$3,011,397</b>	<b>\$1,003,290</b>

<sup>1</sup> Includes scrap transferred to the establishment reporting from other works of the company.

**Iron and steel, blast furnaces.**—The following table shows the quantity and value of pig iron produced in the years 1909, 1904, and 1899, together with the value of the other products of the blast-furnace industry in those years:

PRODUCT.	1909	1904	1899
<b>Total value.....</b>	<b>\$26,620,948</b>	<b>\$8,634,737</b>	<b>\$5,046,155</b>
<b>Pig iron:</b>			
Tons.....	1,717,091	609,588	334,512
Value.....	\$26,596,413	\$8,411,946	\$5,042,550
<b>All other products.....</b>	<b>\$24,535</b>	<b>\$222,791</b>	<b>\$3,595</b>
<b>Pig iron, classified by grades, tons.</b>			
Bessemer.....	622,115	225,414	.....
Basic.....	262,846	4,689	.....
Foundry.....	620,905	275,104	291,693
Forge or mill.....	48,446	34,403	33,699
Malleable Bessemer.....	107,973	34,648	.....
All other.....	46,806	35,150	3,820

The production of pig iron increased remarkably during the decade 1899-1909, the actual gain from 1899 to 1904 being 275,076, or 82.2 per cent, in tonnage, and \$3,369,396, or 66.8 per cent, in value, and from 1904 to 1909, 1,107,503, or 181.7 per cent, in



tonnage, and \$18,184,467, or 216.2 per cent, in value. Of the 1909 product, all of which was coke iron, 770,429 tons were manufactured for use in the plants of the producing companies, and 946,662 tons were produced for sale. The leading grade of pig iron manufactured during each of the three census years was that for foundry purposes, which formed 36.7 per cent of the total production in 1909, 45.1 per cent in 1904, and 87.3 per cent in 1899. No Bessemer pig iron was reported in 1899, but it was second in importance both in 1909 and in 1904, the output amounting to 622,115 tons in 1909, as compared with 225,414 tons in 1904.

There were 19 active furnaces in 1909, of which 17 were located in the western part of the state, in Erie, Niagara, and Monroe Counties, and 2 in the Champlain district. The western group of furnaces used Lake Superior ores, while those of the Champlain district used ores mined in the neighborhood. Four furnaces of the Lackawanna Steel Company having a daily capacity of 600 tons each are included in the western group. This is the largest size of furnace in use, there being only five others in the United States having this capacity.

**Chemicals.**—The following table shows the quantity and value of the more important chemicals and groups of chemicals manufactured during 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$35,346,072	\$23,021,705	\$15,994,366
Acids.....	\$2,551,874	\$1,101,874	\$444,510
Sodas.....	\$6,079,225	\$5,542,930	\$4,921,144
Soda ash—			
Tons.....	142,131	173,721	167,552
Value.....	\$2,271,513	\$2,515,718	\$2,069,422
Sal soda—			
Tons.....	37,106	35,824	28,095
Value.....	\$437,531	\$498,361	\$357,303
Bicarbonate of soda—			
Tons.....	49,306	44,247	43,812
Value.....	\$866,836	\$587,693	\$385,003
Other soda products.....	\$2,503,345	\$1,641,153	\$1,612,416
Alums.....	\$454,523		\$593,070
Coal-tar products.....	\$198,510	\$87,000	\$43,300
Bleaching materials.....	\$916,527	\$567,774	\$340,612
Chemical substances produced by the aid of electricity.....	\$12,918,719	\$4,784,640	\$1,102,481
Plastics.....	\$556,005	\$2,636	
Compressed and liquefied gases.....	\$919,304	\$490,316	\$226,452
Fine chemicals:			
Silver salts—			
Ounces.....	459,149	467,051	325,121
Value.....	\$199,130	\$161,179	\$120,104
Chloroform—			
Pounds.....	1,647,508	150,000	62,540
Value.....	\$417,204	\$50,127	\$31,270
All other.....	\$1,464,947	\$2,472,246	\$324,124
Glycerin: <sup>2</sup>			
Pounds.....	19,871,614	8,000,000	8,000,000
Value.....	\$2,786,879	\$1,120,000	\$1,120,000
Cream of tartar:			
Pounds.....	13,309,512	11,553,660	4,800,000
Value.....	\$2,604,869	\$2,263,872	\$960,000
Other chemicals.....	\$2,707,903	\$1,766,703	\$53,275
All other products.....	\$990,453	\$2,610,408	\$5,714,024

<sup>1</sup>Including sulphuric, nitric, and mixed acids and wood distillation products valued at \$3,908,400.  
<sup>2</sup>Not including 8,955,960 pounds, valued at \$1,212,606, in 1909, and 3,432,515 pounds, valued at \$383,835, in 1904, produced in the state by manufacturers of soap.

The chemical substances produced by the aid of electricity formed the most important group in respect to value, in 1909, and show the largest actual gains, the value having increased \$3,682,159, or 334 per cent, from 1899 to 1904, and \$8,134,079, or 170

per cent, from 1904 to 1909. The value of these products constituted 36.5 per cent of the total value of all products reported for the industry in the state in 1909, as compared with 20.8 per cent in 1904, and 6.9 per cent in 1899. The remarkable growth in the manufacture of this group of products in New York is due largely to the extensive utilization of water power in the western part of the state for the generation of electric current. The value of this group of products manufactured in New York during 1909 represented nearly three-fourths of the total value of such products for the United States. The principal substances constituting this group in 1909 were aluminum (which is obtained exclusively by the electrolytic process), calcium carbide, hypochlorites, caustic soda, sodium, chlorates, phosphorus, and carbundum.

The next group in importance in point of value in 1909 consisted of sodas, the total value of which increased \$621,786, or 12.6 per cent, from 1899 to 1904, and \$536,295, or 9.7 per cent, from 1904 to 1909. Soda ash was the most important single item of the group, and bicarbonate of soda the second. It is noteworthy that the quantity and value of soda ash and the value of sal soda decreased from 1904 to 1909. This group of products was the most important in 1904, but since that period has been superseded by "chemical substances produced by the aid of electricity."

Glycerin and cream of tartar represented the largest values of any of the chemicals shown separately in the table in 1909. The output of glycerin in New York (by the establishments engaged primarily in the manufacture of chemicals) shows an increase from 1904 to 1909 of 11,871,614 pounds, or 148.4 per cent, in quantity and \$1,646,879, or 147 per cent, in value. Nearly all of the cream of tartar manufactured in the United States during 1909 was made in New York.

The most decided relative increase from 1904 to 1909 was in the value of plastics. The manufacture of plastics in New York is a comparatively new industry, for the total output in 1904 was valued at only \$2,636, whereas in 1909 it reached \$556,005, of which the value of casein, fibrin, or gluten compositions represented 95.3 per cent. Chloroform also shows large relative gains in quantity and value.

In addition to those shown in the above table, chemicals valued at \$1,835,321 were produced incidentally during 1909 by 17 establishments primarily engaged in the manufacture of products classified under other industry designations.

**Musical instruments, pianos and organs and materials.**—The number and value of the different classes of instruments manufactured during 1909, 1904, and 1899 are shown in the first table on the following page.

A total of 141,389 pianos were made in 1909, an increase of 39,357, or 38.6 per cent, over the number

reported in 1904, which, in turn, was 42 per cent greater than the number reported in 1899. The value of pianos constituted 70.6 per cent of the total value of products for the industry in 1909, 71.3 per cent in 1904, and 80.4 per cent in 1899. By far the greater part of the pianos were uprights without player attachments, this class showing a substantial increase both in number and in value for both five-year periods. The growth in the production of pianos for or with player attachments, however, has been remarkable, the number having increased from 83 in 1899 to 1,506 in 1904 and 18,917 in 1909. Comparatively few organs were made in the state during any one of the three census years. The number dropped from 1,774 in 1899 to 58 in 1904, but advanced to 275 during the next five-year period. Of these instruments, all in 1904 and nearly all in 1909 were pipe organs. There were 1,701 reed organs manufactured in 1899, but none were reported in 1904 and only 30 in 1909. Both in 1904 and 1909 the value of parts and materials constituted a considerable proportion of the total value of products. The major portion of this amount represents the value of the output of independent establishments manufacturing cases and other parts of instruments which were used as materials in the instrument factories of the state, so that their value was counted again as a part of the value of the finished pianos and organs and thus represents a duplication in the total cost of materials and value of products for the industry.

PRODUCT.	1909	1904	1899
<b>Total value</b> .....	\$33,679,953	\$23,389,504	\$14,746,431
<b>Pianos:</b>			
<b>Upright—</b>			
Number.....	141,889	102,032	71,855
Value.....	\$23,771,763	\$16,634,911	\$11,862,257
<b>Without player attachments—</b>			
Number.....	137,091	98,401	69,274
Value.....	\$21,401,242	\$14,819,717	\$10,890,392
<b>For or with player attachments—</b>			
Number.....	118,174	98,985	69,191
Value.....	\$10,777,094	\$14,505,035	\$10,876,742
<b>Grand—</b>			
Number.....	4,298	3,541	2,581
Value.....	\$2,370,521	\$1,865,194	\$962,365
<b>Player attachments made separate from pianos:</b>			
Number.....	2,789	2,072	(1)
Value.....	\$829,405	\$321,865	(1)
<b>Organs:</b>			
Number.....	275	58	1,774
Value.....	\$334,573	\$133,471	\$279,941
<b>Pipe—</b>			
Number.....	245	58	73
Value.....	\$330,373	\$133,471	\$216,120
<b>Reed—</b>			
Number.....	30		1,701
Value.....	\$4,200		\$63,821
<b>Parts and materials</b> .....	\$7,276,182	\$5,142,812	(1)
<b>All other products</b> .....	\$1,468,030	\$1,106,445	\$2,604,233

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

**Automobiles, including bodies and parts.**—The next table shows the number and value of the different classes of machines manufactured during 1909 and 1904.

During 1909, 8,064 automobiles, valued at \$17,509,582, were made in the automobile factories of New York, as compared with 1,808 automobiles, valued at

\$3,071,093, in 1904, the number in 1909 being over four times as great and the value nearly six times as great as in 1904. Of the automobiles manufactured in 1909, 7,529, or 93.4 per cent of the total number, were propelled by gasoline, as compared with 1,496, or 82.7 per cent of the total, in 1904. There were 7,447 passenger automobiles made in 1909, of which 5,440 were touring cars, and 617 business vehicles, of which 475 were trucks and 139 were delivery wagons. During the five-year period the number of gasoline automobiles increased 403.3 per cent, while those propelled by electricity and steam increased only 71.5 per cent. The most noteworthy increase in the different classes of vehicles manufactured was in touring cars, which show an increase from 421 in 1904 to 5,440 in 1909. Of the 8,064 automobiles manufactured in 1909, 686 were rated at less than 10 horsepower; 1,410, at 10 but less than 20 horsepower; 1,089, at 20 but less than 30 horsepower; 4,198, at 30 but less than 50 horsepower; 666, at 50 but less than 90 horsepower; and 15, at 90 horsepower or over. Of the 126,593 automobiles made in the United States during 1909 by the establishments engaged primarily in this industry, 6.4 per cent were made in New York.

PRODUCT.	1909		1904	
	Number.	Value.	Number.	Value.
<b>Total value</b> .....		\$30,979,527		\$4,260,164
<b>Automobiles</b> .....	8,064	17,509,582	1,808	3,071,093
Gasoline.....	7,529	16,446,788	1,496	2,169,093
Electric and steam.....	535	1,062,794	312	902,000
<b>Passenger vehicles</b> .....	7,447	16,332,669	1,650	2,530,136
Touring cars.....	5,440	12,296,292	421	1,022,682
Runabouts and buggies.....	1,804	1,835,059	1,120	1,222,554
Limousines, cabs, etc.....	607	2,093,020		
All other (omnibuses, patrol wagons, etc.).....	36	107,098	109	285,000
<b>Business vehicles</b> .....	617	1,170,918	158	540,957
Delivery wagons.....	139	232,989	77	191,457
Trucks and all other.....	478	893,924	81	349,500
<b>All other products, including repair work</b> .....		13,409,945		1,189,071

<sup>1</sup> In addition, 39 automobiles, valued at \$110,168, and bodies and parts, valued at \$527,863, were manufactured by establishments engaged primarily in the manufacture of other commodities.

<sup>2</sup> Includes 5 steam touring cars.

The products included under the head of "All other products" at the census of 1909, the value of which amounted to \$13,469,945, or 43.5 per cent of the total for all products, consisted largely of automobile bodies and parts manufactured by establishments where no finished vehicles were produced. It has been the practice to segregate the manufacture of the different parts to a considerable extent and to distribute the various processes among different establishments. As these partly manufactured products became the materials for other establishments which assemble the parts and produce the complete vehicle, there was a duplication, approximately equivalent to the value of such bodies and parts used in the factories of the state, in the total cost of materials and value of products reported for the industry.

Paint and varnish.—The quantity and value of the different products for 1909, 1904, and 1899 are shown in the following table:

PRODUCT.	1909	1904	1899
Total value.....	\$28,559,474	\$25,121,446	\$18,878,292
Pigments:			
White lead, dry—			
Pounds.....	12,173,520	<sup>1</sup> 74,618,249	<sup>1</sup> 39,109,000
Value.....	\$639,841	<sup>1</sup> \$3,051,795	<sup>1</sup> \$547,440
Oxides of lead—			
Pounds.....	20,180,006	15,825,810	12,423,000
Value.....	\$1,181,254	\$822,933	\$663,170
Lamp and other carbon blacks—			
Pounds.....	532,700	27,040	( <sup>2</sup> )
Value.....	\$12,587	\$2,004	( <sup>2</sup> )
Iron oxides and other earth colors—			
Pounds.....	11,919,174	9,172,633	15,458,000
Value.....	\$190,666	\$64,565	\$121,534
Dry colors, including vermilion and other fine colors—			
Pounds.....	44,639,112	24,679,202	42,695,643
Value.....	\$2,695,124	\$2,654,869	\$2,772,554
Barytes—			
Pounds.....	4,393,000	40,000	( <sup>2</sup> )
Value.....	\$23,167	\$400	( <sup>2</sup> )
Pulp colors sold moist—			
Pounds.....	14,020,581	14,776,079	12,941,596
Value.....	\$672,111	\$593,504	\$580,623
Paints:			
White lead in oil—			
Pounds.....	62,073,138	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$3,765,227	( <sup>2</sup> )	( <sup>2</sup> )
Paints in oil, in paste—			
Pounds.....	21,453,365	27,233,382	68,999,820
Value.....	\$2,274,401	\$2,273,822	\$4,009,897
Paints in oil, already mixed for use—			
Gallons.....	3,331,091	3,947,600	2,922,134
Value.....	\$3,618,181	\$3,412,447	\$2,908,441
Varnishes and japans:			
Oleoresinous varnishes—			
Gallons.....	5,199,289	5,070,390	4,928,208
Value.....	\$4,328,544	\$4,173,126	\$4,665,714
Spirit varnishes—			
Gallons.....	253,266	323,596	220,705
Value.....	\$306,681	\$693,670	\$401,428
Pyroxylin varnishes—			
Gallons.....	372,689	3,069	102,777
Value.....	\$422,550	\$3,758	\$99,000
All other varnishes.....	\$1,305,376	\$149,513	( <sup>2</sup> )
Drying japans and lacquers.....	\$1,276,148	\$831,873	\$1,074,113
Liquid fillers:			
Gallons.....	201,232	188,014	( <sup>2</sup> )
Value.....	\$189,501	\$125,385	( <sup>2</sup> )
Paste and dry fillers and putty:			
Pounds.....	15,096,299	14,534,498	( <sup>2</sup> )
Value.....	\$420,300	\$390,704	( <sup>2</sup> )
Water paints, dry:			
Pounds.....	25,490,405	23,335,015	( <sup>2</sup> )
Value.....	\$850,159	\$748,391	( <sup>2</sup> )
Linseed oil:			
Gallons.....	1,436,964	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$781,731	( <sup>2</sup> )	( <sup>2</sup> )
Bleached shellac:			
Pounds.....	1,739,727	( <sup>2</sup> )	( <sup>2</sup> )
Value.....	\$368,253	( <sup>2</sup> )	( <sup>2</sup> )
All other products.....	\$3,331,522	\$4,528,087	\$1,034,372

<sup>1</sup> Includes white lead in oil.

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

A larger value was reported for oleoresinous varnishes at each of the three censuses than for any other single product presented in the table, though in 1909 the combined value of white lead dry and white lead in oil was slightly greater. The value of this class of varnishes was considerably less in 1909, however, than in 1899, a decrease of 10.6 per cent between 1899 and 1904 having been only partly made up by an increase (3.7 per cent) between 1904 and 1909. The quantity and value of white lead, both dry and in oil, manufactured in New York in 1909 formed 22.6 per cent and 23 per cent, respectively, of the corresponding totals for this product in the United States. Other leading products, in the order of their importance in 1909 as measured by value, were paints in oil, already mixed for use, the pigments classified as dry colors, and paints in oil in paste. Of these five leading products, all except dry colors show a gain from 1904 to

1909 in value of output, and all except the paints in oil show an increase in quantity. The largest absolute increase in value from 1904 to 1909 was that of \$753,273, or 20.6 per cent, in the value of white lead dry and in oil combined, while the most striking increase in quantity was that of 19,959,910 pounds, or 80.9 per cent, in the output of dry colors. The most pronounced relative increase in quantity was reported for barytes, and in value, for pyroxylin varnishes.

In addition to the various products reported in the preceding table for 1909, paint and varnish to the value of \$806,814 were manufactured as secondary products by 15 establishments included under other classifications. These products consisted mainly of bleached shellac, drying japans and dryers, and paints in oil, ready for use. There were also 43,431,580 pounds of dry white lead, 737,214 gallons of varnish, and 170,249 pounds of lead oxide manufactured and used in further processes of manufacture within the paint and varnish establishments reporting.

During 1909, 36,203 tons of pig lead, valued at \$2,733,997; 46,520 gallons of grain alcohol, valued at \$23,381; and 101,669 gallons of wood alcohol, valued at \$49,906, were used in the manufacture of paint and varnish in the state.

Leather, tanned, curried, and finished.—The quantity and cost of the different kinds of materials used in this industry during the last three census years are shown in the following table:

MATERIAL.	1909	1904	1899
Total cost.....	\$20,940,733	\$16,274,903	\$17,424,300
Hides:			
Number.....	<sup>1</sup> 1,639,467	1,569,750	2,000,132
Cost.....	\$10,473,699	\$7,804,223	\$8,969,104
Skins:			
Number.....	9,781,180	9,902,459	10,516,312
Cost.....	\$6,951,107	\$4,969,796	\$4,893,981
Calf and kip—			
Number.....	2,107,584	1,135,591	1,048,722
Cost.....	\$2,751,704	\$1,083,168	\$1,126,963
Sheep—			
Number.....	6,491,352	7,124,420	6,665,810
Cost.....	\$3,214,723	\$2,708,110	\$1,946,142
All other—			
Number.....	<sup>2</sup> 1,182,244	1,702,448	2,801,780
Cost.....	\$984,620	\$1,178,528	\$1,821,876
Rough leather, purchased.....	\$361,413	\$282,738	\$418,080
Sides:			
Number.....	16,634	52,172	111,300
Cost.....	\$83,570	\$180,147	\$393,680
All other.....	277,843	102,501	24,500
All other materials.....	\$3,154,514	\$3,218,146	\$3,143,075

<sup>1</sup> Cattle hides only.

<sup>2</sup> Includes horsehides.

Hides show a greater increase in cost during the five-year period 1904–1909 than any other of the materials used, namely, \$2,669,476, or 34.2 per cent, but the number used increased only 69,717, or 4.4 per cent. The cost of hides constituted 50 per cent of the total cost of all materials used in 1909, 48 per cent in 1904, and 51.5 per cent in 1899. Eight and nine-tenths per cent of the hides tanned in the United States during 1909 were tanned in New York establishments. The largest relative increase in number from 1904 to 1909 is shown for calf and kip skins, while the largest decrease is shown for sheepskins.

The following table shows the quantity and value of the different products of this industry in 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$27,642,383	\$21,042,945	\$23,205,991
Leather.....	25,859,801	19,205,208	21,883,703
Sole.....	5,933,249	4,027,072	4,655,818
Upper, other than colt, calf, or kip skins.....	\$5,825,075	\$4,901,630	\$6,903,770
Horsehides and colt skins—			
Number.....	01,887	50,019	10
Value.....	\$285,213	\$159,998	\$76
Calf and kip skins, tanned and finished—			
Number.....	2,106,084	1,122,832	990,213
Value.....	\$3,779,513	\$1,662,513	\$1,442,322
Goatskins, tanned and finished—			
Number.....	505,831	1,033,155	1,801,518
Value.....	\$407,876	\$922,035	\$1,898,957
Sheepskins, tanned and finished—			
Number.....	3,409,260	4,768,772	2,997,036
Value.....	\$2,406,610	\$8,049,793	\$1,800,885
Harness—			
Sides.....	237,198	194,182	146,341
Value.....	\$1,048,537	\$995,947	\$765,500
Carriage, automobile, and furniture—			
Hides.....	83,684	31,637	9,061
Value.....	\$851,055	\$223,025	\$57,177
Trunk, bag, and pocketbook.....	\$376,978	\$109,834	\$379,586
Glove.....	\$2,074,701	\$1,218,868	\$1,800,388
Sold in rough.....	\$599,947	\$836,408	\$1,130,248
All other.....	\$1,671,047	\$1,158,106	\$1,428,907
All other products.....	\$597,502	\$1,320,483	\$278,638
Work on materials for others.....	\$1,185,080	\$1,057,254	\$1,043,656

The value of upper leather (exclusive of colt, calf, and kip skins) constituted a larger proportion of the total value of all products for the industry at the censuses of 1904 and 1899 than that of any other product, but by 1909 sole leather had taken the lead in this respect. For the five-year period 1904-1909, tanned and finished calf and kip skins show the largest relative increase both in number and in value—87.6 per cent and 127.3 per cent, respectively. During the same period both the number and the value of the tanned and finished goatskins and sheepskins decreased. In 1909 New York contributed 17.6 per cent of the total number of tanned and finished sheepskins, and 11.1 per cent of the tanned and finished calf and kip skins reported for the United States. In addition to that shown in the above table, leather valued at \$2,357,587 was tanned and curried during 1909 by establishments which used it in further manufacture.

The amount charged for tanning, currying, or finishing for others shows a slight increase both from 1899 to 1904 and from 1904 to 1909. The estimated value, after treatment, of the stock treated on a custom basis for others than tanners, curriers, or finishers during 1909 was \$7,286,944. If this amount be added to the total value of products, \$27,642,383, reported for the industry, less the \$1,185,080 received for work performed, the result, \$33,744,247, will represent fairly the importance of the leather industry in the state.

The statement which follows gives the quantity and estimated value of the products tanned, curried, or

finished by the leather-manufacturing establishments of the state during the years 1909 and 1904 for others who were not tanners, curriers, or finishers:

PRODUCT.	1909	1904
Total estimated value of stock after treatment.....	\$7,286,944	\$6,840,448
Tanned:		
Hides—		
Number.....	18,271	25,652
Estimated value.....	\$160,180	\$40,836
Skins—		
Number.....	1,827,426	4,130,992
Estimated value.....	\$1,637,551	\$2,438,050
Curried or finished:		
Sides—		
Number.....	325	.....
Estimated value.....	\$6,600	.....
Splits—		
Number.....	172,800	3,765
Estimated value.....	\$201,600	\$5,647
Skins—		
Number.....	5,001,590	4,346,862
Estimated value.....	\$5,272,004	\$3,155,915

The number of hides tanned for others, exclusive of tanners, curriers, and finishers, in 1909 was less than three-fourths the number so treated in 1904, and the number of skins less than one-half the number in 1904. The number of sides, splits, and skins curried or finished, however, increased.

Soap.—The quantity and cost of the principal materials used in the manufacture of soap during 1909 and 1904 are shown in the following table:

MATERIAL.	1909	1904
Total cost.....	\$15,612,382	\$8,410,887
Tallow, grease, and other fats:		
Pounds.....	98,083,852	105,415,189
Cost.....	\$5,843,965	\$4,133,261
Cocconut and palm-kernel oil:		
Gallons.....	1,749,124	907,794
Cost.....	\$883,258	\$406,762
Cottonseed oil:		
Gallons.....	4,237,007	1,788,255
Cost.....	\$1,703,923	\$537,909
Rosin:		
Pounds.....	43,642,265	34,627,676
Cost.....	\$939,230	\$637,347
Roots:		
Pounds.....	9,825,800	3,495,053
Cost.....	\$420,904	\$139,489
Caustic soda:		
Tons.....	11,006	13,928
Cost.....	\$449,716	\$569,950
Soda ash:		
Tons.....	24,958	12,648
Cost.....	\$463,152	\$236,517
Fuel and rent of power.....	\$290,146	\$179,206
All other materials.....	\$4,609,088	\$1,670,366

Tallow, grease, and other fats, which at both censuses constituted the most important item, as measured by cost, among the materials used, show for the five-year period a decrease of 7,331,337 pounds, or 7 per cent, in quantity, but an increase of \$1,710,704, or 41.4 per cent, in cost. This class of materials represented 37.4 per cent of the cost of all materials used in 1909 and 49.1 per cent in 1904. With the exception of caustic soda, each of the remaining items shows an increase for the five-year period in both quantity and cost. The largest actual increase in cost reported for any class of materials was that of \$3,038,722 for the items included under the head of "All other

materials." Cottonseed oil and foots made the most pronounced relative gains in both quantity and cost, the increase in each case amounting to more than 100 per cent in quantity and to more than 200 per cent in value.

The following table gives the quantity and value of hard and soft soap and of glycerin reported for the last two census years, together with the value of the other products reported:

PRODUCT.	1909	1904
Total value.....	\$23,582,977	\$13,401,726
Hard soap:		
Pounds.....	373,529,337	297,377,794
Value.....	\$18,094,061	\$12,440,255
Soft soap:		
Pounds.....	14,607,378	16,427,585
Value.....	\$171,702	\$114,107
Glycerin:		
Pounds.....	8,955,960	3,432,515
Value.....	\$1,212,606	\$383,855
All other products.....	\$4,104,608	\$463,479

The quantity of hard soap, which increased 76,151,-543 pounds, or 25.6 per cent, during the five years covered by the table, represented 21.5 per cent of the total reported for the United States in 1909 by establishments classified as engaged in the soap industry, and 21.9 per cent in 1904. Soft soap, the second largest product in point of quantity, shows a decrease of 1,820,207 pounds, or 11.1 per cent, in this respect, but the value increased materially. Glycerin increased 160.9 per cent in quantity and 215.9 per cent in value. The largest relative gain in value is shown for "All other products," which in 1909 consisted largely of perfumes, paints, flavoring extracts, and baking powders.

In addition to the products shown in the above table, soap valued at \$181,502 was manufactured during 1909 by 16 establishments which were classified under other industry designations. These products consisted mainly of 1,061,481 pounds of hard soap, of which 729,782 pounds was toilet soap.

Canning and preserving.—It was not until about 1850 that canning and preserving, as a factory industry, assumed commercial prominence. New York was one of the first states in which it was developed, and the growth of the industry in that state has been remarkable. Of the 790 establishments reported in 1909, 674 were engaged primarily in canning and preserving fruits and vegetables; 101 in the manufacture of pickles, preserves, and sauces; and 15 in canning and curing fish.

The quantity and value of the different products for 1909, 1904, and 1899 are shown in the next table.

The case, which is used as the unit of measure, consists of 24 standard-size cans—No. 2 (also called 2-pound cans) for beans, corn, 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 in the table.

PRODUCT.	1909	1904	1899
Total value.....	\$19,039,735	\$16,821,221	\$12,506,329
Canned vegetables:			
Cases.....	3,455,901	3,922,068	2,670,275
Value.....	\$6,271,904	\$6,836,451	\$4,410,251
Beans—			
Cases.....	569,176	551,031	274,932
Value.....	\$1,024,065	\$1,055,253	\$448,314
Corn—			
Cases.....	771,475	1,444,344	1,341,352
Value.....	\$1,197,999	\$2,272,032	\$1,925,490
Succotash—			
Cases.....	68,673	.....	12,324
Value.....	\$174,119	.....	\$27,506
Peas—			
Cases.....	1,438,059	1,509,629	751,535
Value.....	\$2,681,360	\$2,598,261	\$1,473,912
Pumpkin—			
Cases.....	103,127	45,663	24,769
Value.....	\$150,974	\$72,730	\$35,370
Tomatoes—			
Cases.....	347,714	184,804	254,618
Value.....	\$657,375	\$389,036	\$483,112
All other—			
Cases.....	157,767	187,057	10,747
Value.....	\$356,000	\$448,409	\$16,541
Canned fruits:			
Cases.....	900,870	585,264	655,261
Value.....	\$2,182,455	\$1,207,700	\$1,347,390
Apples—			
Cases.....	429,180	259,296	320,678
Value.....	\$753,231	\$354,817	\$560,048
Berries—			
Cases.....	214,134	150,730	155,396
Value.....	\$596,130	\$372,171	\$321,759
Cherries—			
Cases.....	90,445	46,160	21,207
Value.....	\$323,803	\$133,814	\$71,881
Peaches—			
Cases.....	41,727	10,060	29,111
Value.....	\$141,142	\$39,399	\$72,591
Pears—			
Cases.....	51,686	51,309	58,036
Value.....	\$216,858	\$172,944	\$226,082
Plums—			
Cases.....	52,853	41,195	70,890
Value.....	\$76,449	\$58,839	\$94,879
All other—			
Cases.....	20,845	20,514	33
Value.....	\$74,842	\$75,776	\$150
Dried fruits:			
Pounds.....	33,722,573	31,543,381	21,542,897
Value.....	\$2,346,575	\$1,346,040	\$1,275,109
Apples—			
Pounds.....	33,652,115	31,458,702	21,542,897
Value.....	\$2,333,137	\$1,331,895	\$1,275,109
All other—			
Pounds.....	70,458	84,679	.....
Value.....	\$13,438	\$14,145	.....
Fish:			
Pounds.....	6,873,885	6,381,124	3,644,310
Value.....	\$1,179,700	\$966,342	\$475,392
Canned fish, all kinds—			
Pounds.....	121,250	407,896	160,896
Value.....	\$75,777	\$37,826	\$23,025
Smoked fish—			
Pounds.....	4,180,092	4,623,080	2,309,600
Value.....	\$780,103	\$777,859	\$401,082
Herring—			
Pounds.....	335,800	460,000	1,494,000
Value.....	\$29,026	\$34,534	\$17,040
Salmon—			
Pounds.....	2,595,614	1,880,600	97,060
Value.....	\$486,910	\$319,620	\$13,900
Sturgeon—			
Pounds.....	498,237	1,523,500	454,000
Value.....	\$152,286	\$332,350	\$66,110
All other—			
Pounds.....	750,441	752,980	64,600
Value.....	\$111,881	\$91,355	\$4,032
Salted fish—			
Pounds.....	2,572,537	1,350,148	1,107,814
Value.....	\$323,820	\$80,657	\$51,285
Herring—			
Pounds.....	693,786	812,830	1,046,600
Value.....	\$94,681	\$37,757	\$42,600
All other—			
Pounds.....	1,878,751	537,318	121,214
Value.....	\$229,139	\$42,900	\$8,785
All other products.....	\$7,053,801	\$6,534,628	\$5,298,187

<sup>1</sup> Does not include canned vegetables to the value of \$79,458, dried fruit to the value of \$28,271, and salted fish to the value of \$2,195, reported by establishments engaged primarily in industries other than canning and preserving.

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

With the exception of canned vegetables, each of the main groups of products shows a substantial gain from 1904 to 1909 both in quantity and in value.

The output of canned vegetables, which constitute the most important group, as measured by value, shows a decrease of 466,077 cases, or 11.9 per cent, in quantity and \$564,547, or 8.3 per cent, in value. Measured by value, the most important single product in 1909 was canned peas, the value of which formed 14.1 per cent of the aggregate value of all products. The value of each of the vegetable products shown separately, with the exception of beans and corn, increased from 1904 to 1909. The fruits included under the head of "All other" were the only canned fruits to show a decrease in either quantity or value in 1909 as compared with 1904, while the largest absolute increase in each item was reported for apples.

Dried apples show an increase of 2,193,413 pounds, or 7 per cent, in quantity and \$1,001,242, or 75.2 per cent, in value from 1904 to 1909. The production of dried apples in New York during 1909 represented 75.5 per cent of the total output of this product for the United States and 75.3 per cent of its value.

The quantity of smoked fish decreased during the five-year period 1904-1909, owing chiefly to the decided decrease of 1,025,263 pounds in smoked sturgeon. More salmon was smoked in 1909 than any other variety of fish. The increase in the quantity and value of salted fish from 1904 to 1909 is noteworthy.

New York ranked first among the states of the Union in 1909 in the output of dried and of canned apples, second in that of canned peas, third in that of canned beans, and sixth in that of canned corn.

**Agricultural implements.**—Although the fiftieth industry in the state when measured by value of products, this industry is of considerable interest owing to the importance of agriculture in New York. The following table gives the value of the different general groups of implements manufactured during 1909, 1904, and 1899:

PRODUCT.	1909	1904	1899
Total value.....	\$14,970,980	\$13,045,891	\$10,537,254
Implements of cultivation.....	3,348,203	2,545,947	
Seeders and planters.....	247,357	1,800,182	10,071,310
Harvesting implements.....	5,950,777	5,841,889	
Seed separators.....	790,494	461,814	
All other products, including amount received for repair work.....	4,634,149	2,399,650	465,944

Harvesting implements formed the most important single group, as measured by value, in 1909 and 1904, and represented 39.7 per cent and 44.8 per cent of the totals for the respective census years. With the exception of seeders and planters, each of the different groups shows an increase in value for the five-year period, the largest being for the items included under the head of "All other products," which nearly doubled in value.

**Gloves and mittens, leather.**—The next table shows the number of pairs and the value of the different kinds of leather gloves, mittens, and gauntlets manufactured in New York in 1909, 1904, and 1899.

Although the number of pairs of gloves, mittens, and gauntlets manufactured decreased slightly from 1904 to 1909, their value increased \$4,328,565, or 44.2 per cent, owing largely to a general rise in prices. The output of men's unlined gloves, mittens, and gauntlets, which formed the most important single class at each of the last three censuses, shows a decrease from 1904 to 1909 of 74,509 dozen pairs, or 8.4 per cent, although its value shows an increase of \$2,351,406, or 54.1 per cent. The output of women's and children's unlined gloves, mittens, and gauntlets, the class second in importance in 1909, increased 181,472 dozen pairs, or 124.7 per cent, and its value \$2,085,202, or 180.3 per cent, during the same period. Of the total output of men's gloves, mittens, and gauntlets reported in 1909, 63.7 per cent, representing 70 per cent of the value, were unlined, the corresponding percentages for women's and children's gloves, mittens, and gauntlets being 57.3 and 71.2, respectively.

PRODUCT.	1909	1904	1899
Total value.....	\$14,336,365	\$9,948,443	\$10,854,221
Gloves, mittens, and gauntlets:			
Dozen pairs.....	1,850,438	1,881,194	1,721,331
Value.....	\$14,122,640	\$9,794,076	\$10,507,789
Men's—			
Dozen pairs.....	1,279,560	1,563,366	1,280,595
Value.....	\$9,568,409	\$7,810,971	\$7,731,868
Lined—			
Dozen pairs.....	464,817	674,114	649,449
Value.....	\$2,808,651	\$3,462,519	\$3,847,825
Unlined—			
Dozen pairs.....	814,743	889,252	637,155
Value.....	\$6,609,858	\$4,348,452	\$4,184,043
Women's and children's—			
Dozen pairs.....	570,878	317,828	424,142
Value.....	\$4,554,231	\$1,983,104	\$2,672,095
Lined—			
Dozen pairs.....	243,861	172,283	193,540
Value.....	\$1,312,817	\$820,892	\$1,015,744
Unlined—			
Dozen pairs.....	327,017	145,545	230,602
Value.....	\$3,241,414	\$1,162,212	\$1,657,251
All other products.....	\$213,725	\$152,368	\$346,432

<sup>1</sup> Includes 17,094 dozen pairs of gauntlets, valued at \$102,926, not distributed by kinds.

The following table gives, for 1909, a more detailed classification, showing for each class the total value of the output and the number of pairs made from the different kinds of leather:

PRODUCT.	Value.	DOZEN PAIRS.			
		Total.	Lamb or sheep skin.	Kid.	All other.
Total value.....	\$14,336,365				
Gloves, mittens, and gauntlets.....	14,122,640	1,850,438	1,408,620	67,399	374,419
Dress.....	11,418,955	1,287,018	1,046,654	66,464	174,500
Men's—					
Lined.....	1,981,224	282,060	198,349	4,600	79,111
Unlined.....	5,405,690	575,097	485,841	31,197	58,059
Women's and children's—					
Lined.....	939,064	142,511	118,639	2,956	20,916
Unlined.....	3,092,977	287,041	243,825	27,702	16,414
Working.....	2,703,085	562,820	361,966	935	199,919
Men's—					
Lined.....	887,327	182,748	121,592		61,156
Unlined.....	1,294,168	239,046	129,735	935	108,976
Boys'—					
Lined.....	373,753	101,350	80,310		21,040
Unlined.....	148,437	39,076	30,329		8,747
All other products.....	213,725				



Of the total output of leather gloves, mittens, and gauntlets in 1909, 76.1 per cent were manufactured from lambskin or sheepskin, 3.6 per cent from kid, and 20.2 per cent from other kinds of leather. Of the dress gloves, about 80 per cent were lambskin or sheepskin, and about 5 per cent were kid, while of the working gloves, mittens, and gauntlets nearly two-thirds were sheepskin or lambskin, less than 1 per cent were kid, and the remainder were made of other kinds of leather.

**Carriages and wagons and materials.**—The number and value of the different kinds of horse-drawn vehicles manufactured during the census years 1909, 1904, and 1899 are shown in the following table:

PRODUCT.	1909	1904	1899
Total value.....	\$13,292,531	\$14,643,510	\$14,002,904
Carriages (family and pleasure):			
Number.....	25,474	42,240	58,176
Value.....	\$2,344,487	\$4,550,593	\$4,939,699
Wagons:			
Number.....	21,937	19,879	22,775
Value.....	\$2,932,813	\$2,448,670	\$2,186,935
Business—			
Number.....	17,747	12,787	(1)
Value.....	\$2,695,589	(1)	(1)
Farm—			
Number.....	4,026	6,099	(1)
Value.....	\$253,942	(1)	(1)
Government, municipal, etc.—			
Number.....	194	83	(1)
Value.....	\$73,282	(1)	(1)
Public conveyances:			
Number.....	219	742	656
Value.....	\$187,936	\$518,466	\$489,142
Sleighs and sleds:			
Number.....	10,823	19,433	14,500
Value.....	\$349,643	\$592,768	\$412,075
All other products, including parts and repair work.....	\$7,477,652	\$6,532,710	\$5,975,143

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

In view of the extraordinary development of the automobile industry, particularly during the last five years, it is but natural that the output of horse-drawn vehicles should decrease materially. In 1899, 96,107 such conveyances were manufactured in New York by the carriage and wagon establishments reported, but the number had decreased to 82,303 in 1904, and to 58,453 in 1909. The value of the vehicles made, however, increased 1 per cent from 1899 to 1904, although from 1904 to 1909 it decreased 28.3 per cent. During the five-year period 1904–1909 the only kinds of vehicles showing an increase in number were business wagons and government and municipal wagons, while the largest decrease was in the number of family and pleasure carriages. The number of sleighs and sleds made decreased 8,610 and their value \$243,125 during the same period. In point of numbers, family and pleasure carriages were the most important of the different classes, but their value in 1909 was exceeded by that reported for business wagons.

**Shipbuilding, including boat building.**—This classification includes the operations of shipyards building or repairing steel and wooden steam, sail, or unrigged vessels, yachts, motor boats, rowboats, and canoes, and the manufacture of masts, spars, oars, and rigging.

The number and gross tonnage of the different classes of vessels launched in 1909, 1904, and 1899 are shown in the following statement:

PRODUCT.	1909		1904		1899	
	Number.	Gross tonnage.	Number.	Gross tonnage.	Number.	Gross tonnage.
Vessels of 5 gross tons and over launched during the year.....	309	60,152	361	104,495	393	86,310
Steel.....	16	7,332	24	14,088	17	11,084
Steam.....	7	3,963	16	8,573	14	7,582
Motor.....	2	100	.....	.....	.....	.....
Sail.....	7	.....	7	4,695	.....	.....
Unrigged.....	7	3,269	1	800	3	3,502
Wooden.....	293	52,820	337	90,427	376	75,226
Steam.....	23	3,565	36	5,759	87	4,817
Motor.....	76	1,190	64	708	.....	.....
Sail.....	15	678	27	451	85	1,400
Unrigged.....	179	47,387	210	83,511	204	69,009
Power boats of less than 5 gross tons.....	790	.....	453	.....	552	.....

The foregoing table shows that the total gross tonnage as well as the average gross tonnage of the vessels launched, not including power boats of less than 5 tons gross register, was greater in 1904 than in either 1909 or 1899, and that the total number of vessels launched was smaller in each succeeding census year, the decrease being principally in the number of wooden vessels. Increases from 1904 to 1909 are shown for the number of steel motor and unrigged vessels and for wooden motor boats. A considerable increase is also shown in the number of power boats of less than 5 tons gross register during the same period.

The value of the work done upon vessels and boats of all kinds during 1909, 1904, and 1899 is shown in the following table:

CLASS OF WORK.	1909	1904	1899
Total value.....	\$11,417,189	\$11,265,303	\$8,647,371
Work done during the year on new vessels and boats.....	3,977,934	4,181,772	3,281,815
Vessels of 5 gross tons and over.....	3,294,121	3,607,085	2,627,113
Boats of less than 5 gross tons.....	683,813	574,687	654,702
Power boats, all kinds.....	424,270	378,635	454,643
Sailboats, rowboats, scows, etc.....	259,543	196,052	200,059
Repair work.....	6,931,117	6,726,959	4,857,916
All other.....	508,138	356,572	507,640

Increases are shown for the decade 1899–1909 for all of the items presented in the table, with the exception of the value of the work done on power boats of less than 5 tons gross register. From 1904 to 1909 there was an increase in every item except the value of work done on new vessels of 5 tons gross register and over, which shows a decrease of 8.7 per cent.

The statistics presented in the two preceding tables do not include those for the United States navy yard in Brooklyn, which launched 5 steam cutters having a total displacement of 68 tons, and did work upon 1 steel vessel of 21,825 tons displacement and 6 small boats having a total displacement of 21 tons, and various repair work, the whole aggregating \$7,032,416 in value.

Wire.—This classification includes only those mills which draw wire from purchased wire rods. The figures for the wire departments of rolling mills which roll the wire rods, which would otherwise be presented in a supplementary note, can not be shown without disclosing the operations of individual establishments. The tonnage and cost of the principal materials used in 1909 were as follows:

MATERIAL.	1909
<b>Total cost</b> .....	<b>\$7,823,518</b>
Wire rods:	
Steel—	
Tons.....	14,850
Cost.....	\$501,362
Copper—	
Tons.....	22,195
Cost.....	\$6,285,405
Other metal (iron, brass, etc.)—	
Tons.....	367
Cost.....	\$62,150
Purchased wire:	
Tons.....	249
Cost.....	\$77,875
Fuel.....	\$185,851
All other materials.....	\$650,815

Comparative figures for 1904 and 1899 are not available. A total of 37,412 tons (2,000 pounds) of wire rods, costing \$6,908,977, were used, copper rods contributing 59.3 per cent of the tonnage and 91 per cent of the cost.

The tonnage and value of the main products reported for the industry in 1909 were as follows:

PRODUCT.	1909
<b>Total value</b> .....	<b>\$10,065,431</b>
Wire and manufactures of wire:	
Steel and iron—	
Tons.....	14,632
Value.....	\$1,893,995
Wire drawn for sale—	
Tons.....	12,151
Value.....	\$1,838,220
Manufactures of wire, nails, woven wire, rope, etc.—	
Tons.....	2,481
Value.....	\$555,775
Copper wire—	
Tons.....	22,375
Value.....	\$7,653,209
Other metal (chiefly brass) wire and manufactures of wire—	
Tons.....	319
Value.....	\$175,593
All other products.....	\$342,034

Of the total quantity of wire and manufactures of wire shown in the above table, 59.9 per cent was copper, 39.2 per cent was iron and steel, and nine-tenths of 1 per cent was made from other metals. Of the total value of wire products, \$9,722,797, the proportions contributed by each class were 78.7 per cent, 19.5 per cent, and 1.8 per cent, respectively. The seven wire mills in the state in 1909 reported 703 wire-drawing blocks, with an annual capacity of 39,519 tons.

Laundries.—Statistics for steam laundries are not included in the general tables or in the totals for

manufacturing industries. There were 508 such establishments in the state of New York in 1909, of which 126 were in New York City; 25 in Buffalo; 23 in Syracuse; 16 in Rochester; 15 in Troy; 12 in Utica; 10 each in Albany, Binghamton, and Poughkeepsie; 7 each in Auburn, Schenectady, and Watertown; 6 each in Elmira and Jamestown; and 5 in Oswego. No other incorporated place had as many as 5 steam laundries.

