
CLAY PRODUCTS INDUSTRIES

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THE CLAY PRODUCTS INDUSTRIES.

GENERAL STATISTICS.

Scope of the classification.—The present report covers two distinct industries: (1) The brick and tile industry, the chief products of which are building brick, fancy and ornamental brick, vitrified paving brick, draintile, and sewer pipe; and (2) the pottery, terra-cotta, and fire-clay products industry, the chief products of which are stoneware, earthenware, porcelain ware, and china of various kinds, sanitary ware, fire brick, and terra-cotta products.

Summary for the two industries combined: 1909.—Table 1 presents a summary of the statistics of the two clay products industries combined, together with figures for the separate industries, for 1909.

	CLAY PRODUCTS INDUSTRIES.		
	Total for the two industries combined.	Brick and tile industry.	Pottery, terra-cotta, and fire-clay products industry.
Number of establishments.....	5,037	4,215	822
Persons engaged in the industry.....	146,786	85,764	61,022
Proprietors and firm members.....	4,737	4,285	452
Salaried employees.....	9,353	4,951	4,402
Wage earners (average number).....	132,696	76,528	56,168
Primary horsepower.....	451,186	341,169	110,017
Capital.....	\$316,022,470	\$174,672,805	\$141,349,665
Expenses.....	141,399,997	75,744,418	65,655,579
Services.....	78,144,116	42,677,391	35,466,725
Salaries.....	11,252,037	5,438,807	5,813,230
Wages.....	66,892,079	37,138,584	29,753,495
Materials.....	45,647,007	23,736,102	21,910,905
Miscellaneous.....	17,608,874	9,430,925	8,177,949
Value of products.....	168,895,365	92,776,504	76,118,861
Value added by manufacture (value of products less cost of materials).....	123,248,358	69,040,402	54,207,956

The 5,037 establishments in the two industries combined in 1909 gave employment to an average of 146,786 persons, of whom 132,696 were wage earners, and paid out \$78,144,116 in salaries and wages. The total cost of materials used in these industries was exceptionally low, equaling in 1909 only 27 per cent of the total value of products, whereas in the case of all industries of the country combined the proportion was 58.7 per cent. This is due to the fact that the clay used is almost invariably taken from the ground by the employees of the establishments in the industry, and the cost, therefore, is reported as wages. This explains the relatively large wage payments reported; such payments equaled 39.6 per cent of the value of products, as compared with 16.6 per cent for all industries combined.

Of the 5,037 establishments canvassed for 1909, more than four-fifths (83.7 per cent) were engaged primarily in the manufacture of brick and tile; these establishments contributed products valued at \$92,776,504, or 54.9 per cent of the total value of products of the two industries combined.

Comparison with earlier censuses.—Table 2 summarizes the statistics for the two clay products industries for each census from 1869 to 1909, inclusive. The financial figures for 1869 are given in currency, which at that time was worth only about 80 cents, gold, to the dollar. For strict comparison, therefore, these figures should be reduced about 20 per cent.

	Number or amount.						Per cent of increase. ¹					
	1909	1904	1899	1889	1879	1869	1899-1909	1904-1909	1899-1904	1889-1899	1879-1889	1869-1879
	Number of establishments.....	5,037	5,507	6,423	6,535	6,383	3,959	-21.6	-8.6	-14.3	-1.7	2.4	61.2
Persons engaged in the industry..	146,786	131,736	118,492	(²)	(²)	(²)	23.9	11.4	11.2			
Proprietors and firm members.....	4,737	5,845	7,596	(²)	(²)	(²)	-37.6	-19.0	-23.1			
Salaried employees.....	9,353	7,442	5,203	(²)	(²)	(²)	79.8	25.7	43.0			
Wage earners (average number).....	132,696	118,449	105,693	123,156	76,576	50,167	25.5	12.0	12.1	(³)	(³)	(³)
Primary horsepower.....	451,186	360,280	252,502	131,821	(³)	12,708	78.7	25.2	42.7	91.5		
Capital.....	\$316,022,470	\$230,882,977	\$148,038,323	\$108,705,670	\$35,039,939	\$26,776,011	113.5	35.0	56.0	36.2	210.2	30.9
Expenses.....	141,399,997	109,515,058	74,377,689	68,203,106	(³)	(³)	90.1	29.1	47.2	9.1		
Services.....	78,144,116	61,981,883	44,611,265	42,833,332	17,044,259	13,332,547	75.2	26.1	33.9	4.2	151.3	27.8
Salaries.....	11,252,037	8,158,213	5,039,195	(³)	(³)	(³)	123.4	37.0	62.0			
Wages.....	66,892,079	53,823,670	39,575,070	(³)	(³)	(³)	69.0	24.3	35.0			
Materials.....	45,647,007	32,907,961	22,921,384	18,267,998	12,633,897	9,531,162	99.1	35.7	43.6	25.5	43.9	33.1
Miscellaneous.....	17,608,874	14,625,214	6,845,040	7,111,776	(³)	(³)	157.3	20.4	113.7	-3.8		
Value of products.....	168,895,365	135,352,854	95,533,862	89,827,785	41,810,920	36,368,151	76.8	24.8	41.7	6.4	114.8	15.0
Value added by manufacture (value of products less cost of materials).....	123,248,358	102,444,893	72,612,478	71,569,787	29,127,023	26,836,989	69.7	20.3	41.1	1.5	145.7	8.5

¹ A minus sign (-) denotes decrease. Where percentages are omitted, comparable figures are not available.
² Comparable figures not available.
³ Figures not strictly comparable.

The statistics for the clay products industries were first reported at the census of 1849, when there were 2,121 establishments, employing 19,801 wage earners, and having products for the year valued at \$8,189,359. At the census of 1859, 2,240 establishments were reported, with 24,569 wage earners, and with products valued at \$13,987,828.

Substantial increases in value of products were reported at each census from 1869 to 1909. The value of products in 1909 was more than four and one-half times the value in 1869. From 1899 to 1909 the growth of the industries was particularly rapid, the average number of wage earners increasing 25.5 per cent, and the value of products 76.8 per cent.

BRICK AND TILE INDUSTRY.

Comparison with earlier censuses.—Table 3 summarizes the statistics of the brick and tile industry for each census from 1849 to 1909, inclusive.

The value of products in 1909 was more than fourteen times as great as that in 1849. There was an increase in the cost of materials, value of products, and value added by manufacture for each census period covered by the table, except for the decade 1889-1899 when there was a decrease. The year 1889 was one of unusual activity in this line of manufacture and was followed by a depression from which the industry had not fully recovered in 1899.

Summary, by states.—Table 4 summarizes the more important statistics for the brick and tile industry, by states, the states being arranged according to value of products reported for 1909. Some of the states for which data can not be shown separately ranked higher than some named in the table.

Table 3 BRICK AND TILE INDUSTRY.

CENSUS.	Number of establishments.	Wage earners (average number).	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
1909.....	4,215	76,528	\$37,138,584	\$23,736,102	\$92,776,504	\$69,040,402
1904.....	4,634	66,021	28,646,005	16,316,499	71,152,062	54,835,563
1899.....	5,423	61,979	21,883,333	11,006,148	51,270,476	40,264,328
1889.....	5,828	104,176	29,709,357	12,639,597	67,770,695	55,131,093
1879.....	5,031	66,355	13,443,532	9,774,834	32,833,587	23,053,753
1869.....	3,182	44,051	11,085,374	7,823,457	30,322,615	22,494,158
1859.....	1,651	20,941	4,054,254	2,132,224	10,769,747	8,637,623
1849.....	1,603	17,345	4,235,088	1,474,023	6,610,731	5,136,708

Table 4 BRICK AND TILE INDUSTRY.

STATE.	Number of establishments: 1909	Wage earners.			Value of products.				Value added by manufacture.				Per cent of increase. ¹									
		Average number: 1909	Per cent of total: 1909	Rank.		Amount: 1909	Per cent of total: 1909	Rank.		Amount: 1909	Per cent of total: 1909	Rank.		Wage earners (average number).		Value of products.		Value added by manufacture.				
				1909	1904			1909	1904			1909	1904	1899-1909	1904-1909	1899-1904	1899-1909	1904-1909	1899-1909	1904-1909	1899-1904	
				1909	1904			1909	1904			1909	1904	1899-1909	1904-1909	1899-1904	1899-1909	1904-1909	1899-1909	1904-1909	1899-1904	
United States.	4,215	76,528	100.0	.....	.....	\$92,776,504	100.0	.....	.....	\$69,040,402	100.0	.....	.....	23.5	15.9	6.5	81.0	30.4	38.8	71.5	25.9	36.2
Illinois.....	340	6,574	8.6	4	4	9,765,051	10.5	1	1	7,273,693	10.5	1	2	25.8	20.3	4.6	92.2	29.4	48.5	79.4	24.5	44.0
Ohio.....	517	7,460	9.8	3	3	9,357,730	10.1	2	4	7,153,387	10.4	2	4	39.5	11.1	25.5	102.1	31.1	54.1	96.1	30.0	50.8
Pennsylvania.....	326	6,058	10.5	2	1	9,225,204	9.9	3	3	6,772,165	9.8	3	3	19.7	6.6	12.3	54.9	26.7	22.3	40.0	10.2	18.0
New York.....	205	8,080	10.6	1	2	8,432,804	9.1	4	2	6,715,524	9.7	4	1	19.9	19.9	.....	48.4	13.5	30.7	46.8	10.8	32.5
Indiana.....	311	3,788	4.9	6	5	4,718,923	5.1	5	5	3,413,336	4.9	5	5	5.0	13.6	-7.6	61.0	23.6	30.3	43.5	20.3	19.2
Iowa.....	235	3,153	4.1	7	6	4,482,767	4.8	6	6	3,278,327	4.7	6	6	59.0	10.9	32.6	126.9	33.3	70.1	116.3	20.9	66.5
New Jersey.....	76	3,405	4.4	6	9	4,073,286	4.4	7	11	3,220,523	4.7	7	9	43.7	74.9	-17.8	120.6	122.6	-0.9	111.6	116.3	-2.2
Missouri.....	120	2,999	3.9	8	7	3,676,274	4.0	8	7	2,663,953	3.9	8	7	22.9	28.3	-4.2	84.9	41.4	30.7	75.7	38.0	27.3
California.....	78	1,703	2.2	13	15	2,756,308	3.0	9	8	1,804,489	2.6	11	8	136.5	25.5	88.5	230.5	43.8	129.7	170.1	14.1	136.7
Washington.....	58	1,300	1.7	18	31	2,558,828	2.8	10	30	1,907,423	2.8	9	30	295.1	153.9	55.0	499.3	279.1	58.1	451.4	262.7	52.0
Texas.....	89	1,935	2.5	10	16	2,544,702	2.7	11	15	1,778,689	2.6	12	15	22.5	47.9	-17.2	149.5	95.0	27.9	126.3	89.5	10.5
Kansas.....	55	1,819	2.4	12	10	2,336,438	2.5	12	9	1,805,633	2.6	10	10	101.0	1.1	98.9	222.7	22.5	163.4	217.8	23.4	157.6
Michigan.....	124	1,565	2.0	14	14	2,047,211	2.2	13	13	1,471,971	2.1	13	13	8.5	9.0	-0.5	80.2	24.0	45.3	64.1	20.1	36.7
Virginia.....	86	2,030	2.7	9	8	1,622,476	2.1	14	12	1,412,092	2.0	14	11	47.4	6.4	38.5	91.1	6.5	79.3	74.1	2.7	69.5
Georgia.....	75	1,901	2.5	11	13	1,711,096	1.8	15	14	1,176,983	1.7	15	14	11.8	31.5	-15.0	62.5	28.0	27.0	49.2	21.1	23.2
Colorado.....	69	922	1.2	26	32	1,670,042	1.8	16	26	1,158,639	1.7	17	25	110.5	86.3	13.0	236.0	104.4	64.4	182.0	77.8	58.6
Minnesota.....	82	1,038	1.4	22	24	1,442,149	1.6	18	16	1,063,873	1.5	18	16	22.3	4.5	17.0	86.8	17.5	58.9	91.3	13.6	59.6
Tennessee.....	91	1,281	1.7	19	17	1,307,820	1.4	19	19	962,297	1.4	19	21	11.2	3.8	7.1	90.9	18.9	60.6	85.4	15.2	60.9
Massachusetts.....	52	891	1.3	24	19	1,243,245	1.3	20	17	913,347	1.3	20	20	-30.7	-9.7	-23.2	-15.3	6.1	-20.2	-14.5	8.6	-21.3
Wisconsin.....	108	1,027	1.3	23	11	1,191,379	1.3	21	10	909,657	1.3	21	12	-30.1	-37.3	11.5	-33.7	-35.6	2.9	-14.7	-29.8	21.5
North Carolina.....	159	1,460	1.9	15	20	1,173,751	1.3	22	29	806,061	1.2	24	29	3.7	35.3	-23.4	83.2	68.7	8.6	63.2	52.7	6.9
Nebaska.....	78	831	1.1	29	25	1,101,100	1.3	23	18	883,092	1.3	22	19	-2.8	-8.2	5.8	38.2	2.6	34.8	38.6	3.3	34.2
Alabama.....	71	1,553	1.8	16	21	1,135,134	1.2	24	25	847,145	1.2	23	26	20.6	20.6	-7.0	72.5	34.0	28.7	84.5	31.7	24.9
Oklahoma.....	38	730	1.0	30	34	1,028,693	1.1	25	33	802,652	1.2	25	32	234.9	82.0	45.6	232.2	101.8	175.7	421.4	110.2	148.1
Kentucky.....	82	1,125	1.5	21	18	1,015,447	1.1	26	23	781,467	1.1	26	23	22.5	1.0	21.4	60.9	14.4	40.6	55.3	9.8	41.4
Maryland.....	40	1,226	1.6	20	12	970,625	1.0	27	20	721,139	1.0	27	18	-18.3	-16.3	-2.5	15.0	-11.5	30.0	4.8	-17.1	20.5
West Virginia.....	34	852	1.2	28	28	950,364	1.0	28	24	675,073	1.0	28	24	60.4	15.6	38.7	117.9	9.2	99.5	99.1	2.3	94.7
Mississippi.....	73	939	1.2	25	26	794,145	0.9	29	28	590,101	0.9	29	27	3.4	4.0	-0.6	52.1	1.4	50.0	39.5	-2.6	43.3
South Carolina.....	45	888	1.2	27	27	730,548	0.8	30	31	462,540	0.7	32	31	-22.4	1.5	-23.6	62.7	11.4	14.3	4.8	-3.3	8.4
Utah.....	34	514	0.7	33	36	683,087	0.7	31	35	547,587	0.8	30	35	106.4	76.6	16.9	265.2	97.4	85.0	255.2	96.8	80.5
Oregon.....	61	385	0.5	36	37	674,520	0.7	32	36	519,373	0.8	31	36	75.0	45.8	20.0	197.4	114.3	33.8	173.7	106.3	23.6
Arkansas.....	42	585	0.8	31	30	601,034	0.6	33	27	432,953	0.6	33	28	45.5	11.4	30.6	117.0	-24.1	185.9	92.4	-27.2	104.4
New Hampshire.....	29	395	0.5	35	29	533,045	0.6	34	32	376,777	0.5	35	33	-33.2	-25.0	-10.8	-0.9	0.8	-1.7	-3.6	-0.3	-3.3
All other states.....	332	4,115	5.4	.....	.....	4,861,271	5.2	.....	.....	3,729,461	5.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Percentages are based on figures in Table 16. A minus sign (-) denotes decrease.

The brick and tile industry is widely distributed throughout the United States, establishments being reported from every state. Illinois ranked first at the censuses of 1909 and 1904 in value of products, and first and second, respectively, in value added by manufacture, and fourth at both censuses in average number of wage earners. Ohio ranked second in 1909 in value of products and value added by manufacture, advancing from fourth place in both respects in 1904. Pennsylvania ranked third in 1909 and 1904 both in value of products and value added by manufacture, and second in average number of wage earners, dropping from first place in this respect since 1904. According to value of products, New York ranked fourth in 1909, dropping from second place, which it held in 1904, but this state ranked first in average number of wage earners, advancing from second place during the five-year period.

Of the seven leading states in the brick and tile industry in 1909, Iowa shows the largest relative increase in number of wage earners, value of products, and value added by manufacture during the decade 1899-1909.

A few of the less important states advanced notably in rank in the industry, as measured by value of products, from 1904 to 1909—Washington, from thirtieth to tenth; Texas, from fifteenth to eleventh; Colorado, from twenty-sixth to sixteenth; North Carolina, from twenty-ninth to twenty-second; and Oklahoma, from thirty-third to twenty-fifth. Kansas dropped from ninth place in 1904 to twelfth in 1909; Massachusetts, from seventeenth to twentieth; Wisconsin, from tenth to twenty-first; and Maryland, from twentieth to twenty-seventh.

Most of the states held the same, or practically the same, rank in respect to value of products in 1909 as in respect to value added by manufacture.

Persons engaged in the industry.—Table 5 shows, for 1909, the number of persons engaged in the brick and tile industry, classified according to occupational status and sex, and in the case of wage earners, according to age also. It should be borne in mind 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 THE BRICK AND TILE INDUSTRY: 1909		
	Total.	Male.	Female.
All classes.....	85,764	85,234	530
Proprietors and officials.....	7,503	7,353	150
Proprietors and firm members.....	4,285	4,149	136
Salaried officers of corporations.....	1,118	1,107	11
Superintendents and managers.....	2,100	2,097	3
Clerks.....	1,733	1,434	299
Wage earners (average number).....	76,528	76,447	81
15 years of age and over.....	75,258	75,178	80
Under 16 years of age.....	1,270	1,260	1

The average number of persons engaged in the brick and tile industry during 1909 was 85,764, of whom 76,528, or 89.2 per cent, were wage earners; 7,503, or 8.7 per cent, proprietors and officials; and 1,733, or 2 per cent, clerks, this class including other subordinate salaried employees.

Of the total number of persons engaged in the industry, 85,234, or 99.4 per cent, were males, and 530, or six-tenths of 1 per cent, females. The average number of children under 16 years of age employed as wage earners was 1,270, or 1.7 per cent of the total number of wage earners.

The average number of wage earners in each state, as reported at the censuses of 1909, 1904, and 1899, is given in Table 16. The distribution of the average number by sex and age is not shown for the individual states, but Table 17 gives such a distribution of the number employed on December 15, or the nearest representative day.

In order to compare the distribution of the persons engaged in the brick and tile industry in 1909 according to occupational status with that in 1904, it is necessary to use the classification employed at the earlier census. (See Introduction.) Such a comparison is made in Table 6.

CLASS.	PERSONS ENGAGED IN THE BRICK AND TILE INDUSTRY.				
	1909		1904		Percent of increase: ¹ 1904-1909
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total.....	85,764	100.0	75,006	100.0	14.3
Proprietors and firm members.....	4,285	5.0	5,295	7.1	-19.1
Salaried employees.....	4,951	5.8	3,690	4.9	34.2
Wage earners (average number).....	76,528	89.2	66,021	88.0	15.9

¹ A minus sign (-) denotes decrease.

Wage earners represented about nine-tenths of the total number of persons engaged in the industry at both censuses, but their number increased only 15.9 per cent between 1904 and 1909, as compared with 34.2 per cent for salaried employees. The number of proprietors and firm members shows a decrease of 19.1 per cent for the five-year period.

Table 7 shows the average number of wage earners in the industry distributed according to age, and in the case of those 16 years of age and over, according to sex, for 1909, 1904, and 1899.