The following statement summarizes the statistics:

Number of establishments.....	508
Persons engaged in the industry.....	14,063
Proprietors and firm members.....	523
Salaried employees.....	962
Wage earners (average number).....	12,578
Primary horsepower.....	12,637
Capital.....	\$7,316,808
Expenses.....	9,488,116
Services.....	6,081,311
Materials.....	1,858,703
Miscellaneous.....	1,545,102
Amount received for work done.....	11,446,663

The most common form of ownership was the individual, with 292 establishments. The firm and corporate forms of ownership were represented by 105 and 111 establishments, respectively. One hundred and forty-five establishments had receipts for the year's business of less than \$5,000; 222, receipts of \$5,000 but less than \$20,000; 119, receipts of \$20,000 but less than \$100,000; and 22, receipts of \$100,000 or over.

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.....	12,129	93.0	July.....	13,010	99.7
February.....	12,160	93.2	August.....	13,046	100.0
March.....	12,107	92.8	September.....	12,899	98.9
April.....	12,155	93.2	October.....	12,782	98.0
May.....	12,812	94.4	November.....	12,735	97.6
June.....	12,702	97.4	December.....	12,897	98.9

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.
<b>Primary power, total</b> .....		<b>12,637</b>
Owned:		
Steam.....	321	9,614
Gas.....	59	528
Water wheels.....	3	51
Water motors.....	3	15
Rented:		
Electric.....	260	1,437
Other.....		992

The kind and amount of fuel used are shown below:

KIND.	Unit.	Quantity.
Anthracite coal.....	Tons.....	63,770
Bituminous coal.....	Tons.....	29,547
Coke.....	Tons.....	2,842
Wood.....	Cords.....	796
Oil.....	Barrels.....	618
Gas.....	1,000 feet.....	106,760

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 next summary.

53063°—12—54

	Custom sawmills.	Custom gristmills.
Number of establishments.....	211	403
Persons engaged in the industry.....	452	623
Proprietors and firm members.....	243	462
Salaried employees.....	3	4
Wage earners (average number).....	206	162
Primary horsepower.....	6,599	14,073
Capital.....	\$423,786	\$1,278,100
Expenses.....	99,303	2,853,010
Services.....	76,613	69,104
Materials.....	7,090	12,745,335
Miscellaneous.....	15,600	38,571
Value of products.....	207,624	13,246,948

<sup>1</sup> Includes estimate of all grain ground. A similar estimate for the 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
<b>STATE—All industries</b> .....	1909	44,935	1,203,241	47,569	151,691	1,003,981	1,997,662	\$2,779,497	\$186,032	\$557,231	\$1,856,904	\$3,369,490	\$1,512,586
	1904	37,194	996,725	41,766	98,012	856,947	1,516,592	2,031,460	111,145	430,015	1,348,603	2,488,346	1,139,743
	1899	35,957	.....	.....	68,030	726,909	1,099,931	1,523,503	76,740	337,324	1,018,377	1,871,831	853,454
Agricultural implements.....	1909	57	6,851	41	1,093	5,717	10,744	26,100	1,012	3,270	6,415	14,971	8,556
	1904	75	7,279	06	934	6,279	12,019	23,436	809	3,241	5,678	13,040	7,368
	1899	87	6,290	80	650	5,551	8,228	20,116	676	2,797	4,825	10,537	5,712
Artificial flowers and feathers and plumes.	1909	319	9,813	417	903	8,493	215	7,982	1,025	3,452	12,258	21,162	8,904
	1904	149	3,740	205	210	3,325	106	1,865	175	1,102	1,463	3,997	2,534
	1899	157	4,477	220	220	4,010	80	2,981	227	1,257	2,190	5,016	2,817
Artificial stone.....	1909	176	967	185	71	711	1,122	1,420	60	390	523	1,357	84
	1904	26	656	20	54	582	688	629	71	364	282	930	646
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Automobiles, including bodies and parts.	1909	113	11,610	59	1,690	9,861	9,398	25,102	1,604	7,016	14,908	30,980	16,072
	1904	35	2,101	21	231	1,849	1,254	3,347	231	1,227	1,907	4,260	2,353
	1899	15	.....	.....	56	288	.....	639	57	166	173	456	283
Babbitt metal and solder.....	1909	24	349	18	139	192	101	1,018	181	149	5,071	6,123	1,052
	1904	15	219	27	64	128	84	1,110	68	86	4,307	4,066	639
	1899	11	251	19	29	203	.....	1,198	33	116	2,719	3,077	358
Bags, other than paper.....	1909	21	1,127	14	113	1,000	751	1,888	149	330	4,116	4,986	870
	1904	17	797	15	60	722	410	867	83	230	3,012	3,648	696
	1899	18	714	17	52	645	.....	678	111	204	1,698	2,250	552
Bags, paper.....	1909	20	1,157	12	113	1,032	1,046	3,281	264	426	3,033	5,613	1,680
	1904	12	604	9	60	535	369	4,774	111	215	1,792	2,858	1,066
	1899	16	.....	.....	65	508	.....	1,787	80	159	1,119	1,695	576
Baskets, and rattan and willow ware..	1909	169	1,486	179	70	1,237	1,882	1,181	62	583	820	1,947	1,127
	1904	194	1,851	217	65	1,569	1,967	1,110	56	587	651	1,949	1,298
	1899	180	1,298	208	31	1,069	.....	693	23	314	416	1,002	586
Belting and hose, leather.....	1909	28	924	22	298	604	1,988	4,442	365	395	4,101	6,420	2,319
	1904	25	997	22	216	769	908	3,669	287	424	3,764	5,749	1,985
	1899	21	693	18	117	568	.....	2,363	134	320	2,400	3,293	893
Bicycles, motorcycles, and parts.....	1909	20	636	15	63	568	406	853	74	345	522	1,165	643
	1904	32	466	28	28	410	612	658	26	206	947	769	412
	1899	66	2,427	57	267	2,103	.....	3,327	216	988	1,856	3,842	1,986
Blackening and cleansing and polishing preparations.	1909	88	1,188	58	472	668	539	2,232	561	297	1,827	3,836	2,009
	1904	65	826	50	223	553	565	1,260	280	214	1,418	2,719	1,301
	1899	58	745	67	181	497	.....	904	222	206	948	1,913	965
Boots and shoes, including cut stock and findings.	1909	296	23,815	293	1,895	21,627	10,456	26,048	2,254	10,609	28,975	48,186	19,211
	1904	259	18,776	202	1,066	17,418	6,571	15,571	1,032	7,873	22,400	37,521	15,121
	1899	320	18,167	376	1,136	16,655	.....	12,959	1,067	6,431	17,309	28,117	10,808
Boxes, cigar.....	1909	56	1,725	67	127	1,531	1,180	1,129	151	659	1,126	2,234	1,168
	1904	57	1,994	68	115	1,811	1,377	1,134	132	754	1,107	2,344	1,237
	1899	66	1,331	76	57	1,198	.....	801	51	453	760	1,537	777
Boxes, fancy and paper.....	1909	315	12,702	351	813	11,538	4,677	8,072	924	4,261	6,113	14,234	8,121
	1904	260	11,821	296	814	10,711	3,573	6,894	818	3,584	5,562	12,748	7,186
	1899	246	9,025	311	438	8,276	.....	3,725	365	2,617	3,347	8,380	5,033
Brass and bronze products.....	1909	247	7,690	218	727	6,661	13,397	16,591	1,024	3,951	13,130	22,184	9,045
	1904	218	4,477	207	388	3,882	3,694	6,442	428	2,088	3,868	8,045	4,177
	1899	172	.....	.....	229	3,456	.....	6,180	275	1,726	5,539	9,327	3,788
Bread and other bakery products....	1909	3,978	29,039	4,212	3,470	21,357	10,319	38,573	2,727	13,881	52,738	86,233	33,495
	1904	3,164	22,659	3,362	1,455	17,708	6,265	24,551	1,099	10,172	36,380	61,034	24,645
	1899	3,000	19,803	3,108	2,081	14,554	.....	19,434	1,473	7,414	23,568	43,051	19,493
Brick and tile.....	1909	205	8,630	212	338	8,080	28,734	13,864	406	3,958	1,717	8,493	6,716
	1904	192	7,193	213	243	6,737	19,090	10,054	281	3,161	1,368	7,430	6,062
	1899	217	7,178	258	183	6,737	18,107	8,741	167	2,765	1,109	5,684	4,575
Brooms and brushes.....	1909	171	3,419	185	337	2,897	1,630	3,026	406	1,326	3,180	6,290	3,110
	1904	176	3,639	207	250	3,182	1,316	3,308	233	1,220	2,849	5,402	2,533
	1899	170	3,084	224	212	2,648	.....	2,718	166	1,021	2,266	4,335	2,069
Butter, cheese, and condensed milk..	1909	1,552	4,930	1,483	581	2,866	16,629	12,216	507	1,607	36,161	42,458	6,297
	1904	1,766	4,804	1,721	215	2,868	14,322	6,066	192	1,485	26,793	31,048	4,255
	1899	1,908	4,438	1,772	227	2,439	13,905	7,084	122	1,157	22,487	25,558	4,071
Buttons.....	1909	165	6,377	206	545	6,126	3,911	6,367	647	2,462	4,168	9,373	5,295
	1904	61	3,638	68	333	3,237	1,571	2,034	284	1,068	1,488	3,849	2,361
	1899	49	2,800	48	105	2,647	903	1,195	83	813	943	2,371	1,428
Candles.....	1909	9	420	4	60	347	147	1,170	106	136	1,090	1,670	571
	1904	8	392	5	47	340	171	1,331	67	128	933	1,332	399
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canning and preserving.....	1909	790	8,818	879	864	7,075	12,469	15,825	916	2,563	11,669	19,040	7,371
	1904	666	9,171	750	625	7,706	9,741	12,822	652	2,409	9,820	16,821	6,992
	1899	604	.....	.....	457	6,384	.....	8,159	411	1,701	7,735	12,506	4,771
Carpets and rugs, other than rag.....	1909	16	12,272	11	363	11,898	11,901	27,528	686	5,870	13,315	25,606	12,291
	1904	12	11,354	8	260	11,077	10,151	19,830	328	4,587	11,133	19,404	8,271
	1899	12	8,795	3	189	8,603	7,783	12,870	250	3,308	7,681	15,029	7,348

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

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

MANUFACTURES—NEW YORK.

851

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
			Expressed in thousands.										
<b>STATE—Continued.</b>													
Carriages and wagons and materials...	1909	610	7,333	693	524	6,116	10,029	\$14,576	\$731	\$3,740	\$5,809	\$13,293	\$7,484
	1904	635	9,234	756	587	7,891	8,524	15,896	716	4,406	6,201	14,644	8,443
	1899	784	.....	.....	505	7,490	.....	14,647	539	4,009	5,913	14,003	8,090
Cars and general shop construction and repairs by steam-railroad companies.	1909	69	18,003	.....	1,549	16,454	21,423	15,264	1,242	9,802	10,088	21,726	11,638
	1904	65	15,163	.....	991	14,172	8,216	11,652	836	7,997	8,778	17,886	9,108
	1899	82	13,505	.....	443	13,062	6,593	11,245	345	6,763	8,880	16,195	7,315
Cars and general shop construction and repairs by street-railroad companies.	1909	62	4,767	.....	287	4,480	4,367	11,304	282	2,832	3,180	6,640	3,400
	1904	14	3,879	.....	169	3,710	1,170	4,975	168	2,261	3,880	3,880	2,532
	1899	17	2,600	.....	47	2,559	.....	6,242	52	1,801	1,528	3,515	1,937
Cars, steam-railroad, not including operations of railroad companies.	1909	4	2,581	.....	194	2,387	3,345	5,459	209	1,577	3,426	5,940	2,514
	1904	4	1,738	.....	136	1,602	2,470	2,891	142	984	2,755	4,251	1,496
	1899	4	2,183	.....	92	2,091	3,000	4,299	76	1,039	3,745	5,228	1,483
Cement.....	1909	15	1,573	14	116	1,443	24,385	10,168	167	810	800	2,409	1,609
	1904	26	2,384	10	155	2,219	22,689	11,373	221	1,133	1,014	3,136	2,122
Chemicals.....	1909	74	6,869	19	1,104	5,746	116,197	46,465	1,623	3,376	19,709	35,346	15,637
	1904	93	5,845	30	848	4,907	66,649	23,149	1,274	2,078	12,958	23,022	10,064
	1899	92	5,037	23	503	4,331	33,950	22,106	719	2,303	8,670	15,904	7,324
Chocolate and cocoa products.....	1909	10	977	3	219	755	2,930	3,088	358	204	4,167	5,823	1,656
	1904	10	917	10	134	773	1,727	2,361	167	259	2,673	4,077	1,404
	1899	11	785	15	151	619	.....	1,263	164	197	1,956	2,715	759
Clocks and watches, including cases and materials.	1909	27	2,854	11	376	2,487	1,311	3,044	632	1,325	2,281	6,184	3,603
	1904	24	2,330	19	147	2,164	1,108	5,567	235	1,088	2,235	4,121	1,885
	1899	27	2,869	17	181	2,721	.....	5,147	108	1,146	2,932	4,036	2,004
Cloth, sponging and refinishing.....	1909	25	479	32	93	604	329	363	90	417	60	1,030	970
	1904	32	618	43	44	531	169	221	40	359	26	749	723
	1899	26	404	34	20	344	.....	126	21	180	11	384	373
Clothing, men's, including shirts.....	1909	2,983	104,567	4,213	8,086	91,363	13,821	119,421	10,949	48,073	135,327	266,075	130,748
	1904	2,402	73,576	3,349	5,575	64,652	7,826	72,170	6,013	29,723	94,861	187,409	92,548
	1899	2,784	.....	.....	4,338	54,458	.....	60,733	4,478	24,160	75,057	148,844	73,787
Clothing, women's.....	1909	3,083	114,925	4,413	12,408	98,104	12,379	84,213	13,409	54,841	148,142	272,518	124,376
	1904	2,216	84,657	3,303	7,054	74,300	6,617	47,008	6,474	35,750	91,705	173,548	81,843
	1899	1,673	55,335	2,466	4,152	48,717	3,964	29,283	4,008	21,988	56,848	106,892	50,044
Coffee and spice, roasting and grinding.	1909	90	2,394	101	774	1,519	4,064	6,829	816	726	12,654	17,430	4,776
	1904	83	2,259	104	513	1,642	4,308	10,853	599	831	22,711	26,995	4,284
	1899	87	2,239	143	555	1,541	.....	9,406	612	711	18,131	22,471	4,340
Coffins, burial cases, and undertakers' goods.	1909	34	1,556	27	294	1,235	1,813	3,830	327	665	2,071	3,785	1,714
	1904	29	1,580	26	237	1,323	1,729	3,159	278	691	1,885	3,677	1,792
	1899	31	1,451	22	179	1,250	.....	2,444	197	626	1,303	2,701	1,398
Confectionery.....	1909	249	10,116	237	1,309	8,670	7,966	11,702	1,580	3,079	15,644	25,540	9,896
	1904	199	8,219	225	826	7,168	5,031	8,712	908	2,495	10,563	18,237	7,674
	1899	153	.....	.....	700	5,675	.....	5,512	726	1,910	8,186	13,611	5,425
Cooperage and wooden goods, not elsewhere specified.	1909	364	3,164	415	138	2,611	4,278	6,534	151	1,222	4,930	7,526	2,596
	1904	343	3,739	394	116	3,229	5,186	4,856	149	1,520	4,814	7,409	2,685
	1899	318	.....	.....	67	2,904	.....	4,263	80	1,348	3,372	5,650	2,278
Copper, tin, and sheet-iron products..	1909	686	17,153	663	1,801	14,089	13,108	37,563	2,067	8,384	21,035	38,452	17,417
	1904	495	14,725	572	1,011	13,142	6,799	29,603	1,303	6,724	13,009	27,314	13,705
	1899	475	.....	.....	697	9,965	.....	12,846	697	4,851	9,223	10,064	10,064
Cordage and twine and jute and linen goods.	1909	16	6,230	9	269	5,962	15,056	15,777	375	2,164	7,589	12,215	4,626
	1904	20	7,025	8	275	6,742	16,060	14,416	412	2,417	10,608	15,806	5,258
	1899	22	.....	.....	148	5,450	.....	10,312	306	1,714	7,516	11,075	4,159
Cordials and syrups.....	1909	35	493	36	163	204	453	1,524	273	151	1,490	2,513	1,023
	1904	20	232	24	29	179	413	573	60	87	684	1,105	421
	1899	10	99	12	25	62	.....	188	31	21	166	307	141
Cork, cutting.....	1909	32	928	29	64	835	692	970	75	313	1,170	1,817	647
	1904	19	540	21	23	406	173	835	31	135	350	670	320
	1899	24	211	25	19	167	.....	229	17	66	291	467	176
Corsets.....	1909	47	2,787	46	305	2,436	523	2,351	353	1,008	2,484	5,161	2,677
	1904	35	1,282	38	120	1,124	214	876	95	378	617	1,675	1,058
	1899	37	.....	.....	89	1,186	.....	770	107	344	730	1,604	865
Cotton goods, including cotton small wares.	1909	47	11,032	23	346	10,663	33,354	23,137	592	4,166	11,726	20,352	8,626
	1904	33	9,031	13	218	8,800	25,812	18,474	314	3,071	8,645	18,434	4,789
	1899	52	9,504	47	198	9,259	24,044	15,060	263	2,746	5,718	10,788	5,070
Cutlery and tools, not elsewhere specified.	1909	161	5,070	152	440	4,478	6,571	6,841	518	2,434	1,853	6,218	4,365
	1904	161	3,960	189	265	3,506	6,642	4,541	295	1,784	1,255	4,579	3,324
	1899	130	.....	.....	158	2,106	.....	3,976	131	971	778	2,518	1,740
Dairymen's, poulterers', and apiarists' supplies.	1909	31	1,250	30	418	802	1,214	4,788	539	449	1,285	4,213	2,928
	1904	31	1,147	29	203	915	1,115	2,283	152	429	1,272	2,510	1,238
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Dentists' materials.....	1909	15	379	10	103	266	221	2,258	158	147	4,577	5,114	837
	1904	21	922	19	136	767	609	1,844	178	450	2,721	3,649	928
	1899	11	178	14	53	111	.....	244	50	52	366	603	237

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

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

## MANUFACTURES—NEW YORK.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.					Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).	Expressed in thousands.							
<b>STATE—Continued.</b>														
Dyeing and finishing textiles.....	1909	81	5,782	68	462	5,252	8,750	\$11,259	\$765	\$2,321	\$4,139	\$9,073	\$5,534	
	1904	55	3,850	60	204	3,586	7,128	7,530	258	1,578	1,339	4,362	3,023	
	1899	42	3,274	50	107	3,117	6,885	6,231	134	1,425	1,402	3,626	2,224	
Dyestuffs and extracts.....	1909	18	579	7	154	418	3,647	4,145	264	200	2,867	4,505	1,638	
	1904	9	616	4	93	519	2,353	3,547	148	317	1,652	2,706	1,034	
	1899	19	623	7	78	538	2,548	2,548	92	301	1,264	2,112	848	
Electrical machinery, apparatus, and supplies.	1909	217	22,819	95	3,752	18,072	53,813	60,427	4,552	12,479	27,483	49,290	21,807	
	1904	175	18,064	95	1,668	16,301	33,050	30,643	1,730	9,287	17,846	35,348	17,502	
	1899	134	11,594	111	1,113	10,370	11,049	17,697	904	5,667	12,539	22,695	10,156	
Electroplating.....	1909	130	878	155	71	652	842	450	59	421	242	1,116	874	
	1904	106	895	132	46	717	697	413	53	409	364	1,185	821	
	1899	99	823	132	41	758	697	602	34	302	403	1,150	747	
Emery and other abrasive wheels.....	1909	10	894	3	172	710	900	2,414	253	385	1,080	2,561	1,481	
	1904	3	44	1	15	28	148	123	18	8	20	74	54	
	1899	3	17	1	15	16	148	45	11	30	74	38	38	
Fancy articles, not elsewhere specified.	1909	182	4,234	190	614	3,430	2,785	6,370	702	1,644	3,321	7,802	4,541	
	1904	145	3,282	184	243	2,855	1,048	2,523	208	1,176	2,080	5,085	3,005	
	1899	105	2,050	254	292	2,404	2,371	2,371	222	953	1,783	4,201	2,418	
Fertilizers.....	1909	15	1,041	8	125	908	2,700	3,602	188	542	2,655	4,251	1,596	
	1904	13	673	9	68	596	1,537	2,598	100	254	1,334	2,082	748	
	1899	32	1,249	24	192	1,033	1,033	4,601	211	492	1,909	3,148	1,239	
Firearms and ammunition.....	1909	8	1,910	1	128	1,781	2,312	4,343	160	1,162	508	2,374	1,866	
	1904	7	1,524	1	99	1,425	1,655	2,966	165	804	329	1,727	1,398	
	1899	8	1,778	3	90	1,685	1,685	2,058	85	930	459	1,970	1,511	
Flags, banners, regalia, society badges, and emblems.	1909	64	1,025	73	139	813	266	1,187	114	354	892	1,864	972	
	1904	54	500	59	74	427	97	807	59	152	480	964	484	
	1899	50	485	61	53	371	371	723	53	125	474	921	447	
Flour-mill and gristmill products.....	1909	983	5,120	1,191	939	2,990	79,098	30,270	950	1,669	60,470	69,802	9,332	
	1904	825	4,650	1,067	520	2,603	68,021	24,819	594	1,553	47,372	54,646	7,174	
	1899	747	3,433	343	343	2,133	59,134	19,969	414	1,116	31,058	35,930	4,872	
Food preparations.....	1909	177	4,163	179	961	3,023	6,061	9,233	1,229	1,332	9,660	17,324	7,664	
	1904	150	3,266	153	494	2,619	4,153	16,954	644	881	6,064	11,408	4,744	
	1899	123	2,158	141	305	1,712	1,712	3,334	309	618	4,242	7,406	3,164	
Foundry and machine-shop products.	1909	1,872	75,740	1,471	10,209	64,066	102,437	208,320	13,197	40,602	61,621	154,370	92,749	
	1904	1,033	69,404	1,545	7,309	60,550	73,695	153,036	8,836	35,309	49,430	127,915	78,485	
	1899	1,753	5,520	5,520	63,216	63,216	63,216	131,561	6,589	34,931	57,964	128,229	70,265	
Fur goods.....	1909	863	11,263	1,310	1,709	8,244	1,102	19,509	1,760	5,704	24,140	41,301	17,161	
	1904	903	7,519	939	776	5,804	1,105	11,251	800	3,480	15,239	20,244	11,005	
	1899	500	5,939	826	659	4,454	4,454	7,300	634	2,486	8,732	15,829	7,097	
Furnishing goods, men's.....	1909	375	20,758	466	2,106	18,186	3,284	24,110	2,566	7,756	21,576	42,197	20,621	
	1904	272	18,636	379	1,631	16,628	2,789	19,045	1,378	5,752	14,669	29,337	14,668	
	1899	272	18,636	379	1,631	16,628	2,789	19,045	1,378	5,752	14,669	29,337	14,668	
Furniture and refrigerators.....	1909	676	23,195	655	2,259	20,281	28,260	34,676	2,814	11,669	19,156	41,629	22,773	
	1904	537	18,671	639	1,282	16,750	21,127	22,838	1,537	8,780	12,897	29,326	16,969	
	1899	375	16,610	478	1,108	15,024	15,024	17,283	1,241	7,236	10,375	24,658	14,283	
Furs, dressed.....	1909	52	893	70	68	765	1,172	744	86	517	272	1,240	968	
	1904	49	852	64	50	738	651	602	62	517	383	1,400	1,017	
	1899	40	541	46	25	470	470	458	26	302	247	777	530	
Gas and electric fixtures and lamps and reflectors.	1909	183	7,188	142	1,029	6,017	3,831	10,840	1,416	3,456	5,412	13,010	7,598	
	1904	142	4,804	115	614	4,075	2,439	6,690	882	2,157	3,615	8,961	5,346	
	1899	113	3,828	119	440	3,269	3,269	4,452	511	1,684	2,356	6,204	3,845	
Gas, illuminating and heating.....	1909	141	9,221	15	2,784	6,422	30,089	278,607	2,982	4,364	15,018	42,347	27,329	
	1904	100	8,755	5	1,721	7,029	15,907	224,341	1,859	4,636	10,940	35,316	24,575	
	1899	101	6,705	1,324	5,381	5,381	5,381	171,379	1,320	3,677	6,867	20,918	15,051	
Glass.....	1909	24	3,295	7	174	3,114	1,774	4,818	272	1,806	1,159	4,509	3,350	
	1904	28	3,304	9	142	3,153	1,604	3,455	202	1,825	1,412	4,280	2,808	
	1899	27	2,690	17	117	2,556	1,127	2,243	140	1,305	900	2,757	1,867	
Glass, cutting, staining, and ornamenting.	1909	156	3,570	165	287	3,118	957	3,015	369	1,841	1,669	4,847	3,178	
	1904	136	3,251	153	183	2,912	863	2,061	227	1,638	1,318	4,263	2,835	
	1899	135	2,398	169	166	2,063	2,063	1,621	176	1,074	1,406	3,559	2,153	
Gloves and mittens, leather.....	1909	225	7,195	312	596	6,287	1,003	10,537	623	2,841	8,023	14,336	6,313	
	1904	194	6,185	270	296	5,613	770	6,348	263	2,131	6,696	9,946	4,250	
	1899	243	3,287	328	328	3,287	920	6,220	295	2,724	6,328	10,354	4,526	
Gold and silver, reducing and refining, not from the ore.	1909	10	64	13	9	42	97	540	18	34	2,396	2,603	207	
	1904	5	43	6	3	34	81	317	20	27	3,689	3,776	87	
	1899	14	80	18	8	54	54	602	10	39	4,314	4,528	214	
Hair work.....	1909	132	2,733	166	254	2,313	4	3,267	230	1,061	4,500	7,851	3,361	
	1904	43	506	53	68	385	52	688	57	165	466	1,012	546	
	1899	54	506	22	22	378	378	467	19	146	293	808	515	

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

2 Figures not comparable.



MANUFACTURES—NEW YORK.

853

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
STATE—Continued.													
Hat and cap materials.....	1909	32	1,087	33	89	965	713	\$2,580	\$119	\$424	\$2,775	\$3,835	\$1,060
	1904	31	1,285	48	45	1,192	544	2,102	55	430	2,325	3,382	1,057
	1899	28	671	37	24	610	.....	755	23	196	1,256	1,751	495
Hats and caps, other than felt, straw, and wool.	1909	244	4,000	348	304	3,348	413	2,798	391	2,004	3,875	7,826	3,951
	1904	209	4,025	327	176	3,522	279	1,955	188	1,859	3,303	6,886	3,583
	1899	288	5,109	400	194	4,600	.....	2,602	197	1,994	4,289	8,344	4,055
Hats, fur-felt.....	1909	44	5,379	47	319	5,013	1,451	5,702	393	2,725	5,406	10,219	4,813
	1904	43	4,684	52	235	4,397	3,487	4,441	264	2,309	3,478	7,740	4,262
	1899	15	4,280	12	135	4,133	1,840	3,050	224	2,079	2,607	5,602	2,985
Hats, straw.....	1909	46	2,922	47	367	2,508	835	3,592	531	1,473	3,993	7,617	3,024
	1904	21	1,468	31	95	1,342	629	1,502	93	614	1,359	2,625	1,266
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hosiery and knit goods.....	1909	360	37,673	302	1,421	35,950	35,882	52,582	2,042	14,839	38,677	67,130	28,453
	1904	271	30,694	224	1,105	29,365	25,310	35,310	1,284	10,160	23,210	46,320	18,110
	1899	258	27,700	250	824	26,026	21,551	30,307	942	8,998	20,266	36,028	15,762
House-furnishing goods, not elsewhere specified.	1909	99	2,175	100	263	1,812	2,983	4,015	306	786	5,690	7,789	2,099
	1904	73	2,154	77	224	1,853	1,927	3,254	209	747	4,496	6,375	1,879
	1899	75	2,392	88	206	2,098	.....	2,871	158	689	4,042	5,579	1,587
Ice, manufactured.....	1909	89	1,372	34	214	1,124	21,375	7,700	287	835	1,044	3,808	2,764
	1904	58	723	21	99	603	15,958	5,972	100	424	577	1,749	1,172
	1899	41	399	17	63	319	5,422	2,555	52	201	269	1,051	782
Ink, printing.....	1909	29	908	20	363	525	2,301	3,052	579	370	1,878	4,059	2,181
	1904	20	439	30	126	283	1,068	1,411	189	184	1,103	2,320	1,217
	1899	24	355	20	128	201	.....	1,084	164	122	695	1,418	723
Instruments, professional and scientific.	1909	87	2,423	73	386	1,964	1,899	4,478	496	1,146	975	3,308	2,333
	1904	75	1,439	62	159	1,222	660	2,145	197	980	493	2,042	1,549
	1899	99	1,244	119	132	993	.....	1,621	132	530	437	1,657	1,220
Iron and steel, blast furnaces.....	1909	9	2,562	.....	264	2,298	95,416	39,666	408	1,758	20,017	26,021	5,704
	1904	9	1,675	.....	70	1,559	39,080	14,645	157	1,161	6,374	8,635	2,261
	1899	9	1,078	.....	45	1,033	15,263	3,396	81	633	3,508	5,046	1,538
Iron and steel, steel works and rolling mills.	1909	25	11,089	4	994	10,091	136,456	61,453	1,292	6,323	25,889	39,532	13,643
	1904	20	8,142	7	609	7,526	69,430	48,852	801	4,393	13,260	21,227	7,967
	1899	21	4,593	15	193	4,385	14,234	8,788	297	2,430	4,168	8,812	4,644
Jewelry.....	1909	479	7,146	603	1,164	5,279	1,596	13,663	1,193	3,820	10,433	20,363	9,930
	1904	204	5,040	421	544	4,075	978	9,115	668	2,606	6,121	12,357	6,236
	1899	260	3,687	361	304	3,022	.....	5,828	304	2,002	5,427	10,245	4,818
Jewelry and instrument cases.....	1909	67	1,364	75	117	1,172	214	1,127	126	519	678	1,781	1,103
	1904	58	1,303	79	84	1,140	172	749	78	413	553	1,432	879
	1899	38	596	60	39	607	.....	367	26	218	270	756	486
Lapidary work.....	1909	43	681	54	128	499	592	4,252	161	791	6,319	8,600	2,341
	1904	27	573	40	92	441	500	2,261	101	610	6,097	7,389	1,283
	1899	37	481	49	34	398	.....	2,976	46	451	4,615	5,501	986
Lead, bar, pipe, and sheet.....	1909	9	225	1	39	185	1,247	1,123	78	120	1,721	2,069	348
	1904	9	198	3	39	156	749	861	59	98	2,869	3,285	410
	1899	8	130	7	30	93	.....	697	32	49	1,469	1,773	304
Leather goods.....	1909	483	9,283	587	1,110	7,686	1,836	10,379	1,258	4,089	11,632	20,997	9,365
	1904	408	8,880	540	866	7,648	1,496	7,264	643	3,295	9,369	17,224	7,855
	1899	340	.....	.....	588	5,752	.....	5,512	525	2,505	6,530	12,090	5,560
Leather, tanned, curried, and finished.	1909	109	6,278	132	453	5,688	14,265	25,755	689	2,912	20,941	27,642	6,701
	1904	118	5,843	158	241	5,444	13,231	24,038	340	2,485	16,275	21,643	5,368
	1899	147	6,922	199	193	6,530	13,162	19,083	265	2,775	17,424	23,206	5,782
Liquors, malt.....	1909	184	10,705	75	1,899	8,781	49,729	127,492	5,051	7,294	18,883	77,720	58,837
	1904	209	9,896	91	1,828	7,977	44,078	106,799	4,316	6,364	15,845	61,958	46,113
	1899	225	9,298	153	1,721	7,424	33,265	95,058	3,674	5,631	11,418	56,138	44,720
Liquors, vinous.....	1909	41	452	24	157	271	712	3,085	217	128	781	1,817	1,036
	1904	59	589	56	143	390	668	3,564	182	176	927	2,249	1,322
	1899	38	379	31	104	244	.....	2,157	102	83	383	943	560
Looking-glass and picture frames.....	1900	140	1,891	144	256	1,491	866	2,209	312	885	1,463	3,555	2,092
	1904	125	1,821	136	175	1,510	999	1,509	199	809	946	2,773	1,827
	1899	120	.....	.....	161	1,489	.....	1,515	183	762	1,280	3,105	1,825
Lumber and timber products.....	1909	2,263	82,458	2,519	2,468	27,471	131,462	64,491	2,798	15,101	41,705	72,530	30,825
	1904	1,599	29,867	1,998	1,856	26,013	101,614	48,937	2,066	13,221	32,461	61,677	29,216
	1899	1,802	.....	.....	1,435	25,283	.....	40,852	1,361	10,834	30,416	52,738	22,322
Malt.....	1909	32	645	20	101	524	5,659	21,978	215	401	8,872	11,051	2,179
	1904	43	679	45	94	540	4,235	12,983	140	370	5,372	7,037	1,665
	1899	56	.....	.....	90	723	.....	12,624	112	345	4,203	5,535	1,327
Marble and stone work.....	1909	655	3,469	768	762	6,939	18,110	16,271	1,007	5,636	7,076	17,921	10,845
	1904	324	3,180	426	595	7,159	10,748	11,480	741	6,099	5,742	16,279	10,537
	1899	538	.....	.....	465	6,954	.....	10,505	518	4,584	5,527	14,546	9,019

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

<sup>2</sup> Excluding statistics for one establishment, 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.					Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).								
			Expressed in thousands:											
<b>STATE—Continued.</b>														
Mattresses and spring beds.....	1909	168	2,088	178	289	1,621	1,581	\$3,060	\$261	\$922	\$3,461	\$5,899	\$2,438	
	1904	136	1,767	162	197	1,408	1,270	1,846	171	733	2,810	4,583	1,773	
	1899	132			153	1,272		1,333	173	609	1,988	3,686	1,698	
Millinery and lace goods.....	1909	931	25,369	1,234	3,057	21,078	3,511	19,920	3,233	9,626	27,135	52,106	24,971	
	1904	567	18,905	817	1,830	16,258	2,042	11,273	1,465	6,268	16,893	32,844	15,951	
	1899	393	13,025	571	1,180	11,274		7,721	1,052	4,032	11,177	21,038	9,861	
Mirrors.....	1909	47	1,160	50	127	983	1,145	1,548	145	630	1,999	3,262	1,263	
	1904	40	1,050	58	105	887	717	1,130	96	472	1,882	2,892	1,010	
	1899	38	1,098	59	95	944		1,456	109	523	2,503	3,947	1,444	
Models and patterns, not including paper patterns.	1909	136	1,382	147	153	1,082	910	1,531	191	736	620	2,461	1,841	
	1904	98	862	118	83	661	581	998	79	395	322	1,261	939	
	1899	105	704	123	34	547		675	37	375	230	984	764	
Musical instruments, pianos and organs and materials.	1909	184	13,102	117	1,047	11,938	10,905	33,019	1,870	7,752	17,495	33,680	16,185	
	1904	160	10,673	133	826	9,614	6,569	21,023	1,256	5,925	10,950	23,390	12,440	
	1899	135	7,393	153	439	6,207	6,207	13,187	641	3,963	8,563	14,746	8,183	
Oil, linseed.....	1909	6	691	5	120	560	4,845	7,241	473	338	12,628	15,392	2,764	
	1904	6	567	5	48	514	3,888	3,979	263	273	8,168	9,907	1,739	
	1899	9	464	9	64	301		4,085	114	199	7,506	8,427	831	
Oilcloth and linoleum.....	1909	4	1,168	2	49	1,102	2,384	2,902	113	571	2,166	3,522	1,356	
	1904	1 4	743	5	26	712	814	2,203	50	381	1,122	1,933	811	
	1899	2 6	841	10	28	803		1,927	45	327	832	1,480	648	
Optical goods.....	1909	51	2,563	49	467	2,047	1,896	4,547	254	1,328	1,225	3,996	2,771	
	1904	33	1,540	26	95	1,428	1,266	2,430	85	664	678	1,870	1,192	
	1899	22			185	1,345		1,909	126	618	567	1,761	1,194	
Paint and varnish.....	1909	147	4,741	78	1,616	3,047	10,857	22,002	2,311	1,803	17,895	28,559	10,664	
	1904	128	4,306	107	949	3,250	10,559	20,007	1,339	1,823	10,870	25,121	8,251	
	1899	122	3,560	53	803	2,710	6,745	16,949	1,359	1,519	12,299	18,878	6,579	
Paper and wood pulp.....	1909	178	13,018	59	886	12,073	337,548	90,912	1,471	6,744	31,767	48,890	17,063	
	1904	177	13,202	85	759	12,418	390,730	56,462	1,132	6,402	22,806	37,761	14,945	
	1899	179	10,001	129	604	9,268	227,767	37,349	869	4,100	14,563	26,716	12,153	
Paper goods, not elsewhere specified..	1909	107	5,257	68	886	4,303	6,257	9,276	1,070	1,705	6,786	12,111	5,325	
	1904	1 70	4,006	82	457	3,467	3,925	5,639	582	1,235	4,203	7,532	3,379	
	1899	1 70	3,119	77	399	2,643		4,657	487	1,005	3,405	6,076	2,071	
Paper patterns.....	1909	16	1,507	12	734	761	609	4,383	594	328	523	2,166	1,643	
	1904	20	1,772	8	693	1,071	38	2,223	490	441	332	2,242	1,910	
	1899	6	714	3	86	625		192	58	100	87	389	302	
Patent medicines and compounds and druggists' preparations.	1909	743	8,500	523	3,315	4,728	5,423	22,484	4,105	2,226	12,589	37,343	24,754	
	1904	611	6,795	507	1,954	4,334	3,418	18,079	2,582	1,847	8,816	28,646	19,380	
	1899	519	7,080	504	1,968	4,603		18,639	2,243	1,827	10,155	26,538	16,383	
Pens, fountain, stylographic, and gold.	1909	30	1,108	25	353	730	192	1,853	374	427	1,563	3,219	1,656	
	1904	24	765	20	181	614	156	881	133	362	876	1,945	1,069	
	1899	23	520	25	88	407		569	103	240	500	1,182	682	
Photographic apparatus and materials.	1909	42	5,186	23	1,075	4,088	6,782	15,410	1,096	2,435	4,967	18,764	13,797	
	1904	44	3,374	26	734	2,614	3,556	4,713	690	1,215	2,742	9,523	6,781	
	1899	52	2,350	37	231	2,082		3,001	207	827	1,824	4,187	2,363	
Photo-engraving.....	1909	66	1,809	42	372	1,395	470	1,035	426	1,351	555	2,908	2,383	
	1904	48	1,209	39	203	967	358	926	238	839	413	1,988	1,575	
	1899	56	925	73	133	719		545	127	558	224	1,179	965	
Pipes, tobacco.....	1909	30	1,871	40	168	1,663	803	2,207	177	757	1,432	3,212	1,786	
	1904	32	1,290	40	37	1,207	571	728	36	550	924	1,881	957	
	1899	39	980	46	80	854		672	73	483	808	1,691	883	
Pottery, terra-cotta, and fire-clay products.	1909	39	2,628	19	242	2,367	4,039	5,343	359	1,266	875	3,403	2,628	
	1904	43	2,979	28	255	2,695	4,212	5,111	328	1,363	872	3,289	2,417	
	1899	52	2,489	43	176	2,270	5,558	4,103	200	873	522	2,389	1,867	
Printing and publishing.....	1909	4,426	94,893	3,732	28,041	63,120	53,973	158,367	33,251	43,559	56,494	216,946	166,452	
	1904	3,718	77,671	3,563	20,672	53,436	29,652	127,887	22,263	34,071	39,482	164,834	125,332	
	1899	3,146	62,147	3,388	10,647	48,112		101,888	12,776	28,114	31,010	118,071	87,061	
Rubber goods, not elsewhere specified.	1909	53	2,518	43	409	2,066	6,898	7,330	720	1,058	5,659	8,784	3,125	
	1904	55	3,050	42	316	2,692	4,399	4,752	463	1,113	5,000	8,266	3,286	
	1899	55	2,375	58	214	2,103		4,114	312	832	2,998	5,304	2,306	
Salt.....	1909	33	1,686	20	141	1,525	9,923	14,552	229	765	1,195	2,897	1,702	
	1904	34	1,627	21	133	1,373	4,923	15,322	172	586	1,138	3,187	1,951	
	1899	38	1,441	5	157	1,279		17,232	247	543	958	2,699	1,741	
Scales and balances.....	1909	16	582	10	119	453	585	1,348	152	284	420	1,180	760	
	1904	16	622	17	80	525	685	1,137	103	292	284	864	600	
	1899	17	600	16	77	507		718	71	239	217	721	504	
Shipbuilding, including boat building.	1909	255	6,230	262	324	5,644	13,835	14,084	543	3,780	3,925	11,417	7,492	
	1904	210	7,001	236	337	6,428	10,988	11,744	471	4,387	3,989	11,265	7,276	
	1899	227	6,044	197	197	5,572	10,374	9,675	265	3,182	3,116	8,647	5,531	

<sup>1</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.<sup>2</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.

MANUFACTURES—NEW YORK.

855

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>STATE—Continued.</b>													
Silk and silk goods, including throwsters.	1909	170	14,138	140	1,093	12,903	11,110	\$20,972	\$1,493	\$5,385	\$13,940	\$26,519	\$12,570
	1904	123	12,348	105	960	11,283	7,250	15,751	1,104	4,288	10,490	20,181	9,691
	1899	92	8,318	94	363	7,861	5,111	9,800	514	2,862	6,570	12,706	6,136
Silverware and plated ware.	1909	53	3,678	45	568	3,065	2,819	7,488	665	1,899	3,589	7,859	4,270
	1904	42	3,663	36	323	3,304	2,817	5,782	367	1,789	3,059	6,580	3,521
	1899	56	2,930	68	337	2,525	.....	4,177	335	1,335	2,259	5,346	3,087
Slaughtering and meat packing.	1909	238	7,583	262	1,211	6,110	13,936	34,536	1,690	4,387	110,108	127,130	16,962
	1904	151	4,654	183	710	3,761	7,271	18,102	872	2,592	66,778	75,550	8,772
	1899	168	4,109	209	612	3,288	.....	15,718	593	1,949	51,173	58,403	7,230
Smelting and refining, not from the ore.	1909	15	407	21	102	284	1,595	3,257	130	191	8,267	9,018	751
	1904	11	230	13	41	176	1,280	1,531	84	101	4,716	5,180	464
	1899	9	259	9	79	171	.....	1,014	101	135	1,475	2,144	669
Soap.	1909	67	3,924	50	898	2,976	5,873	10,708	829	1,436	15,612	23,583	7,971
	1904	67	3,287	69	816	2,402	4,270	10,603	697	1,043	8,411	13,402	4,991
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Stationery goods, not elsewhere specified.	1909	55	1,815	51	521	1,243	1,307	2,762	490	636	1,610	3,344	1,734
	1904	39	1,277	31	233	1,013	554	2,002	206	421	1,078	2,531	1,453
	1899	42	1,219	46	223	1,948	.....	1,707	196	355	895	2,142	1,247
Steam packing.	1909	36	1,295	21	373	901	1,804	3,775	400	464	1,971	3,783	1,812
	1904	23	782	22	100	660	1,097	4,415	172	306	923	2,849	1,426
	1899	27	282	30	66	136	.....	431	70	82	307	634	327
Stereotyping and electrotyping.	1909	47	1,182	40	237	905	1,414	1,209	313	852	626	2,228	1,602
	1904	41	1,019	52	139	828	1,033	1,156	152	662	368	1,603	1,235
	1899	36	839	41	89	709	.....	769	87	435	229	1,094	865
Stoves and furnaces, including gas and oil stoves.	1909	58	4,957	22	688	4,247	6,273	11,479	905	2,746	3,542	8,974	5,432
	1904	48	3,190	32	370	2,788	2,629	5,973	436	1,790	1,939	5,527	3,588
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Surgical appliances and artificial limbs.	1909	72	708	67	177	464	240	969	188	276	507	1,490	983
	1904	62	787	58	112	617	210	679	100	331	318	1,210	892
	1899	64	501	62	78	361	.....	445	63	175	191	863	672
Tobacco manufactures.	1909	3,371	36,197	3,699	2,479	30,019	2,657	41,863	3,209	13,666	31,341	76,662	45,321
	1904	3,543	39,924	3,912	2,066	33,946	1,713	53,795	1,973	14,547	25,240	65,597	40,367
	1899	3,097	31,928	3,461	1,396	27,071	.....	22,491	1,762	11,503	19,115	53,661	34,546
Toys and games.	1909	67	1,406	65	144	1,197	451	1,310	138	457	847	1,849	1,002
	1904	41	926	39	61	825	1,093	1,351	100	324	808	1,644	836
	1899	49	681	60	39	582	.....	670	48	212	343	865	522
Typewriters and supplies.	1909	43	5,160	22	600	4,538	2,757	12,487	802	3,020	1,881	10,208	8,417
	1904	31	3,249	12	376	2,861	1,931	9,959	463	1,700	862	5,352	4,400
	1899	21	2,012	7	157	1,848	.....	3,782	179	1,084	683	3,824	3,141
Umbrellas and canes.	1909	142	2,853	179	255	1,919	507	2,240	248	907	4,131	6,427	2,296
	1904	99	1,827	136	192	1,499	239	1,272	159	617	2,857	4,711	1,854
	1899	101	.....	200	.....	1,621	.....	1,628	162	624	3,315	5,225	1,910
Vinegar and cider.	1909	277	913	304	80	529	5,719	5,036	80	234	1,480	2,246	766
	1904	154	665	182	49	434	3,302	2,315	42	213	997	1,911	914
	1899	149	.....	37	.....	410	.....	1,558	30	170	725	1,273	548
Wall paper.	1909	13	1,889	2	285	1,602	1,696	5,221	414	806	2,474	5,277	2,803
	1904	14	2,021	5	217	1,799	2,159	5,534	293	835	2,795	5,596	2,801
	1899	18	2,385	8	249	2,128	.....	4,086	424	1,063	2,534	4,812	2,278
Wall plaster.	1909	31	1,550	9	204	1,337	7,356	5,791	352	775	2,425	4,494	2,069
	1904	35	1,532	21	135	1,376	5,803	3,899	169	719	2,094	3,735	1,641
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Window shades and fixtures.	1909	75	1,172	74	187	911	1,555	3,341	237	435	3,046	5,476	1,530
	1904	35	988	37	140	811	1,139	2,412	179	276	1,994	2,883	889
	1899	35	.....	83	.....	615	.....	2,154	112	239	2,147	2,944	767
Wire.	1909	7	1,521	1	81	1,439	5,455	5,477	218	758	7,824	10,065	2,241
	1904	6	1,249	2	68	1,179	4,576	4,788	176	637	8,005	9,401	1,396
	1899	3	55	3	7	45	.....	96	5	19	149	194	45
Wirework, including wire rope and cable.	1909	106	1,988	94	245	1,649	2,402	3,759	339	843	3,785	5,875	2,090
	1904	143	2,442	176	281	1,955	1,068	2,383	265	961	1,428	3,639	2,211
	1899	109	1,511	126	109	1,276	.....	2,100	107	586	1,182	2,424	1,242
Wood distillation, not including turpentine and rosin.	1909	29	668	10	65	593	599	3,298	80	262	2,519	3,402	883
	1904	32	574	19	66	489	706	3,199	93	218	2,480	3,357	877
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wood, turned and carved.	1909	159	1,594	194	121	1,279	3,223	1,612	128	729	919	2,422	1,503
	1904	157	1,034	194	35	805	2,448	890	29	443	439	1,299	890
	1899	191	1,218	220	46	952	.....	928	36	520	510	1,540	1,030
Woolen, worsted, and felt goods, and wool hats.	1909	64	9,907	66	381	9,460	22,374	25,208	819	4,145	14,744	23,739	8,995
	1904	67	9,435	74	419	8,942	21,738	20,516	668	3,520	10,715	19,477	8,762
	1899	88	9,923	91	408	9,424	19,180	19,228	615	3,302	8,684	15,784	7,100
All other industries.	1909	2,262	49,296	2,299	6,628	40,369	104,293	212,313	9,117	22,731	236,100	314,400	78,300
	1904	2,118	50,758	2,318	4,504	43,936	77,838	182,877	5,997	23,802	219,372	295,943	77,576
	1899	2,590	.....	.....	5,723	58,274	.....	180,754	6,679	24,787	184,678	250,635	66,057

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

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salariat employ-ees.	Wage earners (average number).							
Expressed in thousands.													
<b>ALBANY—All industries</b> .....	1909	395	11,607	410	1,336	9,861	15,629	\$26,276	\$1,581	\$5,234	\$10,521	\$22,828	\$12,305
	1904	490	10,685	550	1,159	8,978	.....	16,676	1,377	4,289	8,377	20,209	10,832
	1899	511	.....	.....	761	8,106	.....	18,011	914	3,852	7,507	17,269	9,762
Boxes, fancy and paper.....	1909	3	63	5	4	54	15	30	5	22	37	68	51
	1904	5	129	8	5	116	.....	54	4	32	43	115	72
	1899	4	107	7	6	94	.....	10	2	23	34	87	53
Brass and bronze products.....	1909	6	55	5	9	41	59	114	9	31	38	143	55
	1904	4	43	2	12	29	.....	76	9	20	38	89	45
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bread and other bakery products.....	1909	69	451	76	86	289	143	843	52	169	735	1,210	476
	1904	78	463	88	55	320	.....	508	29	153	588	958	370
	1899	70	351	70	58	223	.....	402	25	109	413	756	343
Brick and tile.....	1909	4	99	5	4	90	365	180	3	39	21	143	122
	1904	5	99	6	4	89	.....	126	2	39	44	135	91
	1899	5	89	6	3	80	.....	143	2	33	13	63	50
Carriages and wagons and materials..	1909	4	65	10	7	48	63	203	12	37	32	92	60
	1904	11	115	19	6	90	.....	247	8	51	45	154	109
	1899	8	.....	.....	1	40	.....	91	1	25	21	74	53
Clothing, men's, including shirts.....	1909	13	1,075	24	60	991	256	604	38	331	233	663	435
	1904	20	1,244	25	105	1,114	.....	642	90	327	491	1,031	540
	1899	27	180	29	23	137	.....	105	15	46	91	209	118
Coffee and spice, roasting and grinding.	1909	5	43	11	10	22	170	155	8	11	221	288	67
	1904	5	55	12	13	30	.....	229	13	13	175	228	53
	1899	4	55	7	9	39	.....	198	8	24	243	320	77
Confectionery.....	1909	6	123	6	1	116	140	166	2	35	140	246	106
	1904	5	115	6	11	98	.....	166	10	38	121	232	111
	1899	7	.....	.....	10	119	.....	203	7	43	181	296	115
Cutlery and tools, not elsewhere specified.	1909	3	29	6	4	19	20	20	3	12	10	47	37
	1904	3	21	4	.....	17	.....	20	.....	9	10	25	15
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.	1909	18	745	19	90	636	809	2,923	110	396	559	1,854	795
	1904	23	1,040	24	87	929	.....	1,560	110	508	734	1,774	1,040
	1899	30	.....	.....	79	1,250	.....	2,792	136	643	696	1,926	1,230
Hats and caps, other than felt, straw, and wool.	1909	3	20	5	3	21	3	20	2	14	27	63	36
	1904	3	26	4	1	21	.....	12	1	11	17	36	19
	1899	5	25	6	.....	10	.....	17	.....	9	22	47	25
Liquors, malt.....	1909	8	431	.....	125	306	2,328	4,203	364	262	653	3,056	2,463
	1904	10	385	2	102	281	.....	3,204	322	226	507	2,449	1,852
	1899	10	453	4	106	343	.....	3,776	277	236	528	2,479	1,961
Lumber and timber products.....	1909	9	185	12	13	160	715	338	15	82	266	468	172
	1904	11	221	12	15	194	.....	322	15	94	430	613	183
	1899	9	269	12	11	236	.....	413	10	113	224	415	191
Marble and stonework.....	1909	8	47	14	.....	33	68	52	.....	23	32	86	54
	1904	7	95	6	19	70	.....	256	23	41	42	160	106
	1899	5	27	5	1	21	.....	10	1	12	10	31	21
Patent medicines and compounds and druggists' preparations.	1909	8	28	9	7	12	19	48	4	5	27	69	42
	1904	12	36	18	5	13	.....	28	2	4	11	42	31
	1899	14	32	16	2	14	.....	30	1	6	11	36	25
Photo-engraving.....	1909	3	35	.....	9	26	8	27	12	21	12	50	38
	1904	3	35	1	8	26	.....	21	13	20	7	50	43
	1899	3	35	1	4	30	.....	22	5	26	10	50	40
Printing and publishing.....	1909	64	2,003	51	317	1,635	1,324	3,119	307	957	1,274	3,249	1,975
	1904	56	1,610	60	229	1,337	.....	1,767	226	768	529	2,351	1,322
	1899	54	.....	.....	134	1,150	.....	2,014	126	620	505	1,930	1,426
Slaughtering and meat packing.....	1909	7	30	8	2	20	91	58	1	13	211	266	55
	1904	8	51	9	4	38	.....	99	2	19	124	176	52
	1899	9	.....	.....	.....	43	.....	161	.....	22	672	753	81
Tobacco manufactures.....	1909	52	322	56	21	245	60	444	29	124	280	677	397
	1904	74	558	90	70	498	.....	628	66	247	396	1,074	678
	1899	74	504	91	43	370	.....	517	38	162	232	760	523
All other industries.....	1909	102	5,749	88	564	5,097	8,973	12,711	605	2,620	5,633	10,563	4,390
	1904	147	4,238	104	408	3,666	.....	6,711	432	1,649	4,965	8,533	3,563
	1899	173	.....	.....	271	3,889	.....	7,111	200	1,670	3,601	7,037	3,436
<b>BUFFALO—All industries</b> .....	1909	1,753	61,246	1,489	8,345	51,412	121,791	\$193,041	\$9,347	\$28,727	\$136,538	\$218,804	\$82,265
	1904	1,538	50,390	1,559	5,264	43,567	.....	137,023	5,542	21,622	88,367	147,378	59,011
	1899	1,478	.....	.....	3,767	34,275	.....	95,740	3,429	15,678	65,938	105,627	35,689
Automobiles, including bodies and parts.	1909	23	3,640	13	583	3,044	4,561	9,300	283	2,200	4,596	9,598	5,022
	1904	25	670	1	53	625	.....	791	71	390	580	1,386	806
	1899	3	.....	.....	23	.....	.....	112	6	15	34	78	44
Bicycles, motorcycles, and parts.....	1909	7	181	4	27	150	151	339	31	105	149	390	241
	1904	7	39	7	2	30	.....	45	2	15	13	42	29
	1899	14	673	11	65	597	.....	1,064	70	264	597	1,223	626

1 Figures can not be shown without disclosing individual operations.

2 Excluding statistics for two establishments, to avoid disclosure of 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
<b>BUFFALO—Continued.</b>													
Blacking and cleansing and polishing preparations.	1909	11	287	4	147	136	209	\$042	\$123	\$67	\$411	\$964	\$563
	1904	15	46	3	7	36	.....	94	4	8	84	136	52
	1899	16	81	7	26	48	.....	76	23	10	65	135	70
Boots and shoes, including cut stock and findings.	1909	14	722	14	55	653	370	910	55	287	835	1,356	621
	1904	2 12	406	12	26	428	.....	343	20	144	404	707	303
	1899	2 17	813	19	69	725	.....	540	59	192	571	890	319
Brass and bronze products.....	1909	18	414	12	55	347	2,417	1,047	72	211	1,141	1,791	650
	1904	9	113	8	16	89	.....	102	15	48	231	349	118
	1899	17	42	8	2	32	.....	47	1	16	40	75	35
Bread and other bakery products.....	1909	189	1,794	180	259	1,355	1,191	4,369	251	725	3,335	5,544	2,209
	1904	144	1,046	144	185	1,817	.....	2,912	150	619	2,530	4,452	1,922
	1899	154	1,295	163	129	1,003	.....	1,947	96	413	1,413	2,548	1,135
Brick and tile.....	1909	5	178	5	10	163	265	402	11	88	25	165	140
	1904	7	276	10	12	254	.....	658	9	128	48	243	197
	1899	6	241	12	7	222	.....	678	5	93	38	203	165
Canning and preserving.....	1909	8	73	9	22	42	100	98	13	17	142	204	62
	1904	4	14	5	.....	9	.....	30	.....	5	9	22	13
	1899	2 5	30	7	2	21	.....	41	1	6	27	47	20
Carriages and wagons and materials..	1909	48	504	48	27	429	561	983	44	247	557	1,196	639
	1904	40	615	43	47	525	.....	1,363	56	259	591	1,184	573
	1899	47	.....	44	44	547	.....	1,501	37	286	584	1,280	696
Cars and general shop construction and repairs by steam-railroad companies.	1909	7	3,474	.....	284	3,190	2,768	2,391	219	1,838	2,277	4,524	2,247
	1904	7	2,839	.....	205	2,734	.....	1,714	163	1,512	1,901	3,609	1,708
	1899	9	3,325	.....	80	3,245	.....	1,694	64	1,528	2,556	4,101	1,635
Clothing, men's, including shirts.....	1909	60	1,681	70	181	1,430	365	2,309	182	601	1,797	3,699	1,902
	1904	91	2,016	105	134	1,777	.....	2,216	132	633	2,811	4,809	2,058
	1899	124	.....	99	99	1,627	.....	1,751	97	489	1,533	2,943	1,410
Clothing, women's.....	1909	14	655	12	87	556	61	448	63	182	565	1,014	449
	1904	11	397	10	21	366	.....	218	16	114	269	509	240
	1899	10	280	13	9	258	.....	76	6	57	143	273	130
Confectionery.....	1909	26	633	22	106	505	604	614	93	160	739	1,180	441
	1904	20	675	17	79	579	.....	545	65	160	620	1,251	631
	1899	10	.....	59	59	452	.....	350	46	102	617	930	313
Cooperage and wooden goods, not elsewhere specified.	1909	13	194	12	10	172	206	306	12	94	428	600	181
	1904	18	227	21	6	200	.....	239	3	93	264	427	163
	1899	29	.....	2	2	310	.....	227	1	176	250	527	277
Copper, tin, and sheet-iron products..	1909	67	1,882	68	262	1,552	1,955	4,127	288	853	2,272	4,123	1,851
	1904	40	1,653	50	124	1,479	.....	2,230	129	595	1,309	2,555	1,246
	1899	1 27	.....	28	28	354	.....	611	21	181	427	829	402
Cutlery and tools, not elsewhere specified.	1909	11	273	6	36	231	359	503	47	128	141	452	311
	1904	1 6	138	7	17	114	.....	160	17	51	37	160	123
	1899	3	.....	.....	2	2	.....	4	.....	1	1	5	4
Electrical machinery, apparatus, and supplies.	1909	8	347	4	61	282	654	1,175	85	141	336	661	325
	1904	8	244	2	33	209	.....	508	32	97	169	398	220
	1899	8	67	7	10	50	.....	126	8	20	76	161	85
Flour-mill and gristmill products.....	1909	10	793	1	316	476	10,987	5,313	319	324	17,470	19,942	2,472
	1904	9	540	4	111	425	.....	4,017	120	210	8,602	9,808	1,206
	1899	9	243	11	37	195	.....	1,594	44	112	2,932	3,264	332
Foundry and machine-shop products.	1909	149	10,018	94	1,056	8,868	11,690	20,326	1,343	5,144	8,811	20,775	11,964
	1904	2 118	7,932	111	690	7,131	.....	21,383	672	3,934	6,058	14,557	8,499
	1899	105	.....	430	430	5,044	.....	10,738	404	2,623	4,228	9,279	5,051
Fur goods.....	1909	12	122	11	23	88	6	214	17	61	192	350	158
	1904	7	82	6	1	75	.....	118	2	30	116	217	101
	1899	13	67	15	5	47	.....	63	2	17	44	107	63
Furniture and refrigerators.....	1909	33	2,347	25	270	2,052	2,846	4,083	312	1,037	2,156	4,185	2,029
	1904	26	1,797	34	104	1,659	.....	4,328	115	736	1,205	2,543	1,338
	1899	21	1,329	27	82	1,220	.....	2,603	92	497	794	1,829	1,035
Gloves and mittens, leather.....	1909	9	98	10	12	76	12	108	14	35	73	148	75
	1904	5	60	8	4	48	.....	53	3	20	50	88	33
	1899	4	76	3	19	54	.....	64	13	19	55	106	51
Instruments, professional and scientific.	1909	7	130	6	14	110	34	178	25	54	29	151	122
	1904	5	132	2	24	106	.....	267	29	34	54	158	104
	1899	4	.....	.....	18	88	.....	136	23	31	15	108	63
Jewelry.....	1909	14	401	22	81	298	116	1,307	99	174	385	979	594
	1904	16	374	23	40	306	.....	831	25	154	439	917	473
	1899	10	204	13	18	173	.....	322	33	87	194	414	220
Jewelry and instrument cases.....	1909	8	453	6	36	416	109	342	47	113	131	393	262
	1904	9	493	12	14	467	.....	197	9	110	111	303	192
	1899	4	125	7	11	107	.....	43	7	81	83	91	58

<sup>1</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.  
<sup>2</sup> 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>BUFFALO—Continued.</b>													
Leather goods.....	1909	22	600	27	73	500	400	\$938	\$96	\$262	\$521	\$1,129	\$608
	1904	15	479	22	23	434	.....	598	24	195	356	769	413
	1899	13	.....	.....	25	305	.....	370	24	142	276	520	244
Leather, tanned, curried, and finished.	1909	4	579	7	59	513	1,297	3,058	85	246	2,194	2,809	615
	1904	4	724	3	30	686	.....	1,923	28	264	1,694	2,428	734
	1899	3	580	10	9	561	.....	1,295	8	220	1,152	1,663	511
Liquors, malt.....	1909	16	823	.....	155	673	4,888	12,784	413	536	1,481	6,497	5,016
	1904	10	748	3	162	591	.....	9,312	264	437	1,204	5,187	3,983
	1899	18	735	5	170	500	.....	9,135	209	411	862	4,270	3,408
Lumber and timber products.....	1909	32	2,202	25	227	1,950	6,713	5,051	236	1,100	3,325	5,680	2,255
	1904	30	2,168	38	175	1,955	.....	4,270	183	1,036	2,937	4,824	1,887
	1899	28	2,065	37	82	1,946	.....	3,152	61	775	2,209	3,627	1,368
Malt.....	1909	16	362	8	60	288	3,862	15,472	144	222	5,657	7,095	1,438
	1904	17	282	16	41	225	.....	4,431	69	161	2,239	3,036	797
	1899	16	255	15	35	205	.....	2,304	41	123	1,377	1,960	583
Marble and stone work.....	1909	17	410	15	31	364	427	753	36	243	443	943	500
	1904	14	444	20	34	390	.....	558	39	246	151	712	561
	1899	10	.....	.....	20	396	.....	793	32	217	207	591	384
Mattresses and spring beds.....	1909	8	230	4	36	190	137	256	26	91	276	555	279
	1904	9	193	11	20	162	.....	253	17	71	289	432	143
	1899	4	.....	.....	20	117	.....	180	25	43	166	280	114
Mirrors.....	1909	5	113	1	7	105	125	79	5	69	200	331	131
	1904	3	44	3	3	88	.....	13	2	22	28	70	42
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Models and patterns, not including paper patterns.	1909	0	80	6	7	67	70	59	10	62	12	123	111
	1904	0	56	11	3	42	.....	30	3	32	7	71	64
	1899	6	22	7	.....	15	.....	11	.....	12	2	25	23
Paper goods, not elsewhere specified..	1909	4	140	2	30	108	98	172	30	44	149	295	146
	1904	3	127	2	11	114	.....	134	14	39	83	176	93
	1899	3	.....	.....	4	69	.....	77	4	22	47	90	43
Patent medicines and compounds and druggists' preparations.	1909	61	580	43	302	230	302	1,089	196	90	361	2,801	2,440
	1904	44	371	38	84	249	.....	904	88	78	302	1,996	1,694
	1899	47	613	44	80	489	.....	1,213	79	202	346	1,933	1,587
Photo-engraving.....	1909	6	137	6	35	96	153	120	31	79	28	189	161
	1904	4	62	7	11	44	.....	96	9	45	12	100	88
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing.....	1909	164	3,994	133	772	3,089	3,588	6,649	786	1,937	2,355	7,679	5,324
	1904	161	3,520	148	503	2,869	.....	5,730	535	1,577	1,849	6,446	4,567
	1899	131	.....	.....	448	2,339	.....	4,235	363	1,256	1,072	4,025	2,953
Slaughtering and meat packing.....	1909	39	1,929	35	232	1,662	3,743	7,271	329	963	21,789	25,416	3,627
	1904	33	1,490	31	277	1,182	.....	4,974	265	602	14,220	16,220	2,000
	1899	32	1,214	37	203	974	.....	5,222	147	458	10,117	11,772	1,655
Soap.....	1909	8	1,562	2	230	1,360	2,489	7,257	215	545	5,760	8,653	2,893
	1904	10	1,722	10	671	1,141	.....	5,674	370	435	3,257	4,793	1,536
	1899	9	1,249	13	493	743	.....	2,565	267	242	2,475	3,819	1,344
Stereotyping and electrotyping.....	1909	3	53	3	8	47	112	73	5	32	44	138	94
	1904	3	54	4	11	39	.....	45	8	19	22	107	85
	1899	3	73	4	13	55	.....	62	10	28	7	104	97
Tobacco manufactures.....	1909	188	764	210	38	516	21	600	34	282	550	1,237	687
	1904	175	771	198	34	539	.....	558	26	286	324	983	659
	1899	176	585	194	16	325	.....	420	15	179	299	812	513
Wall plaster.....	1909	3	47	1	14	32	220	172	16	15	52	126	74
	1904	5	62	1	11	50	.....	192	11	25	109	213	104
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
All other industries.....	1909	377	15,293	298	2,003	12,992	50,433	69,054	2,606	6,937	42,348	62,815	20,467
	1904	351	13,482	338	1,315	11,829	.....	51,992	1,719	5,963	31,281	48,445	17,104
	1899	330	.....	.....	878	8,712	.....	33,198	986	4,082	27,697	38,600	10,606
<b>NEW YORK CITY—All industries.</b>													
	1909	25,938	680,510	29,055	97,453	554,002	429,003	\$1,364,353	\$122,074	\$323,698	\$1,092,155	\$2,029,693	\$837,538
	1904	20,839	552,952	24,650	63,586	464,716	.....	1,042,946	73,028	248,128	818,029	1,526,523	708,494
	1899	18,243	.....	.....	43,783	388,586	.....	853,238	61,656	196,656	634,210	1,172,870	538,680
Artificial flowers and feathers and plumes.	1909	312	9,759	411	899	8,449	201	7,908	1,023	3,435	12,237	21,098	8,861
	1904	146	3,707	202	210	3,295	.....	1,849	175	1,094	1,447	3,966	2,519
	1899	152	4,446	224	229	3,993	.....	2,965	227	1,251	2,190	4,997	2,807
Artificial stone.....	1909	24	266	13	26	227	222	507	25	150	195	486	291
	1904	12	572	13	47	512	.....	532	65	329	249	828	579
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Automobiles, including bodies and parts.	1909	56	2,326	31	316	1,979	1,460	3,713	492	1,585	2,636	6,194	3,588
	1904	14	631	8	70	553	.....	1,422	80	493	767	1,399	642
	1899	3	.....	.....	.....	.....	.....	89	.....	4	.....	9	6
Bags, paper.....	1909	9	441	9	65	367	200	945	180	156	1,058	1,082	624
	1904	9	238	9	34	195	.....	181	53	72	397	610	213
	1899	12	.....	.....	46	369	.....	1,336	55	113	632	1,051	419

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

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

3 Figures can not be shown without disclosing individual operations.

4 Not reported separately.



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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>NEW YORK CITY—Contd.</b>													
Baskets, and rattan and willow ware..	1909	26	402	26	35	401	129	\$402	\$38	\$280	\$413	\$986	\$573
	1904	30	527	34	36	457	-----	455	34	212	374	994	620
	1899	37	342	39	12	291	-----	224	15	111	208	418	210
Belting and hose, leather.....	1909	18	451	15	138	298	892	2,396	177	188	2,032	3,670	1,638
	1904	14	357	14	73	270	-----	1,377	85	146	1,612	2,421	809
	1899	12	571	9	84	478	-----	2,064	115	279	2,211	2,996	785
Bicycles, motorcycles, and parts.....	1909	5	33	7	2	24	15	36	1	13	32	68	36
	1904	6	28	7	-----	19	-----	32	-----	10	25	45	20
	1899	15	65	10	7	42	-----	72	3	23	53	124	71
Blacking and cleansing and polishing preparations.	1909	60	677	46	225	406	236	867	233	177	996	1,998	1,002
	1904	46	600	41	147	412	-----	864	184	174	990	1,879	889
	1899	39	558	46	130	382	-----	692	168	175	824	1,612	788
Bluing.....	1909	4	26	3	8	15	10	19	7	7	35	70	35
	1904	7	64	5	8	51	-----	60	10	25	89	173	84
	1899	10	91	13	15	63	-----	86	14	27	98	217	119
Boots and shoes, including cut stock and findings.	1909	181	9,177	194	783	8,200	2,559	8,809	996	4,464	9,950	18,376	8,426
	1904	130	6,672	176	392	6,104	-----	5,814	396	2,959	7,828	13,687	5,859
	1899	173	6,325	222	366	5,737	-----	4,044	357	2,574	6,118	10,641	4,523
Boxes, cigar.....	1909	31	1,396	32	108	1,256	913	930	139	558	916	1,843	927
	1904	31	1,575	38	95	1,442	-----	888	113	630	912	1,919	1,007
	1899	34	992	41	45	908	-----	592	39	365	571	1,171	600
Boxes, fancy and paper.....	1909	211	8,018	244	564	7,210	1,696	4,601	623	2,849	4,013	9,450	5,437
	1904	170	7,968	198	558	7,212	-----	4,066	601	2,545	3,576	8,726	5,150
	1899	169	5,956	202	326	5,428	-----	2,174	275	1,848	2,209	5,759	3,550
Brass and bronze products.....	1909	163	4,197	157	476	3,564	3,054	6,265	608	2,116	3,945	8,755	4,810
	1904	131	3,147	156	275	2,716	-----	3,891	313	1,503	2,038	5,004	2,966
	1899	128	2,450	154	155	2,141	-----	2,729	184	1,090	1,937	4,074	2,137
Bread and other bakery products.....	1909	2,378	20,401	2,511	2,369	15,521	6,642	25,796	1,955	10,375	37,957	61,604	23,947
	1904	1,976	15,692	2,053	892	12,747	-----	16,398	724	7,594	26,474	44,000	17,826
	1899	1,966	14,369	2,037	1,417	10,915	-----	13,799	1,113	5,744	17,559	32,239	14,680
Brooms and brushes.....	1909	94	1,609	106	186	1,317	652	1,788	181	609	1,579	3,107	1,523
	1904	89	1,796	102	174	1,520	-----	2,019	146	625	1,665	3,033	1,368
	1899	84	1,626	99	131	1,396	-----	1,575	99	550	1,296	2,448	1,152
Buttons.....	1909	147	3,635	203	260	3,172	1,024	2,470	295	1,349	2,352	5,235	2,883
	1904	46	2,023	61	157	1,810	-----	854	147	641	881	2,205	1,324
	1899	33	1,471	41	50	1,380	-----	553	47	483	609	1,457	848
Canning and preserving.....	1909	73	1,340	73	233	1,034	1,189	3,428	266	489	3,491	5,538	2,047
	1904	76	1,394	91	175	1,128	-----	2,617	207	466	3,310	5,365	2,055
	1899	72	-----	-----	175	990	-----	2,739	209	378	2,199	3,622	1,423
Carpets and rugs, other than rag.....	1909	5	256	7	34	215	196	312	35	89	119	358	239
	1904	4	1,188	6	27	1,155	-----	612	34	404	1,383	1,981	598
	1899	4	1,079	-----	63	1,616	-----	2,029	103	598	1,317	2,468	1,151
Carpets, rag.....	1909	10	65	10	8	47	25	35	6	26	29	92	63
	1904	13	68	16	-----	52	-----	31	-----	24	20	71	51
	1899	21	50	22	2	26	-----	24	1	11	11	42	31
Carriages and wagons and materials..	1909	195	2,379	231	132	2,010	1,950	3,108	203	1,326	1,566	4,165	2,590
	1904	197	2,953	233	183	2,537	-----	3,774	246	1,636	1,411	4,542	3,131
	1899	209	-----	-----	115	2,343	-----	3,467	126	1,593	1,361	4,159	2,798
Cars and general shop construction and repairs by steam-railroad companies.	1909	3	1,619	-----	102	1,517	1,186	1,181	100	925	980	2,052	1,056
	1904	6	1,209	-----	43	1,166	-----	1,003	42	733	634	1,474	790
	1899	10	992	-----	44	948	-----	745	30	558	533	1,135	602
Cars and general shop construction and repairs by street-railroad companies.	1909	13	3,685	-----	214	3,471	3,207	9,099	21	2,236	2,544	5,312	2,768
	1904	5	3,489	-----	150	3,339	-----	4,502	149	2,055	1,115	3,444	2,329
	1899	6	2,168	-----	37	2,131	-----	5,945	46	1,500	1,363	3,031	1,668
Chemicals.....	1909	33	1,812	14	360	1,438	4,716	10,310	624	981	9,219	12,945	3,726
	1904	34	1,255	21	239	995	-----	5,468	394	570	6,517	9,033	2,510
	1899	37	1,046	10	169	877	-----	4,437	215	479	3,415	5,267	1,852
Clocks and watches, including cases and materials.	1909	20	1,576	8	151	1,417	490	3,474	225	786	1,178	3,036	1,858
	1904	20	2,915	17	101	1,797	-----	3,145	169	845	1,648	3,033	1,885
	1899	21	2,150	14	85	2,051	-----	3,192	149	819	2,006	3,481	1,475
Clothing, men's, including shirts.....	1909	2,526	77,543	3,656	6,745	67,142	7,399	88,944	8,037	37,978	112,831	218,411	105,580
	1904	1,851	50,789	2,650	3,821	44,318	-----	50,489	4,090	22,517	70,453	149,484	73,031
	1899	2,075	-----	-----	3,262	34,737	-----	41,490	3,361	17,500	59,635	117,206	57,571
Clothing, women's.....	1909	2,995	110,567	4,332	11,977	94,258	11,157	80,762	13,099	53,518	144,845	266,477	121,632
	1904	2,140	80,144	3,214	6,841	70,089	-----	43,804	6,255	34,551	89,092	168,419	79,327
	1899	1,607	51,047	2,371	3,961	44,715	-----	27,389	3,934	20,929	54,635	102,712	48,073
Coffee and spice, roasting and grinding.	1909	61	2,080	71	680	1,329	3,475	6,103	731	649	11,448	15,819	4,371
	1904	57	2,003	70	453	1,475	-----	10,131	541	757	21,814	25,807	3,993
	1899	56	2,021	92	502	1,427	-----	8,658	507	657	17,279	21,346	4,067

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

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

## MANUFACTURES—NEW YORK.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>NEW YORK CITY—Contd.</b>													
Coffins, burial cases, and undertakers' goods.	1909	15	781	14	188	529	600	\$2,101	\$199	\$288	\$1,213	\$2,102	\$889
	1904	10	706	9	123	574	.....	1,409	161	320	1,018	1,070	652
	1899	14	686	15	85	586	.....	842	99	317	454	1,211	787
Confectionery.....	1909	127	7,641	119	1,000	6,522	6,254	9,030	1,289	2,373	12,395	20,062	7,667
	1904	110	6,202	126	645	5,431	.....	6,648	726	1,944	8,448	14,045	5,597
	1899	104	.....	.....	533	4,454	.....	4,638	561	1,566	6,582	10,834	4,252
Cooperage and wooden goods, not elsewhere specified.	1909	39	1,200	42	47	1,111	1,215	3,824	64	524	2,221	3,446	1,225
	1904	45	1,646	52	55	1,539	.....	2,998	108	741	2,795	4,001	1,296
	1899	47	.....	.....	40	1,064	.....	3,082	67	773	2,262	3,544	1,282
Copper, tin, and sheet-iron products..	1909	466	11,399	437	1,118	9,844	6,415	23,437	1,352	5,786	12,057	23,303	11,246
	1904	343	9,005	397	658	8,850	.....	18,248	865	4,889	8,182	17,389	9,207
	1899	353	.....	.....	471	7,918	.....	9,866	525	4,003	6,618	14,502	7,584
Cordage and twine and jute and linen goods.	1909	9	4,619	2	181	4,436	9,485	10,060	274	1,601	4,271	7,374	3,103
	1904	10	3,762	1	170	3,591	.....	7,108	249	1,386	6,124	9,570	3,448
	1899	11	3,349	4	93	3,252	.....	6,723	217	1,112	6,060	8,769	2,709
Corsets.....	1909	39	2,445	39	278	2,128	421	2,091	342	889	2,172	4,610	2,438
	1904	30	1,107	35	94	978	.....	728	69	335	500	1,447	977
	1899	30	.....	.....	69	1,007	.....	574	90	289	608	1,355	747
Cotton goods, including cotton small wares.	1909	13	428	14	46	368	415	828	68	165	574	1,051	477
	1904	15	89	7	3	79	.....	103	2	29	187	260	73
	1899	18	668	21	41	596	.....	801	57	197	672	1,118	446
Cutlery and tools, not elsewhere specified.	1909	70	763	73	104	586	377	847	123	362	460	1,346	886
	1904	78	574	94	23	457	.....	640	25	288	283	968	685
	1899	66	.....	.....	45	390	.....	1,534	36	226	208	738	530
Dyeing and finishing textiles.....	1909	69	3,198	67	361	2,770	2,738	4,035	619	1,097	2,727	6,003	3,276
	1904	39	1,383	54	105	1,224	.....	1,631	121	569	401	1,707	1,306
	1899	32	1,143	44	70	1,029	.....	1,709	80	458	448	1,400	1,012
Electrical machinery, apparatus, and supplies.	1909	160	7,002	77	1,239	5,686	6,954	10,623	1,574	3,336	6,837	14,788	7,951
	1904	133	6,063	81	836	5,146	.....	10,098	862	2,460	5,506	11,008	5,502
	1899	104	5,763	95	900	4,768	.....	8,782	685	2,363	5,903	10,851	4,948
Electroplating.....	1909	97	652	119	53	480	477	287	47	315	206	886	680
	1904	77	698	97	32	569	.....	309	43	333	316	983	667
	1899	70	.....	.....	15	400	.....	193	11	225	131	578	447
Enameling and japanning.....	1909	11	67	13	4	50	48	72	3	22	17	77	60
	1904	26	1,637	22	127	1,488	.....	4,246	215	546	1,027	2,357	1,330
	1899	28	1,558	33	49	1,476	.....	2,609	43	538	1,648	2,869	1,221
Engravers' materials.....	1909	8	84	7	19	58	177	130	28	52	194	328	154
	1904	6	44	7	4	33	.....	74	9	20	79	127	48
	1899	6	62	7	8	47	.....	49	17	26	126	195	69
Fancy articles, not elsewhere specified.	1909	156	3,640	172	532	2,945	2,413	5,483	623	1,448	2,890	6,987	4,097
	1904	125	2,549	162	203	2,184	.....	1,073	183	964	1,761	4,331	2,570
	1899	103	2,073	220	275	2,178	.....	2,148	212	872	1,633	3,892	2,209
Files.....	1909	6	129	12	12	105	150	109	13	42	39	121	82
	1904	6	84	8	3	73	.....	73	2	54	36	119	88
	1899	6	76	9	1	66	.....	79	.....	36	16	71	55
Flags, banners, regalia, society badges, and emblems.	1909	50	678	56	92	530	98	757	74	263	712	1,347	635
	1904	47	472	51	57	364	.....	750	49	127	468	808	410
	1899	42	389	49	49	291	.....	571	48	103	427	814	387
Food preparations.....	1909	95	2,320	102	404	1,814	2,724	3,428	630	797	4,983	8,046	3,063
	1904	95	1,698	104	252	1,342	.....	2,266	390	474	2,928	5,094	2,166
	1899	87	1,425	104	188	1,133	.....	1,981	206	437	2,699	4,443	1,744
Foundry and machine-shop products.	1909	923	29,200	758	4,428	24,014	33,453	82,073	6,026	16,736	24,058	63,853	39,795
	1904	810	29,075	801	3,394	24,880	.....	63,889	4,307	16,245	21,040	57,937	36,587
	1899	871	.....	.....	2,578	27,198	.....	58,929	3,333	16,166	26,408	61,182	34,714
Fur goods.....	1909	821	10,719	1,264	1,631	7,824	857	18,636	1,093	5,483	23,434	39,874	16,440
	1904	573	6,946	906	742	5,298	.....	10,791	764	3,278	14,733	25,279	10,546
	1899	512	5,578	765	629	4,184	.....	6,918	617	2,886	8,433	15,239	6,806
Furnishing goods, men's.....	1909	313	8,051	409	1,347	6,205	498	10,326	1,688	2,998	15,545	25,496	9,651
	1904	223	7,510	322	940	6,248	.....	7,153	752	2,151	9,804	16,613	6,809
	1899	217	.....	.....	883	7,945	.....	7,073	920	2,845	11,062	18,768	7,646
Furniture and refrigerators.....	1909	406	9,878	464	1,000	8,414	6,993	11,446	1,179	5,359	8,731	19,439	10,768
	1904	312	7,700	410	590	6,691	.....	7,225	794	4,146	5,857	13,934	8,077
	1899	200	7,987	268	540	7,179	.....	7,808	622	4,087	5,950	14,004	8,554
Furs, dressed.....	1909	49	880	64	68	748	1,137	735	86	512	253	1,209	959
	1904	49	852	64	50	738	.....	602	62	517	380	1,400	1,020
	1899	35	520	40	23	457	.....	481	25	297	235	749	514
Gas and electric fixtures and lamps and reflectors.	1909	149	5,900	127	916	4,857	2,899	8,383	1,254	2,915	4,340	10,750	6,401
	1904	117	3,974	100	538	3,836	.....	5,462	777	1,836	3,050	7,456	4,406
	1899	96	3,191	103	384	2,704	.....	3,517	456	1,405	1,884	4,964	3,060

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

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

MANUFACTURES—NEW YORK.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.					Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).								
			Expressed in thousands.											
<b>NEW YORK CITY—Contd.</b>														
Gas, illuminating and heating.....	1909	15	6,296	.....	1,970	4,326	23,177	\$203,758	\$2,320	\$3,115	\$12,736	\$34,117	\$21,381	
	1904	12	6,324	.....	1,207	5,117	.....	164,523	1,396	3,675	9,347	29,715	20,368	
	1899	13	5,026	.....	961	4,065	.....	134,178	1,031	3,037	5,041	17,116	12,075	
Glass.....	1909	9	948	3	61	884	450	1,267	95	487	281	1,128	847	
	1904	10	1,160	4	61	1,095	.....	1,160	88	627	498	1,552	1,054	
	1899	9	1,046	6	46	994	.....	849	49	441	287	940	683	
Glass, cutting, staining, and ornamenting.	1909	111	2,360	126	182	2,052	529	1,908	250	1,352	1,130	3,448	2,318	
	1904	94	1,831	121	101	1,809	.....	1,032	135	1,024	756	2,577	1,821	
	1899	108	1,557	141	114	1,302	.....	1,107	111	759	1,138	2,641	1,503	
Gloves and mittens, leather.....	1909	38	465	46	23	396	17	316	25	195	291	668	377	
	1904	17	293	23	8	262	.....	147	5	127	159	374	215	
	1899	34	548	38	27	483	.....	245	25	192	236	580	350	
Gold and silver, leaf and foil.....	1909	34	402	39	15	348	41	285	10	201	476	833	357	
	1904	37	481	47	37	397	.....	395	30	220	505	945	440	
	1899	36	509	43	20	446	.....	402	22	200	652	1,184	532	
Gold and silver, reducing and refining, not from the ore.	1909	10	64	13	9	42	97	540	13	34	2,396	2,603	207	
	1904	5	43	6	3	34	.....	317	20	27	3,689	3,776	87	
	1899	14	80	18	8	54	.....	602	10	39	4,814	4,528	214	
Hair work.....	1909	126	2,704	160	253	2,291	2	3,250	230	1,050	4,482	7,817	3,335	
	1904	39	492	49	68	375	.....	679	57	162	461	998	537	
	1899	44	.....	.....	22	353	.....	446	19	139	277	771	494	
Hand stamps and stencils and brands.	1909	46	436	45	75	316	104	364	83	191	155	578	423	
	1904	47	376	54	39	283	.....	281	49	145	96	452	356	
	1899	50	428	61	22	345	.....	359	25	166	128	552	424	
Hats and caps, other than felt, straw, and wool.	1909	220	3,822	324	288	3,210	399	2,688	378	1,940	3,730	7,515	3,785	
	1904	188	3,856	302	173	3,381	.....	1,819	187	1,795	3,198	6,657	3,461	
	1899	256	4,686	372	188	4,126	.....	2,475	189	1,896	4,055	7,932	3,877	
Hats, fur-felt.....	1909	33	1,993	32	191	1,770	781	2,947	222	1,084	2,567	4,765	2,198	
	1904	30	1,842	34	123	1,685	.....	2,336	132	1,065	1,619	3,899	2,280	
	1899	7	1,471	4	72	1,395	.....	1,447	139	807	891	2,241	1,360	
Hosiery and knit goods.....	1909	180	6,082	203	498	5,381	1,551	8,003	653	2,353	7,515	13,565	6,050	
	1904	102	4,329	120	184	4,025	.....	4,582	220	1,451	3,149	6,235	3,080	
	1899	73	2,713	88	167	2,521	.....	2,727	195	924	1,832	3,628	1,796	
House-furnishing goods, not elsewhere specified.	1909	73	899	80	111	702	338	1,225	113	341	1,503	2,534	1,091	
	1904	49	1,055	56	140	859	.....	1,193	113	381	1,362	2,471	1,109	
	1899	51	1,420	65	151	1,213	.....	979	118	418	1,794	2,801	1,097	
Ice, manufactured.....	1909	37	803	11	107	685	14,794	4,454	200	547	839	2,813	1,974	
	1904	35	584	11	69	504	.....	5,125	74	363	523	1,502	979	
	1899	26	314	13	45	256	.....	2,043	38	163	231	900	669	
Ink, printing.....	1909	26	883	18	357	508	2,199	2,998	574	258	1,850	3,965	2,115	
	1904	24	422	28	123	271	.....	1,372	181	179	1,070	2,256	1,186	
	1899	22	336	22	123	191	.....	1,057	152	117	681	1,381	700	
Ink, writing.....	1909	6	213	5	62	146	58	602	120	62	283	737	454	
	1904	6	171	8	36	127	.....	542	78	52	214	562	348	
	1899	6	118	8	13	97	.....	431	26	47	255	499	244	
Instruments, professional and scientific.	1909	63	1,358	55	222	1,081	1,416	2,420	272	678	654	1,909	1,255	
	1904	61	777	58	72	647	.....	820	85	375	300	1,109	800	
	1899	81	759	106	71	582	.....	761	59	344	255	983	728	
Jewelry.....	1909	438	6,668	553	1,076	5,039	1,445	12,253	1,091	3,617	10,004	19,236	9,232	
	1904	263	4,615	378	502	3,737	.....	8,230	542	2,436	5,643	11,348	5,705	
	1899	229	3,448	333	282	2,533	.....	5,454	270	1,901	5,160	9,712	4,552	
Jewelry and instrument cases.....	1909	57	878	66	76	736	93	761	75	395	532	1,353	821	
	1904	47	781	65	68	648	.....	530	66	292	437	1,102	665	
	1899	33	405	42	28	395	.....	318	19	180	285	658	423	
Kaolin and ground earths.....	1909	10	107	8	10	89	345	135	14	47	138	245	107	
	1904	6	150	7	14	129	.....	245	24	75	204	376	172	
	1899	5	49	9	2	38	.....	78	3	22	73	134	61	
Lasts.....	1909	6	225	2	28	195	285	197	53	135	144	455	311	
	1904	6	176	4	13	159	.....	166	23	95	52	269	207	
	1899	8	120	7	10	103	.....	79	13	58	50	180	136	
Lead, bar, pipe, and sheet.....	1909	6	211	1	33	177	1,127	945	72	114	1,574	1,891	817	
	1904	6	177	3	27	147	.....	681	50	93	2,700	3,098	398	
	1899	5	106	7	22	77	.....	535	28	42	1,810	1,592	282	
Leather goods.....	1909	339	7,672	485	886	6,301	946	7,912	1,026	3,440	10,049	17,775	7,726	
	1904	331	7,356	440	579	6,337	.....	5,524	542	2,711	7,955	14,525	6,570	
	1899	277	.....	475	475	4,658	.....	4,406	435	2,046	5,526	10,400	4,874	
Leather, tanned, curried, and finished	1909	20	533	18	62	453	985	1,177	89	235	1,276	1,946	670	
	1904	21	691	29	56	606	.....	1,684	63	299	1,598	2,228	630	
	1899	17	804	25	20	750	.....	2,305	33	362	2,474	3,331	857	