CLASS.	AVERAGE NUMBER OF WAGE EARNERS IN THE BRICK AND TILE INDUSTRY.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	76,528	100.0	66,021	100.0	61,979	100.0
16 years of age and over..	75,258	98.3	64,648	97.9	60,032	96.9
Male.....	75,178	98.2	64,612	97.9	59,956	96.7
Female.....	80	0.1	36	(¹)	76	0.1
Under 16 years of age....	1,270	1.7	1,373	2.1	1,947	3.1

¹ Less than one-tenth of 1 per cent.

There was a constant decrease from census to census, both in the number and in the proportion of children employed, with a slight increase in the proportion represented by males 16 years of age and over. At each census the number of women employed was insignificant.

Wage earners employed, by months.—Table 8 gives the number of wage earners employed in the industry on the 15th (or the nearest representative day) of each month during the year 1909 for each state in which an average of 500 or more wage earners were employed in 1909.

Table 8 WAGE EARNERS EMPLOYED IN THE BRICK AND TILE INDUSTRY: 1909¹

STATE.	Average number during the year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
United States.....	76,528	38,312	38,703	51,316	77,878	96,992	103,017	104,930	102,001	98,704	84,514	66,663	55,300
Alabama.....	1,353	<i>927</i>	<i>808</i>	1,122	1,447	1,404	1,564	1,609	1,633	1,689	1,452	1,355	1,222
Arkansas.....	585	<i>284</i>	<i>302</i>	463	691	682	730	790	765	747	612	498	455
California.....	1,703	<i>993</i>	<i>941</i>	1,411	1,677	1,918	2,157	2,223	2,191	2,109	1,854	1,561	1,405
Colorado.....	922	<i>575</i>	<i>629</i>	697	798	1,112	1,248	1,308	1,222	1,198	888	710	679
Connecticut and Rhode Island.....	1,312	<i>253</i>	<i>277</i>	453	1,453	2,007	2,054	2,065	1,971	1,860	1,717	962	673
Georgia.....	1,901	<i>1,837</i>	1,385	1,770	2,125	2,196	2,198	2,130	2,163	2,110	1,971	1,836	1,593
Illinois.....	6,574	<i>3,795</i>	3,825	4,882	7,521	8,097	8,502	8,294	8,126	8,140	7,526	5,542	4,844
Indiana.....	3,788	<i>2,173</i>	2,307	2,848	3,940	4,044	4,703	4,673	4,621	4,560	4,105	3,568	3,234
Iowa.....	3,158	<i>1,694</i>	1,618	2,856	3,375	3,924	4,093	4,022	3,993	3,971	3,634	3,020	2,294
Kansas.....	1,819	<i>1,145</i>	1,199	1,689	1,908	2,016	2,175	2,135	2,080	2,030	1,940	1,815	1,689
Kentucky.....	1,125	<i>356</i>	359	623	1,106	1,528	1,600	1,665	1,681	1,622	1,397	881	579
Louisiana.....	583	<i>247</i>	314	493	696	736	732	791	681	705	645	547	411
Maryland.....	1,226	<i>742</i>	748	850	1,102	1,454	1,501	1,693	1,601	1,493	1,354	1,087	991
Massachusetts.....	991	<i>164</i>	160	211	576	1,032	1,784	1,808	1,806	1,611	1,098	630	417
Michigan.....	1,565	<i>631</i>	<i>536</i>	724	1,220	1,972	2,362	2,467	2,378	2,256	1,853	1,281	1,076
Minnesota.....	1,038	<i>248</i>	<i>248</i>	286	601	1,593	1,980	2,014	1,775	1,450	1,082	701	414
Mississippi.....	939	<i>464</i>	<i>445</i>	837	1,103	1,254	1,184	1,214	1,200	1,169	996	840	587
Missouri.....	2,090	1,695	<i>1,635</i>	2,624	3,281	3,503	3,576	3,899	3,550	3,611	3,299	2,921	2,490
Nebraska.....	831	<i>220</i>	245	507	924	1,187	1,232	1,185	1,203	1,186	992	648	384
New Jersey.....	3,405	<i>1,529</i>	1,568	2,113	3,725	4,445	4,515	4,514	4,621	4,565	4,024	3,071	2,171
New York.....	8,080	1,630	<i>1,431</i>	2,487	7,765	12,595	13,518	13,787	13,118	12,437	9,022	5,513	3,649
North Carolina.....	1,460	<i>406</i>	470	781	1,542	1,810	2,090	2,260	2,281	2,195	1,649	1,176	850
Ohio.....	7,465	<i>4,873</i>	4,928	5,665	7,460	8,986	9,401	9,372	8,980	8,946	8,070	6,772	6,184
Oklahoma.....	730	<i>369</i>	449	694	722	795	878	932	833	815	797	759	784
Pennsylvania.....	8,058	4,751	<i>4,668</i>	6,004	8,100	9,219	9,702	9,327	9,899	9,853	9,066	8,117	7,310
South Carolina.....	883	<i>510</i>	510	640	957	997	1,049	1,134	1,230	1,130	993	817	683
Tennessee.....	1,281	<i>689</i>	652	879	1,379	1,530	1,614	1,740	1,708	1,735	1,382	1,087	920
Texas.....	1,935	<i>1,467</i>	1,522	1,704	1,988	2,094	2,122	2,303	2,299	2,058	2,051	1,838	1,674
Utah.....	514	<i>267</i>	275	417	545	644	768	720	672	623	479	446	318
Virginia.....	2,090	<i>1,317</i>	1,401	1,596	2,179	2,540	2,615	2,603	2,641	2,586	2,222	1,872	1,604
Washington.....	1,300	<i>854</i>	978	1,109	1,392	1,540	1,690	1,643	1,538	1,490	1,233	1,085	1,042
West Virginia.....	882	<i>397</i>	386	710	1,023	1,062	1,179	1,086	1,046	1,121	980	920	665
Wisconsin.....	1,027	<i>299</i>	280	352	644	1,575	1,914	1,893	1,801	1,617	1,011	651	394

¹ The month of maximum employment for each state is indicated by boldface figures and that of minimum employment by italic figures.

The industry is largely a seasonal one. The largest number of wage earners reported for any month of 1909 was 104,930, in July, and the smallest number, 38,312, in January, the minimum number being equal to 36.5 per cent of the maximum. The greatest activity in the industry is naturally in the summer months, since the manufacture of brick and tile is largely outdoor work. In 1904 the maximum number, 99,024, was reported for July, and the minimum number, 25,754, equal to 26 per cent of the maximum, for January.

Prevailing hours of labor.—In Table 9 the wage earners in the brick and tile industry have been classified according to the number of hours of labor per week prevailing in the establishments in which they were employed. In making this classification the average number of wage earners employed during the year in each establishment was classified as a total according to the hours prevailing in that establishment, even though a few employees worked a greater or smaller number of hours.

Over two-thirds (69.4 per cent) of the wage earners employed in the manufacture of brick and tile in 1909 were in establishments where the prevailing number of hours was 60 or more per week, 18.2 per cent were employed in establishments where the prevailing hours were 54 but less than 60 per week, and 12.4 per cent in establishments where they were less than 54 per week.

Table 9 AVERAGE NUMBER OF WAGE EARNERS IN THE BRICK AND TILE INDUSTRY: 1909

STATE.	Total.	In establishments with prevailing hours—						
		48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72 and over.
United States.....	76,528	7,949	1,557	9,361	4,578	50,613	1,979	493
Alabama.....	1,353	140	13	16	64	1,006	1,97	17
Arkansas.....	585	.....	.....	37	.....	548	.....	.....
California.....	1,703	186	.....	1,410	.....	72	10	25
Colorado.....	922	328	.....	30	40	524	.....	.....
Connecticut and Rhode Island.....	1,312	107	28	367	16	768	26	.....
Georgia.....	1,901	61	160	.....	167	1,446	53	14
Illinois.....	6,574	2,249	25	1,491	273	2,481	50	.....
Indiana.....	3,788	212	86	423	118	2,937	7	.....
Iowa.....	3,158	95	22	300	116	2,329	262	34
Kansas.....	1,819	58	62	57	.....	1,642	.....	.....
Kentucky.....	1,125	119	25	126	47	766	52	.....
Louisiana.....	583	.....	.....	0	6	396	128	7
Maryland.....	1,226	89	.....	26	91	1,020	.....	.....
Massachusetts.....	991	32	46	107	207	567	13	19
Michigan.....	1,565	378	66	130	2	989	.....	.....
Minnesota.....	1,038	182	.....	40	17	708	1	.....
Mississippi.....	939	35	.....	27	.....	850	15	12
Missouri.....	2,090	17	5	42	26	2,814	33	62
Nebraska.....	831	70	23	17	16	672	28	.....
New Jersey.....	3,405	100	137	564	270	2,274	.....	.....
New York.....	8,080	1,467	121	1,449	253	4,667	49	69
North Carolina.....	1,460	10	80	22	288	992	43	10
Ohio.....	7,465	355	65	852	529	5,676	22	67
Oklahoma.....	730	15	.....	46	.....	669	.....	.....
Pennsylvania.....	8,058	562	383	791	1,206	5,084	.....	32
South Carolina.....	883	68	12	46	.....	684	147	21
Tennessee.....	1,281	26	27	43	51	1,017	26	89
Texas.....	1,935	20	30	222	43	1,488	128	4
Utah.....	514	253	.....	91	9	161	.....	.....
Virginia.....	2,090	137	60	49	195	1,633	16	.....
Washington.....	1,300	5	.....	109	12	674	500	.....
West Virginia.....	882	90	3	60	32	697	.....	.....
Wisconsin.....	1,027	.....	20	18	38	911	40	.....

Of the seven groups shown in the table, by far the largest was that made up of the wage earners in establishments where the prevailing hours were 60 per week, such wage earners constituting 66.1 per cent of the total number. This group was the most important, likewise, in all but two of the individual states for which figures are given. In California, however, 82.8 per cent of the wage earners were employed in establishments where the prevailing hours were 54 per week, while in Utah the largest number were employed in establishments where they were 48 or less per week.

Character of ownership.—Table 10 presents statistics with respect to the character of ownership of the establishments in the brick and tile industry in 1909 and 1904.

In 1909, of the total number of establishments reported for the industry, 34.8 per cent were under corporate ownership, as compared with 24.6 per cent in 1904. While corporations thus controlled a little more than one-third of the total number of establishments in 1909 and about one-fourth in 1904, the value of products of these establishments represented 69 per cent of the total value of products for the industry

in 1909 and 57.9 per cent in 1904. Establishments under individual and under firm ownership show a decrease in number during the five-year period and establishments under individual ownership a decrease in value of products.

Table 10

CHARACTER OF OWNERSHIP.	BRICK AND TILE INDUSTRY.			
	Number of establishments.		Value of products.	
	1909	1904	1909	1904
Total.....	4,215	4,634	\$92,776,504	\$71,152,062
Individual.....	1,606	2,202	15,201,103	16,487,795
Firm.....	1,084	1,284	18,526,197	13,357,288
Corporation.....	1,465	1,138	63,989,204	41,215,603
Other.....		10		91,376
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	39.5	47.5	16.4	23.2
Firm.....	25.7	27.7	14.6	18.8
Corporation.....	34.8	24.6	69.0	57.9
Other.....		0.2		0.1

¹ Includes one establishment under cooperative ownership, to avoid disclosure of individual operations.

Table II gives statistics for 1909 with respect to establishments under each form of ownership, for the leading states.

Table 11

STATE.	BRICK AND TILE INDUSTRY: 1909											
	Number of establishments owned by—			Wage earners in establishments owned by—			Value of products of establishments owned by—			Value added by manufacture in establishments owned by—		
	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.
United States.....	1,666	1,084	1,465	13,621	12,018	50,889	\$15,261,103	\$13,526,197	\$63,989,204	\$11,846,547	\$10,412,181	\$46,761,674
Alabama.....	32	10	29	482	115	750	389,357	80,466	665,311	298,642	59,512	488,991
Arkansas.....	11	17	14	41	147	307	48,370	94,563	459,101	37,032	79,835	516,086
California.....	17	7	54	102	111	1,490	194,240	154,174	2,407,894	132,013	119,378	1,553,028
Colorado.....	26	10	33	126	57	739	177,726	70,470	1,421,845	142,596	56,279	959,774
Connecticut and Rhode Island.....	12	8	18	317	171	824	345,975	218,253	910,349	279,489	179,932	714,431
Georgia.....	21	24	30	310	202	1,329	290,658	174,294	1,246,144	209,463	128,428	639,092
Illinois.....	146	100	94	862	777	4,935	1,220,274	1,103,109	7,441,668	986,633	839,561	5,447,499
Indiana.....	157	79	75	865	388	2,535	962,442	463,589	3,283,082	729,736	367,645	2,315,955
Iowa.....	96	70	69	492	691	1,975	631,546	982,025	2,809,196	404,805	736,845	2,076,677
Kansas.....	5	8	42	17	69	1,743	24,980	63,640	2,248,418	17,603	57,525	1,730,505
Kentucky.....	24	16	42	149	120	856	142,372	77,199	795,876	117,546	63,814	600,107
Louisiana.....	18	12	18	174	143	266	159,990	104,179	252,328	108,817	82,498	193,797
Maryland.....	12	11	17	140	84	1,002	139,467	62,108	768,960	104,415	45,588	571,136
Massachusetts.....	31	9	12	402	138	391	545,388	151,708	546,140	407,735	116,657	389,305
Michigan.....	43	41	40	275	343	947	340,472	454,307	1,252,342	260,810	347,833	863,328
Minnesota.....	38	18	26	283	285	470	347,331	342,423	752,395	258,978	246,899	557,996
Mississippi.....	28	19	26	207	324	408	138,667	241,785	363,693	151,871	180,000	258,230
Missouri.....	56	24	40	194	121	2,684	204,639	111,648	3,359,987	160,222	86,425	2,417,306
Nebraska.....	36	19	23	160	181	500	225,609	205,225	730,272	168,241	170,657	544,194
New Jersey.....	33	12	31	532	289	2,534	597,706	279,774	3,195,806	600,009	222,682	2,507,452
New York.....	61	66	78	1,562	2,246	4,272	1,688,280	2,391,025	4,353,499	1,411,258	1,928,163	3,370,103
North Carolina.....	60	58	41	429	473	558	347,677	364,740	401,334	246,507	240,697	318,857
Ohio.....	211	163	153	994	1,095	5,377	1,200,580	1,407,180	6,749,970	934,044	1,096,621	5,122,662
Oklahoma.....	10	9	19	60	71	569	88,172	824,607	115,914	68,140	87,427	647,085
Pennsylvania.....	102	83	141	1,530	1,762	4,776	1,584,534	2,064,467	5,576,263	1,241,749	1,615,075	3,915,341
South Carolina.....	20	15	10	312	195	381	280,617	145,987	303,939	172,397	87,376	202,767
Tennessee.....	46	29	16	369	351	561	307,894	814,907	685,025	216,761	211,212	534,324
Texas.....	33	6	50	454	38	443	527,882	43,275	1,973,545	421,523	33,401	1,323,745
Utah.....	15	10	9	34	34	446	40,609	55,994	586,884	32,926	42,926	471,736
Virginia.....	34	22	30	471	299	1,320	384,712	289,438	1,248,326	286,118	208,989	916,985
Washington.....	19	19	20	146	118	1,036	271,222	204,040	2,083,566	231,142	156,346	1,519,935
West Virginia.....	5	4	25	43	14	825	27,195	16,120	907,049	18,033	12,928	644,112
Wisconsin.....	53	25	30	207	163	657	238,980	190,346	762,053	185,352	146,034	578,271

¹ Includes one establishment under cooperative ownership, to avoid disclosure of individual operations.

In 1909, of the total number of wage earners reported for the brick and tile industry, 13,621, or 17.8 per cent, were employed in establishments under indi-

vidual ownership; 12,018, or 15.7 per cent, in those under firm ownership; and 50,889, or 66.5 per cent, in those owned by corporations.

Of the 4,215 establishments reported in 1909, only 39, or nine-tenths of 1 per cent, employed no wage earners; 75.6 per cent employed from 1 to 20, and 21.3 per cent from 21 to 100. There were 92 establishments that employed over 100 wage earners each, and of these, 1 employed more than 1,000.

Of the total number of wage earners, 28 per cent were reported by establishments employing from 1 to 20; 48.7 per cent by establishments employing from 21 to 100, and 23.3 per cent by establishments employing more than 100 wage earners each.

Expenses.—As stated in the Introduction, the census figures representing expenses do not purport to show the total cost of manufacture, since they take no account of interest or depreciation; hence they can not properly be used for determining profits. Facts of interest can be brought out, however, concerning the relative importance of the different classes of expenses which were reported. Table 1 shows the total expenses reported in 1909 for the brick and tile industry in the United States to have been \$75,744,418, divided as follows: Cost of materials, \$23,736,102, or 31.3 per cent; wages, \$37,138,584, or 49 per cent; salaries, \$5,438,807, or 7.2 per cent; and miscellaneous expenses, made up of advertising, ordinary repairs of buildings and machinery, insurance, traveling expenses, and other sundry expenses, \$9,430,925, or 12.5 per cent. As may be seen from Table 17, the proportion of total expenses represented by each of the various classes of expenses varies somewhat in the different states. Reference has already been made to the small proportion of total expenses represented by cost of materials, due to the fact that the cost of clay, the principal material, is represented in wages. Of the total cost of materials in 1909, as shown in Table 17, nearly three-fourths (74.9 per cent) was for fuel and rent of power.

Engines and power.—The amount of power used in the manufacture of brick and tile was first reported at the census of 1869. The total horsepower used increased from 10,551 in 1869 to 341,169 in 1909. Table 14 shows statistics of power as reported at the censuses of 1909, 1904, and 1899.

The total primary power used in the brick and tile industry increased from 176,700 horsepower in 1899 to 341,169 horsepower in 1909, or 93.1 per cent during the decade. In 1909, as in 1904 and 1899, the power of steam engines constituted more than nine-tenths of the total primary power, but in spite of a large increase

between 1899 and 1904 steam power formed a smaller proportion of the total in 1909 than in 1899—91.8 per cent, as compared with 99.3 per cent. The horsepower of gas and other internal-combustion engines increased from 909 in 1899 to 10,615 in 1909. No rented electric power was reported for the industry in 1899, but in 1904, 2,566 horsepower, and in 1909 16,719 horsepower, was reported. The number and horsepower of electric motors used for distributing power by means of current generated in the establishments themselves also show a very decided increase.

Table 14

BRICK AND TILE INDUSTRY.

POWER.	Number of engines or motors.			Horsepower.			Per cent distribution of horsepower.		
	1909	1904	1899	1909	1904	1899	1909	1904	1899
	Primary power, total.....	5,286	4,438	3,842	341,169	255,362	176,700	100.0	100.0	100.0
Owned.....	4,792	4,351	3,842	324,358	252,384	176,700	95.1	98.8	100.0
Steam.....	4,413	4,113	3,781	313,164	246,200	175,456	91.8	96.4	99.3
Gas.....	365	222	45	10,615	5,245	909	3.1	2.1	0.5
Water wheels.....	7	15	10	202	457	208	0.1	0.1	0.1
Water motors.....	2	1	(¹)	70	1	(¹)	(²)	(²)	(²)
Other.....	5	.....	6	307	481	127	0.1	0.2	0.1
Rented.....	494	85	(¹)	16,811	2,978	.....	4.9	1.2	.....
Electric.....	494	85	(¹)	16,719	2,566	.....	4.9	1.0	.....
Other.....	.....	.....	.....	92	412	.....	(²)	0.2	.....
Electric motors.	708	128	17	21,130	3,036	505	100.0	100.0	100.0
Run by current generated by establishment.....	214	43	17	4,411	470	505	20.9	15.5	100.0
Run by rented power.....	494	85	(¹)	16,719	2,566	.....	79.1	84.5	.....

¹ Not reported.

² Less than one-tenth of 1 per cent.

Table 15 shows, for 1909, the amount of each of the several kinds of power and of the different kinds of fuel used in the industry in 34 of the leading states.

The states which ranked highest with respect to the amount of power used in 1909 were Pennsylvania, Ohio, Illinois, New York, Iowa, and Indiana, the six states which ranked highest in value of products. The total primary power reported for these states in 1909 was 181,399, or 53.2 per cent of the aggregate for the United States. Steam was the most important power in all of the states shown separately, except Utah, where rented electric power was used to a greater extent than any other form of power. The largest amount of steam power—35,454 horsepower—is shown for Ohio, and the largest amount of electric power—3,151 horsepower—for California.

Table 15

BRICK AND TILE INDUSTRY: 1909

STATE.	Primary horsepower.										Electric horsepower.		Fuel used.					
	Number of establishments reporting.	Total horsepower.	Owned by establishments reporting.					Rented.			Total rented and generated by establishment.	Generated in the establishment reporting.	Coal.		Coke (short tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
			Total.	Steam engines.	Gas engines.	Water wheels and motors.	Other.	Electric.	Other.	Anthracite (long tons).			Bituminous (short tons).					
United States..	3,523	341,169	324,358	313,164	10,615	272	307	16,719	92	21,130	4,411	236,336	5,773,232	40,785	1,069,973	1,040,406	16,003,049	
Alabama.....	64	5,127	5,112	5,075	37					21	6		113,766	946	24,224	29		
Arkansas.....	27	2,178	2,178	2,128				50					22,445		10,894	1	289,500	
California.....	68	8,972	5,821	5,607	214					3,219	63	1,220	8,936		1,042	507,017		
Colorado.....	45	3,923	3,298	3,292	5			1		705	80	2,732	110,420	105	1,682	1		
Connecticut and Rhode Island..	35	5,193	4,953	4,865	73			15		240		1,887	19,928		45,842	118		
Georgia.....	74	7,476	7,371	7,252	44			75		111	6	600	140,788	1,009	42,649	97		
Illinois.....	296	36,013	35,433	35,194	237			2		1,728	1,148	3,775	964,310	1,235	26,062	118,752	3,550	
Indiana.....	273	19,881	19,766	19,283	483					303	188	330	469,978	2,156	20,452	12,308	58,782	
Iowa.....	199	20,782	20,527	20,250	227			50		766	511	1,500	467,742	560	1,608	201		
Kansas.....	53	9,827	9,457	8,189	1,268					689	319		45,896	90	226	35,468	6,425,747	
Kentucky.....	65	4,463	4,413	4,376	37					60	10		78,806	3,563	8,272	19	7,500	
Louisiana.....	40	2,910	2,910	2,800	20							156	1,338		40,505	6,018	18,990	
Maryland.....	31	4,815	4,815	4,808	7							94	71,437		3,429	5	44,609	
Massachusetts.....	40	2,907	2,672	2,585	62			25		295		1,513	10,257		58,200	68		
Michigan.....	120	8,340	8,305	7,942	313			50		116	75	2,326	97,977	1,124	24,770	76,488		
Minnesota.....	73	5,867	5,565	5,443	122					313	11	65	58,613	155	44,830	177		
Mississippi.....	57	3,653	3,553	3,553						150	50		41,897	295	39,575	3		
Missouri.....	84	8,274	7,994	7,438	556					190		97	287,021	2,104	30,877	48	598,609	
Nebraska.....	61	4,033	3,586	3,308	203			75		447			56,009	2,027	1,825	2,155		
New Jersey.....	71	11,419	10,093	9,943	60					1,549	133	29,870	168,403	4,202	8,425	133	708	
New York.....	192	28,734	26,671	25,704	807			70		2,063		2,273	124,523	4,138	61,986	7,159	46,632	
North Carolina.....	137	6,769	6,672	6,672						87		418	33,794	290	105,192	22		
Ohio.....	480	37,742	37,546	35,454	2,070			22		196		917	721	2,967	43,685	1,068	1,780,136	
Oklahoma.....	35	3,793	3,523	3,268	255					210		335	29,115		3,198	6	1,732,605	
Pennsylvania.....	297	38,247	37,814	34,938	2,876					433		677	67,513	590,730	6,758	1,517	3,862,614	
South Carolina.....	44	2,824	2,567	2,531	36					257			36,642		44,240	134		
Tennessee.....	62	4,631	4,564	4,524	36			4		67			107,726	3,502	23,121	72		
Texas.....	65	7,488	7,486	7,335	101			50		230			118,797		63,305	250,625	87,868	
Utah.....	12	1,556	426	360	4			62		1,130			27,222		1,047	2		
Virginia.....	73	5,540	5,435	5,400	35					105			140,895	1,056	19,358	50		
Washington.....	41	4,797	3,445	3,445						1,541	189		91,805	213	62,057	402		
West Virginia.....	34	4,983	4,808	4,790	18					175			72,137	373		2	1,054,611	
Wisconsin.....	86	5,640	5,455	5,209	158			28		235			4,018		31,278	324	288	
All other states.....	189	12,376	10,214	9,963	251					2,179	17	418	90,041	1,052	162,722	19,926		

Fuel consumed.—The clay products industries are large consumers of fuel, this being one of the principal items of expense. There were 5,773,232 short tons of bituminous coal consumed in the brick and tile industry in 1909, the largest quantity for a single state being reported for Illinois, and the second largest for Ohio.

The largest quantity of anthracite coal, 124,523 long tons, or more than one-half the total for the country, was reported for New York. Wood, natural gas, and oil were also used to a great extent, the largest quantity of wood being reported for North Carolina, of natural gas for Kansas, and of oil for California.

THE CLAY PRODUCTS INDUSTRIES.

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DETAILED STATE TABLES.

The principal data secured by the census inquiry concerning the brick and tile industry are presented in Tables 16 and 17.

Table 16 shows, for 1909, 1904, and 1899, the number of establishments, number of persons engaged in

the industry, primary horsepower, capital invested, salaries, wages, cost of materials, value of products, and value added by manufacture.

Table 17 gives more detailed statistics for the brick and tile industry for 1909 only.

BRICK AND TILE—COMPARATIVE STATISTICS, BY STATES: 1909, 1904, AND 1899.

STATE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture (value of products less cost of materials).
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
United States.....	1909	4,215	85,764	4,285	4,951	76,528	341,169	\$174,673	\$5,439	\$37,139	\$23,736	\$92,777	\$69,041
	1904	4,634	75,006	5,295	3,690	66,021	255,362	119,957	3,630	25,646	16,316	71,152	54,836
	1899	5,423	71,057	6,652	2,426	61,979	176,700	82,086	2,025	21,883	11,006	51,270	40,264
Alabama.....	1909	71	1,500	56	91	1,353	5,127	1,942	100	434	288	1,135	847
	1904	63	1,178	60	74	1,044	3,300	1,033	72	301	204	847	643
	1899	72	1,259	93	44	1,122	1,501	432	25	257	143	658	515
Arizona.....	1909	21	126	28	.....	98	100	130	.....	56	27	117	90
	1904	5	35	5	.....	30	143	79	.....	20	16	46	30
	1899	19	116	24	3	89	25	57	3	47	15	102	87
Arkansas.....	1909	42	697	55	57	585	2,178	1,300	60	219	168	601	433
	1904	55	629	68	36	525	1,851	943	37	186	127	792	595
	1899	55	491	66	23	402	555	310	18	100	52	277	226
California.....	1909	78	1,879	35	141	1,703	8,972	9,169	162	1,146	952	2,756	1,804
	1904	69	1,504	46	101	1,357	5,067	3,929	102	825	335	1,916	1,581
	1899	56	825	60	45	720	1,408	1,205	43	333	166	834	608
Colorado.....	1909	69	1,036	46	68	922	3,923	2,421	79	637	511	1,670	1,169
	1904	63	580	52	33	495	2,192	1,036	39	322	165	817	662
	1899	65	532	76	18	438	1,083	526	18	237	86	497	411
Connecticut and Rhode Island.....	1909	38	1,417	37	68	1,312	5,193	2,812	98	673	301	1,475	1,174
	1904	34	1,138	34	63	1,041	3,254	1,800	64	475	198	1,081	833
	1899	37	1,126	39	58	1,029	3,421	1,678	60	421	177	901	724
Delaware.....	1909	23	352	19	33	300	834	835	34	116	55	329	274
	1904	21	246	24	13	209	470	272	13	86	27	205	178
	1899	25	251	27	9	215	342	284	9	70	22	168	146
District of Columbia.....	1909	5	210	5	10	195	911	252	9	79	56	182	126
	1904	8	274	8	9	257	770	422	10	90	46	186	140
	1899	11	466	12	17	437	502	716	16	166	63	364	301
Florida.....	1909	29	501	21	41	439	2,288	778	39	138	113	379	266
	1904	14	459	15	19	425	903	342	17	109	65	237	172
	1899	17	288	19	11	258	488	196	10	66	33	135	102
Georgia.....	1909	75	2,085	73	111	1,901	7,476	2,771	132	547	534	1,711	1,177
	1904	59	1,622	77	90	1,446	5,479	1,814	92	350	305	1,337	972
	1899	70	1,837	77	59	1,701	3,120	1,045	46	347	264	1,053	789
Idaho.....	1909	36	347	39	22	286	1,050	800	18	179	109	444	335
	1904	19	95	21	2	72	147	91	3	45	27	113	86
	1899	23	71	28	.....	43	20	49	.....	18	8	44	36
Illinois.....	1909	340	7,347	384	389	6,574	36,013	18,495	466	4,386	2,491	9,765	7,274
	1904	435	6,275	509	303	5,463	29,059	12,988	350	3,052	1,705	7,646	5,841
	1899	506	6,120	688	208	5,224	23,876	9,199	217	2,131	1,026	5,081	4,055
Indiana.....	1909	311	4,361	336	237	3,788	19,881	7,455	251	1,835	1,306	4,719	3,413
	1904	392	4,009	498	176	3,335	15,896	5,449	172	1,403	982	3,818	2,836
	1899	558	4,448	691	148	3,609	12,721	4,505	104	1,195	552	2,931	2,379
Iowa.....	1909	235	3,654	272	224	3,158	20,782	7,327	300	1,673	1,204	4,483	3,279
	1904	302	3,154	366	155	2,633	14,645	4,801	146	1,242	838	3,362	2,524
	1899	330	2,521	441	94	1,986	8,567	3,076	65	769	460	1,976	1,516
Kansas.....	1909	55	1,978	28	131	1,819	9,827	3,930	141	911	531	2,336	1,805
	1904	65	1,974	65	109	1,800	7,240	3,473	117	841	444	1,907	1,463
	1899	57	1,021	67	49	905	2,274	755	29	314	156	724	568
Kentucky.....	1909	82	1,267	61	81	1,125	4,463	2,160	78	400	234	1,015	781
	1904	88	1,277	96	67	1,114	3,098	1,563	43	362	176	887	711
	1899	84	1,051	97	36	918	1,890	805	26	252	128	631	503
Louisiana.....	1909	48	673	43	47	583	2,910	1,256	36	204	111	496	385
	1904	62	1,160	58	65	1,027	3,215	1,343	50	399	210	972	762
	1899	58	1,153	66	43	1,044	1,217	672	26	261	102	532	430
Maine.....	1909	49	330	44	23	263	889	529	20	150	105	390	285
	1904	66	416	68	18	330	880	599	13	165	118	420	302
	1899	71	494	78	24	392	491	455	8	162	106	440	334
Maryland.....	1909	40	1,331	36	69	1,226	4,815	5,117	78	463	250	971	721
	1904	50	1,590	50	76	1,464	4,353	5,337	78	534	227	1,097	870
	1899	45	1,608	50	57	1,501	2,013	3,993	52	458	156	844	688
Massachusetts.....	1909	52	1,104	53	60	991	2,967	1,476	67	509	330	1,243	913
	1904	64	1,208	63	47	1,098	3,745	2,461	41	496	330	1,171	841
	1899	81	1,591	108	54	1,429	3,858	2,319	44	622	400	1,468	1,068

MANUFACTURES.

BRICK AND TILE—COMPARATIVE STATISTICS, BY STATES: 1909, 1904, AND 1899—Continued.

Table 16—Continued.	STATE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.			Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture (value of products less cost of materials).	
				Total.	Proprietors and firm members.	Salaried employees.								Wage earners (average number).
Expressed in thousands.														
	Michigan.....	1909	124	1,800	140	101	1,665	8,346	\$3,017	\$97	\$803	\$575	\$2,047	\$1,472
		1904	169	1,731	206	89	1,436	8,147	2,182	73	651	425	1,651	1,226
		1899	177	1,715	220	52	1,443	5,649	1,407	30	480	239	1,136	897
	Minnesota.....	1909	82	1,200	79	83	1,038	5,867	2,590	87	538	378	1,442	1,064
		1904	101	1,177	132	52	993	4,129	1,688	43	466	290	1,227	937
		1899	104	1,003	125	34	849	2,484	1,041	23	329	185	772	587
	Mississippi.....	1909	73	1,088	73	76	980	3,653	1,288	65	287	204	794	590
		1904	74	1,054	88	63	903	2,308	847	45	272	177	783	606
		1899	74	1,040	94	38	908	1,483	405	20	201	99	522	423
	Missouri.....	1909	120	3,289	121	169	2,999	8,274	7,138	226	1,469	1,012	3,670	2,664
		1904	162	2,679	151	161	2,337	6,945	7,453	179	1,119	669	2,599	1,930
		1899	219	2,797	260	97	2,440	4,378	6,051	113	867	472	1,988	1,516
	Montana.....	1909	21	230	24	17	189	1,135	519	24	166	83	371	288
		1904	14	118	13	8	97	589	240	13	77	38	179	141
		1899	23	160	27	9	124	248	107	4	69	30	134	104
	Nebraska.....	1909	78	978	80	67	831	4,033	2,649	67	465	278	1,161	883
		1904	99	1,084	129	50	905	3,510	1,566	41	471	277	1,132	855
		1899	106	1,029	134	40	855	2,254	1,270	26	327	203	840	637
	Nevada.....	1909	4	13	4	2	12	115	105	2	12	8	32	24
		1904	5	31	9	1	21	120	73	3	16	6	38	32
		1899	7	24	10	.....	14	.....	20	.....	10	3	18	15
	New Hampshire.....	1909	29	443	24	24	395	727	586	27	199	156	533	377
		1904	36	573	32	19	527	1,235	933	19	229	161	529	378
		1899	55	690	71	34	591	1,068	666	18	228	147	538	391
	New Jersey.....	1909	76	3,619	64	150	3,405	11,419	7,355	205	1,625	844	4,073	3,220
		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
	New Mexico.....	1909	13	112	9	11	92	668	330	13	42	32	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
	New York.....	1909	205	8,630	212	338	8,080	28,734	13,804	406	3,958	1,717	8,433	6,716
		1904	192	7,193	213	243	6,737	19,090	10,954	281	3,161	1,868	7,430	6,062
		1899	217	7,178	238	183	6,787	18,107	8,741	167	2,765	1,109	5,684	4,575
	North Carolina.....	1909	159	1,762	197	105	1,460	6,769	1,455	83	370	368	1,174	806
		1904	111	1,271	146	46	1,079	3,222	651	25	247	168	696	528
		1899	157	1,660	216	36	1,408	2,493	445	11	269	147	641	494
	North Dakota.....	1909	13	214	11	15	188	668	769	25	88	73	287	214
		1904	14	142	10	15	117	407	204	10	60	34	170	136
		1899	12	132	20	4	108	165	174	3	48	30	132	102
	Ohio.....	1909	517	8,575	569	540	7,466	37,742	17,315	589	3,527	2,204	9,358	7,154
		1904	590	7,839	704	410	6,719	33,291	12,049	390	2,642	1,633	7,136	5,503
		1899	686	6,414	853	208	5,353	22,715	7,344	189	1,967	982	4,630	3,648
	Oklahoma.....	1909	38	823	32	61	730	3,733	1,303	61	378	226	1,029	803
		1904	50	482	47	34	401	3,029	733	34	186	128	510	382
		1899	49	288	64	6	218	378	136	5	81	31	185	154
	Oregon.....	1909	61	487	71	31	385	1,922	1,250	34	266	155	675	520
		1904	43	330	56	10	264	766	366	9	132	63	315	252
		1899	46	280	58	12	220	511	194	9	98	37	227	190
	Pennsylvania.....	1909	326	8,643	349	530	8,058	38,247	20,150	546	3,881	2,453	9,225	6,772
		1904	370	8,430	445	424	7,561	31,235	13,887	365	3,213	1,599	7,280	5,681
		1899	385	7,509	507	269	6,733	20,921	10,507	248	2,626	1,138	5,954	4,816
	South Carolina.....	1909	45	990	50	52	888	2,824	935	37	233	268	731	463
		1904	47	963	52	36	875	2,531	617	29	184	177	656	479
		1899	76	1,293	107	41	1,145	2,342	341	20	241	132	574	442
	South Dakota.....	1909	12	72	5	13	54	790	227	10	28	31	103	72
		1904	10	64	9	6	49	355	175	3	27	20	84	64
		1899	11	67	19	.....	48	162	64	.....	20	13	46	33
	Tennessee.....	1909	91	1,487	112	94	1,281	4,631	1,868	82	443	346	1,308	962
		1904	84	1,410	108	68	1,234	3,165	1,200	65	378	265	1,100	835
		1899	91	1,307	121	34	1,152	2,821	891	31	293	166	685	519
	Texas.....	1909	89	2,135	50	150	1,935	7,488	3,607	158	797	766	2,545	1,779
		1904	92	1,460	71	81	1,308	3,397	1,609	74	470	366	1,305	939
		1899	143	1,804	161	64	1,579	2,456	1,293	51	420	234	1,020	786
	Utah.....	1909	34	585	40	31	514	1,556	1,190	31	332	136	693	547
		1904	39	359	53	15	291	737	438	13	172	68	346	278
		1899	49	337	77	11	249	207	171	7	89	33	187	154
	Vermont.....	1909	7	80	6	4	70	150	108	3	30	14	65	51
		1904	9	126	11	7	108	268	100	5	47	21	104	83
		1899	15	136	15	5	115	194	99	4	43	18	100	82
	Virginia.....	1909	86	2,311	87	134	2,090	5,540	3,983	142	732	570	1,922	1,412
		1904	84	2,176	84	123	1,964	4,977	3,146	118	620	429	1,804	1,375
		1899	80	1,564	90	56	1,413	3,119	1,331	46	404	195	1,006	811

* Includes Indian Territory.

THE CLAY PRODUCTS INDUSTRIES.

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BRICK AND TILE—COMPARATIVE STATISTICS, BY STATES: 1909, 1904, AND 1899—Continued.

Table 16—Continued.