MANUFACTURES—NEW YORK.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
			Expressed in thousands.										
<b>NEW YORK CITY—Contd.</b>													
Liquors, malt.....	1909	74	6,878	20	1,005	5,793	31,378	\$87,006	\$3,345	\$4,036	\$12,797	\$53,469	\$40,672
	1904	89	6,591	25	1,122	5,444	.....	75,609	3,028	4,513	10,991	43,168	42,177
	1899	89	5,846	30	991	4,824	.....	65,586	2,543	3,854	7,689	39,106	31,417
Looking-glass and picture frames.....	1909	115	1,509	122	207	1,180	543	1,609	256	711	1,230	2,991	1,761
	1904	90	1,217	112	127	978	.....	903	148	567	725	2,046	1,321
	1899	106	.....	.....	119	1,140	.....	1,077	131	611	1,110	2,627	1,517
Lumber and timber products.....	1909	275	9,292	255	887	8,150	10,240	17,227	1,152	5,214	14,104	24,122	10,018
	1904	257	8,711	327	728	7,656	.....	14,273	929	4,544	9,972	21,219	11,247
	1899	196	6,089	246	403	5,440	.....	8,611	474	3,054	8,303	14,852	6,049
Marble and stone work.....	1909	247	4,795	255	478	4,002	10,711	10,055	738	3,785	5,056	12,205	7,149
	1904	168	5,389	215	409	4,765	.....	7,550	552	4,384	4,474	11,915	7,441
	1899	193	.....	.....	282	4,217	.....	6,513	341	3,179	3,954	10,244	6,290
Mattresses and spring beds.....	1909	122	1,454	130	211	1,113	819	2,046	192	668	2,601	4,367	1,766
	1904	92	1,195	115	131	949	.....	1,092	119	525	2,025	3,331	1,366
	1899	95	1,078	122	104	852	.....	813	130	443	1,435	2,744	1,309
Millinery and lace goods.....	1909	886	24,712	1,181	2,970	20,561	3,372	10,413	3,178	9,419	26,761	51,239	24,478
	1904	548	18,280	793	1,816	15,971	.....	11,035	1,458	6,083	10,714	32,343	15,629
	1899	383	12,952	559	1,180	11,213	.....	7,092	1,032	4,014	11,104	20,934	9,820
Mirrors.....	1909	37	938	46	110	782	835	1,329	128	502	1,582	2,612	1,060
	1904	34	961	54	98	800	.....	1,058	91	428	1,809	2,743	934
	1899	31	1,055	51	91	913	.....	1,427	107	509	2,407	3,884	1,417
Models and patterns, not including paper patterns.	1909	96	1,094	110	130	854	523	1,254	169	563	560	2,095	1,535
	1904	62	653	76	75	502	.....	641	71	292	289	1,015	735
	1899	72	527	87	26	414	.....	410	27	297	182	766	584
Musical instruments and materials, not specified.	1909	37	304	37	32	235	123	354	28	132	168	469	301
	1904	45	485	40	34	402	.....	1,134	48	217	257	737	499
	1899	42	422	42	30	350	.....	997	39	197	209	566	397
Musical instruments, pianos and organs and materials.	1909	133	9,305	84	794	8,427	6,033	23,080	1,434	5,773	13,191	25,516	12,325
	1904	117	8,262	101	678	7,483	.....	16,638	1,056	4,895	8,718	18,930	10,212
	1899	105	6,246	121	376	5,740	.....	11,518	557	3,469	6,554	12,831	7,227
Paint and varnish.....	1909	113	4,319	66	1,457	2,802	8,925	20,267	2,134	1,733	16,813	26,664	9,851
	1904	99	3,816	80	815	2,015	.....	17,837	1,104	1,657	15,725	22,890	7,105
	1899	93	3,239	40	708	2,491	.....	15,830	1,270	1,401	11,476	17,553	6,077
Paper goods, not elsewhere specified..	1909	82	4,271	55	731	3,485	3,311	6,525	894	1,428	4,566	8,833	4,267
	1904	65	3,415	71	341	3,093	.....	4,561	462	1,070	3,349	6,197	2,848
	1899	66	2,664	75	330	2,259	.....	3,929	400	876	2,837	5,094	2,257
Patent medicines and compounds and druggists' preparations.	1909	433	5,450	291	1,087	3,172	2,928	12,866	2,873	1,556	9,281	24,984	15,703
	1904	371	4,482	296	1,359	2,827	.....	10,062	1,886	1,289	6,231	18,116	11,855
	1899	277	4,588	265	1,203	3,120	.....	12,425	1,506	1,268	7,774	18,413	10,639
Pens, fountain, stylographic, and gold.	1909	30	1,108	25	353	730	192	1,853	374	427	1,593	3,219	1,666
	1904	24	764	20	131	613	.....	881	133	302	876	1,945	1,069
	1899	23	519	25	88	406	.....	569	103	240	500	1,182	682
Photo-engraving.....	1909	46	1,517	25	305	1,187	275	807	357	1,105	490	2,517	2,027
	1904	36	1,065	26	171	808	.....	768	208	754	385	1,782	1,367
	1899	47	801	65	120	607	.....	491	121	518	206	1,090	884
Pipes, tobacco.....	1909	21	1,772	30	160	1,532	701	2,148	170	727	1,408	3,137	1,729
	1904	27	1,183	41	30	1,106	.....	679	35	508	901	1,795	894
	1899	34	958	41	80	837	.....	663	73	478	502	1,673	871
Pottery, terra-cotta, and fire-clay products.	1909	10	647	2	65	580	705	1,589	116	350	208	962	754
	1904	15	1,140	11	93	1,036	.....	2,325	143	524	337	1,292	955
	1899	17	1,023	15	74	934	.....	1,867	91	394	215	1,145	890
Printing and publishing.....	1909	2,883	74,118	2,352	23,444	48,322	37,835	123,146	28,874	35,097	46,513	183,509	139,990
	1904	2,325	60,233	2,105	17,711	40,357	.....	100,388	19,643	27,092	32,417	138,502	108,035
	1899	1,840	47,178	1,907	8,837	36,344	.....	79,577	11,187	22,589	26,101	98,675	72,574
Rubber goods, not elsewhere specified.	1909	36	1,161	31	199	940	2,016	2,861	349	500	2,184	3,047	1,469
	1904	43	2,300	33	269	1,998	.....	3,237	387	796	3,003	5,521	2,518
	1899	50	2,118	55	192	1,871	.....	3,378	253	739	2,606	4,663	2,057
Saws.....	1909	7	162	8	31	113	401	213	26	64	164	321	157
	1904	8	147	7	36	104	.....	319	27	51	66	220	160
	1899	6	16	6	1	9	.....	26	1	5	8	28	20
Sewing machines, cases, and attachments.	1909	10	80	6	18	50	38	128	23	34	39	135	96
	1904	9	74	5	11	58	.....	81	12	35	23	94	71
	1899	11	120	12	42	75	.....	126	28	41	48	194	146
Shipbuilding, including boat building.	1909	71	4,328	66	240	4,022	9,750	10,166	456	2,732	2,692	8,389	5,097
	1904	76	4,966	87	260	4,649	.....	8,804	377	3,342	2,909	8,409	5,440
	1899	90	4,179	123	127	3,929	.....	5,893	204	2,373	2,009	6,132	4,123
Show cases.....	1909	17	452	23	50	379	476	463	68	206	374	816	442
	1904	13	272	17	14	241	.....	166	16	138	185	462	277
	1899	11	261	12	23	226	.....	151	20	120	172	410	238
Silk and silk goods, including throwsters.	1909	118	8,887	116	819	7,952	4,589	13,147	1,054	3,565	8,490	10,950	8,460
	1904	84	7,901	84	700	7,117	.....	10,145	787	2,931	7,071	14,036	6,966
	1899	68	5,858	70	252	5,536	.....	7,073	375	2,239	4,715	9,521	4,506

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

MANUFACTURES—NEW YORK.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>NEW YORK CITY—Contd.</b>													
Silverware and plated ware.....	1909	42	1,852	43	308	1,441	1,144	\$3,794	\$398	\$978	\$1,805	\$4,199	\$2,334
	1904	32	1,806	30	216	1,554	.....	3,153	260	905	1,472	3,505	2,033
	1899	47	2,154	61	246	1,847	.....	3,160	260	1,068	1,804	4,106	2,302
Slaughtering and meat packing.....	1909	112	4,868	127	812	3,924	8,715	25,185	1,212	3,171	83,834	95,802	12,028
	1904	63	2,033	84	380	2,169	.....	12,055	558	1,793	49,929	55,938	6,009
	1899	80	2,484	103	305	2,010	.....	9,488	419	1,357	38,355	43,360	5,005
Smelting and refining, not from the ore.	1909	11	331	16	81	234	285	2,694	109	161	7,776	8,417	641
	1904	8	187	9	38	145	.....	1,197	79	80	4,426	4,845	419
	1899	7	244	9	75	160	.....	810	97	127	1,428	2,074	646
Soap.....	1909	41	2,191	34	622	1,535	3,144	8,912	563	840	9,169	13,925	4,756
	1904	42	1,454	43	223	1,183	.....	4,491	300	574	4,717	7,929	3,212
	1899	50	1,223	50	192	981	.....	4,055	244	468	4,529	7,730	3,201
Stationery goods, not elsewhere specified.	1909	49	788	46	200	542	245	1,158	221	277	770	1,748	978
	1904	33	651	29	117	505	.....	1,038	119	224	660	1,387	727
	1899	35	777	38	100	639	.....	1,091	97	237	635	1,512	877
Steam packing.....	1909	25	839	14	98	727	1,210	2,707	166	352	1,197	2,090	593
	1904	17	659	13	71	575	.....	3,027	142	263	553	1,524	971
	1899	21	148	22	43	83	.....	253	52	49	123	348	225
Stereotyping and electrotyping.....	1909	34	1,036	26	220	790	1,180	1,054	300	771	547	1,961	1,414
	1904	28	833	36	120	677	.....	1,033	137	507	321	1,380	1,059
	1899	26	567	29	70	468	.....	604	66	339	209	860	651
Stoves and furnaces, including gas and oil stoves.	1909	23	1,342	17	202	1,123	2,596	3,185	280	746	1,605	3,106	1,501
	1904	15	430	16	59	355	.....	922	78	226	426	1,081	655
	1899	7	204	8	29	167	.....	434	26	83	413	692	209
Surgical appliances and artificial limbs	1909	49	514	49	127	338	172	682	139	208	381	1,119	738
	1904	42	539	41	75	423	.....	507	69	239	243	873	680
	1899	46	271	48	46	177	.....	228	34	105	93	480	367
Tobacco manufactures.....	1909	2,036	26,664	2,199	1,944	22,521	2,115	34,003	2,607	10,307	25,430	62,488	37,058
	1904	2,173	29,294	2,350	1,495	25,449	.....	40,641	1,518	10,958	19,522	50,525	31,003
	1899	1,854	24,345	2,050	1,018	21,277	.....	16,804	1,315	9,123	15,323	41,828	26,505
Toys and games.....	1909	59	1,284	61	128	1,095	297	1,075	121	415	753	1,634	881
	1904	35	591	36	32	523	.....	527	38	189	281	740	459
	1899	38	542	46	33	463	.....	531	37	173	304	736	432
Type founding and printing materials.	1909	23	260	17	54	189	217	511	85	131	357	749	392
	1904	22	272	17	45	210	.....	735	53	134	145	554	409
	1899	21	455	14	49	392	.....	878	71	218	252	781	529
Typewriters and supplies.....	1909	27	905	19	226	660	407	2,251	248	385	729	1,961	1,232
	1904	16	629	9	106	514	.....	1,125	107	279	322	1,081	759
	1899	14	569	7	96	466	.....	998	87	251	269	911	642
Umbrellas and canes.....	1909	134	2,322	170	255	1,897	405	2,219	248	890	4,113	6,374	2,261
	1904	94	1,812	130	192	1,490	.....	1,262	159	614	2,847	4,689	1,842
	1899	92	.....	193	1,556	.....	.....	1,551	156	601	3,240	5,081	1,841
Vinegar and cider.....	1909	4	57	2	15	40	75	133	13	20	83	131	48
	1904	4	50	4	6	40	.....	06	4	16	63	110	53
	1899	8	74	8	3	63	.....	229	2	36	60	133	73
Wall paper.....	1909	7	811	2	143	666	566	2,020	190	359	1,144	2,437	1,293
	1904	5	858	2	73	733	.....	1,006	96	391	1,069	2,267	1,228
	1899	12	1,896	6	197	1,693	.....	3,098	352	911	2,005	3,888	1,833
Wall plaster.....	1909	12	912	5	103	804	3,730	3,833	228	429	1,755	2,903	1,148
	1904	11	782	9	68	705	.....	2,361	95	371	1,456	2,173	717
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Window shades and fixtures.....	1909	67	761	72	167	522	130	1,717	206	299	3,015	4,125	1,110
	1904	32	694	36	119	539	.....	993	131	196	1,349	1,979	630
	1899	33	.....	66	317	.....	.....	848	78	147	1,476	2,011	535
Wirework, including wire rope and cable.	1909	67	1,206	68	158	674	724	1,672	208	534	1,152	2,368	1,266
	1904	117	2,066	155	237	1,674	.....	1,827	215	829	1,134	3,015	1,881
	1899	65	712	79	60	573	.....	769	64	282	445	1,090	645
Wood, turned and carved.....	1909	82	1,012	104	80	828	824	910	103	493	662	1,707	1,045
	1904	85	500	104	17	379	.....	373	17	237	290	771	511
	1899	104	673	126	21	526	.....	471	15	333	285	928	643
Woolen, worsted, and felt goods, and wool hats.	1909	11	468	13	36	419	565	1,036	34	207	963	1,512	549
	1904	5	163	12	9	142	.....	191	10	67	267	427	169
	1899	9	989	11	100	878	.....	1,231	90	258	510	1,145	635
All other industries.....	1909	1,421	38,104	1,461	5,921	30,722	60,664	159,735	8,261	17,811	208,475	272,198	63,723
	1904	1,292	37,852	1,473	4,166	32,213	.....	147,922	5,145	16,957	203,858	260,599	56,651
	1899	1,229	.....	.....	2,898	26,440	.....	140,217	3,673	12,827	153,068	188,761	35,893

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

<sup>2</sup> 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
<b>NEW YORK CITY—Manhattan and Bronx Boroughs—All industries.</b>	1909	19,789	500,299	22,658	77,849	399,792	213,064	\$822,726	\$94,971	\$237,467	\$725,456	\$1,431,089	\$705,633
	1904	15,975	410,324	19,387	51,716	339,221	.....	620,526	56,758	132,080	507,030	1,043,252	536,222
	1899	14,362	.....	.....	35,661	285,265	.....	511,918	40,725	146,505	398,076	810,808	412,732
Artificial flowers and feathers and plumes.	1900	301	9,652	397	899	8,356	195	7,838	1,023	3,412	12,209	21,024	8,815
	1904	138	3,682	191	208	3,183	.....	1,803	174	1,071	1,429	3,900	2,471
	1899	142	4,887	215	229	3,943	.....	2,023	227	1,233	2,180	4,955	2,775
Artificial stone.....	1900	10	128	6	10	112	70	67	10	96	89	262	173
	1904	8	332	12	26	294	.....	116	31	127	91	330	239
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Baskets, and rattan and willow ware.	1900	19	208	21	18	109	8	131	14	96	145	358	213
	1904	20	260	24	23	213	.....	80	15	107	86	274	188
	1899	18	129	20	1	108	.....	32	1	58	43	146	102
Belting and hose, leather.....	1900	15	302	11	106	185	722	1,732	111	118	1,353	2,780	1,347
	1904	11	107	9	28	70	.....	169	27	42	232	378	146
	1899	8	441	6	66	369	.....	1,762	79	229	1,733	2,323	660
Blackening and cleansing and polishing preparations.	1900	49	594	34	213	347	206	766	224	152	824	1,699	875
	1904	38	519	33	139	347	.....	730	179	152	802	1,609	807
	1899	33	495	39	124	332	.....	642	162	147	728	1,454	726
Bluing.....	1900	4	26	3	8	15	10	19	7	7	35	70	35
	1904	7	64	5	8	51	.....	60	10	25	89	173	84
	1899	7	83	8	15	60	.....	76	14	25	97	212	115
Boots and shoes, including cut stock and findings.	1900	98	2,095	111	297	2,287	590	2,539	292	1,170	3,186	5,505	2,319
	1904	79	2,299	107	127	2,065	.....	2,007	140	930	2,997	4,887	1,890
	1899	112	2,488	143	168	2,177	.....	1,875	149	1,029	2,845	4,778	1,933
Boxes, cigar.....	1900	24	1,354	23	105	1,226	912	911	137	547	891	1,796	905
	1904	22	1,517	28	91	1,398	.....	865	111	610	833	1,847	964
	1899	27	913	31	45	837	.....	545	39	332	527	1,066	539
Boxes, fancy and paper.....	1900	172	6,247	204	428	5,615	1,284	3,260	487	2,270	3,205	7,489	4,284
	1904	137	5,948	103	378	5,407	.....	2,509	366	1,935	2,781	6,584	3,803
	1899	139	5,294	178	290	4,826	.....	1,950	243	1,064	2,036	5,240	3,204
Brass and bronze products.....	1900	116	2,694	119	298	2,277	1,957	4,150	381	1,360	2,442	5,424	2,982
	1904	93	2,100	115	147	1,838	.....	2,643	184	1,038	1,434	3,487	2,053
	1899	92	1,823	110	122	1,691	.....	2,005	153	839	1,249	2,892	1,643
Bread and other bakery products.....	1900	1,325	13,772	1,415	1,444	10,913	5,377	19,174	1,268	7,107	25,703	41,878	16,175
	1904	1,070	10,550	1,120	605	8,825	.....	12,320	526	5,080	17,946	29,880	11,934
	1899	1,011	9,825	1,002	1,085	7,078	.....	10,027	890	3,904	12,066	21,946	9,880
Brooms and brushes.....	1900	65	1,074	76	131	867	196	994	131	400	1,036	2,097	1,001
	1904	59	1,072	71	104	897	.....	934	88	375	1,066	1,847	781
	1899	52	901	63	66	772	.....	802	58	308	828	1,493	670
Buttons.....	1900	128	2,661	177	225	2,259	480	1,809	238	974	1,866	4,142	2,276
	1904	41	1,866	55	127	1,684	.....	806	136	614	843	2,199	1,266
	1899	30	1,206	39	48	1,119	.....	499	45	417	522	1,235	713
Canning and preserving.....	1900	47	1,077	45	184	848	978	2,893	216	413	2,780	4,624	1,744
	1904	52	1,027	68	156	803	.....	2,238	171	337	2,393	4,139	1,740
	1899	47	.....	.....	125	546	.....	919	148	234	1,501	2,475	974
Carpets, rag.....	1900	4	34	4	3	27	18	19	2	13	14	43	29
	1904	6	35	8	.....	27	.....	7	.....	12	8	32	21
	1899	10	30	11	2	17	.....	15	1	8	7	26	19
Carriages and wagons and materials.	1900	111	1,542	130	90	1,322	1,164	1,832	162	853	1,075	2,904	1,729
	1904	111	1,942	129	149	1,673	.....	2,781	193	1,134	890	3,111	2,321
	1899	111	.....	.....	100	1,662	.....	2,568	111	1,100	926	2,961	2,035
Clocks and watches, including cases and materials.	1900	13	197	8	52	137	40	379	74	112	128	432	304
	1904	12	182	10	27	146	.....	524	37	111	207	517	310
	1899	48	133	6	13	114	.....	156	24	97	171	367	196
Clothing men's, including shirts.....	1900	1,954	59,473	2,898	0,199	50,376	4,833	82,224	7,466	29,386	106,854	199,095	92,441
	1904	1,464	40,750	2,175	3,627	34,948	.....	48,067	3,767	18,679	73,673	140,393	66,720
	1899	1,561	.....	.....	3,160	27,846	.....	39,226	3,218	14,417	57,959	110,653	52,694
Clothing, women's.....	1900	2,696	102,947	3,946	11,620	87,381	9,359	77,195	12,769	50,491	140,222	256,558	116,336
	1904	1,981	76,383	3,003	6,734	66,646	.....	42,670	6,196	33,293	87,443	164,723	77,280
	1899	1,479	48,162	2,219	3,868	42,066	.....	26,380	3,856	19,933	53,373	99,465	49,092
Coffee and spice, roasting and grinding	1900	53	1,378	66	567	745	2,325	3,117	615	371	7,014	9,657	2,843
	1904	45	998	58	304	636	.....	4,236	354	351	8,406	10,638	2,127
	1899	41	928	65	332	631	.....	2,374	345	251	4,594	6,444	1,850
Confectionery.....	1900	95	5,788	89	746	4,933	5,114	7,146	1,007	1,845	10,135	16,215	6,080
	1904	80	4,900	94	532	4,274	.....	5,135	598	1,553	6,961	11,679	4,618
	1899	72	.....	.....	413	3,145	.....	3,044	412	1,157	4,681	7,613	2,932
Cooperage and wooden goods, not elsewhere specified.	1900	21	130	26	10	94	95	159	7	62	103	253	145
	1904	20	283	27	13	243	.....	279	12	156	361	632	271
	1899	30	.....	.....	16	279	.....	414	20	172	421	777	356
Copper, tin, and sheet-iron products..	1900	308	4,933	279	608	4,006	2,325	6,743	748	2,659	4,760	10,307	5,547
	1904	258	4,096	291	363	3,442	.....	5,564	451	2,181	3,152	7,698	4,546
	1899	269	.....	.....	214	2,023	.....	3,580	245	1,865	3,225	7,218	3,993

\* Not reported separately.

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

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

\* Excluding statistics for three establishments, to avoid disclosure of individual operations.



MANUFACTURES—NEW YORK.

865

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>NEW YORK CITY—Manhattan and Bronx Boroughs—Continued.</b>													
Corsets.....	1909	35	2,246	34	252	1,900	378	\$1,863	\$317	\$839	\$2,039	\$4,290	\$2,251
	1904	26	864	30	81	753	.....	647	56	257	453	1,168	715
	1899	25	.....	.....	59	785	.....	451	80	224	494	1,104	610
Cutlery and tools, not elsewhere specified.	1909	48	514	50	75	389	260	556	102	265	280	968	683
	1904	53	416	62	21	333	.....	466	23	215	223	766	543
	1899	45	.....	.....	33	235	.....	1,302	26	130	152	489	337
Dyeing and finishing textiles.....	1909	54	2,660	56	301	2,303	1,956	3,305	501	870	2,872	5,110	2,733
	1904	29	1,036	38	63	835	.....	1,444	79	437	294	1,248	954
	1899	21	887	27	46	814	.....	1,270	60	359	347	1,132	785
Electrical machinery, apparatus, and supplies.	1909	134	6,017	64	1,074	4,879	5,579	8,457	1,329	3,003	5,174	12,012	6,833
	1904	116	5,620	67	769	4,684	.....	9,657	797	2,212	5,005	10,022	5,017
	1899	90	5,265	79	842	4,344	.....	8,343	640	2,197	5,504	10,081	4,577
Electroplating.....	1909	84	564	99	52	413	332	246	45	277	188	789	601
	1904	68	614	82	25	507	.....	269	40	298	299	899	600
	1899	61	.....	.....	14	335	.....	165	11	191	114	505	391
Fancy articles, not elsewhere specified.	1909	125	2,280	116	366	1,733	545	3,025	391	806	1,942	4,403	2,461
	1904	98	1,705	124	160	1,431	.....	1,472	137	624	1,271	3,130	1,859
	1899	146	2,335	106	245	1,894	.....	1,904	183	782	1,531	3,521	1,990
Flags, banners, regalia, society badges, and emblems.	1909	39	647	45	92	510	96	745	74	194	699	1,310	611
	1904	40	455	44	57	354	.....	738	49	123	452	844	392
	1899	33	337	39	48	250	.....	550	47	87	407	754	347
Food preparations.....	1909	53	1,429	60	236	1,133	1,731	2,028	387	530	3,350	5,331	1,981
	1904	61	1,211	56	214	941	.....	1,640	346	348	2,269	4,039	1,770
	1899	55	995	55	158	782	.....	1,193	183	321	2,050	3,467	1,417
Foundry and machine-shop products.	1909	566	12,851	479	1,982	10,890	11,331	26,212	2,433	7,163	11,372	27,419	16,047
	1904	514	14,598	508	1,645	12,445	.....	25,627	2,043	8,300	11,400	29,780	18,320
	1899	574	17,415	636	1,536	15,243	.....	26,892	1,935	9,369	14,989	34,699	19,710
Fur goods.....	1909	804	10,271	1,247	1,551	7,473	754	17,826	1,629	5,323	22,729	38,682	15,953
	1904	558	6,679	709	5,081	5,081	.....	10,201	730	3,168	14,349	24,613	10,264
	1899	482	5,228	728	580	3,920	.....	6,285	574	2,232	8,018	14,444	6,423
Furnishing goods, men's.....	1909	297	7,474	389	1,273	5,812	431	9,616	1,621	2,823	15,058	24,640	9,582
	1904	199	6,001	288	834	4,879	.....	6,472	699	1,811	8,889	14,936	6,097
	1899	206	.....	.....	839	7,146	.....	7,181	394	2,607	10,668	17,540	6,872
Furniture and refrigerators.....	1909	320	7,000	349	740	5,911	4,498	8,128	841	3,854	5,820	13,537	7,717
	1904	248	5,712	314	474	4,924	.....	5,415	549	3,192	4,538	10,838	6,300
	1899	160	6,441	209	446	5,786	.....	6,535	515	3,398	4,750	11,391	6,641
Gas and electric fixtures and lamps and reflectors.	1909	122	4,994	98	770	4,117	2,335	7,084	1,065	2,494	3,649	9,179	5,580
	1904	96	3,259	83	445	2,731	.....	4,663	603	1,530	2,546	6,281	3,735
	1899	72	2,669	77	315	2,277	.....	3,070	383	1,234	1,648	4,279	2,631
Gas, illuminating and heating.....	1909	6	2,998	.....	1,171	1,827	9,216	92,654	1,403	1,310	7,242	17,923	10,681
	1904	5	3,738	.....	742	2,996	.....	79,031	399	2,175	5,322	17,818	12,496
	1899	5	3,636	.....	765	2,571	.....	65,219	834	2,062	3,234	10,797	7,593
Glass, cutting, staining, and ornamenting.	1909	69	1,375	78	128	1,169	287	1,265	179	815	660	2,054	1,394
	1904	64	1,131	76	72	983	.....	803	108	654	482	1,710	1,223
	1899	77	1,197	104	95	998	.....	897	96	602	942	2,143	1,201
Gold and silver, leaf and foil.....	1909	15	268	18	13	237	20	203	9	145	336	610	274
	1904	18	349	27	37	285	.....	344	30	172	404	755	351
	1899	17	328	22	19	227	.....	318	22	139	514	931	417
Hair work.....	1909	120	2,027	152	251	2,224	2	3,180	230	1,031	4,433	7,716	3,283
	1904	35	455	45	68	342	.....	641	57	155	448	970	522
	1899	36	.....	.....	20	328	.....	427	18	131	266	734	408
Hats and caps, other than felt, straw, and wool.	1909	205	3,190	297	240	2,653	264	2,191	303	1,648	3,184	6,400	3,216
	1904	130	3,442	287	160	2,995	.....	1,583	174	1,654	2,958	6,103	3,145
	1899	237	4,521	349	174	3,998	.....	2,409	177	1,858	3,902	7,659	3,757
Hats, fur-felt.....	1909	26	690	28	92	570	198	722	90	366	1,271	2,108	837
	1904	23	549	31	56	462	.....	269	49	279	657	1,242	585
	1899	3	182	23	23	159	.....	60	16	68	181	342	161
Hosiery and knit goods.....	1909	54	1,270	71	179	1,020	160	1,661	173	440	1,964	3,505	1,641
	1904	36	1,137	39	127	971	.....	839	119	323	975	1,967	992
	1899	32	1,224	38	100	1,086	.....	1,084	103	362	733	1,491	753
House-furnishing goods, not elsewhere specified.	1909	64	759	76	99	584	258	996	101	291	1,298	2,185	887
	1904	43	871	51	122	628	.....	980	95	304	1,144	2,074	930
	1899	40	983	50	107	826	.....	601	90	272	1,491	2,281	790
Ice, manufactured.....	1909	16	482	2	64	416	8,146	2,330	90	326	556	1,870	1,314
	1904	17	392	6	37	349	.....	3,707	38	261	369	1,075	706
	1899	8	135	2	12	121	.....	1,063	13	76	117	494	377
Ink, printing.....	1909	14	478	12	208	258	1,321	1,952	364	166	851	2,038	1,187
	1904	16	242	23	75	144	.....	704	99	95	531	1,292	781
	1899	14	199	20	60	119	.....	754	76	73	428	527	399

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

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

<sup>3</sup> Excluding statistics for five 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>NEW YORK CITY—Manhattan and Bronx Boroughs—Continued.</b>													
Instruments, professional and scientific.	1909	40	433	20	77	327	209	\$640	\$81	\$217	\$246	\$714	\$468
	1904	41	437	33	40	364	.....	402	46	209	170	680	504
	1899	55	415	67	40	308	.....	432	33	180	169	612	443
Jewelry.....	1909	414	6,391	524	1,043	4,824	1,351	11,026	1,073	3,482	9,348	18,305	8,957
	1904	255	4,543	363	498	3,082	.....	8,159	538	2,407	5,605	11,253	5,648
	1899	221	3,341	319	278	2,744	.....	5,106	265	1,830	4,762	9,173	5,648
Jewelry and instrument cases.....	1909	54	792	64	68	660	92	641	69	372	503	1,285	789
	1904	44	695	61	59	575	.....	501	54	275	419	1,043	624
	1899	28	376	35	24	317	.....	282	18	161	219	601	382
Leather goods.....	1909	327	6,905	418	814	5,763	853	6,939	930	3,214	9,407	16,452	7,045
	1904	290	6,913	392	558	5,063	.....	5,088	517	2,552	7,665	13,917	6,232
	1899	236	.....	469	469	4,410	.....	4,228	430	1,943	5,345	9,993	4,648
Leather, tanned, curried, and finished.	1909	9	137	6	34	97	248	495	55	65	512	821	309
	1904	9	170	16	17	137	.....	457	16	83	408	615	207
	1899	8	.....	12	140	140	.....	1,072	10	83	592	771	179
Liquors, malt.....	1909	36	4,334	11	651	3,672	20,606	56,208	1,906	3,102	8,231	34,412	26,121
	1904	41	3,782	17	592	3,173	.....	50,004	1,050	2,674	6,548	26,195	19,647
	1899	42	3,506	19	567	2,920	.....	46,281	1,506	2,335	4,738	24,460	19,722
Looking-glass and picture frames.....	1909	94	1,210	98	181	931	334	1,248	229	578	958	2,387	1,423
	1904	85	1,138	101	126	911	.....	819	147	536	647	1,894	1,247
	1899	89	.....	111	111	1,076	.....	905	126	579	1,040	2,476	1,438
Lumber and timber products.....	1909	167	3,835	163	450	3,222	7,026	5,547	542	2,244	5,177	9,787	4,610
	1904	169	4,055	220	417	3,418	.....	5,234	531	2,273	4,570	9,713	5,143
	1899	123	2,932	145	226	2,561	.....	3,872	254	1,469	3,949	6,980	3,031
Marble and stone work.....	1909	96	2,331	101	257	1,973	6,330	5,268	405	1,863	2,799	6,397	3,598
	1904	99	3,740	113	303	3,324	.....	4,804	417	3,098	3,085	8,260	5,175
	1899	105	.....	233	233	2,840	.....	3,930	274	2,136	2,633	7,017	4,384
Mattresses and spring beds.....	1909	88	1,139	92	165	882	655	1,778	152	543	2,180	3,607	1,427
	1904	71	981	88	112	781	.....	853	106	440	1,785	2,930	1,145
	1899	73	972	96	101	775	.....	752	129	408	1,330	2,530	1,200
Millinery and lace goods.....	1909	821	22,490	1,103	2,789	18,598	2,972	17,863	2,986	8,690	25,095	47,016	22,821
	1904	515	17,286	750	1,725	14,811	.....	10,529	1,307	5,800	16,281	31,311	15,030
	1899	361	12,304	534	1,161	10,009	.....	7,556	1,029	3,875	10,972	20,513	9,541
Mirrors.....	1909	31	769	41	89	629	639	1,115	100	415	1,398	2,250	862
	1904	29	820	50	82	688	.....	924	76	381	1,702	2,531	829
	1899	30	980	50	86	853	.....	1,352	100	484	2,444	3,806	1,362
Models and patterns, not including paper patterns.	1909	74	893	84	109	700	305	1,080	155	459	451	1,745	1,294
	1904	53	580	50	69	452	.....	594	66	292	251	913	662
	1899	50	382	57	23	302	.....	316	24	188	134	540	406
Musical instruments and materials, not specified.	1909	29	226	31	25	170	82	273	20	98	96	296	200
	1904	38	413	42	31	340	.....	1,069	43	182	235	419	308
	1899	32	361	32	26	303	.....	903	36	170	187	495	308
Musical instruments, pianos and organs and materials.	1909	121	8,031	69	748	7,214	4,744	20,034	1,373	4,924	12,414	23,511	11,667
	1904	102	6,903	76	549	6,278	.....	12,254	921	4,014	7,361	16,102	8,801
	1899	93	5,344	105	341	4,898	.....	9,420	495	2,907	5,086	11,396	6,310
Paint and varnish.....	1909	27	580	16	226	338	726	1,427	215	236	1,549	2,560	1,011
	1904	20	695	30	175	490	.....	1,822	168	284	1,776	2,679	963
	1899	35	.....	209	209	685	.....	2,200	258	415	2,917	4,309	1,392
Paper goods, not elsewhere specified..	1909	62	2,886	38	589	2,259	1,476	4,339	644	929	2,899	5,763	2,864
	1904	50	2,297	53	242	2,002	.....	2,499	298	662	1,886	3,811	1,925
	1899	53	1,768	69	247	1,462	.....	2,570	276	565	1,686	3,236	1,550
Patent medicines and compounds and druggists' preparations.	1909	354	3,902	245	1,454	2,203	1,430	8,882	2,172	1,093	6,153	18,305	12,152
	1904	304	3,654	252	1,061	2,341	.....	7,133	1,468	1,037	5,215	15,047	9,832
	1899	219	2,016	213	884	1,819	.....	7,628	1,091	730	3,979	11,956	7,977
Pens, fountain, stylographic, and gold.	1909	25	1,025	21	341	663	177	1,783	359	389	1,400	3,017	1,557
	1904	22	743	18	131	594	.....	874	133	352	854	1,904	1,050
	1899	22	508	22	88	398	.....	561	103	236	494	1,169	675
Photo-engraving.....	1909	46	1,517	25	305	1,187	275	807	357	1,195	490	2,517	2,027
	1904	35	1,025	26	169	830	.....	728	201	737	362	1,722	1,360
	1899	46	800	64	129	667	.....	401	121	518	206	1,090	884
Pipes, tobacco.....	1909	13	468	14	36	418	124	351	31	205	451	858	407
	1904	20	584	20	16	539	.....	343	20	270	507	1,002	495
	1899	28	614	35	79	800	.....	650	72	464	783	1,628	843
Printing and publishing.....	1909	2,525	65,522	1,979	22,038	41,504	32,366	166,826	27,189	30,899	41,062	168,176	127,114
	1904	2,054	54,450	1,881	16,885	35,684	.....	89,154	18,636	24,347	29,487	128,671	99,484
	1899	1,626	42,489	1,745	8,275	32,469	.....	73,116	10,590	20,699	24,162	92,301	68,139

<sup>1</sup> Excluding statistics for five establishments, to avoid disclosure of individual operations.<sup>2</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.

MANUFACTURES—NEW YORK.

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.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.	
		Total.	Proprietors and firm members.	Salaryed employes.	Wage earners (average number).								
Expressed in thousands.													
<b>NEW YORK CITY—Manhattan and Bronx Boroughs—Continued.</b>													
Rubbergoods, not elsewhere specified.	1909	28	372	24	86	289	72	\$542	\$103	\$160	\$768	\$1,305	\$537
	1904	33	1,282	24	167	1,001	72	1,718	205	369	2,000	3,791	1,791
	1899	45	1,410	51	166	1,193	72	1,944	212	442	2,043	3,682	1,630
Saws.....	1909	4	11	5	.....	8	16	7	.....	4	5	15	10
	1904	5	14	6	.....	6	16	8	.....	3	4	17	13
	1899	4	8	5	.....	3	16	8	.....	1	5	13	8
Shipbuilding, including boat building.	1909	22	827	18	67	742	845	2,530	102	582	566	1,603	1,037
	1904	18	1,597	23	80	1,494	845	3,177	136	1,141	825	2,533	1,708
	1899	27	1,669	42	42	1,585	845	2,270	89	956	664	2,264	1,600
Show cases.....	1909	9	169	13	18	138	139	149	20	74	120	314	194
	1904	7	126	9	7	110	139	87	7	62	47	185	141
	1899	6	136	5	19	112	139	75	16	48	47	146	90
Silk and silk goods, including throwsters.	1909	90	5,169	98	510	4,561	2,485	7,755	656	2,118	4,916	10,051	5,135
	1904	56	4,456	58	483	3,915	2,485	5,359	537	1,696	3,709	7,887	4,178
	1899	50	4,226	50	169	4,001	2,485	4,428	272	1,579	3,301	6,758	3,457
Silverware and plated ware.....	1909	34	1,208	33	250	925	704	2,794	318	659	1,404	3,151	1,747
	1904	27	1,401	30	195	1,176	704	2,591	228	682	1,241	2,906	1,665
	1899	42	1,920	51	230	1,648	704	2,977	249	942	1,702	3,745	2,043
Slaughtering and meat packing.....	1909	80	3,933	81	605	3,187	7,896	22,275	1,055	2,591	69,090	79,288	10,198
	1904	51	2,229	67	315	1,847	7,896	10,614	485	1,540	43,133	48,386	5,253
	1899	63	2,186	78	330	1,778	7,896	8,829	387	1,213	34,549	39,195	4,646
Smelting and refining, not from the ore.	1909	5	218	9	60	140	100	2,309	94	109	6,682	7,219	537
	1904	4	161	6	27	128	100	1,115	69	76	4,186	4,558	372
	1899	4	192	6	73	113	100	719	93	94	1,148	1,745	507
Soap.....	1909	24	797	20	191	586	874	1,823	264	316	2,520	4,320	1,800
	1904	26	1,140	27	165	948	874	3,442	232	498	3,361	5,694	2,333
	1899	31	956	31	133	792	874	3,213	188	375	3,735	6,479	2,744
Stationery goods, not elsewhere specified.	1909	44	663	42	171	450	229	971	190	239	639	1,499	860
	1904	32	608	28	107	473	229	983	108	213	631	1,320	689
	1899	29	631	33	79	519	229	958	70	220	563	1,347	784
Steam packing.....	1909	15	159	9	30	120	140	252	47	82	140	381	241
	1904	9	109	9	7	93	140	76	9	41	83	190	107
	1899	11	69	14	24	31	140	128	34	23	56	204	148
Stereotyping and electrotyping.....	1909	34	1,036	26	220	790	1,180	1,054	300	771	547	1,961	1,414
	1904	28	833	36	120	677	1,180	1,033	137	507	321	1,350	1,059
	1899	26	567	29	70	468	1,180	604	66	339	209	860	631
Stoves and furnaces, including gas and oil stoves.	1909	16	586	14	112	460	391	1,141	164	364	744	1,579	835
	1904	14	418	14	58	346	391	911	77	221	410	1,051	641
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Surgical appliances and artificial limbs.	1909	38	374	37	88	240	77	516	100	154	220	771	551
	1904	35	464	32	67	365	77	434	63	198	206	705	557
	1899	37	224	40	39	145	77	176	28	90	79	411	332
Tobacco manufactures.....	1909	1,341	23,112	1,430	1,804	10,878	1,783	29,447	2,423	9,194	22,585	54,880	32,235
	1904	1,500	27,140	1,642	1,447	24,051	1,783	39,198	1,476	10,272	18,460	47,749	29,289
	1899	1,220	21,991	1,384	942	19,666	1,783	15,154	1,239	8,409	13,725	37,431	23,706
Toys and games.....	1909	39	932	41	110	781	285	885	105	322	580	1,268	638
	1904	19	307	21	31	255	285	381	35	112	173	493	320
	1899	26	387	29	33	325	285	433	37	132	252	604	352
Type founding and printing materials.	1909	18	194	11	48	135	166	343	79	92	298	616	318
	1904	21	254	16	45	193	166	713	53	117	142	528	338
	1899	21	455	14	49	392	166	878	71	218	252	781	529
Umbrellas and canes.....	1909	122	2,088	154	229	1,705	472	2,018	223	805	3,454	5,530	2,076
	1904	87	1,726	120	190	1,416	472	1,215	157	592	2,809	4,594	1,735
	1899	88	.....	193	1,499	.....	472	1,501	150	578	3,198	4,992	1,794
Window shades and fixtures.....	1909	54	519	60	121	338	35	969	121	198	1,837	2,612	775
	1904	23	177	30	30	117	35	163	30	53	416	626	210
	1899	29	.....	29	200	.....	35	421	34	86	766	1,093	327
Wirework, including wire rope and cable.	1909	47	627	49	87	491	311	736	90	246	635	1,293	603
	1904	92	1,483	122	166	1,195	311	993	125	535	743	2,001	1,258
	1899	49	457	61	31	365	311	430	31	181	282	685	403
Wood, turned and carved.....	1909	60	594	81	52	461	423	454	63	339	333	1,069	636
	1904	68	412	86	12	314	423	298	12	216	175	599	424
	1899	77	472	93	16	363	423	259	12	226	182	623	441
All other industries.....	1909	1,294	28,795	1,293	4,923	22,579	23,771	66,885	6,295	13,903	52,023	90,342	33,819
	1904	1,180	26,895	1,345	3,250	22,300	23,771	46,500	3,510	11,635	47,679	78,569	30,890
	1899	1,171	.....	2,347	19,653	.....	23,771	53,001	2,785	9,895	39,294	63,852	24,558

1 Not reported separately.

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.					Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employ-ees.	Wage earners (average number).	Expressed in thousands.							
<b>NEW YORK CITY—Brooklyn Borough—All Industries.</b>	1909	5,218	145,222	5,495	15,844	123,883	147,580	\$302,337	\$21,146	\$68,328	\$235,132	\$417,223	\$182,091	
	1904	4,182	119,524	4,597	9,932	104,996		313,452	13,521	54,535	230,809	373,463	142,554	
	1899	4,301			6,826	87,446		263,471	9,097	42,341	206,335	313,617	107,238	
Artificial stone.....	1909	0	60	3	9	54	77	238	12	29	79	153	74	
	1904	4	239	1	21	217		416	35	202	150	499	340	
	1899													
Boxes, cigar.....	1909	7	42	9	3	30	1	19	1	11	25	47	22	
	1904	7	43	8	4	31		21	3	15	26	61	35	
	1899	7	79	10		69		47		33	43	105	62	
Brass and bronze products.....	1909	43	1,448	37	171	1,240	1,074	2,028	217	721	1,418	3,176	1,758	
	1904	36	1,005	39	125	842		1,195	125	441	588	1,462	874	
	1899	36	627	44	33	550		724	32	251	688	1,182	494	
Bread and other bakery products.....	1909	853	5,550	884	872	3,794	1,035	5,051	654	2,745	10,287	16,905	6,018	
	1904	767	4,527	789	207	3,471		3,590	189	2,242	7,472	12,453	4,981	
	1899	805	3,901	819	294	2,848		3,251	205	1,711	4,802	9,030	4,228	
Canning and preserving.....	1909	20	227	18	43	160	168	474	46	66	666	935	269	
	1904	14	204	11	17	236		333	34	93	360	1,108	248	
	1899	20			47	302		1,734	37	101	546	923	377	
Carpets, rag.....	1909	6	31	6	5	20	7	17	4	13	15	49	34	
	1904	6	32	7		25		16		11	13	39	26	
	1899	10	19	10		9		7		3	5	15	10	
Carriages and wagons and materials..	1909	66	678	80	34	564	656	1,030	37	380	406	1,126	720	
	1904	69	749	80	30	633		800	30	401	395	1,115	720	
	1899	71		13		544		841	13	325	360	936	625	
Chemicals.....	1909	19	1,215	9	224	982	3,151	7,377	413	703	8,401	10,827	2,426	
	1904	18	984	10	162	812		4,610	288	460	5,079	7,978	1,999	
	1899	17	451	8	83	390		2,107	118	210	2,091	3,574	883	
Clocks and watches, including cases and materials.	1909	7	1,379		99	1,280	441	3,095	151	674	1,050	2,603	1,553	
	1904	5	284	3	21	260		785	37	192	669	978	300	
	1899	8	408	6	24	378		641	43	250	960	1,453	493	
Clothing, men's, including shirts.....	1909	563	17,957	749	546	16,062	2,530	6,676	572	8,543	6,172	10,243	13,071	
	1904	377	9,959	465	104	9,300		2,428	323	3,913	2,777	9,050	6,273	
	1899	505		102		7,327		2,250	143	3,065	1,675	6,522	4,947	
Clothing, women's.....	1909	290	7,239	370	338	6,525	1,096	2,854	310	2,792	3,075	8,508	4,533	
	1904	153	3,625	203	103	3,319		1,118	86	1,222	1,632	3,620	1,988	
	1899	125	2,846	149	93	2,604		900	78	987	1,266	3,233	1,967	
Cordage and twine and jute and linen goods.	1909	6	4,576		178	4,398	9,377	10,008	267	1,589	4,188	7,264	3,076	
	1904	6	2,675		129	2,546		6,108	211	1,025	5,238	8,187	2,929	
	1899	6			72	2,302		5,145	154	848	5,205	7,311	2,106	
Cutlery and tools, not elsewhere specified.	1909	19	238	19	29	190	106	279	21	91	175	362	187	
	1904	18	119	24		95		150		58	45	156	111	
	1899	10	151	22	5	124		209	5	81	42	202	160	
Dyeing and finishing textiles.....	1909	11	433	5	53	375	597	611	118	172	271	716	445	
	1904	5	236	8	31	197		326	81	74	67	313	246	
	1899	6	162	10	13	139		303	12	63	43	194	161	
Electroplating.....	1909	13	88	20	1	67	95	41	1	38	18	96	78	
	1904	0	84	15	7	62		40	3	35	18	84	66	
	1899	9		1		65		28		34	17	73	56	
Fancy articles, not elsewhere specified.	1909	28	635	25	60	541	353	747	96	280	596	1,288	692	
	1904	17	363	23	37	393		320	33	139	208	491	283	
	1899	17	338	24	30	284		245	29	90	152	371	219	
Food preparations.....	1909	36	617	35	128	454	643	743	151	171	1,064	1,697	633	
	1904	31	431	44	32	355		439	38	108	533	852	319	
	1899	30	382	44	24	314		560	17	104	611	889	278	
Foundry and machine-shop products.	1909	305	13,096	244	1,897	10,955	14,845	43,016	2,723	7,679	9,081	28,137	19,056	
	1904	263	13,178	262	1,512	11,404		35,813	1,988	7,335	8,994	26,078	17,084	
	1899	277		965		11,511		30,613	1,300	6,526	10,998	25,411	14,415	
Fur goods.....	1909	17	448	17	80	351	103	809	64	160	705	1,193	488	
	1904	15	268	17	33	218		590	34	120	384	666	232	
	1899	30	350	37	49	264		633	43	154	415	795	380	
Furnishing goods, men's.....	1909	16	578	20	74	484	67	710	68	170	487	856	369	
	1904	15	1,050	20	86	944		541	48	237	847	1,331	494	
	1899	10			29	457		284	17	147	389	635	246	
Furniture and refrigerators.....	1909	79	2,778	109	236	2,433	2,422	3,208	317	1,467	2,857	5,750	2,993	
	1904	59	1,875	88	116	1,671		1,735	167	900	1,273	2,946	1,673	
	1899	40	1,546	59	94	1,393		1,273	107	688	1,200	2,614	1,414	
Furs, dressed.....	1909	36	662	51	38	573	837	407	42	394	183	845	662	
	1904	24	460	33	11	416		224	16	306	81	575	494	
	1899	21	316	27	8	281		273	10	170	146	426	280	