STATE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture (value of products less cost of materials).
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
Washington.....	1900	58	1,447	61	86	1,300	4,797	\$5,188	\$110	\$792	\$651	\$2,559	\$1,908
	1904	51	609	52	45	512	1,486	966	37	306	149	675	526
	1899	32	385	29	27	329	624	370	28	186	81	427	346
West Virginia.....	1900	34	979	17	80	882	4,933	2,300	73	383	275	950	675
	1904	37	840	29	48	763	3,447	1,962	55	330	210	870	660
	1899	42	620	48	22	550	1,680	610	18	184	97	436	339
Wisconsin.....	1900	108	1,219	117	75	1,027	5,640	2,533	60	510	282	1,191	909
	1904	141	1,868	146	84	1,638	5,951	3,052	74	686	553	1,848	1,295
	1899	168	1,695	165	61	1,469	5,156	2,211	48	542	730	1,796	1,066
Wyoming.....	1900	13	47	10	3	34	129	96	2	30	15	70	55
	1904	3	10	2	2	6	65	14	1	6	2	17	15
	1899	4	15	4	.....	11	.....	7	.....	5	1	9	8

Table 17		PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Primary horse-power.
STATE.	Number of establishments.	Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.				Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.		Female.	Male.	Female.		
								Maximum month.	Minimum month.							
1	United States	4,215	85,764	4,285	3,318	1,434	299	76,528	Jy 104,930	Ja 38,312	92,900	91,261	97	1,541	1	341,169
2	Alabama.....	71	1,500	56	67	19	5	1,353	Se 1,689	Fe 808	1,657	1,589		68		5,127
3	Arizona.....	21	126	98				98	Oc 141	Au 59	178	178				100
4	Arkansas.....	42	697	55	30	24	3	585	Jy 790	Ja 284	713	689		24		2,178
5	California.....	78	1,879	35	85	46	10	1,703	Jy 2,223	Fe 941	1,801	1,778	1	22		8,972
6	Colorado.....	69	1,036	46	47	18	3	922	Jy 1,308	Ja 575	1,213	1,194	1	18		3,923
7	Connecticut and Rhode Island.....	38	1,417	37	49	15	4	1,312	Jy 2,065	Ja 253	1,089	1,087	2			5,193
8	Delaware.....	23	352	19	17	12	4	300	Au 425	Fe 133	365	351	2	12		834
9	District of Columbia.....	5	210	5	4	4	2	195	Jy ¹ 249	Ja 89	171	171				911
10	Florida.....	29	501	21	27	14		439	Ap 489	Fe 373	558	525		33		2,238
11	Georgia.....	75	2,085	73	82	26	3	1,901	My ¹ 2,196	Ja 1,337	2,169	2,116	2	51		7,476
12	Idaho.....	36	347	39	16	6		286	Jy 544	De 81	395	387	1	7		1,050
13	Illinois.....	340	7,347	384	242	117	30	6,574	Je 8,302	Ja 3,795	7,849	7,796		53		36,013
14	Indiana.....	311	4,361	336	165	55	17	3,788	Je 4,703	Ja 2,173	4,752	4,649		103	1	19,881
15	Iowa.....	235	3,654	272	159	52	13	3,158	Je 4,093	Ja 1,594	3,707	3,678		20		20,782
16	Kansas.....	55	1,978	28	76	41	14	1,819	Je 2,175	Ja 1,143	1,953	1,951		2		9,827
17	Kentucky.....	82	1,267	61	65	13	3	1,125	Au 1,681	Ja 356	1,538	1,517		21		4,403
18	Louisiana.....	48	673	43	37	9	1	583	Jy 791	Ja 247	816	767	1	48		2,910
19	Maine.....	49	330	44	16	4	3	263	Jy 539	Mh 32	401	398		3		889
20	Maryland.....	40	1,331	36	47	20	2	1,226	Jy 1,093	Ja 742	1,177	1,152		25		4,816
21	Massachusetts.....	52	1,104	53	38	18	4	991	Jy 1,808	Fe 160	1,127	1,125	1	1		2,967
22	Michigan.....	124	1,806	140	69	22	10	1,565	Jy 2,467	Fe 586	2,130	2,122		8		8,346
23	Minnesota.....	82	1,200	79	53	20	10	1,038	Jy 2,014	Ja ¹ 246	1,632	1,613	1	18		5,867
24	Mississippi.....	73	1,088	73	59	15	2	939	My 1,234	Fe 445	1,350	1,273		77		3,653
25	Missouri.....	120	3,289	121	95	67	7	2,999	Jy 3,899	Fe 1,635	3,246	3,151		95		8,274
26	Montana.....	21	230	24	12	5		189	Jy 388	Fe 19	266	265	1			1,135
27	Nebraska.....	78	978	80	43	23	1	831	Au 1,203	Ja 220	1,060	1,047		13		4,033
28	Nevada.....	4	18	4	1	1		12	Se 35	Ja ² 0	22	20		2		115
29	New Hampshire.....	29	443	24	15	8	1	395	My 766	Mh 67	318	314	2	2		727
30	New Jersey.....	76	3,619	64	75	72	3	3,405	Au 4,621	Ja 1,529	3,960	3,877	36	47		11,419
31	New Mexico.....	13	112	9	10	1		92	Jy 130	Mh 44	186	184		2		668
32	New York.....	205	8,630	212	208	118	12	8,080	Jy 13,787	Fe 1,431	10,015	10,004		11		28,734
33	North Carolina.....	159	1,762	197	92	12	1	1,400	Au 2,281	Ja 406	2,448	2,265		183		6,759
34	North Dakota.....	13	214	11	13	1	1	188	Je ¹ 385	Ja 40	284	277		7		668
35	Ohio.....	517	8,575	569	363	132	45	7,406	Je 9,401	Ja 4,878	9,093	9,029	2	62		37,742
36	Oklahoma.....	38	823	32	39	20	2	730	Jy 932	Ja 369	943	941		2		3,733
37	Oregon.....	61	487	71	14	16	1	385	Jy 747	Ja 78	735	729	1	5		1,922
38	Pennsylvania.....	326	8,943	349	322	165	49	8,058	Jy 9,927	Fe 4,658	9,271	9,105	21	145		38,247
39	South Carolina.....	45	990	50	39	9	4	888	Au 1,230	Ja ¹ 510	1,229	1,157		72		2,824
40	South Dakota.....	12	72	5	11	2		54	Je 106	Ja ¹ 8	103	103				790
41	Tennessee.....	91	1,487	112	57	32	5	1,281	Jy 1,740	Fe 632	1,754	1,664	1	89		4,631
42	Texas.....	89	2,135	50	96	49	5	1,935	Jy 2,303	Ja 1,467	2,109	2,058		51		7,488
43	Utah.....	34	585	40	15	16		514	Je 758	Ja 267	584	551		33		1,556
44	Vermont.....	7	80	6	4			70	Je 150	Ja 5	107	107				150
45	Virginia.....	86	2,311	87	88	39	7	2,090	Au 2,641	Ja 1,317	2,400	2,334	12	54		5,640
46	Washington.....	58	1,447	61	56	24	6	1,300	Je 1,690	Ja 854	1,589	1,582	5	2		4,797
47	West Virginia.....	34	979	17	44	34	2	882	Je 1,179	Fe 386	915	902	3	10		4,983
48	Wisconsin.....	108	1,219	117	53	18	4	1,027	Je 1,914	Fe 280	1,413	1,381	1	31		5,640
49	Wyoming.....	13	47	10	3			34	Jy 98	Ja ² 0	108	108				129

¹ Same number reported for one or more other months.

THE CLAY PRODUCTS INDUSTRIES.

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STATISTICS, BY STATES: 1909.

Capital.	EXPENSES.										Value of products.	Value added by manufacture (value of products less cost of materials).
	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 \$174,672,805	\$75,744,418	\$4,170,824	\$1,207,983	\$87,138,584	\$17,788,091	\$5,948,011	\$434,385	\$714,404	\$569,437	\$7,712,199	\$92,776,504	\$69,040,408
2 1,942,486	950,014	81,391	18,698	434,341	244,237	43,752	2,931	7,644	-----	117,020	1,135,134	847,145
3 129,620	92,779	-----	-----	55,983	23,332	3,504	600	588	-----	8,722	117,448	90,562
4 1,300,259	502,346	33,365	20,843	219,252	132,332	35,741	650	4,240	-----	49,915	601,034	432,853
5 9,168,834	2,601,355	124,370	37,249	1,145,664	607,368	284,451	29,179	23,803	21,040	268,222	2,756,308	1,804,489
6 2,420,670	1,358,835	63,056	16,165	637,220	204,161	217,242	2,125	13,904	-----	114,962	1,670,042	1,158,639
7 2,812,117	1,214,678	79,359	18,505	672,715	249,527	51,148	9,839	13,017	18,569	101,999	1,474,577	1,173,902
8 835,148	280,751	21,030	13,233	110,480	39,484	15,167	1,360	1,003	34,029	38,956	329,454	274,803
9 252,181	163,957	5,036	3,052	78,500	38,240	17,541	1,603	1,603	-----	18,526	181,519	125,729
10 778,824	328,093	30,147	8,851	188,589	83,334	29,205	995	2,562	27	34,583	370,021	266,482
11 2,771,068	1,393,535	111,089	21,014	549,967	480,901	53,162	3,827	11,571	1,500	165,444	1,711,086	1,176,983
12 800,137	332,849	13,776	3,685	178,654	88,421	20,865	115	4,720	-----	22,613	443,623	334,337
13 18,495,247	8,285,610	347,258	118,882	4,880,001	1,805,102	686,256	13,897	79,548	33,094	815,572	9,765,951	7,273,693
14 7,455,305	3,871,916	168,486	52,280	1,634,927	832,182	473,405	25,405	43,053	85,888	326,290	4,718,923	3,413,336
15 3,326,525	1,536,594	280,652	39,120	1,672,647	1,038,635	165,805	4,005	24,100	5,229	326,501	4,482,767	3,278,327
16 3,930,102	1,871,168	101,820	38,539	910,784	447,827	82,978	2,980	18,587	17,642	250,061	2,836,438	1,805,633
17 2,100,341	812,951	67,696	9,094	399,737	178,077	55,903	3,500	9,342	645	88,057	1,015,447	781,467
18 1,255,697	428,488	32,984	3,400	204,165	98,144	13,241	330	5,365	300	70,569	496,497	385,112
19 628,785	300,432	14,030	4,475	150,142	97,500	7,444	1,830	3,453	5,861	14,737	390,107	285,163
20 5,117,008	2,874,323	65,793	11,640	462,570	212,818	36,668	2,001	11,653	1,749	69,432	670,025	721,139
21 1,476,337	1,030,100	50,304	16,912	509,302	295,175	34,723	9,062	16,553	-----	98,069	1,243,245	913,347
22 3,017,098	1,627,356	77,412	19,846	803,396	404,462	170,778	6,851	19,830	-----	124,781	2,047,211	1,471,971
23 2,580,632	1,165,897	61,541	25,760	537,546	321,610	56,666	2,300	11,593	11,091	137,790	1,442,149	1,063,873
24 1,287,689	629,339	56,370	8,440	287,491	169,015	35,029	268	8,004	10,172	54,541	794,145	590,101
25 7,138,407	3,040,987	168,222	58,185	1,468,929	710,164	302,167	8,702	29,799	77,983	216,846	3,676,274	2,663,953
26 518,544	208,313	18,508	5,000	165,728	62,491	20,905	600	2,054	-----	23,027	370,574	287,178
27 2,640,302	928,468	49,100	17,428	465,477	210,429	67,585	1,030	7,963	403	109,048	1,161,106	883,092
28 105,142	25,555	1,800	163	11,784	7,521	331	-----	208	-----	3,748	31,980	24,128
29 686,065	440,817	20,770	6,470	198,964	144,736	11,532	1,732	3,522	21,750	31,141	533,045	376,777
30 7,354,660	3,080,500	142,840	62,340	1,625,260	629,602	214,161	24,800	26,975	400	354,116	4,073,286	3,229,523
31 329,771	98,784	12,870	425	41,704	25,911	5,934	105	537	4,200	7,038	122,551	90,706
32 13,864,023	6,905,804	305,358	100,905	3,957,760	1,153,545	563,735	137,994	67,723	21,581	597,203	8,432,804	6,715,524
33 1,454,748	897,041	74,478	8,380	369,681	327,673	40,017	1,209	7,020	2,882	65,701	1,173,751	806,061
34 769,367	238,175	17,714	7,504	87,795	46,798	25,990	1,100	2,420	-----	48,864	286,921	214,133
35 17,314,892	7,418,610	453,138	136,235	3,527,475	1,797,165	407,188	7,648	78,589	93,030	918,152	9,357,730	7,153,387
36 1,303,172	755,496	47,002	12,621	378,350	169,924	56,117	1,754	6,663	2,300	79,865	1,028,693	802,652
37 1,249,815	616,078	19,282	14,942	265,838	139,103	16,044	4,743	4,472	13,254	38,400	674,520	519,373
38 20,150,106	8,029,554	406,631	139,210	3,881,202	1,626,288	826,751	89,447	68,210	18,317	973,498	9,225,204	6,772,165
39 935,372	585,825	31,453	5,528	232,701	138,011	79,992	3,240	3,240	-----	44,900	730,543	462,540
40 226,870	79,632	8,855	726	27,694	19,838	10,730	5	1,120	-----	10,842	102,660	72,086
41 1,867,654	1,051,918	53,892	28,435	449,259	237,008	108,521	14,524	6,272	49,715	110,292	1,307,826	962,297
42 3,606,752	2,063,023	117,751	40,433	797,419	676,932	89,101	3,663	11,582	8,597	317,645	2,544,702	1,778,669
43 1,189,606	520,298	17,644	13,380	331,918	106,023	28,577	50	3,810	-----	17,996	683,087	547,587
44 107,821	50,143	3,398	-----	29,951	13,788	475	-----	475	-----	1,931	64,744	50,481
45 3,983,120	1,540,155	111,211	31,007	731,707	416,509	98,815	4,197	9,925	3,774	137,890	1,922,476	1,412,092
46 5,187,951	1,657,307	89,708	26,308	792,228	421,475	229,930	4,559	13,236	1,314	78,549	2,558,828	1,907,423
47 2,300,229	831,675	52,667	20,605	383,019	167,038	108,203	80	7,573	118	92,342	950,364	675,073
48 2,532,998	985,201	45,840	14,504	509,507	232,766	48,956	2,188	14,899	2,978	113,602	1,191,379	909,657
49 95,690	49,892	1,000	-----	30,341	14,300	576	140	414	-----	2,221	69,535	54,659

* None reported for one or more other months.

POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS INDUSTRY.

Comparison with earlier censuses.—Table 18 summarizes the statistics of the pottery, terra-cotta, and fire-clay products industry for each census from 1849 to 1909, inclusive.

CENSUS.	Number of establishments.	Wage earners (average number).	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
1904.....	873	52,428	25,177,665	16,591,462	64,200,792	47,609,330
1899.....	1,000	43,714	17,691,737	11,915,236	44,293,386	32,348,150
1890.....	707	18,850	8,809,032	5,618,401	22,057,090	16,438,639
1879.....	752	10,221	3,600,727	2,909,063	8,977,333	6,068,270
1849.....	777	6,116	2,247,173	1,702,705	6,045,536	4,342,831
1859.....	559	3,828	1,170,605	793,323	3,213,081	2,419,758
1849.....	518	2,456	653,334	294,351	1,578,628	1,284,277

The value of products in 1909 was more than forty-seven times as great as that in 1849. At each census since 1849 there was an increase reported in number of wage earners, value of products, and value added by manufacture. As in the brick and tile industry, the value of products for the manufacture of pottery, terra-cotta, and fire-clay products shows the largest relative increase (145.7 per cent) for the decade 1879-1889.

Summary, by states.—Table 19 summarizes the more important statistics for the industry, by states, the

states being arranged according to the value of products reported for 1909. Some of the states for which data can not be shown separately ranked higher than some named in the table.

Ohio was the most important state in the manufacture of pottery, terra-cotta, and fire-clay products, ranking first at the censuses of 1909 and 1904 in the average number of wage earners, value of products, and value added by manufacture. In 1909 the value of products for the state represented 27.8 per cent of the total for the United States. The number of wage earners employed in the industry in Ohio increased 39.2 per cent during the decade ending with 1909, and the value of products 78.7 per cent. New Jersey ranked second in 1909 and 1904 in average number of wage earners, value of products, and value added by manufacture, while Pennsylvania held third place at each census in all three items. These three leading states together reported 62.3 per cent of the total value of products in 1909, as compared with 63.9 per cent in 1904. Illinois and Missouri each advanced in rank according to value of products, the former from fifth place in 1904 to fourth in 1909, and the latter from sixth to fifth place. New York, on the other hand, dropped from fourth place in value of products in 1904 to sixth place in 1909.

STATE.	Number of establishments: 1909.	Wage earners.			Value of products.			Value added by manufacture.			Per cent of increase. ¹								
		Average number: 1909.	Per cent of total: 1909.	Rank.	Amount: 1909.	Per cent of total: 1909.	Rank.	Amount: 1909.	Per cent of total: 1909.	Rank.	Wage earners (average number).			Value of products.			Value added by manufacture.		
											1909	1904	1899	1909	1904	1899	1909	1904	1899
		1909	1909	1909	1909	1909	1909	1909	1909	1909	1909	1904	1899	1909	1904	1899	1909	1904	
United States.....	822	56,168	100.0	.....	\$76,118,861	100.0	.....	\$54,207,956	100.0	.....	28.5	7.1	19.9	72.0	18.0	45.0	67.6	13.9	47.2
Ohio.....	186	16,519	29.4	1	21,173,272	27.8	1	14,711,792	27.1	1	30.2	3.8	34.1	78.7	14.1	56.5	70.6	7.2	69.2
New Jersey.....	88	9,815	17.5	2	13,139,000	17.3	2	9,587,832	17.7	2	20.9	3.5	16.0	47.0	12.1	31.0	46.2	9.4	39.6
Pennsylvania.....	139	9,003	16.0	3	13,072,106	17.2	3	8,962,738	16.6	3	1.5	3.9	-2.3	60.8	21.5	32.4	57.0	14.2	39.3
Illinois.....	39	3,167	5.6	4	4,614,728	6.1	4	3,488,282	6.4	4	57.5	30.7	20.5	115.3	41.7	51.9	122.5	38.2	61.0
Missouri.....	29	3,138	5.6	5	4,068,701	5.3	5	2,992,532	5.5	5	95.3	23.0	57.6	144.8	32.0	85.5	131.7	28.4	30.4
New York.....	39	2,367	4.2	6	3,403,496	4.5	6	2,528,824	4.7	6	4.3	-12.1	18.7	42.4	3.5	37.7	35.4	4.6	29.5
Indiana.....	31	2,186	3.9	7	2,965,768	3.9	7	2,106,744	3.9	7	74.9	8.3	61.5	129.7	12.2	104.7	115.2	5.5	104.0
West Virginia.....	10	2,034	3.6	8	2,678,673	3.5	8	1,893,025	3.5	8	60.3	00.2	0.1	142.4	108.3	10.4	113.7	101.4	6.1
California.....	26	1,027	1.8	10	1,797,129	2.4	9	1,291,940	2.4	9	162.7	19.4	119.9	139.3	2.0	134.5	163.7	-5.3	178.6
Kentucky.....	19	1,319	2.3	9	1,469,757	1.9	10	1,087,399	2.0	10	56.8	0.5	56.0	103.0	17.9	72.2	107.2	20.9	71.4
Maryland.....	16	720	1.3	11	756,795	1.0	12	550,683	1.0	11	-33.5	-22.2	-14.5	-9.3	-11.2	2.0	-13.8	-22.8	11.7
Massachusetts.....	20	465	0.8	13	644,286	0.8	13	465,782	0.9	13	-20.4	-18.0	-2.9	-9.7	-10.3	0.7	-11.4	-14.4	3.4
Georgia.....	27	692	1.1	12	613,868	0.8	14	469,723	0.8	14	107.7	.....	107.7	198.1	27.9	133.0	181.1	37.2	104.9
Texas.....	17	420	0.7	15	597,226	0.8	15	402,434	0.7	15	50.0	92.7	21.0	82.6	70.3	171.6	.....	73.6	
Alabama.....	21	425	0.8	14	553,840	0.7	16	388,844	0.7	17	87.2	60.4	16.7	148.4	104.8	21.3	135.8	99.5	18.2
Washington.....	8	289	0.5	18	523,350	0.7	17	411,432	0.8	15	129.4	78.4	28.6	233.1	25.7	165.0	221.1	39.3	130.5
Iowa.....	10	286	0.5	19	464,265	0.6	18	284,486	0.5	20	27.2	22.2	.....	-66.7	-68.7	47.0	.....	-74.5	
Colorado.....	6	214	0.4	21	435,822	0.6	19	327,551	0.6	18	-42.8	-55.0	27.3	-24.0	-44.6	37.1	-20.6	-33.2	18.9
Kansas.....	4	228	0.4	20	378,175	0.5	20	303,822	0.6	19	.....	74.0	.....	108.8	.....	.....	.....	111.1	.....
Tennessee.....	0	323	0.6	17	327,610	0.4	21	218,080	0.4	21	7.7	8.8	-1.0	26.2	6.1	18.8	17.2	-5.2	23.7
Michigan.....	7	206	0.4	22	245,677	0.3	23	171,872	0.3	22	38.3	1.5	36.2	69.7	-15.2	100.0	50.3	-30.4	128.7
Utah.....	3	96	0.2	26	194,834	0.3	24	138,333	0.3	25	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Carolina.....	17	148	0.3	25	146,774	0.2	27	101,797	0.2	27	7.2	.....	-39.1	.....	38.7	.....	.....	.....	.....
Virginia.....	4	68	0.1	28	51,686	0.1	30	35,006	0.1	32	-32.0	.....	-19.0	.....	.....	.....	.....	.....	.....
Dist. of Columbia.....	4	49	0.1	29	44,425	0.1	31	36,037	0.1	30	-55.0	-55.9	1.8	-62.4	-60.4	-5.1	.....	.....	.....
Arkansas.....	5	45	0.1	31	41,024	(?)	32	33,187	0.1	31	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	4	20	(?)	34	34,642	(?)	34	23,490	(?)	34	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Carolina.....	4	36	0.1	32	28,347	(?)	35	20,081	(?)	35	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin.....	3	9	(?)	36	9,109	(?)	38	7,991	(?)	38	.....	.....	.....	.....	.....	.....	.....	.....	.....
All other states.....	24	958	1.7	.....	1,638,976	2.2	.....	1,177,217	2.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Percentages are based on figures in Table 32. A minus sign (-) denotes decrease. Percentage not shown where base is less than 100 for wage earners or less than \$100,000 for value of products or value added by manufacture.
² Less than one-tenth of 1 per cent.