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

5 Excluding statistics for three establishments, to avoid disclosure of individual operations.

6 Excluding statistics for five 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>NEW YORK CITY—Brooklyn Borough—Continued.</b>													
Gas and electric fixtures and lamps and reflectors.	1909	27	906	29	137	740	564	\$1,269	\$189	\$421	\$700	\$1,571	\$371
	1904	<sup>1</sup> 10	878	16	91	571	.....	775	110	285	434	1,108	624
	1899	23	518	25	68	425	.....	745	73	230	235	683	448
Gas, illuminating and heating.....	1909	4	2,251	.....	532	1,719	7,936	49,607	637	1,303	2,795	9,492	6,697
	1904	3	2,103	.....	412	1,691	.....	40,738	436	1,261	2,150	7,541	5,391
	<sup>2</sup> 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Glass.....	1909	6	580	3	37	540	220	541	48	275	157	624	407
	1904	7	981	4	42	935	.....	894	60	500	405	1,196	791
	1899	7	995	4	39	952	.....	714	40	415	268	868	600
Glass, cutting, staining, and ornamenting.	1909	36	905	42	51	812	240	607	70	502	443	1,301	853
	1904	28	691	43	29	619	.....	220	30	367	270	850	580
	1899	28	350	34	19	297	.....	165	15	153	189	483	294
Hair work.....	1909	6	77	8	2	67	.....	70	.....	20	49	101	52
	1904	4	38	4	.....	34	.....	38	.....	7	13	28	15
	1899	8	.....	.....	2	25	.....	20	1	8	11	36	25
Hats, fur-felt.....	1909	7	1,303	4	99	1,200	583	2,225	132	718	1,296	2,657	1,361
	1904	7	1,294	3	67	1,224	.....	2,067	83	786	901	2,657	1,096
	1899	4	1,289	4	49	1,286	.....	1,387	122	799	710	1,899	1,189
Hosiery and knit goods.....	1909	<sup>1</sup> 119	4,369	128	291	3,940	1,306	5,734	440	1,771	5,144	9,350	4,206
	1904	<sup>2</sup> 58	3,081	70	57	2,954	.....	3,620	100	1,093	2,102	4,132	2,030
	1899	40	1,544	49	07	1,428	.....	1,634	92	561	1,088	2,126	1,038
House-furnishing goods, not elsewhere specified.	1909	9	140	10	12	118	80	229	12	50	206	350	144
	1904	6	184	5	18	161	.....	213	18	77	219	396	177
	1899	11	446	15	<sup>4</sup> 44	387	.....	378	27	146	303	610	307
Ice, manufactured.....	1909	12	239	3	31	205	5,060	1,350	96	160	213	666	453
	1904	8	118	1	18	99	.....	847	23	68	89	261	172
	1899	10	104	4	18	82	.....	659	17	55	82	280	198
Instruments, professional and scientific.	1909	19	368	24	66	278	355	528	79	162	153	522	369
	1904	18	331	22	32	277	.....	416	39	164	123	420	297
	1899	24	338	36	31	271	.....	325	26	163	84	365	281
Kaolin and ground earths.....	1909	4	53	1	8	44	229	77	11	22	96	155	59
	1904	4	134	5	13	116	.....	239	23	66	204	359	155
	<sup>2</sup> 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Leather goods.....	1909	52	495	57	48	390	70	650	50	167	464	954	490
	1904	<sup>1</sup> 31	288	40	6	242	.....	210	6	96	179	376	197
	1899	34	.....	.....	6	218	.....	148	4	87	149	338	189
Leather, tanned, curried, and finished.	1909	11	396	12	28	356	737	682	34	170	764	1,125	361
	1904	12	520	13	39	468	.....	1,227	46	216	1,190	1,014	424
	1899	9	.....	.....	17	601	.....	1,293	23	279	1,882	2,560	678
Liquors, malt.....	1909	29	2,029	5	316	1,708	9,120	25,155	1,188	1,468	3,694	14,660	10,966
	1904	35	2,145	5	395	1,745	.....	19,338	1,067	1,386	3,346	12,541	9,196
	1899	35	1,829	9	323	1,497	.....	15,740	795	1,202	2,232	11,381	9,149
Looking-glass and picture frames.....	1909	21	299	24	26	249	209	361	27	133	271	604	333
	1904	11	80	11	1	68	.....	84	1	31	79	153	74
	1899	17	.....	.....	8	64	.....	81	5	32	70	161	81
Lumber and timber products.....	1909	85	4,191	76	351	3,764	9,445	8,812	471	2,260	6,801	10,953	4,152
	1904	69	4,150	82	257	3,817	.....	7,540	330	2,001	4,666	10,156	5,490
	1899	<sup>3</sup> 68	2,857	77	163	2,617	.....	4,156	205	1,441	3,767	6,488	2,731
Marble and stone work.....	1909	74	1,135	72	96	967	1,953	1,930	151	877	1,129	2,786	1,667
	1904	51	1,008	67	71	870	.....	1,668	90	742	763	2,186	1,423
	1899	65	.....	.....	39	1,049	.....	1,787	55	772	1,018	2,477	1,459
Millinery and lace goods.....	1909	57	1,839	72	166	1,601	275	1,288	174	626	1,481	2,926	1,445
	1904	28	954	37	91	826	.....	491	61	270	431	1,009	578
	1899	21	643	24	19	600	.....	135	23	137	191	467	276
Mirrors.....	1909	6	179	5	21	153	196	214	27	87	184	362	178
	1904	4	123	4	14	105	.....	130	13	41	103	107	94
Paint and varnish.....	1909	63	2,440	40	704	1,636	5,627	11,861	1,193	999	10,430	15,743	5,813
	1904	55	2,249	46	417	1,786	.....	12,179	664	1,037	11,268	15,548	4,280
	1899	43	.....	.....	294	1,298	.....	9,476	624	706	6,832	9,393	3,061
Patent medicines and compounds and druggists' preparations.	1909	69	1,162	44	382	736	1,267	3,196	514	341	2,343	5,071	2,728
	1904	59	772	43	285	444	.....	2,824	389	237	926	2,876	1,950
	1899	53	1,631	50	311	1,270	.....	4,740	402	524	3,726	6,261	2,535
Printing and publishing.....	1909	304	8,021	328	1,333	6,360	5,134	15,259	1,597	3,926	5,178	14,436	9,288
	1904	<sup>2</sup> 225	5,457	239	772	4,446	.....	10,899	952	2,625	2,813	9,097	6,284
	1899	186	4,423	212	531	3,680	.....	6,133	573	1,778	1,882	6,050	4,168
Shipbuilding, including boat building.	1909	22	2,286	20	86	2,180	6,057	4,808	155	1,368	1,280	4,531	3,251
	1904	<sup>1</sup> 30	834	38	49	747	.....	999	64	519	503	1,428	925
	1899	145	1,095	60	37	968	.....	1,681	45	607	671	1,760	1,089

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

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

<sup>3</sup> 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>NEW YORK CITY—Brooklyn Borough—Continued.</b>													
Show cases.....	1909	8	283	10	32	241	337	\$314	\$48	\$132	\$254	\$502	\$248
	1904	5	119	8	4	107	.....	73	7	61	123	235	112
	1899	5	125	7	4	114	.....	76	4	71	125	265	140
Silverware and plated ware.....	1909	8	644	10	118	516	440	1,000	80	280	461	1,048	587
	1904	14	302	5	21	366	.....	532	32	217	225	585	360
	1899	23	154	7	15	132	.....	80	9	64	48	179	131
Slaughtering and meat packing.....	1909	32	930	46	147	737	819	2,911	157	580	14,744	16,575	1,831
	1904	11	386	16	63	307	.....	1,432	72	246	6,739	7,500	741
	1899	15	243	21	26	196	.....	471	25	115	2,358	3,139	281
Tobacco manufactures.....	1909	556	2,868	587	115	2,166	290	3,651	156	894	2,494	6,570	4,076
	1904	573	1,867	603	43	1,221	.....	1,180	37	600	930	2,418	1,488
	1899	560	2,083	591	70	1,422	.....	1,397	60	654	1,358	3,706	2,348
Vinegar and cider.....	1909	4	57	2	15	40	75	133	13	20	83	131	48
	1904	4	50	4	6	40	.....	96	4	16	63	116	53
	1899	4	45	4	2	39	.....	132	2	21	29	67	38
Wirework, including wire rope and cable.	1909	17	546	15	70	461	403	916	117	275	455	1,029	574
	1904	22	579	30	71	478	.....	829	90	293	380	1,007	618
	1899	16	255	18	29	208	.....	339	34	102	163	405	242
Wood, turned and carved.....	1909	19	366	21	26	349	385	437	39	140	273	610	337
	1904	16	35	17	5	63	.....	103	5	40	83	168	85
	1899	24	180	30	5	145	.....	193	3	81	98	268	160
All other industries.....	1909	1,086	43,864	1,081	5,311	37,472	48,467	127,054	6,961	19,278	118,978	178,042	69,664
	1904	857	45,376	960	3,005	40,811	.....	139,949	4,950	19,648	150,602	205,283	54,661
	1899	887	.....	.....	2,011	44,039	.....	156,898	3,410	15,237	144,522	184,979	40,457
<b>NEW YORK CITY—Queens Borough—All Industries.</b>													
	1909	771	27,495	745	2,859	23,891	47,721	\$145,307	\$4,407	\$14,169	\$113,200	\$151,680	\$38,480
	1904	513	16,669	507	1,257	14,905	.....	92,977	1,836	8,440	70,403	92,941	22,538
	1899	395	.....	.....	912	10,684	.....	67,420	1,264	5,534	23,354	35,428	12,074
Bread and other bakery products.....	1909	158	887	167	52	668	202	1,292	31	423	1,642	2,552	910
	1904	103	479	108	18	353	.....	384	8	209	812	1,231	469
	1899	105	.....	.....	20	290	.....	384	7	174	477	897	420
Clothing, men's, including shirts.....	1909	0	113	0	.....	104	36	44	.....	40	5	73	68
	1904	10	62	0	.....	53	.....	4	.....	21	3	35	32
	1899	0	.....	.....	.....	64	.....	14	.....	10	2	31	29
Foundry and machine-shop products..	1909	41	2,485	27	361	2,097	2,482	5,474	487	1,503	2,100	5,619	3,519
	1904	17	910	21	131	758	.....	1,601	159	426	329	1,328	999
	1899	13	.....	.....	25	332	.....	728	44	170	194	525	331
Glass.....	1909	3	368	.....	24	344	230	726	48	212	124	503	379
	1904	3	179	.....	19	160	.....	266	28	127	93	356	263
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hosiery and knit goods.....	1909	7	453	4	28	421	85	607	40	141	408	710	362
	1904	7	101	10	.....	91	.....	66	.....	32	65	123	58
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liquors, malt.....	1909	6	253	4	45	204	1,012	2,958	118	189	427	2,575	2,148
	1904	8	389	1	83	305	.....	3,027	160	260	614	3,004	2,590
	1899	7	.....	.....	51	204	.....	1,762	99	167	330	1,651	1,321
Lumber and timber products.....	1909	10	1,133	13	75	1,045	2,294	2,825	125	621	2,063	3,133	1,070
	1904	11	242	15	25	202	.....	348	29	119	320	563	234
	1899	13	.....	.....	14	215	.....	527	15	123	473	706	233
Musical instruments, pianos and organs and materials.	1909	4	929	5	30	894	852	2,443	41	674	421	1,346	925
	1904	4	860	4	43	813	.....	2,639	48	617	770	1,590	814
	1899	3	.....	.....	17	496	.....	1,435	33	335	203	771	568
Paint and varnish.....	1909	18	683	4	269	410	1,377	3,639	438	275	2,501	4,226	1,725
	1904	12	463	10	113	340	.....	1,927	163	187	1,444	2,432	888
	1899	11	.....	.....	120	291	.....	2,402	234	170	1,384	2,368	964
Patent medicines and compounds and druggists' preparations.	1909	10	386	2	151	233	231	787	187	121	784	1,608	824
	1904	8	53	1	13	39	.....	105	28	15	91	193	102
	1899	3	.....	.....	6	25	.....	20	10	12	61	174	113
Printing and publishing.....	1909	38	436	30	61	345	249	879	76	208	240	725	465
	1904	20	207	26	35	146	.....	210	36	78	91	280	189
	1899	18	.....	.....	23	106	.....	220	19	61	30	190	160
Shipbuilding, including boat building.	1909	13	309	14	33	262	411	418	36	184	152	406	254
	1904	10	256	10	18	228	.....	152	17	148	145	378	233
	1899	3	.....	.....	1	54	.....	47	.....	31	20	69	49
Silk and silk goods, including throwsters.	1909	8	1,944	3	104	1,837	477	3,316	165	870	2,249	4,206	1,657
	1904	8	1,493	5	67	1,421	.....	2,553	72	605	1,987	3,342	1,355
	1899	6	.....	.....	30	823	.....	1,719	54	344	897	1,633	736
Tobacco manufactures.....	1909	127	657	170	25	462	37	870	29	211	338	988	660
	1904	81	246	36	5	155	.....	234	5	65	110	306	196
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
All other industries.....	1909	310	16,459	293	1,601	14,565	37,746	110,029	2,586	8,488	99,746	123,000	23,254
	1904	203	10,729	201	687	9,841	.....	78,552	1,077	5,531	63,514	77,730	14,216
	1899	204	.....	.....	605	7,784	.....	68,153	748	3,919	19,283	26,413	7,130

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 Figures not comparable.



MANUFACTURES—NEW YORK.

871

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
<b>NEW YORK CITY—Richmond Borough—All industries.</b>	1909	180	7,494	157	901	6,436	19,738	\$33,983	\$1,549	\$3,734	\$18,367	\$29,701	\$11,334
	1904	169	6,435	159	681	5,595	.....	15,991	912	3,073	9,787	16,867	7,080
	1899	185	.....	.....	384	5,192	.....	10,430	571	2,277	6,445	13,017	6,572
Bread and other bakery products.....	1909	42	192	45	1	146	23	281	2	99	326	568	242
	1904	36	140	36	2	102	.....	96	1	63	244	386	142
	1899	45	.....	.....	18	99	.....	136	11	55	214	366	152
Liquors, malt.....	1909	3	262	.....	53	209	550	2,685	133	177	445	1,822	1,377
	1904	5	276	2	52	222	.....	2,430	145	193	482	1,427	945
	1899	5	.....	.....	50	203	.....	1,802	144	149	388	1,614	1,226
Printing and publishing.....	1909	16	139	15	12	112	86	183	11	65	33	173	140
	1904	15	104	17	17	70	.....	97	18	38	22	137	115
	1899	17	.....	.....	8	78	.....	96	6	45	23	119	96
Tobacco manufactures.....	1909	12	27	12	.....	15	5	36	.....	8	13	40	27
	1904	18	36	13	.....	18	.....	24	.....	9	16	40	24
	1899	17	.....	.....	.....	12	.....	31	.....	5	12	32	20
All other industries.....	1909	107	6,874	85	835	5,954	19,099	30,798	1,403	3,385	17,550	27,098	9,548
	1904	95	5,879	86	610	5,183	.....	13,344	748	2,770	9,023	14,877	5,854
	1899	101	.....	.....	308	4,800	.....	8,365	410	2,023	5,808	10,886	6,078
<b>ROCHESTER—All industries.</b>	1909	1,203	46,617	1,042	6,467	39,108	39,277	\$95,708	\$7,734	\$21,518	\$50,674	\$112,676	\$62,002
	1904	1,109	37,128	1,084	4,265	31,779	.....	69,807	4,529	14,702	37,818	81,109	43,191
	1899	1,221	.....	.....	3,061	28,049	.....	45,210	3,131	11,366	28,245	59,669	31,424
Baking powders and yeast.....	1909	5	14	6	5	3	7	12	5	1	11	28	17
	1904	5	10	7	2	1	.....	7	1	(*)	8	16	8
	1899	4	10	4	4	2	.....	16	3	1	6	15	9
Boots and shoes, including cut stock and findings.	1909	56	6,670	44	515	6,117	1,911	6,788	655	3,038	7,811	13,450	5,639
	1904	65	5,163	70	419	4,674	.....	3,752	409	2,090	5,117	9,155	4,038
	1899	60	5,159	76	404	4,679	.....	3,031	371	1,733	4,214	7,297	3,083
Boxes, cigar.....	1909	3	18	7	.....	11	20	14	.....	5	14	27	13
	1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1899	3	22	4	.....	18	.....	12	.....	7	12	28	16
Boxes, fancy and paper.....	1909	15	700	10	46	704	303	636	80	253	471	966	495
	1904	13	915	10	62	843	.....	611	64	259	267	836	569
	1899	12	785	12	34	739	.....	410	33	176	195	581	386
Brass and bronze products.....	1909	4	252	2	25	225	301	322	40	110	348	560	221
	1904	3	103	2	9	92	.....	455	8	47	154	239	85
	1899	4	60	9	6	45	.....	101	4	24	103	152	49
Bread and other bakery products...	1909	110	626	120	89	417	258	843	59	297	1,350	2,109	750
	1904	79	424	90	39	295	.....	493	39	173	712	1,145	433
	1899	98	429	112	44	278	.....	395	18	128	503	875	372
Buttons.....	1909	4	1,639	.....	216	1,423	1,126	1,964	253	538	529	1,821	1,292
	1904	3	475	.....	76	399	.....	475	65	146	123	527	404
	1899	4	402	2	27	373	.....	292	18	103	69	354	285
Carriages and wagons and materials...	1909	17	609	19	68	522	420	1,787	122	380	504	1,177	673
	1904	16	718	25	54	639	.....	1,568	70	377	560	1,230	670
	1899	13	.....	.....	54	449	.....	1,248	75	279	263	760	497
Clothing, men's, including shirts.....	1909	196	8,559	241	586	7,732	1,007	10,808	1,162	3,809	8,682	18,879	10,197
	1904	239	6,902	300	441	6,161	.....	7,891	743	2,545	6,982	14,949	7,907
	1899	307	5,293	377	244	4,672	.....	6,046	336	1,858	5,522	11,138	5,616
Clothing, women's.....	1909	4	92	1	16	75	21	67	11	30	93	153	60
	1904	7	120	4	17	99	.....	40	8	26	75	150	75
	1899	4	241	5	11	225	.....	94	9	40	88	185	97
Coffee and spice, roasting and grinding.	1909	6	144	1	30	113	192	232	38	43	511	673	162
	1904	3	112	.....	26	86	.....	272	30	36	362	493	131
	1899	3	36	1	12	22	.....	88	9	8	123	153	30
Confectionery.....	1909	16	697	13	78	606	441	880	102	228	1,016	1,927	911
	1904	8	619	2	44	573	.....	820	75	187	658	1,513	855
	1899	9	.....	.....	64	482	.....	378	93	141	570	1,156	586
Cooperage and wooden goods, not elsewhere specified.	1909	10	180	11	12	157	314	356	15	81	522	689	187
	1904	6	89	6	5	78	.....	143	4	44	121	185	64
	1899	13	.....	.....	3	130	.....	95	2	63	119	212	93
Cutlery and tools, not elsewhere specified.	1909	11	125	15	10	100	648	240	8	66	35	162	127
	1904	10	112	15	8	89	.....	179	6	46	46	122	76
	1899	6	60	9	4	56	.....	248	2	27	24	83	59
Electrical machinery, apparatus, and supplies.	1909	9	949	1	232	716	1,283	4,230	212	480	811	1,677	866
	1904	5	1,367	.....	182	1,185	.....	5,353	101	548	854	2,078	1,224
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Electroplating.....	1909	7	35	3	4	28	59	24	3	21	4	37	33
	1904	6	35	6	4	25	.....	18	4	14	14	44	30
	1899	6	.....	.....	3	57	.....	16	2	17	5	36	31
Flour-mill and gristmill products....	1909	10	152	1	41	110	2,708	1,054	55	75	3,066	3,381	315
	1904	10	136	5	24	107	.....	816	32	66	2,940	3,222	282
	1899	14	184	18	30	136	.....	806	34	74	2,624	3,011	387

<sup>1</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.  
<sup>2</sup> 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.  
<sup>3</sup> Less than \$500.  
<sup>4</sup> Figures can not be shown without disclosing individual operations.  
<sup>5</sup> 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
<b>ROCHESTER—Continued.</b>													
Food preparations.....	1909	6	44	4	13	27	42	\$75	\$9	\$13	\$68	\$116	\$48
	1904	3	9	1	2	6	.....	15	1	2	49	71	22
	1899	3	6	3	2	1	.....	13	1	(1)	9	17	8
Foundry and machine-shop products.	1909	89	2,784	60	359	2,365	2,618	6,093	436	1,619	1,967	5,744	3,777
	1904	* 70	1,970	45	188	1,737	.....	3,733	236	1,025	1,266	3,366	2,100
	1899	85	.....	.....	247	2,097	.....	4,642	290	1,127	1,447	4,411	2,964
Fur goods.....	1909	7	109	9	12	88	30	177	9	51	112	406	294
	1904	4	73	2	5	66	.....	90	5	35	44	133	89
	1899	5	87	6	12	69	.....	143	8	28	99	174	75
Furnishing goods, men's.....	1909	6	335	8	55	277	34	298	63	89	494	784	290
	1904	* 4	221	3	28	190	.....	240	22	60	284	504	220
	1899	5	299	7	34	258	.....	250	29	75	324	512	188
Furniture and refrigerators.....	1909	27	1,647	16	166	1,465	1,943	2,806	276	915	1,210	3,087	1,877
	1904	* 18	1,527	13	111	1,403	.....	1,804	163	742	849	2,365	1,516
	1899	25	1,678	26	134	1,518	.....	1,525	155	586	764	2,133	1,369
Gas and electric fixtures and lamps and reflectors.	1909	8	643	2	50	591	426	1,175	76	269	558	1,106	548
	1904	* 5	336	1	30	305	.....	425	51	121	271	679	408
	1899	3	346	1	26	319	.....	320	26	107	273	673	400
Glass, cutting, staining, and ornamenting.	1909	5	49	4	6	39	.....	42	6	27	50	104	54
	1904	3	25	4	3	18	.....	15	2	6	7	29	22
	1899	3	19	4	3	12	.....	24	1	7	4	23	19
Hand stamps and stencils and brands.	1909	4	21	5	2	14	4	20	1	7	15	36	21
	1904	3	11	4	.....	7	.....	15	.....	3	4	16	12
	1899	3	13	4	.....	9	.....	11	.....	6	8	20	12
Hats and caps, other than felt, straw, and wool.	1909	7	43	8	5	30	3	17	4	14	36	82	46
	1904	4	19	6	.....	13	.....	11	.....	7	16	34	18
	1899	6	17	6	1	10	.....	12	1	4	16	29	13
Ice, manufactured.....	1909	3	67	.....	14	53	580	250	10	40	28	137	109
	* 1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lasts.....	1909	4	140	2	14	124	255	212	23	83	94	273	179
	1904	5	79	3	9	67	.....	58	6	28	24	83	69
	1899	4	56	4	2	50	.....	43	2	26	18	70	62
Liquors, malt.....	1909	8	405	1	103	391	1,301	4,824	169	309	732	3,012	2,260
	1904	9	398	2	91	305	.....	4,009	137	225	604	2,174	1,570
	1899	13	523	5	114	404	.....	4,906	171	307	532	2,748	2,166
Looking-glass and picture frames.....	1909	9	211	7	20	178	107	328	31	106	95	281	186
	1904	11	307	8	28	271	.....	290	32	128	82	309	237
	1899	5	264	14	31	219	.....	253	43	100	81	288	207
Lumber and timber products.....	1909	22	1,098	10	107	981	2,935	2,302	130	511	1,485	2,455	970
	1904	28	949	18	70	861	.....	1,531	77	434	1,054	1,949	895
	1899	* 21	665	21	40	405	.....	717	44	236	527	961	434
Models and patterns, not including paper patterns.	1909	9	50	8	4	38	29	27	4	27	9	64	55
	1904	7	58	7	3	48	.....	139	3	30	14	71	57
	1899	10	51	10	2	39	.....	133	4	21	20	67	47
Musical instruments, pianos and organs and materials.	1909	4	118	2	12	104	168	241	13	63	120	234	114
	1904	3	133	3	27	103	.....	340	20	43	90	198	168
	1899	3	283	.....	15	268	.....	255	19	100	239	442	203
Patent medicines and compounds and druggists' preparations.	1909	32	245	20	109	116	83	610	127	48	324	531	507
	1904	31	321	25	126	170	.....	712	120	65	327	738	411
	1899	* 37	343	35	137	171	.....	760	104	51	294	943	649
Printing and publishing.....	1909	123	2,713	84	756	1,873	2,241	4,980	727	1,172	1,629	5,128	3,499
	1904	99	2,389	76	558	1,755	.....	3,825	410	954	1,128	3,734	2,666
	1899	84	2,011	84	329	1,508	.....	3,641	290	799	692	2,603	1,911
Slaughtering and meat packing.....	1909	15	50	20	5	25	120	105	4	14	112	158	46
	1904	10	38	16	.....	22	.....	80	.....	13	54	89	35
	1899	* 10	43	14	.....	29	.....	99	.....	15	124	193	69
Surgical appliances and artificial limbs.	1909	4	29	3	8	18	10	61	5	10	10	49	39
	1904	* 3	22	2	6	14	.....	18	5	8	8	34	26
	1899	3	.....	.....	8	12	.....	21	7	6	7	31	24
Tobacco manufactures.....	1909	94	325	102	14	209	15	385	18	108	189	512	323
	1904	100	833	111	61	661	.....	3,135	43	222	908	2,235	1,327
	1899	* 87	858	90	48	720	.....	593	98	226	881	3,040	2,159
Typewriters and supplies.....	1909	8	123	2	57	64	171	550	70	42	202	591	389
	1904	8	128	2	67	59	.....	230	71	38	91	335	244
	* 1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wood, turned and carved.....	1909	11	41	11	1	29	115	41	1	19	25	66	41
	1904	11	47	14	.....	33	.....	28	.....	20	10	50	40
	1899	9	40	10	1	29	.....	29	1	19	14	54	40
All other industries.....	1909	215	13,710	164	2,596	10,950	14,923	39,814	2,712	6,597	15,323	39,695	24,372
	1904	201	9,935	176	1,440	8,319	.....	26,083	1,460	3,859	11,741	25,949	14,208
	1899	228	.....	922	.....	7,364	.....	13,514	828	2,932	7,382	14,201	6,819

\* Less than \$500.

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

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

\* Figures can not be shown without disclosing individual operations.

MANUFACTURES—NEW YORK.

873

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
<b>SCHENECTADY—All industries.</b>													
	1909	134	17,728	120	2,677	14,931	49,181	\$51,816	\$3,086	\$10,002	\$21,952	\$38,165	\$18,213
	1904	103	15,216	129	771	14,316	.....	22,051	815	9,382	16,497	33,084	18,587
	1899	83	.....	.....	303	8,494	.....	13,606	297	4,966	9,925	17,605	7,680
<b>Bread and other bakery products.....</b>													
	1909	27	145	33	10	102	39	144	6	69	263	403	140
	1904	23	132	32	6	94	.....	67	3	54	160	314	154
	1899	17	.....	.....	20	47	.....	34	7	25	85	150	65
<b>Lumber and timber products.....</b>													
	1909	5	101	3	14	84	394	213	18	52	218	316	98
	1904	3	134	5	13	116	.....	327	13	68	375	559	184
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Marble and stone work.....</b>													
	1909	4	72	3	11	58	108	120	10	28	57	120	63
	1904	3	63	8	1	54	.....	95	1	35	33	87	54
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
<b>Printing and publishing.....</b>													
	1909	18	339	8	112	219	299	503	77	145	173	550	377
	1904	13	133	11	42	80	.....	195	26	63	55	208	153
	1899	11	.....	.....	12	67	.....	81	6	36	20	94	74
<b>Tobacco manufactures.....</b>													
	1909	20	83	29	1	53	.....	43	1	26	41	101	60
	1904	22	106	30	4	72	.....	88	4	41	36	113	77
	1899	11	.....	.....	1	44	.....	35	1	22	32	82	50
<b>All other industries.....</b>													
	1909	60	16,988	44	2,529	14,415	48,341	50,784	2,974	9,682	21,200	36,675	15,475
	1904	39	14,048	43	705	13,900	.....	21,279	868	9,121	15,838	31,803	15,065
	1899	44	.....	.....	270	8,336	.....	13,456	283	4,883	9,788	17,279	7,491
<b>SYRACUSE—All industries..</b>													
	1909	738	21,710	655	2,907	18,148	20,798	\$51,726	\$3,313	\$10,422	\$21,776	\$49,435	\$27,659
	1904	637	16,926	650	1,722	14,554	.....	35,653	1,954	7,116	16,082	34,687	18,605
	1899	630	.....	.....	1,284	11,809	.....	28,928	1,316	5,303	12,548	26,546	13,998
<b>Boxes, fancy and paper.....</b>													
	1909	4	174	3	7	164	53	122	6	49	87	164	77
	1904	4	139	3	4	132	.....	99	3	34	54	121	67
	1899	3	97	6	2	89	.....	82	1	22	32	71	39
<b>Brass and bronze products.....</b>													
	1909	10	236	9	24	203	164	522	92	131	387	663	296
	1904	7	114	8	8	98	.....	205	10	48	149	253	104
	1899	5	72	9	.....	63	.....	104	.....	38	136	201	65
<b>Bread and other bakery products.....</b>													
	1909	83	554	88	65	401	267	958	68	240	1,072	1,892	760
	1904	53	401	54	49	298	.....	824	39	153	720	1,280	563
	1899	61	345	72	52	221	.....	431	38	108	414	790	316
<b>Candles.....</b>													
	1909	5	317	2	40	275	107	925	57	104	688	1,092	404
	1904	4	270	2	27	241	.....	891	42	89	645	894	249
	1899	5	225	4	28	193	.....	612	35	68	426	605	179
<b>Carriages and wagons and materials...</b>													
	1909	13	272	17	10	245	293	564	18	170	268	593	325
	1904	11	343	13	9	321	.....	520	15	187	294	638	344
	1899	18	.....	.....	17	351	.....	425	20	165	346	633	287
<b>Clothing, men's, including shirts.....</b>													
	1909	59	1,921	74	217	1,630	161	2,010	210	694	1,718	3,461	1,743
	1904	52	1,513	69	136	1,308	.....	2,030	181	512	1,603	3,082	1,479
	1899	100	.....	.....	93	1,100	.....	2,026	81	404	1,452	2,830	1,378
<b>Clothing, women's.....</b>													
	1909	8	311	6	20	285	50	162	15	110	222	416	194
	1904	7	435	12	14	409	.....	165	11	106	218	445	227
	1899	8	282	9	12	201	.....	147	9	65	228	383	155
<b>Confectionery.....</b>													
	1909	7	207	7	28	172	177	209	26	63	329	498	169
	1904	5	131	4	11	116	.....	145	12	43	241	350	109
	1899	4	.....	.....	4	51	.....	75	3	21	107	155	48
<b>Cooperage and wooden goods, not elsewhere specified.</b>													
	1909	7	44	9	.....	35	35	67	.....	21	51	95	44
	1904	7	44	12	1	31	.....	50	1	17	35	76	41
	1899	6	50	6	.....	43	.....	43	1	22	33	70	37
<b>Copper, tin, and sheet-iron products..</b>													
	1909	9	380	5	36	339	298	925	55	203	681	1,091	410
	1904	10	125	11	8	106	.....	132	6	52	88	215	129
	1899	11	.....	.....	6	53	.....	64	2	29	66	124	58
<b>Electroplating.....</b>													
	1909	5	49	4	5	40	39	25	4	23	8	47	30
	1904	5	34	7	3	24	.....	12	1	12	6	31	25
	1899	4	.....	.....	.....	19	.....	6	.....	8	4	18	14
<b>Food preparations.....</b>													
	1909	11	225	12	56	157	320	594	76	70	615	1,105	490
	1904	8	159	5	34	120	.....	436	28	48	367	657	290
	1899	4	133	2	38	93	.....	258	39	29	455	790	335
<b>Foundry and machine-shop products.</b>													
	1909	72	3,093	48	317	2,728	3,594	5,874	427	1,518	2,276	5,691	3,415
	1904	58	2,244	63	214	1,967	.....	3,780	234	986	1,324	3,519	2,195
	1899	48	.....	.....	178	1,897	.....	3,405	181	869	1,349	3,013	1,664
<b>Furniture and refrigerators.....</b>													
	1909	17	412	14	32	366	500	699	41	197	286	662	376
	1904	18	509	12	40	457	.....	652	42	241	337	778	441
	1899	28	354	9	23	322	.....	485	23	150	210	554	344
<b>Gloves and mittens, leather.....</b>													
	1909	4	50	5	3	42	7	44	3	14	38	67	29
	1904	4	47	5	2	40	.....	36	2	15	61	90	29
	1899	5	40	6	3	31	.....	19	1	9	33	56	23

\* Figures can not be shown without disclosing individual operations.  
 † Excluding statistics for one establishment, to avoid disclosure of individual operations.  
 ‡ 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.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
			Expressed in thousands.										
<b>SYRACUSE—Continued.</b>													
Hosiery and knit goods.....	1909	5	421	7	31	383	330	\$950	\$33	\$131	\$587	\$909	\$332
	1904	5	496	8	18	470	330	563	21	104	608	872	261
	1899	5	300	9	16	284	330	346	18	70	326	526	200
Jewelry.....	1909	9	19	10	9	9	4	19	.....	7	10	41	31
	1904	6	14	6	.....	8	.....	11	.....	4	10	23	13
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Liquors, malt.....	1909	8	343	5	67	271	1,783	3,940	133	253	680	2,460	1,780
	1904	8	325	3	69	253	1,783	3,687	112	188	557	1,960	1,463
	1899	10	335	10	67	252	1,783	2,904	123	168	405	1,814	1,409
Lumber and timber products.....	1909	18	359	12	31	316	1,050	687	36	183	649	1,003	354
	1904	18	241	9	3	229	1,050	459	2	116	341	572	231
	1899	12	.....	.....	12	250	1,050	455	8	104	375	580	205
Models and patterns, not including paper patterns.	1909	6	40	5	7	28	38	31	4	20	8	45	37
	1904	4	16	4	.....	12	.....	21	.....	6	4	23	19
	1899	3	10	3	.....	7	.....	5	.....	5	3	19	16
Patent medicines and compounds and druggists' preparations.	1909	24	308	14	154	140	239	573	123	64	239	850	611
	1904	14	36	16	7	13	.....	66	6	4	35	118	83
	1899	10	26	9	11	6	.....	31	9	2	20	40	24
Printing and publishing.....	1909	84	1,110	73	314	723	821	1,870	251	444	611	2,032	1,421
	1904	67	884	59	249	576	821	1,315	212	336	368	1,479	1,111
	1899	49	822	42	107	673	821	1,123	102	342	304	1,075	771
Salt.....	1909	7	107	4	13	90	274	375	8	42	13	89	76
	1904	9	133	6	14	113	274	574	8	63	17	170	163
	1899	12	.....	.....	6	110	274	766	7	57	26	159	133
Tobacco manufactures.....	1909	80	571	89	28	454	58	555	32	247	403	941	638
	1904	84	571	93	21	457	58	539	26	222	264	734	620
	1899	72	499	75	29	395	58	375	26	168	280	604	384
All other industries.....	1909	183	10,187	133	1,402	8,052	10,125	29,026	1,600	5,424	9,850	23,508	13,658
	1904	177	7,702	166	781	6,755	10,125	21,441	940	3,539	7,732	16,248	8,516
	1899	167	.....	.....	559	5,045	10,125	14,701	589	2,379	5,518	11,430	5,912
<b>TROY—All industries.</b>													
Boxes, fancy and paper.....	1909	363	22,149	352	1,777	20,020	18,887	\$39,309	\$2,196	\$9,407	\$15,626	\$37,980	\$22,364
	1904	311	20,833	310	1,409	19,114	18,887	32,697	1,542	7,853	13,746	31,861	18,115
	1899	327	.....	.....	972	22,933	18,887	25,274	1,268	8,876	11,462	28,739	17,277
Bread and other bakery products.....	1909	7	373	10	15	348	255	241	18	155	179	434	255
	1904	4	229	5	5	219	255	137	14	81	81	235	154
	1899	4	.....	.....	6	238	255	171	4	90	118	302	134
Brick and tile.....	1909	4	88	4	4	80	315	143	4	41	12	90	78
	1904	5	72	5	3	64	315	162	3	27	16	70	54
	1899	6	.....	.....	4	70	315	100	2	31	13	67	54
Brushes.....	1909	18	622	13	45	564	380	655	60	274	345	959	614
	1904	15	729	19	19	691	380	490	30	208	243	659	416
	1899	.....	.....	.....	.....	.....	380	.....	.....	.....	.....	.....	.....
Carriages and wagons and materials...	1909	6	41	5	3	33	35	70	3	25	22	63	41
	1904	5	62	4	7	51	35	85	6	29	24	90	66
	1899	8	60	8	1	51	35	75	2	29	28	83	55
Clothing, men's, including shirts.....	1909	11	3,741	16	250	3,475	1,136	6,064	294	1,432	3,337	6,970	3,639
	1904	9	2,742	17	137	2,588	1,136	2,548	134	860	1,903	4,204	2,361
	1899	5	.....	.....	121	4,657	1,136	3,007	173	1,660	1,761	4,740	2,989
Confectionery.....	1909	6	40	6	10	24	25	38	7	10	37	67	30
	1904	5	47	6	13	28	25	19	5	11	60	97	37
	1899	3	.....	.....	9	27	25	24	7	9	22	46	24
Copper, tin, and sheet-iron products...	1909	10	88	9	11	68	25	121	8	34	50	123	78
	1904	4	75	3	11	61	25	140	10	29	42	103	66
	1899	4	.....	.....	3	36	25	71	4	17	56	94	38
Foundry and machine-shop products...	1909	28	1,028	28	117	883	1,446	2,889	170	597	710	1,953	1,243
	1904	23	1,068	21	113	934	1,446	2,476	156	554	677	1,803	1,128
	1899	29	.....	.....	110	1,069	1,446	2,934	134	617	732	2,009	1,277
Furnishing goods, men's.....	1909	21	10,370	16	578	9,776	2,419	11,948	706	4,049	4,780	13,639	8,859
	1904	21	10,051	25	603	9,423	2,419	11,211	550	3,307	4,249	11,272	7,023
	1899	23	.....	.....	353	11,005	2,419	7,506	522	3,951	3,962	10,433	6,471
Leather goods.....	1909	6	66	6	12	48	13	121	7	18	59	112	53
	1904	3	37	6	4	24	13	64	3	14	40	79	39
	1899	3	.....	.....	3	27	13	10	1	11	15	37	22

<sup>1</sup> Figures can not be shown without disclosing individual operations.

<sup>2</sup> Excluding statistics for two establishments, to avoid disclosure of individual operations.

<sup>3</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.

MANUFACTURES—NEW YORK.