Of the 10 leading states in the pottery, terra-cotta, and fire-clay products industry, as measured by value of products, Missouri showed the largest relative increase during the decade 1899-1909, 144.8 per cent, and California showed the largest relative increase in the number of wage earners, 162.7 per cent.

A few of the less important states advanced notably in rank in the industry, as measured by value of products, from 1904 to 1909—Texas, from eighteenth to fifteenth; Alabama, from twenty-first to sixteenth; Iowa, from twenty-seventh to eighteenth; Arkansas, from thirty-fifth to thirty-second; and Utah, from twenty-ninth to twenty-fourth. Colorado dropped from twelfth to nineteenth; Tennessee, from nineteenth to twenty-first; Michigan, from twentieth to twenty-third; and the District of Columbia, from twenty-fifth to thirty-first.

Persons engaged in the industry.—Table 20 shows, for 1909, the number of persons engaged in the manufacture of pottery, terra-cotta, and fire-clay products, classified according to occupational status and sex, and in the case of wage earners, according to age also. It should be borne in mind 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 THE MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS: 1909		
	Total.	Male.	Female.
All classes.....	61,022	53,932	7,090
Proprietors and officials.....	2,166	2,122	44
Proprietors and firm members.....	452	420	32
Salaried officers of corporations.....	692	683	9
Superintendents and managers.....	1,022	1,019	3
Clerks.....	2,688	2,078	610
Wage earners (average number).....	56,168	49,732	6,436
16 years of age and over.....	55,352	49,075	6,277
Under 16 years of age.....	816	657	159

The average number of persons engaged in the pottery, terra-cotta, and fire-clay products industry during 1909 was 61,022, of whom 56,168, or 92 per cent, were wage earners; 2,166, or 3.5 per cent, proprietors and officials; and 2,688, or 4.4 per cent, clerks, this class including other subordinate salaried employees. Of the total number of persons engaged in the industry, 53,932, or 88.4 per cent, were males and 7,090, or 11.6 per cent, females. The average number of children under 16 years of age employed as wage earners was 816.

The average number of wage earners for each state, as reported at the censuses of 1909, 1904, and 1899, is given in Table 32. The distribution of the average number by sex and age is not shown for the individual states, but Table 33 gives such a distribution of the number employed on December 15, or the nearest representative day. Female wage earners were reported

in 16 of the 29 states for which separate figures are shown. The largest number of such wage earners, 3,366, was reported for the state of Ohio, and the next largest number, 1,219, for New Jersey. The comparatively few wage earners under 16 years of age were fairly well distributed among the states, the largest number, 304, being reported for Pennsylvania.

In order to compare the distribution of persons engaged in this industry in 1909 according to occupational status with that in 1904, it is necessary to use the classification employed at the earlier census. (See Introduction.) Such a comparison is made in Table 21.

CLASS.	PERSONS ENGAGED IN THE MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.				
	1909		1904		Percent of increase: 1904-1909
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total.....	61,022	100.0	56,730	100.0	7.6
Proprietors and firm members.....	452	0.7	550	1.0	-17.8
Salaried employees.....	4,402	7.2	3,752	6.6	17.3
Wage earners (average number).....	56,168	92.0	52,423	92.4	7.1

¹ A minus sign (-) denotes decrease.

Proprietors and firm members decreased from 1904 to 1909, while salaried employees and wage earners both increased, the relative gain being the greater in the case of salaried employees. Wage earners formed a slightly smaller proportion of the total number of persons engaged in the industry in 1909 than in 1904.

Table 22 shows the average number of wage earners in the pottery, terra-cotta, and fire-clay products industry distributed according to age, and in the case of those 16 years of age and over, according to sex, for 1909, 1904, and 1899.

CLASS.	AVERAGE NUMBER OF WAGE EARNERS EMPLOYED IN THE MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.					
	1909		1904		1899	
	Number.	Per cent distribution.	Number.	Per cent distribution.	Number.	Per cent distribution.
Total.....	56,168	100.0	52,423	100.0	43,714	100.0
16 years of age and over.....	55,352	98.5	51,295	97.8	42,652	97.6
Male.....	49,075	87.4	45,342	86.5	38,171	87.3
Female.....	6,277	11.2	5,953	11.4	4,481	10.3
Under 16 years of age.....	816	1.5	1,133	2.2	1,062	2.4

The proportion of men and women employed did not change greatly between the three censuses, but there was a constant decrease in the proportion of children employed.

Wage earners employed, by months.—Table 23 gives the number of wage earners employed in the industry on the 15th (or the nearest representative day) of each month during the year 1909 for the 12 states in which an average of 500 or more wage earners were employed during the year.

MANUFACTURES.

Table 23 WAGE EARNERS EMPLOYED IN THE MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS: 1909¹

STATE.	Average number during the year	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
United States.....	56,168	50,383	52,284	54,419	55,088	55,509	56,094	56,485	57,715	58,299	59,200	59,355	59,208
California.....	1,027	<i>879</i>	912	918	978	1,031	1,075	1,081	1,120	1,092	1,067	1,096	1,077
Georgia.....	592	590	551	550	557	600	502	620	612	621	629	613	538
Illinois.....	3,157	<i>2,662</i>	2,686	3,003	3,208	3,233	2,784	3,271	3,288	3,447	3,528	3,488	3,399
Indiana.....	2,186	2,058	<i>2,046</i>	2,147	2,118	2,122	2,128	2,150	2,229	2,242	2,265	2,346	<i>2,354</i>
Kentucky.....	1,319	1,224	<i>1,221</i>	1,305	1,287	1,233	1,311	1,323	1,360	1,380	1,384	1,395	1,411
Maryland.....	720	720	720	730	696	734	724	700	724	738	746	747	720
Missouri.....	3,138	<i>2,653</i>	2,728	2,990	3,035	3,050	3,011	3,137	3,215	3,316	3,397	3,560	3,556
New Jersey.....	9,815	<i>8,840</i>	8,998	9,271	9,565	9,666	9,977	10,012	10,070	10,113	10,334	10,507	10,426
New York.....	2,367	<i>2,105</i>	2,310	2,318	2,350	2,361	2,340	2,429	2,424	2,368	2,381	2,475	2,547
Ohio.....	16,519	<i>15,197</i>	16,056	16,508	16,588	16,657	16,796	16,056	16,680	16,772	17,044	16,935	16,899
Pennsylvania.....	9,003	<i>8,090</i>	8,464	8,540	8,489	8,553	8,929	9,228	9,367	9,555	9,600	9,583	9,538
West Virginia.....	2,034	<i>1,769</i>	1,803	1,901	1,991	1,976	1,986	2,018	2,127	2,147	2,100	2,205	2,235

¹ The month of maximum employment for each state is indicated by boldface figures and that of minimum employment by italic figures.

The manufacture of pottery, terra-cotta, and fire-clay products is very little subject to seasonal variations, the clay for pottery and kindred products being stored during the seasonable months for use during the cold or wet seasons of the year. The largest number of wage earners employed during any month of 1909 was 59,355, in November, and the smallest number, 50,383, in January, the minimum number being equal to 84.9 per cent of the maximum. In 1904 the maximum number of wage earners employed in the industry was reported for September, and the minimum number, which was equal to 86.6 per cent of the maximum, was reported for January.

Prevailing hours of labor.—In Table 24 the wage earners in the pottery industry have been classified according to the number of hours of labor per week prevailing in the establishments in which they were employed. In making this classification the average number of wage earners employed during the year in each establishment was classified as a total according to the hours prevailing in that establishment, even though a few employees worked a greater or smaller number of hours.

Over three-fourths (75.8 per cent) of the wage earners employed in 1909 were in establishments where the prevailing number of hours was from 54 to 60 per week, inclusive, and only 2.5 per cent were employed in establishments where they were more than 60 per week. Of the seven groups shown in the table, by far the largest was that made up of the wage earners in establishments where the prevailing hours were 60 per week, such wage earners constituting 39.1 per cent of the total number. This group was the most important in six of the individual states for which figures are given. In Missouri, New Jersey, and New York, however, the wage earners in establishments where the prevailing hours per week were between 54 and 60 formed the largest group, and in Maryland and West Virginia the greatest number were employed in establishments which reported 48 hours and under per week as the prevailing hours of labor.

Table 24 AVERAGE NUMBER OF WAGE EARNERS EMPLOYED IN THE MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRECLAY PRODUCTS: 1909

STATE.	Total.	In establishments with prevailing hours—						
		48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72 and over.
United States.....	56,168	6,488	5,709	10,071	10,590	21,909	987	434
California.....	1,027	18	.....	660	.....	250	99	.....
Georgia.....	592	3	.....	87	.....	270	282	.....
Illinois.....	3,157	613	2	141	1,185	1,216	.....	.....
Indiana.....	2,186	142	.....	512	560	972	.....	.....
Kentucky.....	1,319	378	.....	68	299	574	.....	.....
Maryland.....	720	337	.....	101	20	262	.....	.....
Missouri.....	3,138	65	.....	241	1,706	1,126	.....	.....
New Jersey.....	9,815	652	1,968	1,448	3,028	2,719	.....	.....
New York.....	2,367	234	423	570	617	451	.....	72
Ohio.....	16,519	2,143	2,660	3,838	1,058	6,703	117	.....
Pennsylvania.....	9,003	679	404	1,739	1,404	4,389	66	362
West Virginia.....	2,034	1,201	217	420	33	163	.....	.....

Character of ownership.—Table 25 presents statistics with respect to the character of ownership of establishments in the industry in 1909 and 1904.

Table 25 MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.

CHARACTER OF OWNERSHIP.	Number of establishments.		Value of products.	
	1909	1904	1909	1904
	Total.....	822	873	\$76,118,861	$84,200,792
Individual.....	190	193	2,978,895	3,144,665
Firm.....	96	134	3,127,978	3,140,485
Corporation.....	536	546	70,011,988	57,915,652
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	23.1	22.1	3.9	4.9
Firm.....	11.7	15.3	4.1	4.9
Corporation.....	65.2	62.5	92.0	90.2

In 1909, of the total number of establishments, 65.2 per cent were under corporate ownership, as compared with 62.5 per cent in 1904. While corporations thus controlled a little more than three-fifths of the total number of establishments at both censuses, the value of the products of these establishments represented 92 per cent of the total value of products for the industry in 1909, and 90.2 per cent in 1904.

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Table 26 gives statistics for establishments in the pottery, terra-cotta, and fire-clay products industry classified according to form of ownership, for the 12 states in which an average of 500 or more wage earners were employed in 1909.

In 1909, 2,295 wage earners, or 4.1 per cent of the total number, were employed in establishments under individual ownership; 2,447, or 4.4 per cent, in those under firm ownership; and 51,426, or 91.6 per cent, in those owned by corporations.

STATE.	MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS: 1909											
	Number of establishments owned by—			Wage earners in establishments owned by—			Value of products of establishments owned by—			Value added by manufacture in establishments owned by—		
	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.
United States	190	96	536	2,295	2,447	51,426	\$2,978,895	\$3,127,978	\$70,011,988	\$2,201,860	\$2,217,180	\$49,788,916
California	7	2	17	47	(X)	980	<i>185,250</i>	(X)	1,071,879	<i>80,324</i>	(X)	1,205,616
Georgia	17	2	8	24	—	568	<i>28,155</i>	(X)	588,713	<i>23,557</i>	(X)	436,886
Illinois	9	5	25	15	99	3,043	21,296	164,904	4,428,528	10,192	108,993	3,363,097
Indiana	4	5	22	66	64	2,056	65,110	98,438	2,802,220	46,629	71,314	1,988,801
Kentucky	5	1	13	17	(X)	1,302	<i>17,864</i>	(X)	1,451,693	<i>15,018</i>	(X)	1,072,387
Maryland	2	4	10	(X)	77	643	<i>643</i>	<i>74,288</i>	682,507	<i>(X)</i>	<i>54,494</i>	496,189
Missouri	9	1	19	402	(X)	2,730	<i>806,885</i>	(X)	3,461,810	<i>415,920</i>	(X)	2,578,012
New Jersey	16	9	63	179	588	9,048	218,130	705,289	12,215,581	159,138	503,714	8,924,980
New York	11	4	24	285	32	2,050	381,379	35,450	2,986,667	276,318	28,674	2,223,832
Ohio	17	18	151	735	316	15,408	859,736	472,823	19,340,713	669,217	345,803	13,696,772
Pennsylvania	22	22	95	231	895	7,877	823,139	1,135,332	11,613,635	239,206	785,962	7,937,480
West Virginia	1	1	14	(X)	(X)	<i>2,034</i>	(X)	(X)	<i>2,878,673</i>	(X)	(X)	<i>1,893,055</i>

NOTE.—In some states, in order to avoid disclosing the returns for individual establishments, the figures for one group have been consolidated with those for establishments under some other form of ownership. In such cases an (X) is placed in the column from which the figures have been omitted, and the figures for the group with which they have been combined are printed in italics.

Size of establishments.—Table 27 presents statistics for 1909 and 1904 for establishments in the pottery, terra-cotta, and fire-clay products industry, grouped according to the value of their products.

VALUE OF PRODUCTS PER ESTABLISHMENT.	MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.			
	Number of establishments.		Value of products.	
	1909	1904	1909	1904
Total	822	873	\$76,118,861	\$64,200,792
Less than \$5,000	176	166	362,030	388,167
\$5,000 and less than \$20,000	123	179	1,445,678	1,984,046
\$20,000 and less than \$100,000	291	321	15,653,399	16,625,169
\$100,000 and less than \$1,000,000	220	207	54,870,795	45,203,410
\$1,000,000 and over	3	—	3,786,959	—
Per cent of total	100.0	100.0	100.0	100.0
Less than \$5,000	21.4	19.0	0.5	0.6
\$5,000 and less than \$20,000	15.0	20.5	1.9	3.1
\$20,000 and less than \$100,000	35.4	36.8	20.6	25.9
\$100,000 and less than \$1,000,000	27.9	23.7	72.1	70.4
\$1,000,000 and over	0.4	—	5.0	—

In 1909 only three establishments manufactured products valued at \$1,000,000 or over. In 1904 there were no establishments of this class reported. Establishments manufacturing products valued at \$100,000 but less than \$1,000,000 formed the most important

class at both censuses, reporting 72.1 per cent of the total value of products in 1909 and 70.4 per cent in 1904.

The average value of products per establishment increased from \$73,540 in 1904 to \$92,602 in 1909, and the average value added by manufacture, as computed from the figures in Table 18, from \$54,535 to \$65,946. The average number of wage earners per establishment, likewise, shows an increase from 60 in 1904 to 68 in 1909.

Table 28 classifies the establishments in the pottery industry in 12 of the leading states according to the number of wage earners employed.

Of the 822 establishments reported in 1909, 4.1 per cent employed no wage earners; 35.2 per cent employed from 1 to 20; 39.5 per cent, from 21 to 100; 16.7 per cent, from 101 to 250; and 4.5 per cent, more than 250 each. There were but 8 establishments that employed more than 500 wage earners.

Of the total number of wage earners, 3.7 per cent were reported by establishments employing from 1 to 20, 29.9 per cent by establishments employing 21 to 100, and 66.4 per cent by establishments employing more than 100 wage earners each.

Table 28

MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS: 1909

STATE.	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.	
	Es-tab-lish-ments.	Wage earners (average number).		Es-tab-lish-ments.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.
United States..	822	56,168	34	155	360	134	1,707	178	6,139	147	10,646	137	22,010	29	9,522	7	4,755	1	1,029
California.....	26	1,027	3	5	13	10	125	2	81	3	101	2	217	1	400				
Georgia.....	27	592	7	11	18	2	23	2	68	4	331	1	152						
Illinois.....	39	3,157		10	16	7	96	8	315	6	412	7	1,289					1	1,029
Indiana.....	31	2,186		7	21	3	50	5	172	10	683	3	435	3	825				
Kentucky.....	19	1,319				1	16	9	133	4	293	4	578	1	299				
Maryland.....	16	720		4	8	4	38	3	115	2	115	3	444						
Missouri.....	29	3,138		7	13	2	20	3	122	6	438	7	1,007	3	832	1	705		
New Jersey.....	88	9,815	1	9	18	14	168	18	601	13	967	23	3,869	8	2,820	2	1,372		
New York.....	39	2,367	3	7	18	6	78	13	468	4	305	4	730	2	768				
Ohio.....	188	16,519	2	15	34	18	221	53	1,904	43	3,086	45	7,145	7	2,302	3	1,827		
Pennsylvania.....	139	9,603	4	19	53	25	353	33	1,137	29	2,123	25	4,061	4	1,276				
West Virginia.....	16	2,034		1	2	3	41	2	70	5	370	4	701			1	850		

Expenses.—As stated in the Introduction, the census figures for expenses do not purport to show the total cost of manufacture, since they take no account of interest or depreciation; hence they can not properly be used for determining profits. Facts of interest can be brought out, however, concerning the relative importance of the different classes of expenses which were reported. Table 1 shows the total expenses in the pottery industry in 1909 to have been \$65,655,579, distributed as follows: Cost of materials, \$21,910,905, or 33.4 per cent; wages, \$29,753,495, or 45.3 per cent; salaries, \$5,813,230, or 8.9 per cent; and miscellaneous expenses, made up of advertising, ordinary repairs of buildings and machinery, insurance, traveling expenses, and other sundry expenses, \$8,177,949, or 12.5 per cent. As may be seen by comparing the items in Table 33, the proportions of the total represented by the different classes of expenses vary somewhat in the several states, the difference being due in a measure to the differences in character of the products manufactured. Of the total expenses in 1909, the cost of materials represented only 33.4 per cent, this exceptionally small proportion being due, as in the case of the brick and tile industry, mainly to the low cost of clay, the principal material used. Of the total cost of materials, as shown in Table 33, over one-third (34.5 per cent) was expended for fuel and rent of power.