875

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

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

INDUSTRY.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>TROY—Continued.</b>													
Liquors, malt.....	1909	10	434	6	99	329	1,382	\$3,797	\$188	\$243	\$649	\$2,406	\$1,757
	1904	9	383	.....	83	300	.....	3,248	155	212	614	2,123	1,514
	1899	9	.....	.....	71	303	.....	2,522	102	190	445	1,826	1,381
Marble and stone work.....	1909	9	49	13	4	32	90	87	2	36	31	88	57
	1904	7	46	12	2	32	.....	78	2	24	23	76	53
	1899	6	.....	.....	.....	35	.....	54	.....	17	21	62	41
Pottery, terra-cotta, and fire-clay products.	1909	3	141	.....	27	114	240	258	32	52	102	241	139
	1904	3	134	.....	22	112	.....	274	18	50	39	141	102
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing.....	1909	33	539	26	201	312	439	1,006	169	204	248	969	721
	1904	31	486	23	113	345	.....	740	99	206	170	782	606
	1899	33	.....	.....	42	367	.....	830	45	211	128	704	570
Tobacco manufactures.....	1909	37	361	51	29	281	.....	286	24	166	245	579	334
	1904	43	366	52	18	296	.....	226	16	156	214	533	319
	1899	44	.....	.....	8	247	.....	147	4	114	137	358	221
All other industries.....	1909	118	3,930	110	338	3,482	10,605	11,250	470	1,954	4,341	8,552	4,211
	1904	87	4,078	66	240	3,772	.....	10,543	333	1,978	4,905	8,806	3,901
	1899	114	.....	.....	208	3,753	.....	7,659	253	1,846	3,757	7,460	3,703
<b>UTICA—All industries.</b>													
	1909	317	14,634	276	1,205	13,153	21,874	\$27,786	\$1,550	\$5,864	\$16,846	\$31,199	\$14,553
	1904	333	12,154	335	937	10,882	.....	21,184	1,084	4,477	12,774	22,880	10,106
	1899	311	.....	.....	788	8,898	.....	17,898	786	3,276	8,194	16,479	8,285
Bread and other bakery products.....	1909	46	225	49	41	135	58	336	22	79	345	541	196
	1904	38	168	40	11	117	.....	214	7	58	250	405	155
	1899	36	189	37	28	124	.....	177	17	52	233	385	152
Carriages and wagons and materials.....	1909	7	59	10	2	47	70	76	1	29	21	67	46
	1904	7	143	9	7	127	.....	159	8	75	48	104	116
	1899	5	.....	.....	1	34	.....	34	.....	15	17	44	27
Clothing, men's, including shirts.....	1909	24	1,634	32	210	1,392	475	2,019	257	651	1,611	3,079	1,468
	1904	50	1,504	58	142	1,304	.....	1,921	182	515	1,598	2,943	1,345
	1899	58	1,470	72	151	1,247	.....	2,359	129	445	1,329	2,586	1,257
Foundry and machine-shop products..	1909	21	1,030	13	85	932	1,231	2,232	114	496	1,298	2,192	894
	1904	28	1,380	23	152	1,205	.....	2,604	193	637	1,177	2,708	1,531
	1899	19	1,287	15	106	1,106	.....	2,401	134	541	1,013	2,307	1,294
Gas and electric fixtures and lamps and reflectors.	1909	3	101	.....	12	80	105	252	14	46	98	184	86
	1904	3	57	2	8	47	.....	45	8	21	46	91	45
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Hosiery and knit goods.....	1909	15	4,694	4	127	4,563	3,625	5,908	235	1,751	4,605	8,054	3,449
	1904	15	3,369	7	154	3,208	.....	3,015	107	1,069	3,390	5,261	1,871
	1899	12	1,796	7	62	1,727	.....	1,680	67	1,727	1,528	2,514	986
Liquors, malt.....	1909	5	232	.....	60	172	794	1,766	91	127	351	1,393	1,042
	1904	5	169	.....	51	118	.....	1,004	62	99	263	933	670
	1899	8	162	8	34	120	.....	638	38	90	182	741	559
Marble and stone work.....	1909	9	66	11	4	51	250	154	3	40	91	166	75
	1904	4	73	7	5	61	.....	133	5	28	52	135	83
	1899	4	.....	.....	2	29	.....	44	1	17	47	85	38
Printing and publishing.....	1909	27	485	26	164	295	533	832	167	186	222	861	639
	1904	29	454	23	127	299	.....	607	137	172	168	736	568
	1899	28	.....	.....	109	320	.....	527	94	177	136	620	484
Slaughtering and meat packing.....	1909	3	23	3	6	14	55	112	3	11	141	167	26
	1904	3	34	7	6	21	.....	79	5	11	158	198	40
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tobacco manufactures.....	1909	43	229	50	18	161	64	302	21	86	169	453	284
	1904	47	255	56	20	179	.....	255	19	90	124	403	279
	1899	40	236	52	19	165	.....	207	15	73	116	371	255
All other industries.....	1909	114	5,856	78	476	5,302	14,614	13,807	622	2,462	7,694	14,042	6,348
	1904	104	4,548	98	254	4,196	.....	11,148	236	1,702	5,500	8,903	3,403
	1899	101	.....	.....	216	4,026	.....	9,771	240	139	3,593	6,826	3,233
<b>YONKERS—All industries.</b>													
	1909	158	13,746	150	885	12,711	16,978	\$58,769	\$1,298	\$6,726	\$43,202	\$59,334	\$16,132
	1904	106	10,347	104	464	9,779	.....	33,731	721	4,519	23,330	33,849	10,219
	1899	107	.....	.....	308	7,555	.....	12,239	437	3,264	9,541	17,304	7,763
Bread and other bakery products.....	1909	28	178	29	24	125	13	138	13	89	327	598	271
	1904	18	130	21	9	100	.....	109	4	67	243	395	152
	1899	17	98	18	5	75	.....	69	2	43	143	252	109
Copper, tin, and sheet-iron products..	1909	13	52	17	1	34	3	65	1	26	25	75	50
	1904	5	70	7	.....	63	.....	58	.....	45	51	126	75
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.	1909	10	1,559	9	204	1,346	1,952	4,206	227	925	1,057	2,837	1,780
	1904	9	961	7	99	855	.....	2,391	115	457	1,241	2,212	971
	1899	12	670	12	63	505	.....	1,013	49	352	798	1,382	584
Marble and stone work.....	1909	7	44	7	4	33	50	93	3	33	33	90	57
	1904	3	65	6	2	37	.....	33	3	49	15	80	65
	1899	3	42	4	1	37	.....	40	2	29	25	72	47

<sup>1</sup> Figures can not be shown without disclosing individual operations.  
<sup>2</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.  
<sup>3</sup> 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 AND CITY OR VILLAGE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
<b>YONKERS—Continued.</b>													
Patent medicines and compounds and druggists' preparations.	1909	4	137	4	52	81	66	\$1,932	\$129	\$36	\$190	\$393	\$643
	1904	4	129	4	49	80	66	1,961	172	31	234	953	719
	1899	4	121	0	35	80	66	174	115	31	222	745	523
Printing and publishing.....	1909	18	160	14	43	103	91	348	43	74	68	280	212
	1904	19	104	6	19	79	91	162	21	53	31	151	120
	1899	12	65	7	12	46	91	134	17	27	18	123	106
Tobacco manufactures.....	1909	17	32	19	.....	13	.....	21	.....	7	12	33	21
	1904	16	37	16	.....	21	.....	21	.....	9	10	31	21
	1899	17	29	17	.....	12	.....	16	.....	8	15	39	24
All other industries.....	1909	61	11,584	51	557	10,976	14,803	51,906	882	5,536	41,490	54,588	13,088
	1904	42	8,851	41	286	8,524	14,803	28,096	406	3,808	21,505	29,601	8,066
	1899	42	.....	.....	192	6,710	14,803	10,793	252	2,774	8,320	14,691	6,671

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

Amsterdam.....	1909	97	10,776	103	389	10,284	11,745	\$18,162	\$545	\$4,823	\$13,195	\$22,449	\$9,254
	1904	89	8,504	95	416	7,993	11,745	14,554	404	3,170	8,853	15,007	6,154
	1899	98	.....	.....	188	6,261	11,745	9,461	218	2,457	5,990	10,643	4,653
Auburn.....	1909	140	7,484	130	857	6,497	15,455	23,743	701	3,157	8,937	15,561	7,024
	1904	111	7,275	120	495	6,060	15,455	18,178	455	2,897	8,244	13,421	6,177
	1899	120	.....	.....	311	5,895	15,455	12,427	322	2,452	5,212	9,575	4,363
Batavia.....	1909	59	2,340	51	288	2,007	3,204	5,097	349	960	1,781	4,401	2,620
	1904	51	2,033	45	385	1,603	3,204	4,670	297	753	1,784	3,589	1,805
	1899	54	.....	.....	189	1,573	3,204	3,399	167	659	1,246	2,573	1,327
Binghamton.....	1909	206	7,997	239	985	6,823	7,742	14,214	1,062	3,084	8,726	17,114	8,388
	1904	241	6,514	247	631	5,930	7,742	11,827	589	2,425	6,421	13,907	7,456
	1899	219	.....	.....	465	5,011	7,742	8,654	460	1,891	5,363	10,539	5,176
Cohoes.....	1909	103	8,596	84	303	8,209	14,291	13,117	439	3,387	8,176	14,831	6,635
	1904	98	7,276	93	273	6,910	14,291	10,063	304	2,707	6,284	10,290	4,006
	1899	112	.....	.....	201	8,273	14,291	11,133	251	2,971	5,908	11,031	5,123
Corning.....	1909	45	2,289	48	167	2,074	1,486	3,216	191	1,038	864	3,050	2,186
	1904	57	2,583	58	170	2,355	1,486	2,658	194	1,148	1,075	3,084	2,009
	1899	49	.....	.....	113	1,900	1,486	1,818	139	740	920	2,273	1,353
Cortland.....	1909	51	2,022	46	220	2,356	6,061	5,460	284	1,302	3,574	6,395	2,821
	1904	53	2,487	44	161	2,282	6,061	4,491	187	1,117	2,598	4,574	1,976
	1899	46	.....	.....	112	1,412	6,061	2,730	125	609	1,796	3,064	1,268
Dunkirk.....	1909	57	3,301	43	502	2,756	5,194	7,079	549	1,414	3,208	6,576	3,368
	1904	38	3,056	34	227	3,395	5,194	5,771	260	2,003	4,749	9,909	5,180
	1899	41	.....	.....	110	2,533	5,194	4,134	118	1,336	3,015	6,226	2,211
Elmira.....	1909	154	4,425	136	642	3,647	6,672	10,830	735	1,882	3,590	8,067	4,477
	1904	142	3,714	126	380	3,208	6,672	6,237	366	1,465	3,001	6,303	3,307
	1899	144	.....	.....	271	3,570	6,672	5,091	242	1,491	3,902	6,597	2,686
Fulton.....	1909	45	3,014	34	181	2,799	17,963	11,033	250	1,298	4,857	7,867	3,010
	1904	.....	.....	.....	.....	.....	17,963	.....	.....	.....	.....	.....	.....
	1899	.....	.....	.....	.....	.....	17,963	.....	.....	.....	.....	.....	.....
Geneva.....	1909	50	1,824	42	256	1,520	2,705	4,104	307	792	2,991	5,154	2,183
	1904	54	1,812	44	188	1,580	2,705	6,441	217	805	2,990	4,052	1,956
	1899	49	.....	.....	126	1,180	2,705	2,280	150	505	1,660	2,716	1,066
Glens Falls.....	1909	68	3,048	69	205	2,774	6,772	6,226	289	1,223	2,309	4,877	2,568
	1904	49	2,235	57	126	2,052	6,772	3,290	164	721	1,292	2,825	1,533
	1899	57	.....	.....	162	3,101	6,772	4,055	156	950	1,850	3,994	2,135
Gloversville.....	1909	187	6,604	221	642	5,741	6,163	11,909	692	2,791	8,092	14,171	6,109
	1904	180	5,693	248	307	5,048	6,163	8,027	290	2,031	5,252	9,341	4,089
	1899	183	.....	.....	241	7,813	6,163	5,567	239	2,305	5,254	9,071	3,817
Hornell.....	1909	45	2,459	40	236	2,183	3,349	2,866	239	1,048	1,878	3,648	1,770
	1904	45	2,385	44	141	2,200	3,349	2,116	136	974	1,464	3,163	1,699
	1899	48	.....	.....	110	1,549	3,349	1,707	93	590	1,308	2,431	1,123
Hudson.....	1909	45	1,451	37	112	1,302	1,515	2,774	127	576	2,063	3,507	1,444
	1904	48	1,681	40	108	1,524	1,515	4,073	143	696	2,078	4,116	2,038
	1899	45	.....	.....	74	1,132	1,515	2,190	90	452	1,334	2,604	1,270
Ithaca.....	1909	81	1,105	72	160	873	3,045	2,978	144	439	840	1,920	1,080
	1904	67	1,120	70	177	873	3,045	2,771	191	424	819	2,080	1,261
	1899	62	.....	.....	97	861	3,045	2,523	78	426	656	1,501	845
Jamestown.....	1909	156	7,753	142	322	6,789	11,679	16,075	995	3,305	7,384	14,720	7,336
	1904	149	5,078	170	571	5,237	11,679	10,200	893	2,235	4,251	10,350	6,099
	1899	108	.....	.....	378	4,528	11,679	8,364	470	1,718	3,793	7,731	3,938
Johnstown.....	1909	138	3,009	198	222	2,589	3,410	5,204	176	1,175	3,925	6,674	2,649
	1904	100	2,745	151	168	2,426	3,410	3,680	140	943	2,561	4,543	1,932
	1899	115	.....	.....	127	3,695	3,410	3,589	118	1,153	2,985	5,123	2,138

<sup>1</sup> Excluding statistics for one establishment, to avoid disclosure of individual operations.  
<sup>2</sup> 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.  
<sup>3</sup> Figures not available.



MANUFACTURES—NEW YORK.

877

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

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

CITY OR VILLAGE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
			Total.	Proprietors and firm members.	Salaried employes.	Wage earners (average number).							
Expressed in thousands.													
Kingston.....	1909	99	3,845	93	471	3,281	4,648	\$5,024	\$411	\$1,366	\$2,582	\$5,986	\$3,404
	1904	96	2,981	94	251	2,636	.....	7,119	237	1,096	2,112	4,812	2,700
	1899	109	.....	.....	150	2,042	.....	3,211	148	925	1,903	3,952	2,049
Little Falls.....	1909	55	4,408	58	139	4,211	7,742	6,990	232	1,965	4,923	8,460	3,537
	1904	49	2,801	56	124	2,621	.....	4,514	144	1,034	2,535	4,471	1,936
	1899	52	.....	.....	106	2,980	.....	3,953	121	1,049	2,233	4,071	1,838
Lockport.....	1909	109	2,574	90	346	2,138	14,335	10,227	425	1,130	5,350	8,168	2,818
	1904	109	2,636	103	210	2,323	.....	6,123	255	3,316	5,808	2,492	2,492
	1899	124	.....	.....	224	2,369	.....	5,972	231	1,078	3,097	5,353	2,256
Middletown.....	1909	59	1,970	62	175	1,733	2,548	3,695	181	902	2,905	4,658	1,753
	1904	50	1,702	58	108	1,596	.....	2,298	104	740	1,955	3,356	1,401
	1899	51	.....	.....	58	1,396	.....	1,931	59	574	1,325	2,155	830
Mount Vernon.....	1909	90	1,492	76	209	1,207	1,590	3,202	209	802	1,286	3,376	2,090
	1904	54	904	51	183	670	.....	7,284	150	426	784	1,877	1,093
	1899	37	.....	.....	93	438	.....	4,057	78	224	328	910	582
New Rochelle.....	1909	42	882	39	108	735	620	1,377	118	482	814	1,669	855
	1904	28	595	23	55	517	.....	814	48	342	462	1,103	641
	1899	25	.....	.....	15	198	.....	392	12	110	278	508	230
Newburgh.....	1909	104	4,966	96	526	4,344	4,902	8,920	667	2,180	4,843	9,928	5,085
	1904	79	4,620	80	327	4,013	.....	6,508	479	1,789	3,276	7,036	3,700
	1899	93	.....	.....	281	3,074	.....	4,519	264	1,316	2,648	5,358	2,710
Niagara Falls.....	1909	156	7,214	117	1,008	6,089	95,792	37,239	1,441	3,588	14,271	28,652	14,381
	1904	85	5,132	54	504	4,574	.....	27,116	591	2,348	9,192	16,916	7,724
	1899	93	.....	.....	326	2,840	.....	14,344	384	1,318	4,838	8,540	3,652
North Tonawanda.....	1909	81	3,146	56	266	2,824	15,888	8,274	300	1,582	6,389	9,600	3,211
	1904	33	2,194	32	137	2,025	.....	4,825	170	894	4,534	6,499	1,965
	1899	34	.....	.....	125	1,656	.....	4,947	147	768	4,244	6,294	2,050
Ogdensburg.....	1909	75	1,463	61	143	1,250	3,404	2,617	148	517	3,508	4,948	1,440
	1904	55	1,064	46	89	929	.....	2,722	89	341	2,263	3,057	794
	1899	74	.....	.....	86	809	.....	1,064	68	306	1,501	2,261	760
Olean.....	1909	54	2,671	42	370	2,269	5,202	8,952	358	1,330	7,728	10,005	2,277
	1904	41	1,295	41	79	1,175	.....	4,972	110	624	3,297	4,677	1,360
	1899	47	.....	.....	115	1,793	.....	5,745	121	841	4,815	6,210	1,395
Ossining.....	1909	34	477	24	97	356	986	2,063	125	243	466	1,329	893
	1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oswego.....	1909	81	4,247	58	372	3,817	9,753	11,249	453	1,813	6,103	10,413	4,310
	1904	77	4,076	50	280	3,746	.....	6,710	331	1,462	4,717	7,592	2,875
	1899	75	.....	.....	251	3,457	.....	7,002	339	1,378	4,312	7,487	3,175
Peekskill.....	1909	52	2,384	46	233	2,055	3,133	3,828	340	1,241	2,042	7,888	4,946
	1904	40	2,158	45	156	1,957	.....	3,895	218	1,025	2,282	7,252	4,970
	1899	37	.....	.....	86	1,281	.....	1,427	95	620	761	1,783	1,022
Plattsburg.....	1909	41	1,243	33	161	1,049	5,739	2,694	158	513	1,745	3,138	1,393
	1904	39	876	40	96	750	.....	2,066	75	328	610	1,057	547
	1899	39	.....	.....	58	621	.....	1,872	39	214	524	1,043	519
Port Chester.....	1909	34	2,334	30	182	2,122	3,175	5,417	237	1,040	4,554	6,243	1,689
	1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Poughkeepsie.....	1909	111	4,037	102	636	3,299	3,326	10,231	847	1,659	3,807	9,151	5,284
	1904	108	4,229	105	349	3,775	.....	6,657	357	1,641	3,533	7,207	3,674
	1899	118	.....	.....	185	2,810	.....	5,182	231	1,236	2,981	6,577	2,596
Rensselaer.....	1909	33	842	28	51	763	1,263	2,146	161	364	1,166	2,296	1,130
	1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Rome.....	1909	119	3,995	112	250	3,633	8,844	8,903	355	1,851	10,203	14,423	4,220
	1904	89	3,479	83	187	3,209	.....	5,722	247	1,392	5,694	8,631	2,937
	1899	87	.....	.....	135	2,274	.....	3,509	147	800	3,462	5,549	2,087
Saratoga Springs.....	1909	39	1,065	30	202	833	1,718	4,350	251	464	883	2,337	1,454
	1904	35	668	28	50	590	.....	3,485	57	284	702	1,709	1,007
	1899	44	.....	.....	157	602	.....	1,490	120	211	678	1,334	656
Watertown.....	1909	107	3,834	87	456	3,291	13,543	18,662	592	1,798	3,821	8,527	4,706
	1904	85	3,365	74	271	3,026	.....	10,869	372	1,612	3,342	7,251	3,909
	1899	91	.....	.....	206	3,223	.....	7,938	267	1,589	3,708	6,888	3,180
Watervliet.....	1909	36	880	33	94	753	904	1,423	127	302	816	1,660	853
	1904	36	1,227	33	83	1,111	.....	1,353	115	470	839	1,738	899
	1899	41	.....	.....	62	1,000	.....	1,693	78	374	733	1,507	774
White Plains.....	1909	33	333	28	56	249	404	2,095	54	180	372	816	444
	1904	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> 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.

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

TABLE II.—DETAIL STATEMENT FOR

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, super- and managers.	Clerks.		Average number.	Wage earners.		Total.	16 and over.		Under 16.				
					Male.	Female.		Number.			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 All industries.....	44,935	1,203,241	47,569	31,305	87,404	32,982	1,003,981	Oct 1,003,162	Jan 945,356	(1)	(1)	(1)	(1)	(1)	1,997,666		
2 Agricultural implements.....	57	6,851	41	294	688	111	5,717	Mh 6,916	Aug 3,968	5,998	5,921	64	13	.....	10,744		
3 Artificial flowers and feathers and plumes.....	319	9,813	417	146	621	136	8,493	Oct 9,332	Jan 7,209	9,040	1,223	7,613	16	188	215		
4 Artificial stone.....	176	907	185	33	25	13	711	Aug 995	Jan 336	882	878	3	.....	.....	.....		
5 Automobiles, including bodies and parts.....	113	11,610	59	357	1,067	266	9,861	Dec 12,073	July 8,269	12,218	12,057	150	1	.....	1,122		
6 Babbitt metal and solder.....	24	349	18	31	78	35	192	Aug 201	Jan 181	193	193	.....	.....	.....	191		
7 Bags, other than paper.....	21	1,127	14	29	61	23	1,000	No 1,068	July 946	1,070	331	664	5	70	751		
8 Bags, paper.....	20	1,157	12	34	60	19	1,032	No 1,093	Jan 949	1,052	546	506	.....	.....	.....		
9 Baskets, and rattan and willow ware.....	109	1,486	179	41	22	7	1,237	Aug 1,465	Jan 950	1,427	1,073	350	4	.....	1,046		
10 Belting and hose, leather.....	28	924	22	41	216	41	604	Dec 691	Mh 542	698	693	21	4	.....	1,882		
11 Bicycles, motorcycles, and parts.....	20	636	15	24	23	16	568	My 673	Se 469	604	592	3	9	.....	1,988		
12 Blacking and cleansing and polishing preparations.....	88	1,188	58	93	240	139	658	My 696	Jan 614	676	311	359	6	.....	536		
13 Bluing.....	15	70	13	5	8	2	42	Je 45	Jan 37	44	20	22	.....	.....	15		
14 Boots and shoes, including cut stock and findings.....	296	23,815	293	502	759	634	21,627	Dec 22,755	Jan 20,655	22,857	14,548	7,847	255	207	10,456		
15 Boxes, cigar.....	56	1,725	67	31	81	15	1,531	Dec 1,670	Mh 1,470	1,686	861	770	15	40	1,180		
16 Boxes, fancy and paper.....	315	12,702	361	299	334	180	11,538	Dec 12,584	July 10,815	12,611	4,317	7,928	54	312	4,677		
17 Brass and bronze products.....	247	7,596	218	244	353	130	6,651	Dec 7,730	Jan 5,903	7,094	7,265	410	19	.....	13,397		
18 Bread and other bakery products.....	3,978	26,039	4,212	330	1,745	1,305	21,357	No 21,757	Fe 20,937	22,024	18,988	2,926	92	18	10,319		
19 Brick and tile.....	205	8,630	212	208	118	12	8,080	July 13,787	Fe 1,431	10,015	10,004	11	.....	.....	28,734		
20 Brooms.....	58	1,197	58	40	42	17	1,040	Mh 1,108	Jan 880	1,058	993	56	4	.....	661		
21 Brushes.....	113	2,222	127	59	133	46	1,857	No 1,987	July 1,707	1,988	1,385	546	44	13	1,049		
22 Butter, cheese, and condensed milk.....	1,552	4,930	1,483	271	234	76	2,866	Je 3,588	Jan 2,065	3,163	2,868	278	17	.....	16,629		
23 Buttons.....	165	6,877	206	121	272	162	6,126	Dec 6,493	Jan 5,567	6,540	3,554	2,007	36	162	3,911		
24 Candles.....	9	420	4	19	34	16	347	Dec 386	Aug 315	396	200	146	17	23	147		
25 Canning and preserving.....	790	8,818	879	293	458	113	7,075	Dec 15,475	Fe 2,058	17,198	7,540	9,483	102	73	12,409		
26 Carpets and rugs, other than rag.....	16	12,272	11	70	204	29	11,898	Dec 12,192	Jan 11,570	12,192	6,708	5,406	51	27	11,901		
27 Carpets, rag.....	34	272	33	9	24	6	200	Je 232	Jan 164	196	142	50	2	.....	850		
28 Carriages and wagons and materials.....	610	7,333	693	192	287	75	6,116	My 6,384	Se 5,925	6,206	6,101	105	.....	.....	10,029		
29 Cars and general shop construction and repairs by steam-railroad companies.....	69	18,003	.....	546	984	19	16,454	Dec 17,433	My 15,641	17,433	17,415	11	7	.....	21,423		
30 Cars and general shop construction and repairs by street-railroad companies.....	62	4,767	.....	134	145	8	4,480	Se 4,655	July 4,220	4,773	4,750	22	1	.....	4,367		
31 Cars, steam-railroad, not including operations of railroad companies.....	4	2,581	.....	24	154	16	2,387	Fe 2,929	July 1,593	2,907	2,880	27	.....	.....	3,345		
32 Cement.....	15	1,573	14	42	61	13	1,443	My 1,765	Jan 1,087	1,692	1,091	1	.....	.....	24,385		
33 Chemicals.....	74	6,869	19	228	714	162	5,746	Dec 6,130	Mh 5,480	6,133	5,932	177	7	7	116,197		
34 Chocolate and cocoa products.....	10	977	3	20	173	26	755	Se 830	Jan 654	794	540	253	1	.....	2,630		
35 Clocks and watches, including cases and materials.....	27	2,854	11	57	239	50	2,467	No 2,625	Jan 2,350	2,622	2,147	436	23	16	1,311		
36 Cloth, sponging and refinishing.....	25	729	32	22	61	10	604	No 631	Jan 563	621	595	26	.....	.....	329		
37 Clothing, men's, including shirts.....	2,983	104,567	4,213	1,160	5,927	1,399	91,363	Dec 95,637	Apr 88,298	97,788	57,225	40,143	98	322	13,821		
38 Clothing, women's.....	3,083	114,925	4,413	1,534	7,501	3,373	98,104	Oct 109,317	July 83,160	102,929	43,511	58,948	64	406	12,379		
39 Coffee and spice, roasting and grinding.....	90	2,394	101	99	576	108	1,519	Oct 1,679	My 1,450	1,632	1,061	469	2	.....	4,064		
40 Coffins, burial cases, and undertakers' goods.....	34	1,556	27	69	195	30	1,235	Mh 1,271	July 1,167	1,235	971	259	3	2	1,813		
41 Confectionery.....	249	10,110	237	245	773	201	8,570	No 10,264	July 7,765	9,799	3,924	5,679	12	184	7,966		
42 Cooperage and wooden goods, not elsewhere specified.....	364	3,164	415	61	43	34	2,611	Se 3,073	Jan 2,049	3,037	2,930	96	9	2	4,278		
43 Copper, tin, and sheet-iron products.....	636	17,153	663	500	926	375	14,639	No 15,945	Jan 13,100	16,045	14,033	1,914	77	21	13,108		
44 Cordage and twine and jute and linen goods.....	16	6,230	9	62	165	42	5,952	Mh 6,069	Je 5,716	5,991	2,781	3,165	21	24	15,056		
45 Cordials and sirups.....	38	493	36	22	118	23	294	Je 501	Dec 213	219	183	36	.....	.....	453		
46 Cork, cutting.....	32	928	29	26	27	11	835	Aug 910	Jan 745	812	424	383	2	3	692		
47 Corsets.....	47	2,787	46	46	204	55	2,436	Mh 2,584	My 2,304	2,430	280	2,138	1	11	523		
48 Cotton goods, including cotton small wares.....	47	11,032	23	126	175	45	10,663	Fe 10,881	Oct 10,502	10,848	5,995	4,563	216	84	33,354		
49 Cutlery and tools, not elsewhere specified.....	161	5,070	152	157	188	95	4,478	Dec 4,673	July 4,256	4,679	4,075	492	47	65	6,571		
50 Dairymen's, poultryers', and apiarists' supplies.....	31	1,250	30	41	273	104	802	My 988	July 664	744	729	14	.....	1	1,214		
51 Dentists' materials.....	15	379	10	22	55	26	266	Se 276	Apr 258	268	172	94	2	.....	221		
52 Dyeing and finishing textiles.....	81	5,782	63	131	247	84	5,252	Oct 5,571	Je 4,682	5,553	3,883	1,640	24	6	8,750		
53 Dyestuffs and extracts.....	18	579	7	38	84	32	418	Fe 444	Je 392	404	390	14	.....	.....	3,647		
54 Electrical machinery, apparatus, and supplies.....	217	22,819	95	875	2,090	787	18,972	Dec 21,912	Jan 16,658	22,503	19,345	3,102	55	1	53,313		
55 Electroplating.....	130	878	155	26	29	16	652	Dec 688	July 610	700	669	23	8	.....	842		
56 Emery and other abrasive wheels.....	10	894	3	29	127	16	719	Dec 869	Mh 612	874	695	176	.....	.....	960		
57 Enameling and japanning.....	17	100	18	2	2	2	76	Oct 89	July 68	71	53	18	.....	.....	88		
58 Engravers' materials.....	8	84	7	8	7	4	58	No 65	Fe 52	64	64	.....	.....	.....	177		
59 Fancy articles, not elsewhere specified.....	182	4,234	190	140	316	158	3,430	No 3,882	Je 3,180	3,735	2,371	1,284	46	34	2,785		
60 Fertilizers.....	15	1,041	8	28	75	22	908	Aug 1,143	No 671	686	686	.....	.....	.....	2,769		
61 Files.....	11	209	15	12	4	2	176	Dec 194	Jan 162	196	192	3	1	.....	324		

1 No figures given for reasons explained in the Introduction.







TABLE II.—DETAIL STATEMENT FOR THE

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, supts. and managers.	Clerks.		Wage earners.				Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number.		Male.		Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1 Photographic apparatus and materials.	42	5,180	23	127	628	320	4,088	Jy	4,288	Fe	3,708	4,275	3,106	1,131	35	3	6,782
2 Photo-engraving.	66	1,809	42	102	221	49	1,305	De	1,459	Ja	1,316	1,457	1,415	23	10	.....	470
3 Pipes, tobacco.	30	1,871	40	33	95	40	1,663	Oc	1,736	Au	1,607	1,664	1,429	222	4	9	803
4 Pottery, terra-cotta, and fire-clay products.	39	2,628	19	102	101	39	2,367	De	2,547	Ja	2,105	2,613	2,133	425	51	4	4,639
5 Printing and publishing.	4,426	94,893	3,732	4,052	16,007	7,982	63,120	De	66,147	Jy	61,199	66,390	51,021	14,722	507	140	53,978
6 Pumps, not including steam pumps.	22	486	17	28	22	11	408	De	455	Mh	384	456	454	2	.....	.....	719
7 Rubber goods, not elsewhere specified.	53	2,518	43	111	211	87	2,066	De	2,222	My	1,856	2,319	1,710	594	5	10	6,898
8 Salt.	33	1,686	20	59	72	10	1,525	Au	1,677	Ja	1,274	1,507	1,356	151	.....	.....	9,923
9 Saws.	15	456	13	15	34	15	379	Mh	451	My	328	341	305	36	.....	.....	1,658
10 Scales and balances.	16	582	10	19	68	32	453	No	508	Ja	374	507	502	2	3	.....	585
11 Screws, machine.	5	120	4	5	3	3	105	De	129	Ja	81	129	126	2	1	.....	190
12 Sewing machines, cases, and attachments.	13	170	7	15	25	9	114	De	178	Mh	90	179	179	.....	.....	.....	120
13 Shipbuilding, including boat building.	255	6,230	262	119	183	22	5,644	My	6,437	Fe	4,808	5,878	5,868	4	6	.....	13,835
14 Shoddy.	14	255	7	18	5	2	223	De	255	Ja	189	255	213	42	7	.....	1,982
15 Show cases.	21	495	20	23	22	9	415	De	441	Fe	384	441	432	7	1	1	616
16 Signs and advertising novelties.	67	1,035	64	63	62	35	811	No	844	Ja	748	876	734	133	9	.....	389
17 Silk and silk goods, including throwsters.	170	14,136	140	274	587	232	12,903	Mh	13,616	Jy	11,720	13,231	4,641	8,255	78	257	11,110
18 Silverware and plated ware.	53	3,678	45	97	351	120	3,065	No	3,663	Jy	2,625	3,373	2,705	550	17	5	2,819
19 Slaughtering and meat packing.	238	7,583	262	155	846	210	6,110	De	6,313	Au	5,893	6,260	6,082	172	4	2	13,936
20 Smelting and refining, not from the ore.	15	407	21	14	70	12	284	De	295	Ja	200	293	293	.....	.....	.....	1,595
21 Soap.	67	3,924	50	157	452	259	2,976	No	3,083	Jo	2,842	3,075	2,393	680	2	.....	5,873
22 Stationery goods, not elsewhere specified.	55	1,815	51	64	294	163	1,243	Ap	1,278	Ja	1,166	1,248	884	348	7	9	1,307
23 Steam packing.	36	1,295	21	49	282	42	901	De	1,050	Jy	811	1,051	948	100	3	.....	1,804
24 Stereotyping and electrotyping.	47	1,182	40	60	145	32	905	De	927	Au	884	927	918	3	6	.....	1,414
25 Stoves and furnaces, including gas and oil stoves.	58	4,957	22	169	407	112	4,247	No	4,604	Ja	2,930	4,413	4,396	10	7	.....	6,273
26 Surgical appliances and artificial limbs.	72	708	67	42	88	47	464	De	479	Ja	450	455	243	185	5	22	240
27 Tobacco manufactures.	3,371	36,197	3,609	568	1,518	393	30,019	De	31,850	Fe	28,882	32,730	16,881	16,564	147	138	2,667
28 Toys and games.	67	1,406	65	52	57	35	1,197	No	1,472	Ja	913	1,330	736	564	23	7	461
29 Type founding and printing materials.	27	281	23	21	25	10	202	Jy	223	Ja	176	209	183	26	.....	.....	281
30 Typewriters and supplies.	43	5,160	22	138	343	119	4,538	Ap	4,967	Au	3,111	4,751	4,082	662	7	.....	2,767
31 Umbrellas and canes.	142	2,353	179	51	145	59	1,919	No	2,116	Ja	1,749	2,051	1,118	925	8	.....	507
32 Vinegar and cider.	277	913	304	41	31	8	529	No	1,457	Mh	248	1,188	1,017	162	9	.....	5,719
33 Wall paper.	13	1,889	2	43	206	36	1,602	No	1,873	Au	915	1,910	1,682	245	7	6	1,596
34 Wall plaster.	31	1,550	9	67	110	27	1,337	My	1,436	Ja	1,193	1,365	1,347	18	.....	.....	7,356
35 Whips.	8	190	8	4	11	5	162	Mh	190	De	81	181	110	71	.....	.....	264
36 Window shades and fixtures.	75	1,172	74	42	106	39	911	My	948	Se	858	986	789	197	.....	.....	1,555
37 Wire.	7	1,521	1	21	53	7	1,439	De	1,593	Ja	1,320	1,594	1,447	140	5	2	5,465
38 Wirework, including wire rope and cable.	106	1,988	94	89	115	41	1,649	No	1,753	Ja	1,511	1,744	1,504	166	14	.....	2,402
39 Wood distillation, not including turpentine and rosin.	29	668	10	40	17	8	593	Fe	651	Au	501	646	646	.....	.....	.....	599
40 Wood, turned and carved.	150	1,594	194	45	55	21	1,279	No	1,452	Au	1,197	1,389	1,257	129	3	.....	3,223
41 Woolen, worsted, and felt goods, and wool hats.	64	9,907	66	154	185	42	9,460	Je	9,950	Ja	8,771	9,596	5,333	4,068	85	110	22,374
42 All other industries <sup>2</sup> .	1,716	41,179	1,808	1,219	3,501	775	33,876	.....	.....	.....	.....	.....	.....	.....	.....	.....	89,615

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

<sup>2</sup> All other industries embrace—

Artists' materials.	13	Charcoal.	4	Glue.	11
Awnings, tents, and sails.	132	China decorating.	9	Graphite and graphite refining.	1
Axle grease.	11	Clothing, horse.	8	Grease and tallow.	43
Baking powders and yeast.	28	Clothing, men's, buttonholes.	98	Haircloth.	2
Beet sugar.	1	Coke.	2	Hamrocks.	2
Belting and hose, woven and rubber.	5	Drug grinding.	9	Hones and whetstones.	2
Billiard tables and materials.	18	Engraving and desiniking.	83	Horseshoes, not made in steel works or rolling mills.	2
Bone, carbon, and lamp black.	1	Engraving, wood.	28	Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	10
Butter, reworking.	1	Explosives.	3	Iron and steel, doors and shutters.	11
Card cutting and designing.	22	Flavoring extracts.	107	Iron and steel forgings.	22
Carriages and sleds, children's.	16	Fuel, manufactured.	5	Iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills.	6
Cars, street-railroad, not including operations of railroad companies.	1	Galvanizing.	1		
Cash registers and calculating machines.	3	Glucose and starch.	5		

MANUFACTURES—NEW YORK.

883

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.		
\$15,410,350	\$10,021,660	\$345,959	\$749,890	\$2,435,327	\$113,172	\$4,853,532	\$35,347	\$42,511	\$2,772	\$2,343,150	\$18,763,929	\$13,797,225
1 1,034,557	2,610,232	240,945	185,137	1,350,603	50,023	504,943	90,326	1,576	18,252	174,067	2,908,409	2,353,443
2 2,207,358	2,602,579	49,758	127,375	757,485	22,034	1,409,348	32,197	342	1,020	202,190	3,212,262	1,779,680
3 5,342,721	2,946,384	219,819	139,390	1,295,514	271,101	603,571	22,997	32,653	5,722	355,617	3,403,496	2,528,824
4 158,366,653	188,269,238	11,505,535	21,745,628	43,559,305	1,936,855	54,557,405	4,122,786	517,924	16,069,882	33,353,918	216,946,482	160,452,222
5 1,089,209	679,007	50,174	26,957	227,945	11,200	284,251	3,207	4,206	2,040	68,967	817,090	521,579
6 7,329,973	8,044,837	403,867	316,540	1,058,398	115,414	5,543,196	40,421	21,271	15,448	530,282	8,783,693	3,125,083
7 14,552,287	2,467,250	143,440	85,214	705,132	410,178	779,013	.....	35,157	52,716	190,400	2,896,826	1,701,635
8 960,712	800,805	49,878	32,385	208,605	18,259	436,273	17,487	5,626	1,600	96,792	973,641	519,109
9 1,947,777	936,838	85,090	67,403	283,592	16,592	403,510	19,978	8,601	5,120	46,952	1,179,584	759,482
10 206,358	140,403	7,366	4,877	52,520	4,572	52,888	2,790	1,417	.....	13,973	176,765	119,305
11 552,440	210,955	24,317	15,395	80,407	3,351	54,530	9,488	170	271	23,026	237,480	179,599
12 14,084,162	9,733,787	304,759	238,171	3,779,531	166,035	3,758,631	138,697	71,868	89,907	1,186,188	11,417,189	7,492,523
13 965,363	800,326	27,919	5,346	106,293	17,178	606,808	3,240	3,596	.....	35,946	869,364	245,373
14 509,320	704,281	51,860	23,004	231,583	12,761	393,656	24,155	1,362	75	25,825	900,043	493,626
15 946,286	1,567,951	117,135	70,191	496,579	17,330	642,746	67,733	1,427	5,251	143,509	1,772,415	1,112,339
16 20,972,116	23,853,493	709,385	783,008	5,385,355	249,977	13,698,612	325,414	48,145	1,269,206	1,383,491	26,518,821	12,570,232
17 7,487,630	7,018,015	291,366	373,682	1,899,252	72,180	3,516,679	70,978	10,358	9,278	768,242	7,859,346	4,270,487
18 34,585,822	120,932,034	547,403	1,142,417	4,387,005	507,208	109,661,023	239,879	243,327	23,575	4,180,794	127,130,051	16,961,817
19 3,257,285	8,088,545	32,375	97,911	191,242	45,643	8,220,916	10,906	4,447	.....	79,105	9,017,639	751,080
20 16,708,332	20,156,035	295,507	533,777	1,435,571	290,146	15,322,236	116,323	62,814	6,325	2,093,436	23,582,977	7,970,595
21 2,762,337	3,409,348	152,116	377,585	635,580	21,851	1,587,987	50,049	8,408	.....	557,466	3,344,380	1,734,542
22 3,774,644	3,542,495	180,852	308,811	463,733	53,904	1,916,582	17,264	11,273	104	589,912	3,783,236	1,812,690
23 1,200,210	2,038,390	143,855	163,789	851,946	74,202	551,940	96,863	1,436	8,342	141,017	2,227,687	1,601,945
24 11,479,494	8,387,503	430,540	474,350	2,746,399	215,999	3,326,402	86,627	56,445	11,245	1,039,496	8,973,730	5,431,329
25 969,101	1,248,002	90,660	97,636	276,472	15,087	492,105	52,163	1,508	4,407	217,964	1,490,235	983,043
26 41,862,854	65,786,577	1,220,156	1,088,426	13,666,141	189,919	31,151,487	942,327	9,025,649	19,683	7,582,789	76,061,552	45,320,146
27 1,810,500	1,637,005	74,302	63,007	457,428	18,732	827,964	64,144	2,455	10,783	117,590	1,849,225	1,002,529
28 676,657	697,500	54,516	31,112	139,818	10,560	373,179	31,611	1,661	986	54,057	822,752	439,013
29 12,480,596	7,105,884	404,749	397,175	3,020,484	77,493	1,803,042	35,886	32,050	1,000	1,334,005	10,298,038	8,417,508
30 2,239,978	5,723,503	103,757	144,591	907,206	37,636	4,093,574	149,167	1,540	14,575	271,457	6,426,667	2,295,457
31 5,035,742	1,945,284	55,325	24,947	234,192	33,856	1,446,255	13,148	12,745	585	124,229	2,246,322	766,210
32 5,220,889	4,622,083	146,990	266,976	806,369	55,314	2,418,994	60,276	21,793	31,344	824,027	5,276,870	2,802,562
33 5,790,576	4,002,204	205,246	146,678	774,924	169,578	2,265,351	13,469	27,876	31,376	377,796	4,493,963	2,069,034
34 246,363	320,069	5,800	8,200	69,485	3,663	156,747	5,520	1,090	.....	69,564	341,287	180,877
35 3,340,914	5,034,670	114,408	123,043	435,193	35,419	3,910,864	60,820	11,031	72	343,820	5,475,752	1,529,469
36 5,477,199	9,321,121	155,552	62,469	758,079	185,851	7,637,667	14,818	18,028	.....	488,657	10,065,431	2,241,913
37 3,760,420	5,346,652	209,771	129,071	843,251	75,198	3,710,246	70,814	11,651	14,298	282,352	5,875,153	2,089,709
38 3,298,055	3,143,341	65,340	14,162	262,095	604,464	1,914,057	75	14,362	.....	268,786	3,401,722	883,201
39 1,612,183	1,978,760	58,249	69,696	728,547	46,781	871,805	65,042	2,872	3,214	132,584	2,421,621	1,503,085
40 25,207,821	21,379,217	468,652	349,907	4,144,918	370,969	14,373,059	31,722	79,289	170,876	1,389,825	23,739,421	8,995,393
41 194,761,252	279,923,145	3,512,379	4,132,024	19,179,919	5,533,122	223,807,991	975,516	8,796,488	165,575	13,820,131	298,514,230	69,173,117

<sup>2</sup> All other industries embrace—Continued.

Iron and steel pipe, wrought.....	1	Phonographs and graphophones.....	3	Tin foil.....	5
Labels and tags.....	25	Pulp goods.....	3	Upholstering materials.....	38
Liquors, distilled.....	13	Roofing materials.....	7	Vault lights and ventilators.....	14
Locomotives, not made by railroad companies.....	2	Rules, ivory and wood.....	3	Washing machines and clothes wringers.....	9
Matches.....	2	Safes and vaults.....	3	Waste.....	3
Mats and matting.....	4	Sand and emery paper and cloth.....	2	Whalebone cutting.....	1
Mineral and soda waters.....	594	Soda-water apparatus, copper.....	26	Wheelbarrows.....	6
Mucilage and paste.....	21	Sporting and athletic goods.....	48	Wood carpet.....	0
Oakum.....	1	Spring, steel, car and carriage.....	7	Wood preserving.....	4
Oil, not elsewhere specified.....	31	Statuary and art goods.....	58	Wool pulling.....	4
Paving materials.....	8	Sugar, refining, not including beet sugar.....	5	Wool scouring.....	1
Pencils, lead.....	2	Sulphuric, nitric, and mixed acids.....	4		
Pens, steel.....	1	Tin plate and ternoplate.....	2		
Petroleum, refining.....	7				



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

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number):			Total.	10 and over.		Under 10.				
					Male.	Female.	Total.	Male.	Female.		Under 10.	Male.	Female.				
														Male.	Female.	Male.	
1 All industries.....	395	11,607	410	368	755	213	9,861	6,962	2,832	67	10,413	7,378	2,966	42	27	15,829	
2 Boxes, fancy and paper.....	3	63	5	2	1	1	54	16	38		58	17	41			15	
3 Brass and bronze products.....	6	55	5	4	5	5	41	39		2	43	41		2		59	
4 Bread and other bakery products.....	69	451	78	5	51	30	289	215	65	9	298	222	67	8	1	143	
5 Brick and tile.....	4	99	5	1	2	1	90	90			141	141				365	
6 Carriages and wagons and materials.....	4	65	10	6		1	48	48			46	40				83	
7 Clothing, men's, including shirts.....	13	1,075	24	17	28	15	901	102	875	14	1,037	107	916	1	13	256	
8 Coffee and spice, roasting and grinding.....	5	43	11		9	1	22	19	3		23	20	3			170	
9 Confectionery.....	6	123	6		1	116	54	58	4	128	60	64	1	3		140	
10 Cutlery and tools, not elsewhere specified.....	3	20	6	2	1	19	18	1		20	19	1				20	
11 Foundry and machine-shop products.....	18	745	19	33	45	12	636	607	29		734	700	34			809	
12 Hats and caps, other than felt, straw, and wool.....	3	20	5		2	1	21	10	5		22	17	5			3	
13 Liquors, malt.....	8	431		40	70		306	306			315	315				2,328	
14 Lumber and timber products.....	9	185	12	8	4	1	160	159	1		147	146	1			715	
15 Marble and stone work.....	8	47	14				33	33			38	38				68	
16 Patent medicines and compounds and druggists' preparations.....	8	28	9	3	2	2	12	6	6		13	7	6			19	
17 Photo-engraving.....	3	35		7	2		26	25		1	30	29		1		8	
18 Printing and publishing.....	64	2,003	51	59	180	78	1,635	1,149	463	23	1,654	1,163	468	18	5	1,324	
19 Slaughtering and meat packing.....	7	30	8		2		20	20			19	19				91	
20 Tobacco manufactures.....	52	322	56	5	16		245	192	49	4	251	197	50	4		60	
21 All other industries <sup>1</sup> .....	102	5,749	88	167	328	69	5,097	3,848	1,230	10	5,806	4,074	1,310	7	5	8,973	

<sup>1</sup> All other industries embrace: Artificial stone, 1; awnings, tents, and sails, 2; axle grease, 1; bags, paper, 1; baking powders and yeast, 2; baskets, and rattan and willow ware, 1; belting and hose, leather, 1; billiard tables and materials, 1; blacking and cleansing and polishing preparations, 2; bluing, 1; boots and shoes, including cut stock and findings, 3; boxes, cigar, 1; brushes, 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; chemicals, 1; clothing, women's, 4; coffins, burial cases, and undertakers' goods, 1; copper, tin, and sheet-iron products, 3; cork, cutting, 1; electrical machinery, apparatus, and supplies, 2; electroplating, 1; engraving and diesinking, 1; engraving, wood, 1; flour-mill and gristmill products, 2; food preparations, 2; foundry supplies, 1; fur goods, 1; furnishing goods, men's, 2; furniture and refrigerators, 3; gas, illuminating and heating, 2; glass, cutting, staining, and

BUFFALO.

1 All industries.....	1,753	61,246	1,489	1,889	4,505	1,951	51,412	43,385	7,445	582	56,223	47,508	8,079	412	224	121,791
2 Automobiles, including bodies and parts.....	23	3,640	13	68	430	85	3,044	2,041	100	3	3,570	3,448	117	5		4,561
3 Bicycles, motorcycles, and parts.....	7	181	4	10	10	7	150	146	1	3	183	178	1	4		151
4 Blacking and cleansing and polishing preparations.....	11	287	4	15	64	78	138	51	81	4	134	50	80	4		209
5 Boots and shoes, including cut stock and findings.....	14	722	14	8	37	10	653	343	228	82	690	362	241	56	31	370
6 Brass and bronze products.....	18	414	12	21	24	10	347	330	4	4	501	489	6	6		2,417
7 Bread and other bakery products.....	189	1,794	180	27	172	60	1,355	1,025	329	1	1,365	1,032	331	2		1,191
8 Brick and tile.....	5	178	5	4	4	2	163	103			103	103				265
9 Canning and preserving.....	8	73	9	3	14	5	42	33		2	48	36	8	2		100
10 Carriages and wagons and materials.....	48	504	48	7	10	10	429	382	47		449	400	49			551
11 Cars and general shop construction and repairs by steam-railroad companies.....	7	3,474		133	148	3	3,100	3,181	6	3	3,456	3,445	8	3		2,768
12 Clothing, men's, including shirts.....	60	1,681	70	34	105	42	1,430	442	962	26	1,585	490	1,067	6	22	365
13 Clothing, women's.....	14	655	12	10	43	28	556	95	455	6	567	97	464	1	5	61
14 Confectionery.....	26	633	22	14	62	30	505	181	317	7	577	207	362		8	604
15 Cooperage and wooden goods, not elsewhere specified.....	13	194	12	7		3	172	168		4	178	174		4		206
16 Copper, tin, and sheet-iron products.....	67	1,882	68	47	144	71	1,552	1,404	132	10	1,243	1,125	105	11	2	1,955
17 Cutlery and tools, not elsewhere specified.....	11	273	6	17	13	6	231	223	7	1	239	231	7	1		359
18 Electrical machinery, apparatus, and supplies.....	8	347	4	18	31	12	282	268	13	1	320	304	15	1		654
19 Flour-mill and gristmill products.....	10	793	1	40	231	45	476	457	18	1	465	447	17	1		10,987
20 Foundry and machine-shop products.....	149	10,018	94	264	568	224	8,868	8,788	62	18	10,185	10,095	73	17		11,690
21 Fur goods.....	12	122	11	3	9	11	88	32			130	47	70	2	2	6
22 Furniture and refrigerators.....	33	2,347	25	90	147	63	2,052	1,010	74	59	2,246	2,090	81	63	3	2,846
23 Gloves and mittens, leather.....	9	98	10	2	5	5	76	35	38	3	83	38	42		3	12
24 Instruments, professional and scientific.....	7	130	6	6	4	4	110	82	21	7	99	74	19	5	1	34
25 Jewelry.....	14	401	22	6	31	44	298	244	45	9	297	243	45	5	4	116
26 Jewelry and instrument cases.....	8	458	6	17	12	7	410	62	317	7	445	99	339	1	6	109
27 Leather goods.....	22	600	27	24	32	17	509	396	102	11	523	407	105	9	2	460
28 Leather, tanned, curried, and finished.....	4	579	7	8	42	9	513	453	50	10	581	513	57	11		1,297
29 Liquors, malt.....	16	828		62	93		673	670	3		677	674	3			4,888
30 Lumber and timber products.....	32	2,262	25	84	93	50	1,650	1,625	6	19	2,087	2,059	6	22		6,713
31 Malt.....	16	362	8	24	35	7	288	288			337	337				3,862
32 Marble and stone work.....	17	410	15	11	12	8	364	298	66		396	324	72			427
33 Mattresses and spring beds.....	8	230	4	8	15	13	190	155	34	1	185	151	33	1		137
34 Mirrors.....	5	113	1	2	2	3	105	104		1	109	108		1		125
35 Models and patterns, not including paper patterns.....	9	80	6	4	3		67	66			80	79	1			76
36 Paper goods, not elsewhere specified.....	4	140	2	10	8	12	108	62	45	1	117	67	40	1		92

MANUFACTURES—NEW YORK.

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.

ALBANY.

Capital.	EXPENSES.										Value of products.	Value added by manufacture.
	Total.	Services.			Materials.		Miscellaneous.					
		Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
1 \$26,276,429	\$20,668,578	\$855,663	\$725,354	\$5,234,431	\$471,845	\$10,049,005	\$134,950	\$634,970	\$121,382	\$2,440,978	\$22,825,702	\$12,304,882
2 38,546	77,030	3,300	1,580	22,018	665	36,470	3,375	379	.....	9,293	88,310	51,175
3 113,726	134,228	5,900	3,530	30,679	1,935	85,994	2,400	395	.....	3,394	142,950	55,021
4 842,646	1,075,103	12,525	39,799	169,383	22,770	711,783	14,993	4,701	.....	99,039	1,209,809	475,316
5 179,562	85,193	1,500	1,612	38,982	18,996	2,107	600	667	.....	20,669	142,800	121,637
6 203,217	87,234	10,956	624	36,716	2,729	28,999	.....	1,797	.....	5,443	92,489	60,791
7 604,114	643,759	17,398	20,376	330,818	5,158	227,453	8,161	3,377	3,400	27,618	668,080	435,469
8 154,635	253,099	.....	8,400	11,377	3,332	217,761	1,200	1,217	.....	.....	288,066	66,973
9 165,710	199,931	.....	2,000	34,851	3,212	136,476	900	.....	5,000	16,525	245,774	106,086
10 20,250	31,971	2,990	800	11,546	1,021	9,447	810	51	3,210	2,696	47,002	36,534
11 2,922,965	1,223,560	63,250	47,173	395,582	26,036	533,094	8,320	0,147	.....	140,325	1,353,723	794,593
12 28,600	45,576	.....	2,016	14,392	314	26,207	594	.....	.....	1,993	62,500	35,919
13 4,203,388	2,668,514	272,500	91,314	291,598	52,156	600,724	.....	447,121	.....	913,106	3,056,444	2,403,564
14 337,605	414,975	10,829	4,188	82,430	2,233	293,959	3,050	2,192	1,121	14,973	408,226	172,034
15 52,138	62,907	.....	.....	23,231	2,192	29,986	1,142	174	2,000	4,182	86,169	53,991
16 48,121	51,033	2,500	1,836	5,139	618	26,483	863	136	650	12,748	68,887	41,786
17 26,871	49,641	11,290	895	21,485	564	11,782	1,069	25	.....	2,531	50,072	37,726
18 3,119,269	2,926,369	140,662	165,968	957,015	37,666	1,236,162	24,447	8,530	78,385	277,534	3,248,642	1,974,814
19 57,718	234,255	.....	1,000	12,674	2,203	208,711	1,920	675	.....	7,072	265,927	55,013
20 443,979	590,767	17,750	10,964	124,443	2,315	277,488	7,004	89,909	216	60,668	677,435	397,632
21 12,713,469	9,812,543	282,844	321,299	2,620,077	285,730	5,347,820	54,102	63,449	26,776	810,437	10,562,337	4,928,778

ornamenting, 2; hand stamps and stencils and brands, 2; hosiery and knit goods, 2; ice, manufactured, 1; ink, writing, 1; jewelry, 2; jewelry and instrument cases, 1; lasts, 1; mattresses and spring beds, 2; mineral and soda waters, 11; models and patterns, not including paper patterns, 2; mucilage and paste, 1; musical instruments, pianos and organs and materials, 1; oil, not elsewhere specified, 2; optical goods, 1; paper goods, not elsewhere specified, 3; phonographs and graphophones, 1; photographic apparatus and materials, 1; pottery, terra-cotta, and fire-clay products, 2; saws, 1; soap, 1; stereotyping and electrotyping, 1; stoves and furnaces, including gas and oil stoves, 3; surgical appliances and artificial limbs, 1; toys and games, 1; window shades and fixtures, 1; wirework, including wire rope and cable, 1; wood, turned and carved, 2; wool pulling, 2.

BUFFALO.

1 \$183,041,267	\$195,019,696	\$4,610,680	\$4,736,059	\$28,727,228	\$4,822,019	\$131,716,222	\$915,176	\$1,728,571	\$959,620	\$16,303,521	\$218,803,994	\$82,265,763
2 9,300,037	8,180,955	150,259	132,797	2,199,567	62,701	4,532,954	21,339	14,336	.....	1,067,002	9,597,763	5,002,108
3 338,611	329,022	24,629	0,718	105,435	3,324	145,666	6,053	963	2,025	34,189	390,357	241,367
4 942,202	831,229	26,392	96,663	66,554	3,889	407,250	2,617	2,393	2,000	223,471	963,586	552,447
5 909,755	1,221,171	11,135	44,129	267,136	8,826	826,042	8,446	2,243	.....	53,214	1,355,821	520,953
6 1,046,601	1,519,307	40,605	31,052	210,942	31,102	1,109,973	6,492	-1,813	15,567	71,761	1,790,549	649,474
7 4,368,514	4,750,168	65,792	184,867	724,886	81,223	3,253,930	45,355	19,795	5	374,315	5,544,300	2,209,147
8 402,488	146,630	7,480	4,007	88,429	22,162	2,903	4,125	5,832	.....	11,692	165,221	140,156
9 97,607	178,510	1,900	10,970	17,115	2,313	139,904	1,770	720	.....	3,818	204,284	62,067
10 682,948	906,128	27,722	10,010	246,800	8,817	547,793	8,354	4,120	2,295	44,217	1,196,020	630,410
11 2,390,773	4,528,648	109,260	109,319	1,938,340	71,814	2,205,144	.....	17,471	.....	77,300	4,524,448	2,247,400
12 2,308,628	3,043,137	62,701	119,234	600,778	15,018	1,781,748	39,286	2,567	306,916	114,889	3,698,623	1,901,857
13 448,301	902,730	22,864	39,892	181,899	3,350	561,704	13,189	.....	.....	79,922	1,014,059	449,005
14 614,336	1,108,994	26,627	65,595	160,073	15,080	723,734	24,109	1,004	25,030	67,442	1,179,919	441,105
15 305,536	556,199	9,970	1,612	94,126	2,733	426,345	2,800	1,440	.....	18,173	608,941	180,893
16 4,127,151	3,667,285	120,589	167,063	852,647	44,983	2,227,056	24,663	17,642	2,365	210,277	4,122,813	1,850,774
17 503,455	356,282	30,360	16,258	128,454	8,632	132,658	3,306	1,994	2,941	81,679	452,283	310,993
18 1,174,887	628,171	47,992	36,983	141,826	14,413	321,436	3,170	3,419	25	59,406	601,287	325,438
19 5,313,092	10,032,135	113,812	205,494	323,992	86,249	17,383,360	880	20,543	140,202	757,603	19,941,592	2,471,983
20 20,326,291	18,378,417	662,264	680,795	5,143,940	393,655	8,418,388	95,061	59,238	178,217	2,752,409	20,775,474	11,904,031
21 213,726	294,755	6,080	10,701	60,810	604	191,508	9,465	169	.....	15,418	350,321	185,209
22 4,083,497	3,808,360	162,088	159,530	1,030,648	40,808	2,115,095	33,227	14,427	1,000	254,937	4,184,064	2,029,061
23 108,348	130,689	4,450	9,985	34,741	1,633	71,292	4,400	100	.....	4,118	147,620	74,725
24 178,023	129,147	13,917	0,151	53,605	1,094	28,372	5,568	62	1,822	15,576	151,243	121,777
25 1,307,483	735,777	14,800	84,259	173,660	3,443	381,812	9,774	357	.....	67,682	879,250	593,905
26 341,661	347,755	32,140	15,082	113,228	1,883	128,999	9,668	107	.....	49,581	392,530	261,648
27 937,585	964,309	34,664	61,470	262,166	15,780	504,766	10,140	3,590	.....	71,733	1,129,321	608,776
28 3,058,110	2,658,582	35,085	49,980	246,027	19,296	2,174,658	20,000	6,377	.....	107,150	2,808,993	618,093
29 12,783,514	5,305,407	299,470	113,059	536,338	101,884	1,378,828	.....	1,008,559	.....	1,932,169	6,496,549	5,015,837
30 5,061,255	5,074,691	140,214	95,981	1,105,938	41,836	3,283,107	12,035	20,921	600	.....	373,079	5,580,018
31 15,471,572	6,380,159	91,575	52,854	221,795	153,175	5,503,619	33,699	42,009	.....	280,743	7,094,746	1,437,952
32 752,798	821,568	23,454	12,627	242,887	7,759	435,114	3,156	2,857	13,446	80,268	943,318	500,445
33 256,132	437,105	11,770	13,962	91,147	2,805	278,339	10,914	776	.....	32,452	554,814	278,670
34 78,642	293,625	1,300	3,564	69,300	1,789	193,681	5,200	294	500	2,997	330,991	130,521
35 59,421	88,944	7,060	2,470	62,030	592	11,555	4,050	108	.....	1,063	122,939	110,792
36 172,447	249,845	20,520	9,004	44,322	2,160	147,913	5,800	111	.....	20,615	294,816	145,343

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.  
BUFFALO—Continued.

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	Male.	Female.		Under 16.	Male.	Female.	Male.	Female.		
																16 and over.	
37 Patent medicines and compounds and druggists' preparations.	61	580	48	44	56	202	230	81	146	3	215	76	136	3	.....	362	
38 Photo-engraving.	6	137	6	7	22	6	96	89	.....	7	102	95	.....	7	.....	163	
39 Printing and publishing.	104	3,994	133	168	390	214	3,089	2,459	584	46	3,159	2,514	596	44	5	3,588	
40 Slaughtering and meat packing.	30	1,929	35	31	141	60	1,662	1,602	58	2	1,694	1,633	59	2	.....	3,743	
41 Soap.	8	1,592	2	64	121	45	1,360	982	378	.....	1,413	1,020	393	.....	.....	2,489	
42 Stereotyping and electrotyping.	3	58	3	1	4	3	47	43	.....	4	47	43	.....	4	.....	112	
43 Tobacco manufactures.	188	764	210	13	20	5	516	447	57	12	563	488	62	.....	.....	21	
44 Wall plaster.	3	47	1	5	6	3	32	32	.....	.....	31	31	.....	.....	.....	220	
45 All other industries <sup>1</sup> .	377	15,293	298	472	1,102	429	12,902	10,199	2,503	195	14,751	11,576	2,951	94	130	50,433	

<sup>1</sup> All other industries embrace: Agricultural implements, 2; artificial flowers and feathers and plumes, 2; artificial stone, 5; awnings, tents, and sails, 6; axle grease, 3; babbit metal and solder, 1; bags, other than paper, 1; baking powders and yeast, 4; baskets, and rattan and willow ware, 8; belting and hose, leather, 2; belting and hose, woven and rubber, 3; billiard tables and materials, 1; bluing, 3; boxes, cigar, 4; boxes, fancy and paper, 11; brooms, 7; brushes, 2; butter, cheese, and condensed milk, 1; buttons, 2; carpets, rag, 7; carriages and sleds, children's, 1; cars and general shop construction and repairs by street-railroad companies, 1; cars, steam-railroad, not including operations of railroad companies, 2; cash registers and calculating machines, 1; cement, 1; chemicals, 1; clothing, men's, buttonholes, 3; coffee and spices, roasting and grinding, 8; coffins, burial cases, and undertakers' goods, 2; corsets, 4; cotton goods, including cotton small wares, 1; dairymen's, poultryers', and appliers' supplies, 3; dentists' materials, 1; dyestuffs and extracts, 1; electroplating, 11; emery and other abrasive wheels, 2; enameling and japanning, 3; engraving and die-making, 5; engraving, wood, 2; fancy articles, not elsewhere specified, 3; fertilizers, 3; fire extinguishers, chemical, 3; flags, banners, regalia, society badges, and emblems, 2; flavoring extracts, 9; food preparations, 12; foundry supplies, 1; furnishing goods, men's, 2; furs, dressed, 1; galvanizing, 1; gas and electric fixtures and lamps and reflectors, 15; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 0; glue, 1; grease and tallow, 3; hair work, 1; hand stamps and stencils and brands, 3; hats and caps, other than felt, straw, and wool, 4; hats, straw, 1; hosiery and knit goods, 1; house-furnishing goods, not elsewhere specified, 4; ice, manufactured, 3; ink, printing, 3;

NEW YORK CITY.

1 All industries	25,938	680,510	20,055	16,838	58,732	21,883	554,002	366,411	183,861	3,730	587,745	388,647	195,127	1,605	2,366	429,003
2 Artificial flowers and feathers and plumes.	312	0,759	411	144	621	134	8,440	1,129	7,128	192	8,981	1,200	7,577	16	188	201
3 Artificial stone.	24	266	13	12	13	1	227	224	2	1	287	284	2	1	.....	221
4 Automobiles, including bodies and parts.	56	2,326	31	117	156	43	1,979	1,000	8	2	2,338	2,326	10	2	.....	1,400
5 Bags, paper.	9	441	9	13	42	10	367	186	181	.....	380	103	187	.....	.....	200
6 Baskets, and rattan and willow ware.	26	462	26	17	14	4	401	315	85	1	414	325	88	1	.....	139
7 Belting and hose, leather.	18	451	15	21	91	26	298	282	15	1	337	319	17	1	.....	892
8 Bicycles, motorcycles, and parts.	5	33	7	.....	2	.....	24	24	.....	.....	24	24	.....	.....	.....	15
9 Blacking and cleansing and polishing preparations.	60	677	40	55	125	45	400	179	226	1	432	191	240	1	.....	238
10 Bluing.	4	26	3	2	5	1	15	3	10	2	18	4	12	.....	2	10
11 Boots and shoes, including out stock and findings.	181	9,177	194	183	369	231	8,200	5,000	2,212	88	8,725	6,277	2,354	47	47	2,558
12 Boxes, cigar.	31	1,396	32	25	75	8	1,258	661	545	50	1,399	732	603	15	40	913
13 Boxes, fancy and paper.	211	8,018	244	170	272	116	7,210	2,754	4,335	121	7,899	3,017	4,749	26	107	1,696
14 Brass and bronze products.	163	4,197	157	147	254	75	3,564	3,244	314	6	4,051	3,687	357	7	.....	3,054
15 Bread and other bakery products.	2,378	20,401	2,511	213	1,181	975	15,521	13,476	1,996	40	16,014	13,904	2,050	45	6	6,842
16 Brooms.	13	139	13	3	3	.....	114	111	3	.....	115	112	3	.....	.....	60
17 Brushes.	81	1,470	93	37	105	32	1,203	693	458	52	1,308	754	498	43	13	562
18 Buttons.	147	3,635	203	62	151	47	3,172	1,944	1,150	78	3,357	2,057	1,217	17	66	1,024
19 Canning and preserving.	73	1,340	78	44	155	34	1,034	598	420	16	1,685	627	440	10	8	1,189
20 Carpets and rugs, other than rag.	5	250	7	6	15	18	215	107	107	1	225	112	112	.....	.....	1,198
21 Carpets, rag.	10	65	10	2	4	2	47	42	3	2	55	49	3	2	1	25
22 Carriages and wagons and materials.	195	2,379	231	59	60	13	2,016	2,005	11	.....	1,993	1,982	11	.....	.....	1,950
23 Cars and general shop construction and repairs by steam-railroad companies.	3	1,619	.....	27	71	4	1,517	1,517	.....	.....	1,695	1,695	.....	.....	.....	1,185
24 Cars and general shop construction and repairs by street-railroad companies.	13	3,685	.....	89	121	4	3,471	3,454	17	.....	3,777	3,758	19	.....	.....	3,207
25 Chemicals.	33	1,812	14	75	209	70	1,438	1,300	132	6	1,460	1,320	134	3	3	4,716
26 Clocks and watches, including cases and materials.	20	1,576	8	39	89	23	1,417	1,110	301	6	1,545	1,210	328	7	.....	490
27 Clothing, men's, including shirts.	2,526	77,543	3,650	754	4,681	1,310	67,142	45,390	21,006	146	71,838	48,505	23,117	45	111	7,399
28 Clothing, women's.	2,995	110,507	4,332	1,420	7,284	3,273	94,258	41,127	52,715	416	98,745	43,085	55,224	59	377	11,157
29 Coffee and spice, roasting and grinding.	61	2,080	71	75	510	89	1,329	928	390	2	1,354	945	407	.....	.....	3,475
30 Coffins, burial cases, and undertakers' goods.	15	731	14	33	132	23	529	405	124	.....	1,527	403	124	.....	.....	600
31 Confectionery.	127	7,641	119	182	607	211	6,822	2,678	3,699	145	7,450	3,071	4,242	8	159	6,254
32 Cooperage and wooden goods, not elsewhere specified.	39	1,200	42	17	21	9	1,111	1,097	12	2	994	981	11	.....	2	1,215
33 Copper, tin, and sheet-iron products.	466	11,399	437	356	587	175	9,844	8,542	1,230	72	10,668	9,257	1,333	59	19	6,415
34 Cordage and twine and jute and linen goods.	9	4,619	2	31	131	19	4,436	1,850	2,515	41	4,441	1,852	2,513	19	22	9,485
35 Corsets.	39	2,445	39	32	195	61	2,128	220	1,892	10	2,088	222	1,856	1	9	421
36 Cotton goods, including cotton small wares.	13	428	14	12	28	6	363	166	198	4	388	175	209	.....	4	415
37 Cutlery and tools, not elsewhere specified.	70	763	73	28	46	30	580	392	147	47	615	412	154	.....	49	377
38 Dyeing and finishing textiles.	69	3,108	67	93	195	73	2,770	1,681	1,083	6	2,906	1,764	1,136	4	2	2,738
39 Electrical machinery, apparatus, and supplies.	160	7,002	77	272	741	226	5,686	4,824	896	26	6,241	5,295	917	28	1	6,954
40 Electroplating.	97	652	119	18	21	14	480	459	17	4	508	486	18	4	.....	47
41 Enameling and japanning.	11	67	13	1	2	1	50	32	18	.....	49	31	18	.....	.....	48
42 Engravers' materials.	8	84	7	8	7	4	58	58	.....	.....	64	64	.....	.....	.....	177
43 Fancy articles, not elsewhere specified.	156	3,640	172	110	289	133	2,945	1,901	993	51	3,212	2,073	1,083	27	29	2,413
44 Files.	6	129	12	6	4	2	105	102	3	.....	120	116	3	1	.....	150
45 Flags, banners, regalia, society badges, and emblems.	50	678	56	14	37	41	539	171	346	13	558	180	364	8	6	98
46 Food preparations.	95	2,320	102	64	291	49	1,814	1,177	615	22	1,992	1,293	675	5	19	2,724
47 Foundry and machine-shop products.	923	29,200	758	1,176	2,777	475	24,014	23,304	659	51	25,412	24,661	697	52	2	33,453
48 Fur goods.	821	10,719	1,264	166	1,073	392	7,824	5,339	2,485	17	9,353	6,382	2,951	6	14	857
49 Furnishing goods, men's.	313	8,051	409	144	830	373	6,295	1,990	4,254	51	6,493	2,053	4,388	12	40	498
50 Furniture and refrigerators.	406	9,878	464	297	592	111	8,414	8,180	231	3	8,980	8,730	247	.....	.....	6,993
51 Furs, dressed.	49	880	64	20	40	8	748	744	4	.....	685	681	4	.....	.....	1,187

# MANUFACTURES—NEW YORK.

887

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.

BUFFALO—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.			
37 \$1,088,881	\$2,062,860	\$38,571	\$107,725	\$90,053	\$7,605	\$353,302	\$15,472	\$5,744	\$374	\$1,394,014	\$2,801,045	\$2,440,138	
38 120,304	160,508	11,520	19,183	79,052	1,310	26,291	3,444	285	2,000	17,423	189,051	161,450	
39 6,649,413	6,276,566	363,421	423,039	1,936,777	77,315	2,277,601	108,514	20,142	179,580	890,177	7,678,698	5,323,782	
40 7,270,613	23,389,052	124,442	204,868	963,210	120,821	21,867,805	3,159	24,314	-----	280,433	25,416,054	3,627,428	
41 7,256,606	7,067,717	91,864	122,692	544,592	106,505	5,653,565	350	37,931	4,000	506,218	8,652,900	2,892,830	
42 73,459	92,817	1,820	3,497	32,195	1,901	42,039	4,400	-----	-----	6,965	137,673	93,733	
43 600,004	1,038,867	14,347	19,176	282,343	3,977	546,443	18,213	102,936	710	50,722	1,236,596	686,176	
44 171,807	95,546	8,288	7,809	14,566	3,062	48,957	-----	624	-----	12,240	126,417	74,398	
45 99,054,793	56,799,867	1,450,167	1,158,617	6,937,368	3,223,278	39,125,143	274,613	262,448	82,333	4,285,900	62,815,787	20,467,366	

ink, writing, 1; iron and steel, blast furnaces, 3; iron and steel, steel works and rolling mills, 4; iron and steel, doors and shutters, 1; iron and steel forgings, 5; lasts, 2; lead, bar, pipe, and sheet, 1; liquors, vinous, 1; looking-glass and picture frames, 8; millinery and lace goods, 8; mineral and soda waters, 21; mucilage and pasta, 2; musical instruments and materials, not specified, 1; musical instruments, pianos and organs and materials, 5; oil, linseed, 4; oil, not elsewhere specified, 3; optical goods, 5; paint and varnish, 7; pens, steel, 1; petroleum, refining, 1; photographic apparatus and materials, 3; pipes, tobacco, 1; pottery, terra-cotta, and fire-clay products, 2; pumps, not including steam pumps, 1; rubber goods, not elsewhere specified, 4; safes and vaults, 1; saws, 1; scales and balances, 3; screws, machine, 2; sewing machines, cases, and attachments, 1; shipbuilding, including boat building, 11; show cases, 2; signs and advertising novelties, 2; silk and silk goods, including throwsters, 2; smelting and refining, copper, 1; smelting and refining, not from the ore, 1; sporting and athletic goods, 2; statuary and art goods, 3; steam packing, 3; stoves and furnaces, including gas and oil stoves, 3; sulphuric, nitric, and mixed acids, 3; surgical appliances and artificial limbs, 7; toys and games, 1; type founding and printing materials, 1; type-writers and supplies, 1; umbrellas and canes, 2; vault lights and ventilators, 1; wall paper, 1; whips, 1; wirework, including wire rope and cable, 10; wood distillation, not including turpentine and rosin, 1; wood, turned and carved, 3.

## NEW YORK CITY.

1	\$1,364,352,683	\$1,803,961,431	\$46,675,495	\$75,398,230	\$323,698,132	\$26,024,774	\$1,066,130,559	\$30,291,011	\$27,832,207	\$60,088,482	\$147,716,541	\$2,029,692,576	\$937,537,243
2	7,903,251	18,143,366	270,699	752,592	3,435,058	43,543	12,103,339	452,149	2,322	180,135	813,529	21,098,226	8,861,344
3	506,697	415,514	17,610	7,632	140,806	3,394	191,412	15,129	1,739	26,447	290,345	485,739	290,933
4	3,712,861	5,722,453	171,665	174,741	1,584,739	67,497	2,568,152	234,258	8,681	1,100	765,620	6,194,854	3,558,705
5	945,286	1,481,020	124,460	55,459	155,542	7,397	1,050,153	28,850	2,622	360	56,177	1,682,054	624,504
6	402,051	840,860	23,800	14,636	280,205	3,833	409,027	16,043	2,734	260	90,322	985,991	573,131
7	2,396,180	2,770,921	78,906	98,539	187,663	16,468	2,015,512	20,927	1,062	-----	351,844	3,070,246	1,638,266
8	35,819	54,926	-----	1,492	12,720	515	31,238	3,900	-----	300	4,821	67,855	30,102
9	867,099	1,781,101	96,905	136,230	177,355	15,409	980,370	44,233	2,123	420	327,555	1,998,058	1,001,779
10	19,333	57,012	3,300	3,860	6,527	308	34,970	2,470	159	-----	5,418	70,314	35,036
11	8,808,620	16,740,227	394,014	601,679	4,463,992	97,504	9,852,673	218,409	18,549	82,360	1,031,147	18,376,429	8,426,282
12	930,242	1,749,721	72,484	66,276	558,450	14,494	901,332	49,651	3,473	-----	80,561	1,842,913	927,087
13	4,600,671	8,424,062	306,376	316,450	2,848,716	96,846	3,916,145	386,037	8,595	47,197	497,701	9,450,308	5,437,317
14	6,294,822	7,734,051	292,164	315,637	2,115,015	144,128	3,801,052	154,604	25,036	27,413	858,102	8,754,857	4,508,677
15	25,796,438	54,839,070	548,895	1,405,645	10,374,524	1,181,979	36,774,943	1,642,964	154,392	7,522	2,748,212	61,904,484	23,947,562
16	82,302	207,224	4,330	5,839	52,255	2,290	123,421	10,901	18	-----	8,170	245,466	117,755
17	1,705,938	2,418,309	68,117	102,312	556,448	30,809	1,422,303	59,311	5,480	163,270	2,863,455	1,410,343	
18	2,469,890	4,373,146	134,584	160,482	1,348,868	42,698	2,309,169	104,011	2,346	111,876	159,122	2,839,624	
19	3,427,552	4,966,031	101,807	164,048	488,533	46,797	3,444,385	71,566	10,635	1,000	637,810	5,537,640	
20	311,900	282,791	15,760	19,375	89,108	6,821	112,066	6,230	7,350	-----	26,091	357,680	
21	35,472	75,289	2,585	3,108	26,325	635	28,153	5,876	73	-----	8,534	62,780	
22	3,108,177	3,483,560	126,301	77,061	1,326,080	58,159	1,508,282	202,667	26,244	29,705	129,061	4,165,155	
23	1,181,486	2,052,346	45,765	53,830	924,598	70,738	915,237	4,200	11,981	-----	25,852	2,052,346	
24	9,099,347	5,811,962	126,801	93,992	2,236,068	93,466	2,450,300	5,360	110,998	-----	194,977	5,311,962	
25	10,310,476	11,767,883	271,392	352,727	981,253	305,163	8,913,338	45,532	55,278	-----	843,200	12,945,352	
26	3,474,401	2,491,682	116,018	109,121	786,095	16,013	1,163,068	33,338	10,606	7,182	251,141	3,035,596	
27	88,943,663	197,794,162	2,118,529	5,918,880	37,978,340	708,008	112,123,104	2,928,191	48,835	27,270,086	8,700,189	218,411,030	
28	80,761,926	236,090,095	3,201,948	9,897,302	53,517,688	1,133,499	143,711,523	5,383,824	27,002	8,919,867	10,842,637	296,477,331	
29	6,102,708	13,767,456	181,427	549,918	648,678	141,809	11,306,518	145,113	37,739	1,815	754,439	15,810,392	
30	2,101,397	1,896,950	60,618	138,665	287,668	17,374	1,195,765	26,343	7,039	-----	163,493	2,102,009	
31	9,029,546	18,994,868	634,534	654,044	2,373,127	202,199	12,192,813	408,211	38,922	1,000	1,889,418	20,062,181	
32	3,823,578	3,067,560	42,188	21,818	524,326	33,963	2,187,071	21,953	22,609	77,050	136,582	3,445,608	
33	23,437,023	20,985,558	729,907	622,306	5,785,729	606,030	11,450,550	342,449	71,235	160,457	1,216,895	23,303,074	
34	10,060,713	7,238,697	132,067	142,362	1,601,368	115,883	4,154,631	91,550	88,160	-----	912,376	7,374,073	
35	2,080,020	4,105,861	99,428	252,412	888,943	22,994	2,148,927	127,780	7,598	-----	480,164	4,610,171	
36	828,358	942,532	43,024	25,372	165,198	14,922	558,706	6,975	3,117	-----	51,632	1,051,108	
37	846,805	1,170,244	69,017	53,879	361,710	17,690	442,869	43,504	1,386	-----	146,029	1,345,558	
38	4,034,664	5,288,218	401,608	217,608	1,096,948	133,284	2,598,842	95,954	22,860	320,232	405,875	6,002,643	
39	10,622,668	13,763,508	737,875	836,245	3,335,937	170,876	6,666,561	204,621	50,491	25,025	1,725,287	14,787,736	
40	287,072	655,737	27,981	18,542	314,695	26,722	179,029	56,085	422	1,907	29,744	885,726	
41	71,655	50,137	900	2,000	22,367	3,017	14,416	3,516	383	-----	3,538	77,215	
42	129,890	302,343	19,276	9,181	52,392	4,189	190,012	10,864	18	463	15,948	328,271	
43	5,483,280	5,921,245	243,679	379,593	1,448,313	53,704	2,835,901	120,286	13,443	103,770	722,550	6,987,206	
44	108,651	99,760	8,307	41,556	41,556	5,206	33,825	1,037	845	-----	3,566	121,328	
45	767,361	1,161,115	21,204	52,364	208,336	8,924	702,726	40,343	702	11,722	119,234	1,347,352	
46	3,427,760	7,437,706	263,214	362,156	797,233	130,763	4,852,603	141,605	22,405	1,365	861,362	8,046,233	
47	82,972,570	54,603,313	3,035,345	2,990,963	16,735,910	850,613	23,207,673	950,020	271,230	746,894	5,813,699	63,852,691	
48	18,635,692	33,847,054	1,246,844	1,246,844	5,432,884	80,909	23,383,241	918,212	47,324	262,823	2,008,433	39,874,886	
49	10,325,813	22,641,830	388,053	1,800,322	2,997,751	54,853	15,489,683	425,707	3,530	731,809	1,250,134	25,495,845	
50	11,446,217	17,248,745	561,986	616,994	5,359,266	201,633	8,528,961	565,405	60,861	204,061	1,149,036	19,438,816	
51	734,631	955,591	44,163	41,880	512,341	28,780	224,472	38,772	2,519	185	62,489	1,209,225	

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 YORK CITY—Continued.

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).					Total.	16 and over.		Under 16.			
					Male.	Female.	Total.	16 and over.		Under 16.	Male.		Female.	Male.	Female.			
								Male.	Female.									
52 Gas and electric fixtures and lamps and reflectors.	140	5,900	127	210	580	126	4,857	4,562	276	19	5,411	5,082	308	21	.....	2,899		
53 Gas, illuminating and heating.	15	6,296	.....	183	1,691	96	4,820	4,325	1	.....	4,411	4,410	1	.....	.....	23,177		
54 Glass.	9	948	3	33	23	5	884	827	15	42	4,411	4,410	1	.....	.....	450		
55 Glass, cutting, staining, and ornamenting.	111	2,360	126	53	74	55	2,052	1,835	190	27	2,240	2,009	17	41	6	629		
56 Gloves and mittens, leather.	38	405	46	3	13	7	396	161	230	5	433	170	252	4	1	17		
57 Gold and silver, leaf and foil.	34	402	30	3	7	5	348	186	167	5	351	188	158	4	1	41		
58 Gold and silver, reducing and refining, not from the ore.	10	64	13	2	7	.....	42	42	.....	.....	43	43	.....	.....	.....	97		
59 Hair work.	128	2,704	160	20	149	84	2,291	994	1,288	0	2,519	1,093	1,417	2	7	2		
60 Hand stamps and stencils and brands.	46	436	45	28	35	12	316	271	36	0	3,841	3,841	39	10	.....	104		
61 Hats and caps, other than felt, straw, and wool.	226	3,822	324	51	190	47	3,210	2,541	663	6	3,889	2,683	700	6	.....	399		
62 Hats, fur-felt.	33	1,993	32	40	120	31	1,770	1,093	752	15	1,952	1,106	829	9	8	781		
63 Hosiery and knit goods.	180	6,082	293	94	303	101	5,381	1,666	3,646	69	5,907	1,829	4,002	7	69	1,551		
64 House-furnishing goods, not elsewhere specified.	73	899	80	21	57	33	702	260	435	7	759	281	470	4	4	338		
65 Ice, manufactured.	37	803	11	60	45	2	685	685	.....	.....	639	639	.....	.....	.....	14,764		
66 Ink, printing.	26	883	18	56	253	48	508	498	10	.....	512	502	10	.....	.....	2,199		
67 Ink, writing.	6	213	5	17	40	5	146	72	74	.....	146	72	74	.....	.....	58		
68 Instruments, professional and scientific.	63	1,358	55	51	137	34	1,081	965	108	.....	1,123	1,003	112	6	2	1,416		
69 Jewelry.	438	6,668	553	168	556	352	5,639	4,273	659	107	5,538	4,696	724	106	12	1,445		
70 Jewelry and instrument cases.	57	878	66	25	37	14	736	441	292	3	811	486	322	2	1	93		
71 Kaolin and ground earths.	10	107	8	8	1	1	89	89	.....	.....	92	92	.....	.....	.....	345		
72 Lasts.	6	225	2	13	11	4	195	195	.....	.....	220	220	.....	.....	.....	285		
73 Lead, bar, pipe, and sheet.	6	211	1	14	15	4	177	176	.....	.....	178	177	.....	.....	.....	1,127		
74 Leather goods.	389	7,672	485	172	536	178	6,301	5,149	1,008	54	6,562	5,362	1,144	36	20	946		
75 Leather, tanned, curried, and finished.	20	533	18	22	31	9	453	384	69	.....	502	425	77	.....	.....	885		
76 Liquors, malt.	74	6,878	20	281	770	14	5,793	5,792	1	.....	5,914	5,913	1	.....	.....	31,378		
77 Looking-glass and picture frames.	115	1,509	122	50	118	39	1,180	1,094	75	11	1,341	1,243	85	11	2	543		
78 Lumber and timber products.	275	9,292	255	289	516	82	8,150	8,125	7	.....	8,125	8,057	8	19	.....	19,240		
79 Marble and stone work.	247	4,795	255	218	231	29	4,062	4,054	.....	.....	4,430	4,421	.....	.....	.....	10,711		
80 Mattresses and spring beds.	122	1,454	130	58	111	42	1,113	923	100	.....	1,114	924	190	.....	.....	819		
81 Millinery and lace goods.	886	24,712	1,181	477	1,739	754	20,561	4,412	15,865	284	21,639	4,041	16,639	55	244	3,372		
82 Mirrors.	37	938	46	27	65	18	782	763	19	.....	844	823	21	.....	.....	835		
83 Models and patterns, not including paper patterns.	96	1,094	110	37	66	27	854	717	132	5	903	758	140	.....	5	526		
84 Musical instruments and materials, not specified.	37	304	37	7	14	11	235	216	19	.....	260	239	21	.....	.....	126		
85 Musical instruments, pianos and organs and materials.	133	9,305	84	264	363	167	8,427	8,216	101	110	8,979	8,754	108	116	1	6,033		
86 Paint and varnish.	113	4,319	60	261	968	228	2,802	2,562	231	9	2,871	2,025	237	8	1	8,925		
87 Paper goods, not elsewhere specified.	82	4,271	55	129	461	141	3,485	1,395	2,011	79	3,647	1,460	2,104	9	74	3,311		
88 Patent medicines and compounds and druggists' preparations.	433	5,450	291	440	973	574	3,172	1,446	1,700	20	3,379	1,540	1,811	9	19	2,928		
89 Pens, fountain, stylographic, and gold.	30	1,108	25	44	197	112	730	642	79	9	755	664	82	7	2	192		
90 Photo-engraving.	46	1,517	25	76	193	86	1,187	1,158	21	8	1,231	1,201	22	8	.....	275		
91 Pipes, tobacco.	21	1,772	30	28	92	40	1,582	1,307	202	13	1,578	1,364	201	4	9	701		
92 Pottery, terra-cotta, and fire-clay products.	10	647	2	40	21	4	580	501	75	4	650	561	84	1	4	705		
93 Printing and publishing.	2,883	74,118	2,352	3,183	13,492	6,769	48,322	37,636	10,453	333	51,083	39,623	11,034	244	107	37,835		
94 Rubber goods, not elsewhere specified.	36	1,161	31	41	121	28	940	676	254	10	998	718	269	2	9	2,916		
95 Saws.	7	152	8	6	16	9	113	111	2	.....	125	123	2	.....	.....	401		
96 Sewing machines, cases, and attachments.	10	80	6	10	4	4	56	56	.....	.....	65	65	.....	.....	.....	38		
97 Shipbuilding, including boat building.	71	4,328	66	73	156	11	4,022	4,014	4	4	3,906	3,898	4	4	.....	9,758		
98 Show cases.	17	452	23	20	22	8	370	370	.....	.....	404	395	7	1	.....	476		
99 Silk and silk goods, including throwsters.	118	8,887	116	160	485	174	7,952	3,008	4,744	200	8,084	3,050	4,811	49	184	4,689		
100 Silverware and plated ware.	42	1,852	43	64	245	59	1,441	1,335	101	5	1,574	1,463	110	6	.....	1,144		
101 Slaughtering and meat packing.	112	4,863	127	104	589	119	3,924	3,919	5	.....	4,006	4,001	5	.....	.....	8,715		
102 Smelting and refining, not from the ore.	11	331	16	9	63	9	234	234	.....	.....	238	238	.....	.....	.....	285		
103 Soap.	41	2,191	34	74	342	206	1,535	1,262	273	.....	1,571	1,292	279	.....	.....	3,144		
104 Stationery goods, not elsewhere specified.	49	788	46	43	85	72	642	303	226	13	539	301	225	4	9	245		
105 Steam packing.	25	839	14	28	62	8	727	662	63	2	858	781	74	3	.....	1,210		
106 Stereotyping and electrotyping.	34	1,036	26	59	139	25	790	790	.....	.....	811	811	.....	.....	.....	1,180		
107 Stoves and furnaces, including gas and oil stoves.	23	1,342	17	46	115	41	1,123	1,121	2	.....	1,071	1,069	2	.....	.....	2,596		
108 Surgical appliances and artificial limbs.	49	514	49	32	64	31	338	188	145	5	325	181	139	.....	5	172		
109 Tobacco manufactures.	2,036	26,664	2,169	417	1,221	306	22,521	10,334	12,119	68	24,833	11,395	13,303	26	49	2,115		
110 Toys and games.	59	1,284	61	44	55	29	1,095	575	466	24	1,206	633	546	20	7	297		
111 Type founding and printing materials.	23	260	17	21	24	9	189	165	24	.....	196	171	25	.....	.....	217		
112 Typewriters and supplies.	27	905	19	48	155	23	660	563	97	.....	670	572	98	.....	.....	407		
113 Umbrellas and canes.	134	2,322	170	51	145	59	1,897	1,038	853	6	2,029	1,110	912	7	.....	495		
114 Vinegar and cider.	4	87	2	5	10	.....	40	40	.....	.....	44	44	.....	.....	.....	75		
115 Wall paper.	7	811	2	10	119	14	666	576	88	2	806	697	106	2	1	568		
116 Wall plaster.	12	912	5	28	64	11	804	786	18	.....	823	805	18	.....	.....	3,730		





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

NEW YORK CITY—Continued.

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.				
					Male.	Female.	Total.	Male.	Female.		Under 16.	Male.	Female.	Male.	Female.		
																16 and over.	
117 Window shades and fixtures.....	67	761	72	32	101	34	522	407	115	.....	536	418	118	.....	130		
118 Wirework, including wire rope and cable..	67	1,200	08	60	73	25	974	806	65	13	1,042	959	70	.....	724		
119 Wood, turned and carved.....	82	1,012	104	19	48	13	828	710	118	.....	810	695	115	13	824		
120 Woolen, worsted, and felt goods, and wool hats.	11	468	13	13	22	1	410	255	163	1	486	296	189	.....	565		
121 All other industries <sup>1</sup> .....	1,421	38,104	1,461	1,171	3,556	1,194	30,722	23,478	6,977	267	31,804	24,305	7,223	107	60,664		

<sup>1</sup> All other industries embrace: Artists' materials, 13; awnings, tents, and sails, 84; axle grease, 5; babbitt metal and solder, 20; bags, other than paper, 14; baking powders and yeast, 10; billiard tables and materials, 11; bone, carbon, and lamp black, 1; brick and tile, 3; butter, reworking, 1; candles, 4; card cutting and designing, 21; carriages and sleds, children's, 9; cash registers and calculating machines, 3; charcoal, 1; china decorating, 7; chocolate and cocoa products, 8; cloth, sponging and refinishing, 23; clothing, horse, 7; clothing, men's, buttonholes, 81; cordials and sirups, 32; cork, cutting, 31; dairymen's, poultryers', and apiarists' supplies, 1; dentists' materials, 13; drug grinding, 9; dyestuffs and extracts, 14; emery and other abrasive wheels, 3; engraving and diesinking, 72; engraving, wood, 23; fertilizers, 3; firearms and ammunition, 2; fire extinguishers, chemical, 5; fireworks, 4; flavoring extracts, 63; flour-mill and gristmill products, 10; foundry supplies, 1; fuel, manufactured, 1; galvanizing, 8; glucose and starch, 3; glue, 7; grease and tallow, 5; hammocks, 1; hat and cap materials, 31; hats, straw, 42; horseshoes, not made in steel works or rolling mills, 2; iron and steel, steel works and rolling mills, 3; iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills, 5; iron and steel, doors and shutters, 9; iron and steel forgings, 8;

ROCHESTER.