Engines and power.—The amount of power used in the manufacture of pottery, terra-cotta, and fire-clay products was first returned at the census of 1869, for which year a total of 2,148 horsepower was reported. Table 29 shows statistics of power used as reported at the censuses of 1909, 1904, and 1899.

The total primary power used in the pottery industry increased from 75,802 horsepower in 1899 to 110,017 horsepower in 1909, or 45.1 per cent during the decade. The power generated by steam engines

constituted all but a small proportion of the total horsepower reported, 92.7 per cent in 1909, as compared with 94.4 per cent in 1904 and 97.4 per cent in 1899. There was a marked increase in the power of gas and other internal-combustion engines and of electric motors operated by purchased current (rented electric power), and a decrease in the amount of water power used in the industry.

Table 29

MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.

POWER.	Number of engines or motors.			Horsepower.			Per cent distribution of horsepower.		
	1909	1904	1899	1909	1904	1899	1909	1904	1899
	Primary power, total.....	1,408	1,251	1,108	110,017	104,918	75,802	100.0	100.0	100.0
Owned.....	1,161	1,177	1,108	106,463	102,718	75,802	96.8	97.9	100.0
Steam.....	1,037	1,082	1,058	101,965	99,089	73,848	92.7	94.4	97.4
Gas.....	120	91	23	4,353	3,165	604	4.0	3.0	0.8
Water wheels.....	3	4	11	85	355	773	0.1	0.3	1.0
Water motors.....	1		(1)	10		(1)	(2)		
Other.....			16	50	112	577	(2)	0.1	0.8
Rented.....	247	74	(1)	3,554	2,200		3.2	2.1	
Electric.....	247	74	(1)	3,544	1,847		3.2	1.8	
Other.....				10	353		(2)	0.3	
Electric motors.....	693	265	78	10,648	4,684	1,892	100.0	100.0	100.0
Run by current generated by establishment.....	446	191	78	7,099	2,837	1,892	66.7	60.6	100.0
Run by rented power.....	247	74	(1)	3,544	1,847		33.3	39.4	

¹ Not reported.

² Less than one-tenth of 1 per cent.

The number and horsepower of electric motors used for distributing power by means of current generated in the establishments themselves also show a decided increase.

Table 30 shows for 1909 the amount of each of the several kinds of power and of the different kinds of fuel used in the pottery industry in each of the 12 leading states.

Table 30

MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS: 1909

STATE.	Primary horsepower.		Owned by establishments reporting.						Rented.		Electric horsepower.		Fuel used.				
	Number of establishments reporting.	Total horsepower.	Total.	Steam engines.	Gas engines.	Water wheels and motors.	Other.	Elec. tric.	Other.	Total, rented and generated by establishment.	Generated in the establishment reporting.	Coal.		Coke (short tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
												Anthracite (long tons).	Bituminous (short tons).				
United States .	703	110,017	108,463	101,965	4,353	95	50	3,544	10	10,643	7,099	98,348	3,026,546	4,562	38,743	370,334	10,365,943
California.....	21	2,856	2,211	2,167	44			645		945	300				309	200,347	
Georgia.....	8	1,840	1,840	1,840								138			5,325		
Illinois.....	29	7,995	7,345	7,290	15		40	650		770	120	45,253			903	38,031	
Indiana.....	29	5,089	4,964	4,962	2			125		297	172	189,448			55		40,000
Kentucky.....	15	3,654	3,429	3,417	12			125		160	35	205,376		1,906	470	4	5,400
Maryland.....	13	1,336	1,324	1,318	6			2	10	2		8		28	198	53	210
Missouri.....	26	7,848	7,715	7,657	58			133		1,334	1,201	37,357		30	307	6,091	500
New Jersey.....	83	11,817	11,501	11,427	74			316		2,476	2,160	284,316		1,142	1,238	703	126
New York.....	35	4,039	3,958	3,538	420			81		602	521	80,785		586	501	30,230	30,503
Ohio.....	182	26,778	26,534	24,334	2,200			244		2,049	1,805	6,580			388	2,670	7,309,525
Pennsylvania.....	129	23,142	22,622	21,523	1,014	85		520		918	398	781,527		415	701	142	1,432,335
West Virginia.....	16	1,674	1,521	1,403	118			153		153		8,643					1,279,930
All other states....	117	12,349	11,799	11,389	390		10	550		937	387	74,069		455	28,348	94,063	207,414

In 1909 Ohio, Pennsylvania, and New Jersey together reported 61,737 horsepower, or 56.1 per cent of the aggregate for the industry. Steam was the most important power in all of the states. The largest amount of steam power is shown for Ohio, and the next largest for Pennsylvania. The largest amount of rented electric power is shown for Illinois, and the largest amount of power generated by gas and other internal-combustion engines, for Ohio.

Fuel consumed.—Bituminous coal was the principal kind of fuel used in 1909, the largest amount being reported by Ohio, which state also reported the largest amount of gas. The largest quantity of anthracite coal, or more than four-fifths of the total for the country, was reported for New Jersey, and by far the largest amount of oil by California.

Centralization of the manufacture of pottery.—The manufacture of pottery in New Jersey is largely centralized in the city of Trenton and that of Ohio in East Liverpool. Table 31 shows the production of pottery products in these cities in 1909 and 1899. The figures for 1909 are taken from "Mineral Resources of the United States," United States Geological Survey.

The two cities covered by the table reported 41 per

cent of the total value of pottery products for the United States in 1909, and 51.6 per cent in 1899. The increase in the value of pottery products in Trenton during the decade 1899-1909 was 50 per cent, as compared with 34.9 per cent for East Liverpool. The products of the industry in the two cities are somewhat different, since sanitary ware, which formed the chief product in Trenton, was not reported for East Liverpool, while the pottery products in the latter city were practically confined to white ware, C. C. ware, etc.

Table 31

MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.

PRODUCT.	Trenton, N. J.		East Liverpool, Ohio.	
	1909	1899	1909	1899
	Total.....	\$7,175,801	\$4,785,142	\$5,538,870	$4,105,200
Stoneware and yellow and Rockingham ware.....			89,803	98,034
White ware, C. C. ware, white granite, semiporcelain ware, and semivitreous porcelain ware.....	1,242,361	1,565,357	4,578,390	3,529,664
China, bone china, delft, and belleek ware.....	1,082,398	536,870		197,144
Sanitary ware.....	3,944,697	1,942,332		
Porcelain electrical supplies.....	807,491	154,807	712,461	142,447
All other pottery products.....	98,954	585,776	158,216	137,911

1 Figures do not agree with those shown for the city in Vol. IX of Thirteenth Census Reports, because the census of manufactures excluded statistics for certain establishments which were taken by the Geological Survey.

MANUFACTURES.

DETAILED STATE TABLES.

The principal data secured by the census inquiry concerning the manufacture of pottery, terra-cotta, and fire-clay products are presented in Tables 32 and 33.

Table 32 shows for 1909, 1904, and 1899 the number of establishments, number of persons engaged in

the industry, primary horsepower, capital invested, salaries, wages, cost of materials, value of products, and value added by manufacture for the United States and for individual states. Table 33 gives more detailed statistics for the industry for 1909.

POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS—COMPARATIVE STATISTICS, BY STATES: 1909, 1904, AND 1899.

STATE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture (value of products less cost of materials).
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
United States.....	1909	822	61,022	452	4,402	56,188	110,017	\$141,350	\$5,813	\$29,753	\$21,911	\$76,119	\$54,208
	1904	873	56,730	550	3,752	52,428	104,918	110,926	4,623	25,178	16,591	64,201	47,610
	1899	1,000	47,435	944	2,777	43,714	75,802	65,952	3,012	17,692	11,915	44,263	32,348
Alabama.....	1909	21	478	19	34	425	1,193	1,016	46	144	170	559	389
	1904	16	305	19	21	265	805	445	20	87	78	273	185
	1899	21	270	23	15	227	425	200	8	67	60	225	165
Arkansas.....	1909	5	54	6	3	45	31	50	2	17	8	42	34
	1904	3	25	3	.....	22	25	.....	.....	8	4	20	16
	1899	10	106	10	4	92	135	78	5	27	12	60	48
California.....	1909	26	1,167	12	128	1,027	2,856	3,545	184	641	505	1,797	1,292
	1904	22	941	10	71	860	2,195	3,484	99	555	396	1,761	1,365
	1899	18	448	16	41	391	1,084	1,307	59	246	261	751	490
Colorado.....	1909	6	231	3	14	214	450	1,079	26	143	108	436	328
	1904	11	511	4	31	476	2,108	832	51	268	296	787	491
	1899	10	423	7	42	374	1,005	856	60	216	161	574	413
District of Columbia.....	1909	4	57	4	4	49	200	49	4	20	8	44	36
	1904	6	129	10	8	111	295	343	5	51	22	111	89
	1899	6	122	8	5	109	327	256	6	38	28	117	89
Georgia.....	1909	27	650	21	46	592	1,540	932	58	234	153	614	461
	1904	21	648	19	37	592	2,055	801	48	166	144	480	336
	1899	21	329	23	21	285	416	267	18	67	42	206	164
Illinois.....	1909	39	3,474	23	294	3,157	7,995	14,901	383	1,885	1,126	4,615	3,480
	1904	45	2,710	34	260	2,416	5,915	6,608	329	1,244	732	3,256	2,524
	1899	53	2,199	41	153	2,005	4,980	3,512	201	841	576	2,144	1,568
Indiana.....	1909	31	2,373	16	171	2,186	5,089	4,806	213	1,190	859	2,966	2,107
	1904	38	2,200	35	140	2,019	5,387	3,837	183	981	646	2,643	1,997
	1899	49	1,350	40	60	1,250	2,621	1,526	60	531	312	1,291	979
Iowa.....	1909	10	322	5	31	286	1,147	702	36	173	180	464	284
	1904	7	94	9	7	78	280	137	8	41	29	78	49
	1899	17	264	17	13	234	764	361	13	93	57	249	192
Kansas.....	1909	4	259	.....	31	238	715	455	49	135	74	378	304
	1904	4	146	.....	15	131	560	235	18	56	37	181	144
	1899	3	26	3	1	22	112	20	1	12	6	29	23
Kentucky.....	1909	19	1,429	7	103	1,319	3,554	2,340	114	538	382	1,470	1,088
	1904	21	1,400	14	80	1,312	2,799	1,518	92	456	347	1,247	900
	1899	16	899	11	47	841	1,576	699	45	233	199	724	525
Louisiana.....	1909	4	33	6	1	26	40	66	1	9	11	35	24
	1904	5	44	7	1	36	101	45	1	12	8	31	23
	1899	3	25	4	1	20	15	11	1	6	6	22	16
Maryland.....	1909	16	799	12	67	720	1,336	973	71	316	296	757	551
	1904	16	997	14	58	925	1,484	1,148	55	389	138	852	714
	1899	18	1,144	15	47	1,082	663	1,081	44	385	196	835	639
Massachusetts.....	1909	20	541	9	67	465	932	1,167	76	256	179	644	465
	1904	25	844	22	55	567	1,216	1,592	61	294	175	718	543
	1899	29	682	26	72	584	1,209	1,623	60	262	188	713	525
Michigan.....	1909	7	230	7	17	206	426	325	14	89	74	246	172
	1904	6	222	4	15	203	372	117	10	101	43	290	247
	1899	9	170	5	16	149	633	280	13	51	37	145	108
Missouri.....	1909	29	3,437	11	288	3,138	7,848	13,247	405	1,554	1,076	4,069	2,993
	1904	33	2,728	18	178	2,532	6,089	5,378	251	1,246	752	3,083	2,331
	1899	37	1,757	27	123	1,607	2,805	2,952	162	648	370	1,662	1,242
New Jersey.....	1909	88	10,542	38	689	9,815	11,817	22,349	1,036	5,661	3,551	13,139	9,583
	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	6,557
New York.....	1909	39	2,628	19	242	2,367	4,039	5,343	359	1,296	875	3,408	2,528
	1904	43	2,970	28	256	2,695	4,212	5,111	328	1,333	872	3,289	2,417
	1899	52	2,489	43	176	2,270	5,558	4,103	200	873	522	2,389	1,867
North Carolina.....	1909	17	173	19	6	148	770	184	18	42	45	147	102
	1904	6	97	7	6	84	325	91	12	20	26	106	80
	1899	21	169	24	7	138	293	83	5	24	27	84	57

THE CLAY PRODUCTS INDUSTRIES.

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POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS—COMPARATIVE STATISTICS, BY STATES: 1909, 1904, AND 1899—Continued.

STATE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horse-power.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture (value of products less cost of materials).
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
Ohio.....	1909	186	17,751	69	1,163	16,519	26,778	\$32,167	\$1,443	\$5,628	\$6,461	\$21,173	\$14,712
	1904	205	17,072	106	1,047	15,919	24,754	26,360	1,177	7,677	4,823	18,551	13,728
	1899	248	12,913	225	818	11,870	20,051	15,564	766	5,001	3,229	11,851	8,622
Pennsylvania.....	1909	139	9,784	99	682	9,003	23,142	27,225	856	4,357	4,109	13,072	8,963
	1904	168	9,375	87	619	8,669	23,475	25,707	738	3,979	2,909	10,769	7,850
	1899	143	9,512	172	468	8,872	16,057	11,309	451	3,007	2,452	8,127	5,675
South Carolina.....	1909	4	42	3	3	36	304	51	4	9	8	28	20
	1904	6	98	4	6	88	425	97	5	20	14	41	27
	1899	10	60	12	2	46	114	26	1	10	5	23	18
Tennessee.....	1909	6	354	3	28	323	678	357	32	126	110	328	218
	1904	8	318	7	14	297	535	186	19	128	79	309	230
	1899	18	330	15	15	300	577	172	12	91	74	260	186
Texas.....	1909	17	475	12	43	420	923	795	46	183	195	597	402
	1904	22	253	24	11	218	500	178	10	91	70	327	257
	1899	28	318	31	7	280	370	203	7	77	44	192	148
Utah.....	1909	3	105	1	8	96	267	236	9	56	57	195	138
	1904	6	42	3	5	34	175	91	6	20	29	77	48
	1899	7	46	8	2	36	150	35	2	11	6	29	23
Virginia.....	1909	4	76	4	4	68	158	94	4	20	19	52	33
	1904	3	91	4	6	81	235	121	5	17	30	77	47
	1899	5	116	6	10	100	305	309	13	24	34	83	49
Washington.....	1909	8	321	1	31	289	1,263	1,023	39	197	112	523	411
	1904	6	182	1	19	162	1,179	987	26	114	121	416	285
	1899	8	149	8	15	126	155	437	18	60	29	157	128
West Virginia.....	1909	16	2,149	6	100	2,034	1,674	2,921	160	1,256	786	2,679	1,893
	1904	17	1,346	5	71	1,270	1,974	2,267	135	634	346	1,286	940
	1899	14	1,339	13	57	1,269	1,837	1,610	52	500	219	1,105	836
Wisconsin.....	1909	3	12	2	1	9	33	22	1	4	1	9	8
	1904	4	17	2	3	12	70	25	3	5	3	15	12
	1899	4	19	9	.....	10	45	23	.....	4	1	14	13
All other states.....	1909	24	1,067	15	94	958	2,819	2,840	124	574	463	1,638	1,175
	1904	20	933	8	58	887	1,910	2,024	90	463	466	1,420	954
	1899	41	1,113	30	75	1,008	2,450	1,716	95	446	378	1,261	833

MANUFACTURES.

POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS—DETAILED STATISTICS, BY STATES: 1900.

Table 33

STATE.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.										WAGE EARNERS—DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horsepower.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.				Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.		Female.	Male.	Female.			
								Maximum month.	Minimum month.								
United States..	922	61,022	452	1,714	2,078	610	56,168	No 59,355	Ja 50,383	60,842	53,159	6,799	712	172	110,017		
Alabama.....	21	478	19	18	14	2	425	Oc 583	My 333	505	540		25		1,193		
Arkansas.....	5	54	6	2	1		45	Mh 49	De 39	49	40		9		31		
California.....	26	1,167	12	46	71	11	1,027	Au 1,120	Ja 879	1,133	1,124	6	3		2,856		
Colorado.....	6	231	3	7	2	5	214	Jy 267	Ja 181	228	222	4	2		450		
District of Columbia.....	4	57	4				49	Ap 57	Oc 42	48	48				200		
Georgia.....	27	659	21	20	18	8	592	Oc 629	Ap 537	640	632		8		1,540		
Illinois.....	39	3,474	23	79	183	32	3,157	Oc 3,528	Ja 2,552	3,431	3,385	42	4		7,995		
Indiana.....	31	2,373	16	71	75	25	2,186	De 2,353	Fe 2,045	2,422	2,030	353	25	14	5,089		
Iowa.....	10	322	5	14	15	2	286	Au 337	Ja 216	257	255		2		1,147		
Kansas.....	4	259		13	14	4	228	Se 269	Ja 155	251	250		1		715		
Kentucky.....	19	1,429	7	44	49	10	1,319	De 1,411	Fe 1,221	1,413	1,334	70	9		3,554		
Louisiana.....	4	33	6	1			26	Fe ¹ 27	Ja ¹ 26	26	21		5		40		
Maryland.....	16	799	12	35	27	5	720	No 747	Ja 554	724	565	92	61		1,336		
Massachusetts.....	20	541	9	27	24	16	465	No 507	Fe 360	509	470	27	12		932		
Michigan.....	7	230	7	10	5	2	206	My 225	No 190	197	190		1		426		
Missouri.....	29	3,437	11	74	181	33	3,133	De 3,566	Ja 2,653	3,573	3,561	7	5		7,848		
New Jersey.....	88	10,542	38	245	347	97	9,815	No 10,507	Ja 8,840	10,486	9,192	1,184	75	35	11,817		
New York.....	39	2,623	19	102	101	39	2,367	De 2,547	Ja 2,105	2,613	2,133	425	51	4	4,039		
North Carolina.....	17	173	19	5	1		148	Au 174	Ja 104	143	133		10		770		
Ohio.....	186	17,751	69	469	498	196	16,519	Oc 17,044	Ja 15,187	17,323	13,847	3,296	110	70	26,778		
Pennsylvania.....	139	9,784	99	301	304	77	9,003	De 9,638	Ja 8,090	10,290	9,387	599	267	37	23,142		
South Carolina.....	4	42	3	2	1		36	My 43	Ja 21	43	42		1		304		
Tennessee.....	6	354	3	6	21	1	323	Je 333	De 311	319	314	2	3		678		
Texas.....	17	475	12	12	29	2	420	Oc 469	Fe 388	440	439		1		923		
Utah.....	3	105	1	4	3	1	96	No 100	My 89	99	99				267		
Virginia.....	4	76	4	3	1		68	Je 87	Mh 49	81	58	17	0		158		
Washington.....	8	321	1	18	10	3	289	Jy 329	Fe 202	292	292				1,263		
West Virginia.....	16	2,149	6	46	40	23	2,084	De 2,235	Ja 1,769	2,245	1,600	624	15	6	1,674		
Wisconsin.....	3	12	2	1			9	Ja ¹ 10	Je 7	10	9		1		33		
All other states ¹	24	1,067	15	35	43	16	958			992	941	50	1		2,819		