1 All industries.....	1,203	46,617	1,042	1,248	3,434	1,785	39,108	26,717	11,977	414	41,865	28,672	12,756	204	233	39,277
2 Baking powders and yeast.....	5	14	6	1	3	1	3	1	2	.....	3	1	2	.....	.....	7
3 Boots and shoes, including cut stock and findings.	56	6,076	44	160	133	222	6,117	3,401	2,551	165	6,430	3,577	2,682	84	87	1,911
4 Boxes, cigar.....	3	18	7	.....	.....	.....	11	9	2	.....	11	9	.....	.....	.....	26
5 Boxes, fancy and paper.....	15	760	10	23	11	12	704	176	500	28	708	192	545	3	28	308
6 Brass and bronze products.....	4	252	2	12	7	6	225	214	10	1	219	208	10	1	.....	301
7 Bread and other bakery products.....	110	626	120	8	51	30	417	374	42	1	434	389	44	1	.....	268
8 Buttons.....	4	1,639	.....	24	107	85	1,423	694	692	37	1,595	778	775	8	34	1,126
9 Carriages and wagons and materials.	17	609	10	12	47	9	523	521	1	.....	521	520	1	.....	.....	420
10 Clothing, men's, including shirts.....	108	8,569	241	80	395	102	7,732	3,673	3,990	69	8,222	3,904	4,247	10	61	1,007
11 Clothing, women's.....	4	92	1	9	2	5	75	23	52	.....	86	26	60	.....	.....	21
12 Coffee and spice, roasting and grinding....	6	144	1	7	19	4	113	70	37	.....	99	67	32	.....	.....	192
13 Confectionery.....	16	697	13	20	42	10	600	224	382	.....	623	230	393	.....	.....	441
14 Cooperage and wooden goods, not elsewhere specified.	10	180	11	5	3	4	157	150	.....	1	150	149	.....	1	.....	314
15 Cutlery and tools, not elsewhere specified..	11	125	15	4	4	2	100	100	.....	.....	106	106	.....	.....	.....	648
16 Electrical machinery, apparatus, and supplies.	9	949	1	16	155	61	716	582	134	.....	704	621	143	.....	.....	1,288
17 Electroplating.....	7	35	3	2	2	.....	28	28	.....	.....	35	35	.....	.....	.....	59
18 Flour-mill and gristmill products.....	10	162	1	22	12	7	110	110	.....	.....	123	123	.....	.....	.....	2,798
19 Food preparations.....	6	44	4	2	5	6	27	13	14	.....	33	16	17	.....	.....	42
20 Foundry and machine-shop products.....	89	2,784	60	127	135	97	2,365	2,340	17	2	2,756	1,733	19	4	.....	2,618
21 Fur goods.....	7	109	9	2	2	8	88	38	50	.....	106	46	00	.....	.....	30
22 Furnishing goods, men's.....	6	335	3	7	42	6	277	43	229	5	258	40	213	.....	5	34
23 Furniture and refrigerators.....	27	1,647	10	56	88	22	1,405	1,442	16	7	1,606	1,681	17	8	.....	1,943
24 Gas and electric fixtures and lamps and reflectors.	8	643	2	20	19	11	591	579	12	.....	643	630	13	.....	.....	426
25 Glass, cutting, staining, and ornamenting..	5	49	4	1	3	2	39	39	.....	.....	40	40	.....	.....	.....	4
26 Hand stamps and stencils and brands.....	4	21	5	.....	.....	.....	14	11	2	1	13	10	2	1	.....	.....
27 Hats and caps, other than felt, straw, and wool.	7	43	8	2	3	.....	30	18	12	.....	39	23	16	.....	.....	3
28 Ice, manufactured.....	3	67	.....	3	11	.....	53	53	.....	.....	50	50	.....	.....	.....	580
29 Lasts.....	4	140	2	11	3	.....	124	121	3	.....	134	131	.....	3	.....	255
30 Liquors, malt.....	8	495	1	29	71	3	391	391	.....	.....	392	392	.....	.....	.....	1,301
31 Looking-glass and picture frames.....	9	211	7	11	12	3	178	163	13	2	175	160	13	2	.....	107
32 Lumber and timber products.....	22	1,098	10	39	52	16	981	964	13	4	1,028	1,011	13	4	.....	2,935
33 Models and patterns, not including paper patterns.	9	50	8	2	2	.....	38	33	4	1	40	35	4	1	.....	29
34 Musical instruments, pianos and organs and materials.	4	118	2	8	.....	4	104	103	1	.....	119	118	1	.....	.....	168
35 Patent medicines and compounds and druggists' preparations.	32	245	20	23	54	32	116	37	79	.....	136	43	93	.....	.....	83
36 Printing and publishing.....	123	2,713	84	103	391	262	1,873	1,455	397	21	1,990	1,546	422	21	1	2,241
37 Slaughtering and meat packing.....	15	50	20	.....	5	.....	25	24	1	.....	26	25	1	.....	.....	129
38 Surgical appliances and artificial limbs....	4	29	3	1	5	2	18	16	2	.....	17	15	2	.....	.....	19
39 Tobacco manufactures.....	94	325	102	7	7	.....	209	166	41	2	234	186	46	2	.....	15
40 Typewriters and supplies.....	8	123	2	10	20	21	64	59	4	1	65	60	4	1	.....	171
41 Wood, turned and carved.....	11	41	11	.....	.....	.....	29	29	.....	.....	28	28	.....	.....	.....	115
42 All other industries <sup>1</sup> .....	215	13,710	164	364	1,510	722	10,950	8,212	2,072	66	11,748	8,818	2,604	49	17	14,923

<sup>1</sup> All other industries embrace: Artificial flowers and feathers and plumes, 1; artificial stone, 9; automobiles, including bodies and parts, 4; awnings, tents, and sails, 3; babbitt metal and solder, 1; bags, paper, 1; baskets, and rattan and willow ware, 3; belting and hose, leather, 2; belting and hose, woven and rubber, 1; billiard tables and materials, 1; blacking and cleansing and polishing preparations, 3; bluing, 2; brooms, 1; brushes, 3; canning and preserving, 4; carpets, rag, 2; carriages and sleds, children's, 2; cars and general shop construction and repairs by steam-railroad companies, 1; cars and general shop construction and repairs by street-railroad companies, 1; chemicals, 1; china decorating, 1; cloth, sponging and refinishing, 1; clothing, men's, buttonholes, 5; coffins, burial cases, and undertakers' goods, 2; copper, tin, and sheet-iron products, 22; cordials and sirups, 2; corsets, 1; enameling and japanning, 2; engraving and diesinking, 2; fancy articles, not elsewhere specified, 2; fireworks, 1; flags, banners, regalia, society badges, and emblems, 2; flavoring extracts, 4; gas, illuminating and heating, 1; glass, 1; gold and silver, leaf and foil, 1; grease and tallow, 1; hair work, 2; hats, fur-felt, 1; hosiery and knit goods, 1; ink, writing, 1; instruments, professional and scientific, 3; iron and steel forgings, 1; iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills, 1; jewelry, 4; jewelry and instrument cases, 1; leather goods, 6; leather, tanned, curried and finished, 1; lime, 1; liquors,



MANUFACTURES—NEW YORK.

891

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 YORK CITY—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.
117	\$1,716,974	\$3,802,578	\$89,656	\$116,878	\$298,567	\$12,169	\$3,002,724	\$80,291	\$6,282	.....	\$216,221	\$4,125,488	\$1,110,595
118	1,672,000	2,105,599	122,874	84,730	534,027	24,538	1,127,020	59,180	6,212	\$10,916	136,102	2,358,299	1,206,741
119	910,188	1,420,955	37,117	66,847	493,175	37,363	624,493	57,544	215	1,414	103,287	1,707,488	1,045,632
120	1,035,516	1,273,918	12,598	21,079	206,611	14,214	948,754	13,037	2,832	.....	54,795	1,611,642	548,074
121	159,734,370	254,792,427	3,574,262	4,683,949	17,813,804	3,044,990	205,432,826	1,502,216	5,644,677	162,845	12,932,868	272,193,534	63,715,718

iron and steel, nails and spikes, cut and wrought, including wire nails, not made in steel works or rolling mills, 3; labels and tags, 23; lapidary work, 42; liquors, distilled, 1; liquors, vinous, 3; malt, 2; matches, 1; mats and matting, 3; mineral and soda waters, 252; moving pictures, 7; mucilage and paste, 13; needles, pins, and hooks and eyes, 2; oakum, 1; oil, essential, 1; oil, linseed, 1; oil, not elsewhere specified, 20; oilcloth and linoleum, 2; optical goods, 27; paper and wood pulp, 1; paper patterns, 15; paving materials, 6; pencils, lead, 2; petroleum, refining, 3; phonographs and graphophones, 2; photographic apparatus and materials, 21; pumps, not including steam pumps, 3; roofing materials, 3; rules, ivory and wood, 2; sand and emery paper and cloth, 2; scales and balances, 6; screws, machine, 2; shoelldy, 1; signs and advertising novelties, 60; smelting and refining, copper, 1; soda-water apparatus, 26; sporting and athletic goods, 25; springs, steel, car and carriage, 2; statuary and art goods, 50; sugar, refining, not including beet sugar, 3; tin foil, 4; tin plate and terneplate, 2; upholstering materials, 10; vault lights and ventilators, 11; washing machines and clothes wringers, 1; whalebone cutting, 1; whips, 2; wire, 2; wood carpet, 6; wood preserving, 3; wool pulling, 2.

ROCHESTER.

1	\$95,707,791	\$94,358,221	\$3,199,373	\$4,534,279	\$21,518,034	\$1,182,804	\$49,491,578	\$668,791	\$911,048	\$2,411,591	\$10,440,723	\$112,676,215	\$62,001,833
2	12,424	20,933	728	3,832	1,092	378	11,069	710	40	.....	3,084	28,094	16,647
3	6,787,526	12,247,981	347,154	308,050	3,038,249	59,530	7,751,012	89,314	13,800	.....	640,872	13,450,155	5,639,613
4	14,050	21,147	.....	.....	5,070	398	13,857	325	80	.....	1,417	26,738	12,483
5	636,145	864,212	55,606	24,070	253,233	10,221	460,293	24,823	1,930	.....	34,036	965,727	495,213
6	321,750	520,347	31,880	8,585	110,400	11,151	337,220	3,271	833	.....	17,007	669,460	221,089
7	843,083	1,855,492	10,484	48,236	297,136	39,464	1,310,797	26,644	7,760	170	105,801	2,108,821	749,560
8	1,963,527	1,475,018	58,800	183,716	538,220	24,431	504,348	14,886	7,777	.....	132,780	1,821,230	1,292,451
9	1,786,567	1,127,063	46,977	74,877	380,320	11,395	492,768	7,664	9,700	4,509	99,453	1,177,190	673,027
10	10,808,113	17,355,581	387,462	774,689	3,808,562	66,451	8,615,110	106,575	17,621	2,065,400	1,513,711	18,878,508	10,196,947
11	66,915	147,380	8,583	2,896	29,720	1,703	91,256	3,072	.....	.....	10,170	153,086	60,127
12	232,448	633,900	16,800	21,269	43,360	4,824	506,165	6,794	516	.....	34,232	672,518	161,529
13	880,145	1,534,247	52,398	49,671	228,276	18,934	996,627	20,001	3,766	.....	214,586	1,926,726	911,165
14	355,627	638,384	10,066	4,882	81,404	5,385	516,409	230	1,881	.....	18,637	688,710	166,916
15	240,310	128,882	5,448	2,957	66,309	6,166	28,680	2,172	1,976	3,195	11,979	161,862	127,016
16	4,230,332	1,690,780	48,051	163,998	479,823	21,780	789,660	4,010	9,516	.....	173,942	1,677,996	865,656
17	23,706	31,956	2,236	864	20,721	1,251	3,019	2,748	25	.....	1,092	36,790	32,520
18	1,053,527	3,278,747	40,872	13,720	74,711	15,588	3,050,309	440	7,406	500	75,204	3,381,370	315,482
19	75,359	104,906	2,207	6,340	13,034	1,872	65,886	3,284	.....	.....	12,339	116,272	48,515
20	6,093,437	4,698,391	273,541	162,284	1,619,254	95,198	1,871,462	46,938	23,268	18,899	587,557	5,743,964	3,777,304
21	177,148	205,911	2,540	6,416	51,281	1,633	110,165	14,050	113	150	15,683	406,408	204,608
22	298,110	727,521	13,760	48,897	88,698	1,401	492,627	6,880	58	20,000	55,200	784,459	290,431
23	2,806,025	2,777,200	136,250	140,289	915,316	38,167	1,172,041	30,912	17,888	7,075	320,851	3,086,855	1,876,647
24	1,174,508	1,007,976	49,650	26,935	289,356	10,527	547,432	9,909	4,635	.....	150,542	1,106,024	548,065
25	42,412	89,569	1,092	4,576	26,907	107	50,235	2,212	.....	.....	4,440	104,050	53,714
26	19,531	25,750	.....	780	6,994	124	14,577	1,389	.....	.....	1,886	35,781	21,080
27	17,436	66,896	2,600	1,322	13,534	432	35,340	1,540	35	13	12,080	82,100	46,328
28	259,255	107,509	2,600	7,088	39,602	16,373	11,847	.....	1,308	.....	23,691	137,803	109,083
29	211,709	241,263	19,652	2,916	33,217	3,655	90,307	4,704	139	.....	36,678	273,307	179,345
30	4,823,920	2,202,659	78,875	79,776	308,902	67,538	664,158	8,000	495,687	.....	504,724	3,011,620	2,279,833
31	328,176	259,289	16,130	14,703	105,983	4,274	90,442	7,046	971	.....	19,740	280,935	186,219
32	2,302,044	2,278,858	78,793	51,310	510,976	25,066	1,460,372	11,978	10,320	.....	130,043	2,454,922	969,484
33	26,718	45,591	1,440	2,100	26,837	881	8,373	2,380	225	150	3,235	64,257	55,003
34	241,476	220,526	11,386	1,812	62,605	3,289	116,817	4,815	1,577	.....	18,225	234,194	114,088
35	618,817	748,382	41,884	85,246	48,131	3,003	321,350	15,386	1,593	1,872	229,917	830,762	506,409
36	4,979,680	4,453,441	277,707	449,690	1,171,747	45,770	1,583,198	77,723	12,945	256,792	577,869	5,127,910	3,498,942
37	104,695	134,744	.....	4,146	14,119	3,061	109,018	1,076	1,049	.....	2,275	158,001	45,922
38	60,664	37,464	1,800	4,029	9,803	420	10,012	1,378	329	.....	10,192	48,839	35,406
39	385,070	432,031	11,680	5,957	108,186	1,215	188,045	6,851	59,576	951	49,620	512,260	323,009
40	549,855	453,168	33,504	36,660	42,208	3,953	198,406	4,430	2,051	1,000	130,956	590,847	388,488
41	41,090	50,742	.....	884	19,386	2,914	22,209	3,230	50	.....	1,979	66,549	40,846
42	39,814,446	29,306,440	1,020,219	1,694,802	6,505,402	552,881	14,769,573	93,941	193,699	30,925	4,444,998	39,695,077	24,372,623

vinous, 1; malt, 1; marble and stone work, 4; mattresses and spring beds, 4; mineral and soda waters, 11; mirrors, 1; moving pictures, 1; mucilage and paste, 2; musical instruments and materials, not specified, 1; needles, pins, and hooks and eyes, 2; oils, not elsewhere specified, 1; optical goods, 3; paper goods, not elsewhere specified, 2; petroleum, refining, 1; photographic apparatus and materials, 10; photo-engraving, 2; pipes, tobacco, 3; pottery, terra-cotta, and fire-clay products, 1; pumps, not including steam pumps, 2; rubber goods, not elsewhere specified, 2; saws, 1; scales and balances, 1; screws, machine, 1; shipbuilding, including boat building, 3; show cases, 1; silk and silk goods, including throwsters, 2; silverware and plated ware, 1; soap, 1; stationary goods, not elsewhere specified, 4; statuary and art goods, 1; stereotyping and electrotyping, 5; stoves and furnaces, including gas and oil stoves, 2; type founding and printing materials, 2; umbrellas and canes, 1; upholstering materials, 1; vault lights and ventilators, 1; vinegar and cider, 1; washing machines and clothes wringers, 1; whips, 2; window shades and fixtures, 1; wirework, including wire rope and cable, 4; woolen, worsted, and felt goods, and wool hats, 1.

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

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.									WAGE EARNERS—NUMBER DEG. 15, OR NEAREST REPRESENTATIVE DAY.					Pri- mary horse- power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.			
					Male.	Female.	Total.	Male.	Female.		Under 16.	Male.	Female.			
														Male.	Female.	
1 All industries.....	134	17,728	120	618	1,576	483	14,931	13,159	1,737	35	17,429	15,353	2,036	30	10	49,161
2 Bread and other bakery products.....	27	145	33	.....	8	2	102	90	11	1	103	91	11	1	.....	39
3 Lumber and timber products.....	5	101	3	7	7	.....	84	84	.....	.....	91	91	.....	.....	.....	394
4 Marble and stone work.....	4	72	3	4	5	2	58	58	.....	.....	68	68	.....	.....	.....	108
5 Printing and publishing.....	18	339	8	20	70	16	219	176	40	3	241	194	44	3	.....	299
6 Tobacco manufactures.....	20	63	29	.....	1	.....	53	51	.....	2	54	52	.....	2	.....	48,341
7 All other industries <sup>1</sup> .....	60	16,988	44	537	1,479	403	14,415	12,700	1,686	29	16,872	14,857	1,981	24	10	.....

<sup>1</sup>All other industries embrace: Boxes, fancy and paper, 2; brooms, 3; carriages and wagons and materials, 4; cars and general shop construction and repairs by street-railroad companies, 1; clothing, men's, including shirts, 1; clothing, women's, 1; confectionery, 7; copper, tin, and sheet-iron products, 2; electrical machinery, apparatus and supplies, 3; flour-mill and gristmill products, 2; foundry and machine-shop products, 2; furnishing goods, men's, 1; gas, illuminating and heating, 1; hammocks, 1; hand

SYRACUSE.

1 All industries.....	738	21,710	655	668	1,540	699	18,148	14,505	3,373	210	19,932	16,019	3,679	110	124	20,796
2 Boxes, fancy and paper.....	4	174	3	3	1	3	164	31	106	27	210	40	196	2	32	63
3 Brass and bronze products.....	10	236	0	14	2	8	203	201	2	.....	201	199	2	.....	.....	164
4 Bread and other bakery products.....	83	554	88	11	31	23	401	320	69	6	420	349	74	3	3	267
5 Candles.....	5	317	2	18	17	10	275	140	105	30	312	159	119	16	18	107
6 Carriages and wagons and materials.....	13	272	17	.....	9	1	245	241	4	.....	225	221	4	.....	.....	293
7 Clothing, men's, including shirts.....	59	1,921	74	24	145	48	1,630	603	944	23	1,736	706	1,005	5	20	161
8 Clothing, women's.....	8	311	6	7	7	0	255	38	242	5	303	41	257	3	2	50
9 Confectionery.....	7	207	7	8	9	11	172	66	105	1	201	77	123	.....	1	177
10 Cooperage and wooden goods, not elsewhere specified.....	7	44	9	.....	.....	.....	35	35	.....	.....	36	36	.....	.....	.....	35
11 Copper, tin, and sheet-iron products.....	9	380	5	13	18	5	339	320	10	.....	271	256	15	.....	.....	298
12 Electroplating.....	5	40	4	2	2	1	40	39	1	.....	40	39	1	.....	.....	39
13 Food preparations.....	11	225	12	11	34	11	157	94	58	5	171	102	63	1	5	39
14 Foundry and machine-shop products.....	72	3,093	48	110	130	77	2,728	2,597	112	19	3,155	3,003	130	22	.....	3,594
15 Furniture and refrigerators.....	17	412	14	22	6	5	366	352	12	2	408	303	13	2	.....	600
16 Gloves and mittens, leather.....	4	50	5	1	.....	2	42	21	21	.....	44	22	22	.....	.....	7
17 Hosiery and knit goods.....	5	421	7	8	13	10	383	55	309	19	408	59	329	3	17	330
18 Jewelry.....	9	10	10	.....	.....	.....	9	9	.....	.....	11	11	.....	.....	.....	4
19 Liquors, malt.....	8	343	5	23	39	5	271	270	1	.....	260	259	1	.....	.....	1,783
20 Lumber and timber products.....	18	359	12	14	11	0	316	309	4	3	313	306	4	3	.....	1,059
21 Models and patterns, not including paper patterns.....	6	40	5	4	1	2	28	28	.....	.....	34	34	.....	.....	.....	38
22 Patent medicines and compounds and druggists' preparations.....	24	308	14	17	50	87	140	50	81	.....	137	58	79	.....	.....	239
23 Printing and publishing.....	84	1,110	73	34	195	85	723	558	153	12	762	588	162	11	1	821
24 Salt.....	7	107	4	12	1	.....	90	90	.....	.....	120	120	.....	.....	.....	274
25 Tobacco manufactures.....	60	571	89	8	17	3	454	331	108	15	489	357	116	5	11	58
26 All other industries <sup>1</sup> .....	183	10,187	133	309	803	290	8,652	7,692	917	43	9,656	8,584	1,024	34	14	10,125

<sup>1</sup>All other industries embrace: Agricultural implements, 2; artificial stone, 3; automobiles, including bodies and parts, 4; awnings, tents, and sails, 3; habbit metal and solder, 1; baking powders and yeast, 3; baskets and rattan and willow ware, 3; belting and hose, leather, 1; billiard tables and materials, 2; boots and shoes, including cut stock and findings, 3; boxes, cigar, 1; brick and tile, 1; brooms, 2; brushes, 1; butter, cheese, and condensed milk, 1; buttons, 1; canning and preserving, 3; carpets, rug, 3; cars and general shop construction and repairs by street-railroad companies, 2; cars and general shop construction and repairs by street-railroad companies, 1; chemicals, 2; clocks and watches, including cases and materials, 1; coffee and spice, roasting and grinding, 3; coffins, burial cases, and undertakers' goods, 2; cutlery and tools, not elsewhere specified, 4; dairymen's, poultryers', and apriarists' supplies, 1; electrical machinery, apparatus, and supplies, 5; enameling and japanning, 1; engraving, wood, 1; firearms and ammunition, 1; flags, banners, regalia, society badges, and emblems, 1; flavoring extracts, 2; flour-mill and gristmill products, 2; fur goods, 2; furnishing goods, men's, 2; gas and electric fixtures and lamps and reflectors, 1; gas, illuminating and heating, 2; grease and tallow, 2; hair work, 1; hand stamps and stencils and brands, 2; hats, fur-felt, 3; ice, manufactured, 1; instruments, professional and scientific, 2; iron and steel, steel works and rolling mills, 2; iron and steel,

TROY.

1 All industries.....	363	22,149	352	496	935	346	20,020	8,763	11,187	70	21,888	9,416	12,367	42	33	18,867
2 Boxes, fancy and paper.....	7	373	10	9	1	5	348	212	131	5	349	212	132	3	2	255
3 Bread and other bakery products.....	36	238	33	6	19	9	171	158	10	3	170	157	10	3	.....	82
4 Brick and tile.....	4	88	4	3	1	.....	80	77	.....	.....	70	67	.....	.....	.....	315
5 Brushes.....	18	622	13	15	20	10	564	530	27	1	588	559	28	1	.....	380
6 Carriages and wagons and materials.....	6	41	5	3	.....	.....	33	33	.....	.....	34	34	.....	.....	.....	35
7 Clothing, men's, including shirts.....	11	3,741	16	66	113	71	3,475	1,021	2,419	35	3,391	996	2,360	11	24	1,136
8 Confectionery.....	6	40	6	3	0	1	24	15	9	.....	24	15	9	.....	.....	25
9 Copper, tin, and sheet-iron products.....	10	88	0	4	5	2	88	68	.....	.....	73	73	.....	.....	.....	25
10 Foundry and machine-shop products.....	28	1,028	28	54	43	20	883	878	5	.....	970	965	5	.....	.....	1,446
11 Furnishing goods, men's.....	21	10,370	16	89	329	160	9,776	1,906	7,870	.....	11,277	2,195	9,078	4	.....	2,419
12 Leather goods.....	6	66	6	4	2	.....	43	40	8	.....	54	45	9	.....	.....	13
13 Liquors, malt.....	10	434	0	40	57	2	329	329	.....	.....	349	349	.....	.....	.....	1,352
14 Marble and stone work.....	9	49	13	1	2	1	32	32	.....	.....	30	30	.....	.....	.....	90
15 Pottery, terra-cotta, and fire-clay products.....	3	141	.....	10	15	2	114	114	.....	.....	122	122	.....	.....	.....	240
16 Printing and publishing.....	33	539	28	31	145	25	312	305	5	2	320	313	5	2	.....	439
17 Tobacco manufactures.....	37	361	61	5	23	1	281	264	17	.....	293	275	18	.....	.....	.....
18 All other industries <sup>1</sup> .....	118	3,930	110	153	149	36	3,482	2,775	686	21	3,774	3,009	743	15	7	10,665

<sup>1</sup>All other industries embrace: Awnings, tents, and sails, 6; bags, other than paper, 1; belting and hose, leather, 2; bluing, 2; boxes, cigar, 1; brass and bronze products, 2; canning and preserving, 1; clothing, men's, buttonholes, 9; clothing, women's, 1; coffee and spice, roasting and grinding, 2; cordage and twine and jute and linen goods, 1; dyestuffs and extracts, 1; electrical machinery, apparatus, and supplies, 2; electroplating, 2; engraving, wood, 1; files, 1; flour-mill and gristmill products, 2; food preparations, 2; fur goods, 3; furniture and refrigerators, 1; gas, illuminating and heating, 1; grease and tallow, 1; hair work, 2; hand stamps and stencils and brands, 3; hats and caps, other than felt, straw, and wool, 1; hats, fur-felt, 1; hosiery and knit goods, 4; instruments, professional and scientific, 3; iron and steel, steel works and rolling

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.

SCHENECTADY.

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 \$51,815,808	\$37,402,739	\$1,305,319	\$1,780,783	\$10,001,932	\$956,909	\$20,995,411	\$44,498	\$181,037	\$9,875	\$2,126,975	\$38,164,699	\$16,212,379
2 143,075	352,589	-----	6,044	69,088	8,475	254,314	5,025	1,252	-----	8,391	403,404	140,615
3 213,082	307,530	11,800	6,505	52,203	2,110	215,958	2,040	1,305	-----	15,009	315,950	97,852
4 129,169	100,844	7,550	2,466	27,636	2,032	55,118	1,250	845	-----	3,947	119,077	62,827
5 502,661	496,590	26,464	50,331	144,578	10,174	162,673	11,376	825	1,475	88,704	550,406	377,569
6 42,507	85,529	-----	800	26,103	680	40,552	2,130	9,357	-----	5,001	100,821	59,589
7 50,784,724	30,059,657	1,250,515	1,714,637	9,682,324	933,438	20,260,796	22,671	107,453	8,400	2,004,423	36,674,441	15,474,207

stamps and stencils and brands, 1; hosiery and knit goods, 1; liquors, malt, 1; locomotives, not made by railroad companies, 1; mattresses and spring beds, 1; mineral and soda waters, 8; paint and varnish, 2; patent medicines and compounds and druggists' preparations, 4; pottery, terra-cotta, and fire-clay products, 1; slaughtering and meat packing, 4; shoddy, 1; soap, 1; sporting and athletic goods, 1; vinegar and cider, 1; wall plaster, 1.

SYRACUSE.

1 \$51,725,850	\$41,304,017	\$1,523,033	\$1,790,225	\$10,421,716	\$858,565	\$20,917,031	\$280,370	\$703,457	\$349,189	\$4,480,431	\$48,434,615	\$27,659,019
2 121,812	147,992	4,320	1,996	48,561	2,310	84,613	1,440	1,319	-----	3,433	163,525	76,602
3 522,108	661,621	86,120	6,332	130,823	17,827	369,294	8,836	604	-----	41,725	683,231	296,110
4 957,805	1,486,120	21,095	41,050	240,263	27,751	1,044,510	27,392	4,675	-----	78,769	1,831,698	759,428
5 925,197	939,611	35,070	21,862	103,968	11,684	675,817	780	3,180	-----	87,550	1,092,385	404,884
6 563,598	501,421	-----	17,566	169,820	6,664	261,600	2,826	2,057	-----	40,288	592,703	324,499
7 2,009,777	3,062,573	39,255	170,704	693,609	11,683	1,705,865	31,513	1,414	244,439	164,091	3,460,803	1,743,255
8 162,216	381,920	7,710	6,974	110,388	3,691	218,416	6,570	429	2,086	25,656	410,447	194,340
9 208,711	440,277	11,266	15,118	63,118	8,273	320,234	9,184	831	-----	18,203	498,366	109,859
10 67,011	74,285	-----	-----	20,619	476	50,841	340	238	-----	1,771	95,434	44,117
11 926,133	1,030,187	35,290	19,710	202,595	8,628	672,452	744	3,729	-----	87,039	1,091,367	410,287
12 25,432	37,411	2,080	1,575	22,865	799	6,798	2,353	62	-----	879	46,933	39,336
13 594,099	845,262	26,328	9,923	70,028	8,332	606,817	1,818	2,955	84	78,947	1,104,798	459,649
14 5,874,103	4,778,654	253,581	172,985	1,518,229	167,593	2,108,531	36,448	28,421	16,546	476,330	5,691,526	3,415,412
15 699,238	580,658	30,513	10,384	196,877	8,642	277,143	4,105	2,606	-----	50,388	662,236	376,451
16 44,173	57,995	2,000	780	13,750	454	37,057	720	139	800	2,195	66,677	29,106
17 949,976	799,025	22,367	10,593	130,594	8,543	577,914	125	4,684	27,000	17,805	968,713	382,256
18 19,175	19,702	-----	7,067	203	203	9,935	1,614	40	-----	843	40,518	30,380
19 3,940,300	1,978,738	83,120	40,891	252,808	60,362	619,284	6,842	411,693	-----	501,550	2,459,703	1,780,057
20 686,634	910,688	21,840	14,590	183,413	12,532	636,474	6,842	3,851	1,785	29,301	1,003,304	564,288
21 31,405	34,525	3,900	565	19,773	1,027	6,564	1,417	82	-----	1,247	44,873	37,282
22 573,367	733,262	31,615	91,452	63,755	4,558	234,568	11,855	1,553	11,468	282,448	849,879	610,763
23 1,809,570	1,506,459	57,486	193,805	444,400	26,804	584,063	34,377	8,530	41,283	175,711	2,032,013	1,421,146
24 374,624	89,388	7,540	300	41,830	3,816	9,297	6,562	6,562	1,000	19,043	88,547	75,434
25 554,514	824,672	16,610	14,896	247,231	3,245	400,120	9,316	83,575	-----	49,879	941,302	537,937
26 29,025,812	19,315,271	723,937	876,568	5,425,332	452,078	9,398,825	79,755	129,588	3,198	2,225,390	23,507,574	13,650,071

bolts, nuts, washers, and rivets, not made in steel works or rolling mills, 1; iron and steel forgings, 2; lead, bar, pipe, and sheet, 1; leather goods, 5; looking-glass and picture frames, 1; malt, 1; marble and stone work, 10; mattresses and spring beds, 3; millinery and lace goods, 1; mineral and soda waters, 5; mirrors, 1; muslinage and paste, 1; musical instruments and materials, not specified, 2; musical instruments, pianos and organs and materials, 1; oil, not elsewhere specified, 1; optical goods, 3; paint and varnish, 3; photographic apparatus and materials, 1; photo-engraving, 3; pipes, tobacco, 1; pottery, terra-cotta, and fire-clay products, 3; pumps, not including steam pumps, 3; rubber goods, not elsewhere specified, 1; safes and vaults, 2; show cases, 1; silverware and plated ware, 1; slaughtering and meat packing, 4; soap, 2; sporting and athletic goods, 1; stationery goods, not elsewhere specified, 2; statuary and art goods, 2; steam packing, 1; stereotyping and electrotyping, 2; stoves and furnaces, including gas and oil stoves, 3; sulphuric, nitric, and mixed acids, 1; typewriters and supplies, 4; umbrellas and canes, 1; vinegar and cider, 1; wall plaster, 3; washing machines and clothes wringers, 2; window shades and fixtures, 2; wirework, including wire rope and cable, 2.

TROY.

1 \$39,309,202	\$32,090,155	\$1,129,098	\$1,068,555	\$9,406,734	\$641,741	\$14,984,633	\$175,116	\$560,722	\$1,166,573	\$2,958,983	\$37,979,986	\$22,353,612
2 241,324	389,194	15,785	2,242	154,943	4,080	175,090	7,928	444	-----	28,682	434,429	255,259
3 325,778	647,912	9,784	15,400	115,787	14,109	464,794	8,173	3,359	-----	16,446	724,333	245,370
4 143,082	65,375	3,400	416	40,727	9,937	2,523	-----	1,287	-----	7,085	90,162	77,702
5 654,067	749,675	32,150	36,948	273,523	10,039	334,480	4,268	2,331	1,940	53,951	959,266	614,747
6 79,320	53,286	2,644	-----	26,454	1,492	20,294	-----	955	-----	1,547	63,435	41,649
7 6,004,199	6,051,165	120,397	173,444	1,431,804	50,395	3,286,161	29,951	8,066	553,339	309,978	6,976,241	3,630,695
8 37,619	59,977	2,340	4,472	9,665	1,341	35,195	2,386	113	-----	4,465	67,544	30,818
9 1,211,195	98,734	6,680	2,700	34,136	1,029	49,047	1,473	930	-----	3,799	127,581	77,505
10 2,889,460	1,613,004	110,997	58,874	590,525	41,558	668,435	12,591	9,857	1,612	112,555	1,952,971	1,242,978
11 11,948,258	11,364,127	300,658	405,572	4,049,046	80,726	4,099,541	34,737	32,125	590,659	1,171,063	13,698,745	8,858,478
12 120,687	91,408	3,049	3,566	18,220	691	57,856	1,270	725	-----	6,091	111,774	53,227
13 3,796,066	1,964,922	120,327	67,184	242,729	49,599	599,727	-----	397,923	-----	487,433	2,405,847	1,756,521
14 87,247	73,542	785	1,580	35,574	3,071	26,928	765	478	-----	3,701	83,422	67,823
15 258,438	229,503	15,196	10,465	52,236	18,289	83,542	-----	2,203	-----	41,572	241,455	139,624
16 1,005,763	704,941	63,726	104,984	203,559	11,880	236,508	18,384	1,637	17,470	106,798	969,212	720,829
17 285,895	502,994	5,252	18,967	165,517	1,073	244,112	7,238	35,279	-----	25,556	579,298	334,113
18 11,249,694	7,370,396	317,022	153,741	1,956,289	341,772	4,000,405	45,952	62,380	-----	491,291	8,549,461	4,207,284

mills, 2; iron and steel forgings, 1; looking-glass and picture frames, 1; lumber and timber products, 2; mats and matting, 1; mattresses and spring beds, 3; millinery and lace goods, 2; mineral and soda waters, 7; models and patterns, not including paper patterns, 3; muslinage and paste, 1; oil, not elsewhere specified, 1; oilcloth and paste, 1; optical goods, 1; paint and varnish, 3; paper and wood pulp, 3; patent medicines and compounds and druggists' preparations, 8; photo-engraving, 2; scales and balances, 2; slaughtering and meat packing, 4; springs, steel, car and carriage, 1; stereotyping and electrotyping, 1; stoves and furnaces, including gas and oil stoves, 3; umbrellas and canes, 1; vault lights and ventilators, 1; wirework, including wire rope and cable, 3; wood, turned and carved, 1.

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.

UTICA.

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN INDUSTRY.									WAGE EARNERS—NUMBER DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Primary horse-power.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners (average number).			Total.	16 and over.		Under 16.			
					Male.	Female.	Total.	16 and over.			Under 16.	Male.	Female.	Male.		Female.
								Male.	Female.							
<b>All industries</b>	317	14,634	276	354	636	215	13,153	7,716	5,200	237	13,851	8,117	5,488	96	150	21,874
Bread and other bakery products	46	225	49	4	18	19	135	115	18	2	149	127	20	2	.....	58
Carriages and wagons and materials	7	60	10	.....	1	.....	47	47	.....	.....	46	46	.....	.....	.....	70
Clothing, men's, including shirts	24	1,634	32	31	145	34	1,302	701	607	24	1,629	837	666	13	13	475
Foundry and machine-shop products	21	1,030	13	34	20	22	932	920	2	1	1,529	944	2	1	.....	1,231
Gas and electric fixtures and lamps and reflectors	3	101	.....	6	3	3	80	79	10	.....	89	79	10	.....	.....	105
Hosiery and knit goods	15	4,094	4	40	52	35	4,503	1,456	2,901	146	4,749	1,517	3,080	35	117	3,025
Liquors, malt	5	232	.....	15	45	.....	172	172	.....	.....	164	164	.....	.....	.....	794
Marble and stone work	9	60	11	2	1	1	51	50	1	.....	42	41	1	.....	.....	250
Printing and publishing	27	485	26	34	105	25	295	266	22	7	292	263	22	7	.....	533
Slaughtering and meat packing	3	23	3	1	2	3	14	14	.....	.....	15	15	.....	.....	.....	55
Tobacco manufactures	43	220	50	2	15	1	141	137	20	4	175	149	22	4	.....	64
All other industries <sup>1</sup>	114	5,856	78	184	221	71	5,302	3,690	1,559	53	5,654	3,935	1,665	34	20	14,014

<sup>1</sup> All other industries embrace: Agricultural implements, 1; artificial stone, 2; automobiles, including bodies and parts, 4; awnings, tents, and sails, 2; baking powders and yeast, 1; belting and hose, leather, 1; boots and shoes, including cut stock and findings, 2; boxes, cigar, 2; boxes, fancy and paper, 3; brass and bronze products, 5; brick and tile, 1; brushes, 1; carpets, rag, 1; cars and general shop construction and repairs by steam-railroad companies, 2; cloth, sponging and refinishing, 1; clothing, 1; women's, 1; coffins, burial cases, and undertakers' goods, 1; confectionery, 5; cooperage and wooden goods, not elsewhere specified, 1; copper, tin, and sheet-iron products, 1; cordage and twine and lute and linen goods, 1; cordials and syrups, 1; cotton goods, including cotton small wares, 3; cutlery and tools, not elsewhere specified, 2; dairy-men's, poultryers', and apiculturists' supplies, 2; dyeing and finishing textiles, 2; electrical machinery, apparatus, and supplies, 3; electroplating, 1; emery and other abrasive wheels, 1; engraving and diesinking, 1; fancy articles, not elsewhere specified, 1; fire extinguishers, chemical, 1; flags, banners, regalia, society badges, and emblems, 2;

YONKERS.

<b>All industries</b>	158	13,746	150	174	569	142	12,711	8,304	4,384	43	13,518	8,914	4,559	19	26	16,978
Bread and other bakery products	23	178	29	2	1	21	125	125	.....	.....	129	129	.....	.....	.....	13
Copper, tin, and sheet-iron products	13	62	17	.....	1	.....	34	34	.....	.....	38	38	.....	.....	.....	3
Foundry and machine-shop products	10	1,559	9	17	149	38	1,340	1,257	89	.....	1,688	1,577	111	.....	.....	1,962
Marble and stone work	7	44	7	3	1	.....	33	33	.....	.....	37	37	.....	.....	.....	50
Patent medicines and compounds and druggists' preparations	4	137	4	13	31	8	81	36	45	.....	84	37	47	.....	.....	66
Printing and publishing	18	100	14	6	31	6	103	92	8	3	104	93	8	2	1	91
Tobacco manufactures	17	32	10	.....	.....	.....	13	12	1	.....	17	16	1	.....	.....	.....
All other industries <sup>1</sup>	61	11,584	61	133	355	99	10,976	6,715	4,221	40	11,421	6,987	4,392	17	25	14,803

<sup>1</sup> All other industries embrace: Artificial stone, 1; awnings, tents, and sails, 2; blacking and cleansing and polishing preparations, 1; brass and bronze products, 1; brooms, 1; canning and preserving, 2; carpets and rugs, other than rag, 1; carriages and wagons and materials, 5; clothing, men's, including shirts, 1; confectionery, 1; cooperage and wooden goods, not elsewhere specified, 1; electrical machinery, apparatus, and supplies, 2; electroplating, 1; fancy articles, not elsewhere specified, 1; fertilizers, 1; food preparations, 3; furnishing goods, men's, 2; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 1; hats, fur-felt, 1; house-furnishing

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

1 AMSTERDAM	97	10,779	103	140	187	62	10,284	5,553	4,587	144	10,523	5,680	4,689	63	91	11,745
2 AUBURN	140	7,484	130	313	387	157	6,497	4,899	1,520	78	7,304	5,609	1,711	34	60	15,455
3 BATAVIA	59	2,346	61	67	109	62	2,007	1,710	283	14	2,181	1,858	303	15	.....	3,204
4 BINGHAMTON	263	7,907	239	260	411	264	6,823	3,923	2,869	41	7,291	4,102	3,058	12	29	7,742
5 COHOES	103	8,596	34	143	120	34	8,209	3,883	4,121	205	8,229	4,127	4,385	169	58	14,281
6 CORNING	45	2,285	48	78	71	46	2,074	1,821	249	4	2,121	1,947	265	5	.....	1,486
7 CORTLAND	51	2,622	46	98	44	2,356	2,070	2,855	1	2,470	2,170	2,999	1	.....	.....	6,061
8 DUNKIRK	67	3,301	43	105	321	76	2,756	2,547	183	26	2,762	2,553	183	13	.....	5,194
9 ELMIRA	154	4,425	130	191	350	115	3,647	2,790	836	22	3,805	2,912	809	17	7	6,672
10 FULTON	45	3,014	34	75	62	44	2,799	1,839	932	28	3,505	2,937	934	15	14	17,963
11 GENEVA	50	1,824	42	70	110	64	1,526	1,193	319	14	1,708	1,383	369	1	15	2,705
12 GLENS FALLS	68	3,048	69	74	60	65	2,774	1,320	1,445	3	3,145	1,504	1,637	2	2	6,772
13 GLOVERSVILLE	187	6,604	221	138	338	160	5,741	3,571	2,095	75	6,235	3,876	2,276	48	35	6,163
14 HORNELL	45	2,459	40	75	130	31	2,183	1,694	482	7	2,325	1,806	513	7	.....	3,349
15 HUDSON	45	1,451	37	30	62	20	1,302	806	470	26	1,349	836	487	14	13	1,515
16 ITHACA	31	1,105	142	217	465	140	6,789	5,513	1,181	95	7,747	6,286	1,351	63	47	11,679
17 JAMESTOWN	156	7,753	142	217	465	140	6,789	5,513	1,181	95	7,747	6,286	1,351	63	47	11,679
18 JOHNSTOWN	138	3,009	198	91	65	66	2,589	1,719	821	49	2,772	1,840	878	33	21	3,410
19 KINGSTON	99	3,845	93	121	237	113	3,281	1,896	1,270	115	3,687	2,132	1,427	63	65	4,648
20 LITTLE FALLS	55	4,408	83	48	75	16	4,211	2,493	1,693	25	4,406	2,607	1,771	10	18	7,742
21 LOCKPORT	109	2,574	90	130	148	68	2,138	1,740	394	4	2,302	1,874	423	5	.....	14,335
22 MIDDLETOWN	59	1,970	62	65	94	26	1,733	1,269	459	5	1,805	1,321	479	3	2	2,548
23 MOUNT VERNON	60	1,492	39	50	94	65	1,207	985	218	4	1,374	1,121	249	3	1	1,690
24 NEW ROCHELLE	42	882	39	34	40	34	735	625	95	15	807	687	104	9	7	620
25 NEWBURGH	104	4,990	96	128	281	117	4,344	2,845	1,482	17	4,426	2,888	1,510	10	7	4,902
26 NAGARA FALLS	150	7,214	117	227	572	209	6,089	5,212	853	24	6,736	5,788	942	9	17	95,792
27 NORTH TONAWANDA	81	3,140	61	101	128	37	2,824	2,423	373	28	3,151	2,705	416	22	3	15,888
28 OGDENSBURG	75	1,493	61	52	69	22	1,259	811	405	43	1,440	928	463	14	35	3,404
29 OLEAN	54	2,671	42	109	203	58	2,250	2,002	135	32	2,380	2,202	144	16	18	5,302
30 OSSINING	34	477	24	23	58	16	355	262	92	2	408	297	104	2	.....	886
31 OSWEGO	61	4,247	53	113	207	52	3,817	2,649	1,141	27	4,316	2,913	1,291	8	24	9,733
32 PEEKSKILL	52	2,364	46	70	180	33	2,055	1,591	456	8	2,219	1,938	493	.....	.....	3,133
33 PLATTSBURG	31	1,243	33	48	64	49	1,049	713	336	.....	1,079	734	345	.....	.....	5,738
34 PORT CHESTER	44	2,334	30	32	106	44	2,122	1,483	611	28	2,237	1,564	643	20	10	3,175
35 POUGHKEEPSIE	111	4,037	102	139	393	104	3,299	2,184	1,092	23	3,503	2,319	1,158	14	12	1,263
36 RENSSELAER	33	842	28	21	21	9	763	481	278	4	862	538	310	4	.....	8,844
37 ROME	119	3,995	112	87	114	49	3,633	3,113	487	33	4,055	3,475	542	14	24	1,718
38 SARATOGA SPRINGS	39	1,065	30	44	109	49	833	400	322	21	956	662	370	20	4	13,543
39 WATERLOO	107	3,834	87	149	241	66	3,291	2,834	421	36	3,884	3,344	498	38	4	994
40 WATERVLIET	36	850	33	33	44	17	753	455	272	26	854	517	309	30	.....	404
41 WHITE PLAINS	33	333	28	17	25	14	249	246	3	.....	280	277	3	.....	.....	.....

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.

UTICA.

Table with 13 columns: Capital, Total, Services (Officials, Clerks, Wage earners), Materials (Fuel and rent of power, Other), Miscellaneous (Rent of factory, Taxes, Contract work, Other), Value of products, and Value added by manu- facture.

flavoring extracts, 1; flour-mill and gristmill products, 2; food preparations, 3; fur goods, 2; furnishing goods, men's, 1; furniture and refrigerators, 3; gas, illuminating and heating, 1; glass, cutting, staining, and ornamenting, 2; hats and caps, other than felt, straw, and wool, 2; jewelry, 1; lead, bar, pipe, and sheet, 1; leather goods, 2; lumber and timber products, 7; mattresses and spring beds, 2; millinery and lace goods, 1; mineral and soda waters, 4; models and patterns, not including paper patterns, 1; mucklage and paste, 1; musical instruments, pianos and organs and materials, 2; paint and varnish, 1; paper and wood pulp, 2; paper patterns, 1; patent medicines and compounds and druggists' preparations, 1; soap, 1; sporting and athletic goods, 2; stoves and furnaces, including gas and oil stoves, 2; wall plaster, 2; washing machines and clothes wringers, 1; waste, 1; wirework, including wire rope and cable, 1; woolen, worsted, and felt goods, and wool hats, 1.

YONKERS.

Table with 13 columns: Capital, Total, Services (Officials, Clerks, Wage earners), Materials (Fuel and rent of power, Other), Miscellaneous (Rent of factory, Taxes, Contract work, Other), Value of products, and Value added by manu- facture.

goods, not elsewhere specified, 1; ice, manufactured, 2; liquors, malt, 1; lumber and timber products, 3; mattresses and spring beds, 2; millinery and lace goods, 2; mineral and soda waters, 6; musical instruments, pianos and organs and materials, 1; photo-enraving, 1; rubber goods, not elsewhere specified, 2; shipbuilding, including boat building, 1; silk and silk goods, including throwsters, 1; slaughtering and meat packing, 1; sugar, refining, not including beet sugar, 2; surgical appliances and artificial limbs, 1; toys and games, 1; wirework, including wire rope and cable, 2; wood, turned and carved, 1.

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

Table with 13 columns: Capital, Total, Services (Officials, Clerks, Wage earners), Materials (Fuel and rent of power, Other), Miscellaneous (Rent of factory, Taxes, Contract work, Other), Value of products, and Value added by manu- facture.