STATE.	Capital.	EXPENSES.										Value of products.	Value added by manufacture (value of products less cost of materials).
		Total.	Services.			Materials.		Miscellaneous.					
			Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.	Other.		
United States..	\$141,349,665	\$65,655,579	\$3,368,436	\$2,444,794	\$29,753,495	\$7,560,632	\$14,350,373	\$134,048	\$537,503	\$208,287	\$7,298,111	\$76,118,861	\$54,207,956
Alabama.....	1,015,974	454,363	32,135	13,823	143,841	71,316	98,680		3,190		91,378	558,840	388,844
Arkansas.....	50,043	32,023	1,600	100	17,162	5,839	2,598		78	300	4,290	41,624	33,187
California.....	3,545,162	1,534,031	104,303	80,012	641,227	248,443	256,746	2,209	21,144	8,316	171,681	1,797,129	1,291,940
Colorado.....	1,078,694	330,267	15,545	10,550	142,741	38,941	69,330	96	4,847		48,717	425,822	327,551
District of Columbia.....	48,738	37,831	3,900		20,127	6,188	2,200	1,260	373	100	3,683	44,425	36,037
Georgia.....	932,209	502,410	29,792	28,010	233,748	86,271	66,874	304	4,222	550	52,639	613,868	460,723
Illinois.....	14,900,981	3,946,183	190,795	186,052	1,884,579	433,231	693,215	3,804	23,434	45,566	479,117	4,614,728	3,488,282
Indiana.....	4,805,603	2,566,074	125,695	87,115	1,180,578	339,413	519,611	145	19,101	2,513	283,483	2,965,768	2,106,744
Iowa.....	792,426	434,832	19,815	16,122	173,377	127,830	51,949		1,772		43,967	464,265	284,486
Kansas.....	464,724	297,728	27,523	21,320	135,018	33,202	41,151		2,280		37,234	378,175	303,822
Kentucky.....	2,339,729	1,252,597	64,646	49,840	538,161	152,811	229,547	433	10,036		207,123	1,469,757	1,087,399
Louisiana.....	66,445	22,189	720		9,055	1,045	10,107	180	116		966	34,642	23,490
Maryland.....	973,443	663,352	43,070	27,579	316,110	71,429	134,683	3,118	8,570	1,596	57,197	756,795	550,083
Massachusetts.....	1,166,607	583,330	43,197	32,862	255,970	67,627	110,377	4,454	10,350	1,216	56,777	644,286	465,782
Michigan.....	365,427	195,452	10,613	3,722	88,620	35,450	38,346		1,613		17,079	245,677	171,872
Missouri.....	13,246,816	3,403,628	192,045	212,224	1,554,141	499,731	576,438	9,650	40,016	4,757	403,923	4,068,701	2,992,632
New Jersey.....	22,348,615	11,349,670	627,917	407,646	5,661,153	1,171,826	2,379,342	14,972	76,337	17,385	993,092	13,130,000	9,587,832
New York.....	5,342,721	2,946,354	219,819	139,390	1,295,514	271,101	603,571	22,997	32,653	5,722	353,617	3,403,496	2,528,824
North Carolina.....	183,903	115,095	17,450	450	41,779	10,401	34,676		943	100	9,306	146,774	101,767
Ohio.....	32,166,636	18,838,269	801,509	641,338	8,627,779	2,025,175	4,436,305	15,859	161,374	98,159	2,040,771	21,173,272	14,711,792
Pennsylvania.....	27,225,268	10,811,423	535,732	320,614	4,357,336	1,149,042	2,960,326	39,406	84,916	15,897	1,348,154	13,072,106	8,962,738
South Carolina.....	51,212	25,985	3,000	720	9,333	7,895	371		148		4,518	28,347	20,081
Tennessee.....	359,887	291,059	14,280	17,689	126,338	67,680	41,850		2,772		20,459	327,610	218,080
Texas.....	794,914	503,676	28,295	18,109	182,753	135,771	59,021	35	3,333	350	76,009	597,226	402,434
Utah.....	236,093	138,900	6,580	2,570	55,577	25,341	31,160		1,983	5,385	10,304	194,834	138,833
Virginia.....	94,397	43,760	2,920	650	20,175	7,425	11,155		210		1,225	51,586	33,000
Washington.....	1,022,709	389,942	27,075	11,595	197,036	60,978	50,940		3,634		38,684	523,350	411,432
West Virginia.....	2,921,056	2,421,294	92,585	67,429	1,255,844	167,810	617,838	4,830	10,619		204,339	2,678,673	1,898,025
Wisconsin.....	22,222	8,178	1,040		3,525	507	611		102		2,303	9,109	7,991
All other states ²	2,839,894	1,425,194	78,237	47,272	575,578	240,804	220,955	10,150	17,747	375	234,076	1,638,976	1,177,217

¹ Same number reported for one or more other months.

² "All other states" embrace: Arizona, 1 establishment; Connecticut, 5; Maine, 2; Montana, 1; Minnesota, 4; Mississippi, 3; Nebraska, 1; New Hampshire, 2; New Mexico, 2; Oregon, 3.

SPECIAL STATISTICS RELATING TO PRODUCTS FOR THE CLAY PRODUCTS INDUSTRIES COMBINED.

Table 34 shows the value of products of the combined clay products industries in the United States for 1909, 1904, and 1899. In order to avoid a duplicate canvass, the United States Geological Survey, which annually collects statistics of the production of clay products, and the Bureau of the Census cooperated in collecting data for the year 1909. The figures relative to quantities and values of brick and tile, pottery, terra-cotta, and fire-clay products, therefore, agree in the reports of the two bureaus for 1909, with the exception that the census report includes among the clay products sand-lime brick, the manufacture of which is treated as a separate industry by the Geological Survey. The variations in the reports of the two bureaus for other census years may be attributed to differences in the methods employed.

PRODUCT.	CLAY PRODUCTS INDUSTRIES.		
	1909	1904	1899
Total value.....	\$168,895,365	\$135,352,854	\$95,533,862
Brick and tile, terra-cotta, and fire-clay products.....	\$136,387,840	\$109,003,306	\$76,551,645
Brick.....	\$97,137,844	\$78,728,083	\$58,640,228
Common—			
Thousands.....	9,787,671	8,683,897	7,054,528
Value.....	\$57,216,789	\$51,230,871	\$39,674,749
Fire—			
Thousands.....	838,167	678,362	800,862
Value.....	\$16,620,695	\$11,752,625	\$8,636,502
Vitrified paving, etc.—			
Thousands.....	1,023,654	715,559	590,720
Value.....	\$11,269,586	\$7,256,088	\$4,828,456
Front, including fancy colored and fancy or ornamental—			
Thousands.....	\$21,641	\$20,142	\$451,420
Value.....	\$9,886,292	\$7,335,511	\$5,170,492
Sand lime.....	\$1,150,580	\$698,003	(²)
Enameled.....	\$993,902	\$445,985	\$329,969
Drain tile.....	\$9,798,978	\$5,622,198	\$3,662,184
Sewer pipe.....	\$10,322,324	\$8,416,009	\$4,560,334
Architectural terra cotta.....	\$6,251,625	\$3,792,763	\$2,027,532
Fireproofing, terra-cotta lumber, and hollow building tile, or blocks.....	\$4,460,708	\$4,317,312	\$1,665,031
Tile, not drain.....	\$5,201,963	\$2,725,717	\$1,276,300
Stove lining.....	\$423,583	(²)	\$416,235
Other.....	\$2,694,821	\$5,501,224	\$4,303,801
Pottery.....	\$31,048,341	\$25,834,513	\$17,222,040
White ware, including C. C. ware, white granite, semiporcelain ware, and semivitreous porcelain ware.....	\$13,728,316	\$9,195,703	\$6,376,351
Sanitary ware.....	\$5,989,235	\$3,932,506	\$2,211,877
Stoneware and yellow and Rockingham ware.....	\$3,993,859	\$3,481,521	\$2,130,263
Porcelain electrical supplies.....	\$3,047,499	\$1,500,283	\$470,355
China, bone china, delft, and belleek ware.....	\$1,700,766	\$3,478,627	\$1,297,978
Red earthenware.....	\$804,808	\$821,095	\$782,260
Other.....	\$1,717,800	\$3,424,178	\$3,972,956
All other products.....	\$1,459,178	\$515,035	\$1,700,177

¹ In addition to the products included in this table, clay products to the value of \$637,391 in 1909 and to the value of \$299,452 in 1904 were manufactured by establishments assigned to other industries.
² Not reported separately.
³ Product of Ohio included in "other" pottery.

Of the total value of the clay products in 1909, the value of brick formed 58 per cent, that of tile and allied products 23.4 per cent, and of pottery products 18.5 per cent. The corresponding proportions in 1899 were 62.5 per cent, 19.1 per cent, and 18.4 per cent, respectively. Of the total value of brick, common brick represented 58.9 per cent in 1909, as compared with 67.7 per cent in 1899. On the other hand, the

proportions represented by fire, vitrified paving, and front brick were greater in 1909 than in 1899. The relative increase in quantity produced was much less than that in the value of the product, this fact being specially noticeable in the case of fire brick, which increased 92.4 per cent in value during the decade and only 4.7 per cent in quantity.

White ware, including C. C. ware, etc., the most important of the pottery products, represented 44.2 per cent of the total value of this class of products in 1909 and 37 per cent in 1899. The largest absolute increase in value of products during the decade, \$7,351,965, was the class of products just mentioned, but the largest relative gain was in porcelain electrical supplies. All of the specified pottery products show large percentages of increase in value for the decade, except red earthenware, for which class of products the increase was small.

Table 35 shows, by states, the quantity of common brick, fire brick, and vitrified paving brick for 1909, 1904, and 1899 and their value for 1909.

PRODUCT AND STATE.	PRINCIPAL PRODUCTS OF THE CLAY PRODUCTS INDUSTRIES.					
	1909		1904		1899	
	Value.	Quantity (thousands).				
Common brick.....	\$57,216,789	9,787,671	8,683,897	7,054,528		
Alabama.....	799,693	146,180	134,305	107,495		
California.....	1,749,209	276,396	262,108	129,492		
Connecticut and Rhode Island.....	1,408,033	242,000	179,175	150,665		
Georgia.....	1,469,839	275,809	247,078	201,551		
Illinois.....	5,927,054	1,237,025	990,362	657,202		
Indiana.....	1,573,185	261,227	308,133	303,282		
Iowa.....	1,072,340	153,065	213,501	218,031		
Kansas.....	1,160,877	254,890	215,651	70,605		
Maryland.....	914,420	148,673	159,467	111,459		
Massachusetts.....	1,177,261	183,584	177,971	230,471		
Michigan.....	1,250,787	219,820	238,141	199,764		
Minnesota.....	969,729	161,685	173,153	145,226		
Missouri.....	1,961,895	276,408	257,500	250,355		
Nebraska.....	646,532	139,151	132,000	118,952		
New Jersey.....	2,609,605	460,968	303,117	394,645		
New York.....	7,760,746	1,542,552	1,226,561	1,240,633		
North Carolina.....	1,140,727	183,313	120,349	126,458		
Ohio.....	2,429,870	420,999	462,656	465,986		
Oklahoma.....	952,453	156,889	64,797	22,958		
Pennsylvania.....	5,607,490	872,658	809,154	780,387		
Tennessee.....	1,022,282	159,328	150,522	112,520		
Texas.....	1,860,601	293,660	198,141	173,006		
Virginia.....	1,540,648	249,794	202,458	128,455		
Washington.....	1,081,579	143,198	73,705	55,444		
Wisconsin.....	956,232	147,741	220,607	178,497		
Fire brick.....	16,620,695	838,167	678,362	800,862		
Illinois.....	682,793	31,210	12,947	11,500		
Kentucky.....	899,363	51,645	36,617	21,340		
Missouri.....	1,508,302	78,678	38,834	26,502		
New Jersey.....	907,276	35,454	31,057	40,281		
Ohio.....	1,730,401	103,148	87,626	69,129		
Pennsylvania.....	8,107,807	417,836	356,666	558,016		
Vitrified paving brick or block.....	11,269,586	1,023,654	715,559	590,720		
Illinois.....	1,562,373	140,105	101,617	88,047		
Indiana.....	559,201	58,697	47,608	28,120		
Kansas.....	932,419	103,264	90,162	40,635		
Missouri.....	781,706	59,863	50,528	22,594		
Ohio.....	3,113,128	324,530	189,734	145,657		
Pennsylvania.....	1,329,317	116,735	91,646	89,017		
West Virginia.....	565,218	45,661	42,122	65,451		

¹ Includes Indian Territory.

Table 36 shows, by states, the value of the remaining clay products for 1909, 1904, and 1899.

MANUFACTURES.

Table 36 PRODUCT AND STATE.	VALUE OF THE PRINCIPAL PRODUCTS OF THE CLAY PRODUCTS INDUSTRIES.			PRODUCT AND STATE.	VALUE OF THE PRINCIPAL PRODUCTS OF THE CLAY PRODUCTS INDUSTRIES.		
	1909	1904	1899		1909	1904	1899
Front, including fancy colored and fancy or ornamental brick.	\$9,886,292	\$7,335,511	75,170,492	Tile, not drain.	\$5,281,963	\$2,725,717	\$1,276,300
California	1,309,770	315,988	76,173	California	130,941	25,250	3,400
Colorado	473,039	249,830	140,413	Illinois	335,020	241,563	130,085
Illinois	397,393	570,746	279,822	Kentucky	296,179	214,124	3,000
Indiana	1,511,171	222,579	148,819	New Jersey	992,606	245,518	37,123
Missouri	619,465	472,439	330,250	Ohio	1,912,343	988,630	565,094
New Jersey	870,823	737,554	653,187	Pennsylvania	441,243	215,688	61,036
Ohio	1,418,154	1,005,573	505,692	Stove lining.	423,583	(¹)	418,235
Pennsylvania	2,139,519	1,360,147	1,010,239	Maryland	25,925	.....	32,457
Texas	1,407,023	71,991	62,008	Massachusetts	159,530	.....	143,547
Utah	317,189	81,535	19,373	New York	79,653	.....	74,507
Virginia	1,333,057	434,091	258,254	Ohio	23,803	.....	7,563
				Pennsylvania	97,270	.....	106,851
Sand-lime brick.	1,150,580	698,003	(²)	White ware, including C. C. ware, white granite, semiporcelain ware, and semivitreous porcelain ware.	13,728,316	9,195,703	6,376,351
California	30,056	35,425	.....	New Jersey	1,242,361	1,290,768	1,566,148
Florida	77,076	30,100	.....	Ohio	5,884,189	6,167,494	4,609,446
Indiana	32,800	57,000	.....	Pennsylvania	812,338	547,798	200,767
Iowa	48,210	.....	.....	West Virginia	1,769,808	550,551	.....
Michigan	218,226	48,550	.....	Sanitary ware.	5,989,295	3,932,506	2,211,877
New Jersey	21,925	15,880	.....	New Jersey	4,341,040	3,006,406	2,126,471
New York	90,402	18,100	.....	Ohio	310,254	197,225	.....
Pennsylvania	62,255	68,786	.....	Pennsylvania	252,951	86,053	41,727
				West Virginia	500,432	165,400	.....
Enameled brick.	993,902	445,985	329,869	Stoneware and yellow and Rockingham ware.	3,993,859	3,481,521	2,130,263
California	.....	.....	.....	Illinois	702,411	750,821	572,075
Indiana	.....	.....	.....	Kentucky	126,172	129,410	93,835
Michigan	.....	.....	.....	Ohio	1,806,798	1,146,718	741,685
Ohio	.....	.....	.....	Pennsylvania	297,029	386,423	174,450
West Virginia	.....	.....	.....	Texas	111,539	121,766	67,647
Drain tile.	9,798,878	5,522,198	3,662,184	Porcelain electrical supplies.	3,047,499	1,560,283	470,355
Illinois	1,613,593	1,042,056	1,025,469	New Jersey	823,050	328,524	154,807
Indiana	2,018,401	1,235,585	1,833,347	New York	752,185	452,019	125,234
Iowa	2,830,910	1,290,786	359,258	Ohio	1,146,694	584,243	100,314
Michigan	384,006	221,502	138,889	Red earthenware.	804,806	821,695	762,260
Ohio	2,032,528	1,174,280	968,483	California	42,404	24,133	24,474
				Illinois	31,771	10,850	52,300
Sewer pipe.	10,322,324	8,416,009	4,560,334	Massachusetts	154,837	181,771	163,231
California	904,473	679,804	479,537	Michigan	60,939	20,600	20,641
Georgia	351,492	174,000	100,612	New Jersey	36,573	30,034	24,000
Illinois	394,461	391,453	229,040	New York	30,200	31,275	33,955
Indiana	332,440	257,618	161,935	Ohio	145,137	183,236	164,798
Iowa	282,037	94,200	47,719	Pennsylvania	159,796	130,532	99,786
Missouri	1,162,730	792,710	436,624	All other pottery products, including china, bone china, delft, and belleek ware.	3,484,566	6,902,805	5,270,934
Ohio	3,009,798	2,039,772	1,680,724				
Pennsylvania	445,594	809,374	204,400				
Washington	737,847	214,720	76,694				
Architectural terra cotta.	6,251,625	3,792,763	2,027,532				
California	345,402	223,000	76,000				
Illinois	1,898,865	804,554	422,009				
New Jersey	1,637,705	1,216,400	660,304				
New York	998,535	815,893	417,350				
Pennsylvania	428,522	341,077	130,100				
Washington	206,324	19,632	9,300				
Fireproofing, including terra-cotta lumber, etc.	4,466,708	4,317,312	1,665,031				
California	128,447	113,336	7,100				
Illinois	439,796	348,053	198,360				
Indiana	410,500	576,903	62,575				
Iowa	304,398	92,001	.....			
Missouri	110,464	192,222	26,257				
New Jersey	1,299,540	1,279,121	653,144				
New York	199,999	267,680	108,926				
Ohio	804,637	917,176	346,060				

¹ Excluding the value of fancy or ornamental brick, separate figures for which are not available.

² Not reported.

³ Not reported separately.

GLASS

(873)

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THE MANUFACTURE OF GLASS.

GENERAL STATISTICS.

Scope of the industry.—This industry, according to the census classification, embraces establishments manufacturing (1) building glass, which includes window glass, plate glass, and all varieties of cast and rolled glass; (2) pressed and blown glass, such as tableware, jelly cups, tumblers, goblets, lamps, chimneys, lantern globes, electric light bulbs and globes, opal ware, and cut glass; and (3) bottles, jars, demijohns, etc. Only establishments which make glass from the raw material, silica sand, are included. Establishments engaged primarily in glass beveling, bending sheet glass, engraving glass, making glass labels, and staining and ornamenting glass, and those which make cut glassware from purchased "blanks" are not included.

Comparison with earlier censuses.—Statistics for the glass industry in the United States first appeared in

the report of the census of manufactures of 1810, and data relating to the industry have been reported at every subsequent census.

At the census of 1849, 94 establishments were reported as engaged in the industry, these establishments giving employment to an average of 5,668 hands and manufacturing products valued at \$4,641,676. At the census of 1859, 112 establishments were reported, with an average of 9,016 hands and products valued at \$8,775,155.

Table 1 summarizes the statistics of establishments engaged in the manufacture of glass for each census from 1869 to 1909, inclusive. The financial figures for 1869 are given in currency, which at that time was worth only about 80 cents, gold, to the dollar. For strict comparison, therefore, these figures should be reduced about 20 per cent.

	NUMBER OR AMOUNT.						PER CENT OF INCREASE. ¹					
	1909	1904	1899	1889	1879	1869	1899-1909	1904-1909	1899-1904	1889-1899	1879-1889	1869-1879
Number of establishments.....	363	399	355	294	169	154	2.3	-9.0	12.4	20.7	74.0	-9.7
Persons engaged in the industry.....	72,573	67,105	55,256	(²)	(²)	(²)	31.3	8.1	21.4	.....	.....	.....
Proprietors and firm members.....	87	96	170	(²)	(²)	(²)	-48.8	-9.4	-43.5	.....	.....	.....
Salaried employees.....	3,575	3,040	2,268	(²)	(²)	(²)	57.6	17.6	34.0	.....	.....	.....
Wage earners (average number).....	68,911	63,969	52,818	44,892	24,177	15,367	30.5	7.7	21.1	17.7	(³)	(³)
Primary horsepower.....	123,132	91,476	52,943	28,241	5,672	1,857	132.6	34.0	72.8	87.5	397.9	205.4
Capital.....	\$129,288,384	\$89,389,151	\$61,423,903	\$40,966,850	\$18,804,599	\$13,826,142	110.5	44.6	45.5	49.9	117.9	36.0
Expenses.....	85,374,185	73,285,470	50,106,736	36,527,203	(²)	(²)	70.1	16.5	46.0	37.4	.....	.....
Services.....	44,203,215	41,228,441	29,877,086	22,118,522	9,144,100	7,589,110	48.3	7.4	38.0	35.1	141.9	20.5
Salaries.....	4,933,591	3,940,203	2,792,376	(²)	(²)	(²)	78.8	26.7	41.1	.....	.....	.....
Wages.....	39,299,624	37,288,148	27,084,710	(²)	(²)	(²)	45.1	5.4	37.7	.....	.....	.....
Materials.....	32,119,499	26,145,522	16,731,009	12,140,985	8,028,621	5,804,365	92.0	22.8	56.3	37.8	51.2	30.9
Miscellaneous.....	8,961,471	5,911,507	3,538,641	2,267,696	(²)	(²)	149.7	51.6	64.7	58.2	.....	.....
Value of products.....	92,095,203	79,607,998	59,539,712	41,051,004	21,154,571	13,467,507	62.9	15.7	40.8	37.7	94.1	14.6
Value added by manufacture (value of products less cost of materials)....	59,975,704	53,462,476	39,808,703	28,910,019	13,125,950	12,603,142	50.7	12.2	34.3	37.7	120.2	4.1

¹ A minus sign (-) denotes decrease. Where percentages are omitted, comparable figures are not available.
² Comparable figures not available.
³ Figures not strictly comparable.

The 363 establishments reported in 1909 as engaged in the manufacture of glass gave employment to an average of 72,573 persons, of whom 68,911 were wage earners, and paid \$44,293,215 in salaries and wages. These establishments turned out products to the value of \$92,095,203, to produce which materials costing \$32,119,499 were utilized, and the value added by manufacture was \$59,975,704, which represented 65.1 per cent of the value of products.

From 1899 to 1909 the average number of wage earners increased 16,093, or 30.5 per cent, and the value of products \$35,555,491, or 62.9 per cent. The industry manifests a consistent development through-

out the 40-year period covered by the table. Comparing 1909 with 1869, it will be seen that the number of establishments was more than twice as great in 1909 as at the earlier date, the number of wage earners more than four times as great, the value of products nearly five times as great, and the primary horsepower more than sixty-six times as great.

Summary, by states.—Table 2 summarizes the more important statistics of the industry, by states, the states being arranged according to the value of products reported for 1909. Some states for which data can not be shown separately ranked higher than some named in the table.

MANUFACTURES.

Table 2

STATE.	Number of establishments: 1909	WAGE EARNERS.			VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.				PER CENT OF INCREASE. ¹									
		Average number: 1909	Per cent of total: 1909	Rank.		Amount: 1909	Per cent of total: 1909	Rank.		Amount: 1909	Per cent of total: 1909	Rank.		Wage earners (average number).			Value of products.			Value added by manufacture.		
				1909	1904			1909	1904			1909	1904	1909	1904	1899	1904	1899	1899	1904	1899	1904
United States.....	363	68,911	100.0	.....	.....	\$2,035,203	100.0	.....	.....	\$59,975,704	100.0	.....	.....	30.5	7.7	21.1	62.9	15.7	40.8	50.7	12.2	34.3
Pennsylvania.....	112	23,710	34.4	1 1	1	32,817,936	35.6	1 1	1	20,184,023	33.7	1 1	1	22.1	14.0	7.1	49.1	18.6	25.7	29.6	10.0	17.8
Ohio.....	45	10,159	14.7	2 3	3	14,358,274	15.6	2 3	3	9,070,288	16.1	2 3	3	123.5	29.5	72.5	215.8	59.1	98.5	193.6	56.2	87.9
Indiana.....	44	9,544	13.8	3 2	2	11,593,094	12.6	3 2	2	0,865,591	11.4	3 2	2	-26.7	-20.6	-7.6	-21.4	-21.2	-0.3	-32.5	-25.0	-10.1
West Virginia.....	51	6,190	9.0	4 6	6	7,779,483	8.4	4 6	6	5,483,555	9.1	4 6	6	217.6	68.5	88.5	315.5	69.1	145.7	328.7	64.2	161.1
New Jersey.....	23	5,651	8.2	5 4	4	6,901,088	7.6	5 4	4	4,962,491	8.3	5 4	4	5.0	2.6	2.3	36.6	7.9	26.0	37.6	8.0	27.4
Illinois.....	11	3,507	6.1	6 5	5	5,047,333	5.5	6 5	5	3,505,879	5.8	6 5	5	6.1	-26.4	44.3	78.1	-10.2	98.3	62.3	-16.9	95.4
New York.....	24	3,114	4.5	7 7	7	4,508,790	4.9	7 7	7	3,349,713	5.6	7 7	7	21.8	-1.2	23.3	63.5	5.4	55.2	80.4	16.8	54.4
Kansas.....	23	1,435	2.1	9 11	11	2,036,573	2.2	8 10	10	1,364,829	2.3	8 11	11	.....	99.9	.....	112.4	.....	.....	126.0	.....	.....
Missouri.....	4	1,755	2.5	8 8	8	1,992,883	2.2	9 8	8	1,046,137	1.7	9 8	8	170.0	12.4	140.2	160.2	11.9	132.5	95.9	-2.5	100.9
Maryland.....	7	1,052	1.5	10 12	12	1,038,308	1.1	10 12	12	801,549	1.3	10 12	12	41.7	62.1	-12.5	86.0	75.9	5.7	97.3	85.8	6.2
Virginia.....	5	524	0.8	13 13	13	681,900	0.7	13 13	13	431,113	0.7	13 13	13	.....	11.0	.....	24.2	.....	.....	13.4	.....	.....
All other states.....	14	2,270	3.3	.....	.....	3,279,481	3.6	.....	.....	2,310,536	3.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

¹ Percentages are based on figures in Table 19. A minus sign (-) denotes decrease. Percentage not shown where comparative figures can not be given without disclosing individual operations.

The glass industry is highly centralized, the bulk of the production being reported by five adjoining states. These five states reported more than three-fourths (75.8 per cent) of the number of establishments, over four-fifths (80.2 per cent) of the wage earners, and almost four-fifths (79.8 per cent) of the value of products.

Pennsylvania was by far the most important state in the industry, the value of the products of the establishments of this state in 1909 representing more than one-third of the total for the United States. Ohio ranked second in value of products in 1909 and Indiana third, a reversal of the ranking of these states in 1904.

Of the states shown in the table, West Virginia showed the greatest relative development in the industry, the number of wage earners having increased 217.6 per cent from 1899 to 1909, and the value of products 315.5 per cent, while the state advanced in rank from sixth place in 1904 to fourth in 1909. Ohio and Missouri also showed large increases in number of wage earners and value of products during the decade.

In general, the states held the same or nearly the same rank with respect to value of products in 1909 as in 1904, and all of the states had the same rank in value added by manufacture in 1909 as in value of products.

Persons engaged in the industry.—Table 3 shows, for 1909, the number of persons engaged in the industry, classified according to occupational status and sex, and in the case of wage earners according to age also. It should be borne in mind 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 the industry during 1909 was 72,573, of whom 68,911, or 95 per cent, were wage earners, 1,376, or 1.9 per cent, proprie-

tors and officials, and 2,286, or 3.1 per cent, clerks, this class including other subordinate salaried employees. Of the total number of persons engaged in the industry, 67,811, or 93.4 per cent, were males, and 4,762, or 6.6 per cent, females. Of the total number of females, 85.7 per cent were wage earners, employed chiefly in the packing departments. The number of children employed as wage earners was 3,561, or 5.2 per cent of the total number of wage earners.

Table 3

CLASS.	PERSONS ENGAGED IN THE INDUSTRY: 1909		
	Total.	Male.	Female.
All classes.....	72,573	67,811	4,762
Proprietors and officials.....	1,376	1,366	10
Proprietors and firm members.....	87	82	5
Salaried officers of corporations.....	479	475	4
Superintendents and managers.....	810	809	1
Clerks.....	2,286	1,616	670
Wage earners (average number).....	68,911	64,829	4,082
16 years of age and over.....	65,350	61,639	3,711
Under 16 years of age.....	3,561	3,190	371

The average number of wage earners in each state for 1909, 1904, and 1899 is given in Table 19. The average number distributed by sex and age is not shown for individual states, but Table 20 gives such a distribution of the number employed on December 15, or the nearest representative day. Female wage earners were reported from 16 states, the largest number, 1,770, being reported from Pennsylvania, and the next largest, 1,074, from Ohio. Employees under 16 years of age were fairly well distributed among the states.

In order to compare the distribution of the persons engaged in the industry in 1909, according to occupational status, with that in 1904, it is necessary to use the classification employed at the earlier census. (See Introduction.) Such a comparison is made in Table 4.

Table 4

CLASS.	PERSONS ENGAGED IN THE INDUSTRY.				Percent of increase: ¹ 1904-1909
	1909		1904		
	Number.	Per cent distribution.	Number.	Per cent distribution.	
Total.....	72,573	100.0	67,105	100.0	8.1
Proprietors and firm members...	87	0.1	96	0.1	-9.4
Salaried employees.....	3,575	4.9	3,040	4.5	17.6
Wage earners (average number)...	68,911	95.0	63,969	95.3	7.7

¹ A minus sign (-) denotes decrease.

Table 5 shows the average number of wage earners in the industry distributed according to age, and in the case of those 16 years of age and over, according to sex, for 1909, 1904, and 1899.

The most significant fact brought out in this table is the decline in the number of children employed in the industry, only about half as many being employed in 1909 as in 1899. The number of women employed was comparatively small and was proportionately less

in 1909 and 1904 than in 1899, but the relative number of men in the industry was considerably larger in 1909 than in 1899.

Table 5

CLASS.	AVERAGE NUMBER OF WAGE EARNERS IN THE INDUSTRY.					
	1909		1904		1899	
	Number	Per cent distribution.	Number	Per cent distribution.	Number	Per cent distribution.
Total.....	68,911	100.0	63,969	100.0	52,818	100.0
16 years of age and over..	65,350	94.8	57,534	89.9	45,702	86.5
Male.....	61,639	89.4	54,079	84.5	42,173	79.8
Female.....	3,711	5.4	3,455	5.4	3,529	6.7
Under 16 years of age....	3,561	5.2	6,435	10.1	7,116	13.5

Wage earners employed, by months.—Table 6 gives the number of wage earners employed in the industry on the 15th (or the nearest representative day) of each month during the year 1909 for 12 of the leading states in which an average of 500 or more wage earners were employed during the year.

Table 6

WAGE EARNERS EMPLOYED IN THE INDUSTRY: 1909¹

STATE.	Average number during the year.	WAGE EARNERS EMPLOYED IN THE INDUSTRY: 1909 ¹											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
United States.....	68,911	72,931	75,720	78,921	77,692	76,550	73,038	40,222	43,839	56,127	71,746	78,454	81,665
California.....	640	679	757	711	749	841	834	195	155	652	680	720	721
Illinois.....	3,507	4,351	4,246	4,336	4,596	4,396	4,243	1,975	1,908	1,441	2,837	3,634	4,321
Indiana.....	9,544	10,056	10,581	11,103	10,533	10,793	9,942	6,807	5,872	6,800	10,168	11,082	11,731
Kansas.....	1,435	1,300	1,778	1,847	1,734	1,608	1,644	433	403	1,005	1,492	1,978	2,033
Maryland.....	1,052	1,032	1,039	1,250	1,278	1,253	1,278	514	417	926	1,156	1,214	1,272
Missouri.....	1,755	1,490	1,541	1,626	1,609	1,493	1,762	1,621	1,666	1,780	2,032	2,175	2,170
New Jersey.....	5,651	7,217	7,212	7,202	7,286	7,023	6,144	1,345	1,161	2,742	6,035	7,205	7,253
New York.....	3,114	3,553	3,555	3,630	3,695	3,769	3,397	1,743	1,497	2,025	3,174	3,591	3,714
Ohio.....	10,150	11,051	11,282	11,312	11,089	11,065	10,286	5,888	6,790	8,085	10,779	11,567	11,814
Pennsylvania.....	23,710	24,057	24,901	26,256	25,361	25,484	25,303	16,242	18,019	21,098	24,378	25,630	26,711
Virginia.....	524	593	600	600	620	637	663	40	52	654	636	589	609
West Virginia.....	6,190	5,363	6,021	6,933	6,399	6,621	6,145	3,310	4,856	6,170	6,894	7,393	7,669

¹ The month of maximum employment for each state is indicated by boldface figures and that of minimum employment by italic figures.

The industry is most active during the colder months of the year, since most establishments shut down for a time during the summer to clean up and make repairs. July was the month of minimum employment in six, and August in four states shown in the table. The largest number of wage earners employed in the industry during any month of 1909 was 81,665, in December, and the smallest number, 40,222, in July, the minimum number being equal to 49.3 per cent of the maximum. In 1904 the maximum number, 74,316, was shown for April, and the minimum number, 28,246, for July, the latter number being equal to 38 per cent of the former.

In five of the states (Indiana, Kansas, Ohio, Pennsylvania, and West Virginia) the month of maximum employment was December and in Missouri it was November, but in the other states shown in the table the greatest number of wage earners were employed in the spring and early summer.

Prevailing hours of labor.—In Table 7 the wage earners in the industry have been classified according

to the number of hours of labor per week prevailing in the establishments in which they were employed. In making this classification the average number of wage earners employed during the year in each establishment was classified as a total, according to the hours prevailing in that establishment, even though a few employees worked a greater or smaller number of hours.

More than one-half (53.2 per cent) of the wage earners employed in the industry in 1909 were in establishments where the prevailing hours were 54 or less per week, 20.2 per cent were employed in establishments where the prevailing hours were between 54 and 60 per week, and 26.6 per cent in establishments where the prevailing hours were 60 or more per week.

Of the seven groups shown in the table, the largest was that made up of the wage earners in establishments where the prevailing hours were between 48 and 54 per week, such wage earners constituting 24.1 per cent of the total number. This group was most

important, likewise, in five of the individual states for which figures are given. In Missouri the most common working time was between 60 and 72 hours per week and in Ohio and Pennsylvania it was between 54 and 60 hours per week.

STATE.	In establishments with prevailing hours—							
	Total.	48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72 and over.
United States...	68,911	11,358	16,603	8,707	13,923	10,764	3,423	4,133
California.....	640	100	540	.....	.....	.....	.....	.....
Illinois.....	3,507	94	957	80	.....	676	.....	1,700
Indiana.....	9,544	1,850	2,109	1,978	1,575	1,584	448	.....
Kansas.....	1,435	831	126	164	39	273	.....	.....
Maryland.....	1,052	181	482	389	.....	.....	.....	.....
Missouri.....	1,755	.....	102	.....	224	.....	1,066	363
New Jersey.....	5,651	1,007	2,451	420	1,773	.....	.....	.....
New York.....	3,114	369	776	280	328	1,361	.....	.....
Ohio.....	10,159	1,797	2,279	1,726	2,501	1,139	652	65
Pennsylvania.....	23,710	3,049	4,406	1,645	6,235	5,468	1,267	1,050
Virginia.....	624	.....	465	59	.....	.....	.....	.....
West Virginia.....	6,190	1,866	2,252	1,424	385	263	.....	.....

Character of ownership.—Table 8 presents statistics with respect to the character of ownership of establishments in the glass industry.

CHARACTER OF OWNERSHIP.	NUMBER OF ESTABLISHMENTS.		VALUE OF PRODUCTS.	
	1909	1904	1909	1904
Total.....	363	399	\$92,095,203	\$79,607,998
Individual.....	23	21	1,529,780	1,234,651
Firm.....	19	26	1,426,929	2,019,890
Corporation.....	321	337	89,138,494	74,380,170
Other.....	.....	15	.....	917,387
Per cent of total.....	100.0	100.0	100.0	100.0
Individual.....	6.3	5.3	1.7	1.6
Firm.....	5.2	6.5	1.5	3.3
Corporation.....	88.4	84.5	96.8	94.0
Other.....	.....	3.8	.....	1.2

In 1909, of the total number of establishments, 88.4 per cent were under corporate ownership, as compared with 84.5 per cent in 1904. In 1909 the value of products of these establishments represented 96.8 per cent of the total, and in 1904, 94 per cent. In 1904, 15 establishments were operated by cooperative associations, but no establishments were reported for this form of ownership in 1909.

Table 9 gives statistics for establishments, classified according to form of ownership, for the 11 states employing an average of more than 500 wage earners in 1909 for which figures can be shown without disclosing individual operations.

STATE.	NUMBER OF ESTABLISHMENTS OWNED BY—			WAGE EARNERS IN ESTABLISHMENTS OWNED BY—			VALUE OF PRODUCTS OF ESTABLISHMENTS OWNED BY—			VALUE ADDED BY MANUFACTURE IN ESTABLISHMENTS OWNED BY—		
	Indi- vidu- als.	Firms.	Cor- pora- tions.	Indi- vidu- als.	Firms.	Corpo- rations.	Individuals.	Firms.	Corpora- tions.	Individu- als.	Firms.	Corpora- tions.
United States.....	23	19	321	1,317	1,316	66,278	\$1,529,780	\$1,426,929	\$89,138,494	\$1,031,246	\$1,069,150	\$57,875,308
Illinois.....	.....	1	10	.....	(X)	3,507	.....	(X)	5,047,333	.....	(X)	3,505,279
Indiana.....	3	.....	41	454	.....	0,090	430,916	.....	11,162,178	254,597	.....	6,610,994
Kansas.....	5	1	17	146	(X)	1,289	829,056	(X)	1,48,408	(X)	(X)	1,216,421
Maryland.....	.....	1	6	.....	(X)	1,052	.....	(X)	1,058,368	.....	(X)	801,549
Missouri.....	.....	.....	4	.....	.....	1,755	.....	.....	1,992,883	.....	.....	1,046,137
New Jersey.....	3	1	19	262	(X)	5,389	329,938	(X)	6,631,150	240,934	(X)	4,715,657
New York.....	2	2	20	153	(X)	2,976	193,968	(X)	4,314,822	134,783	(X)	3,214,930
Ohio.....	3	2	40	300	(X)	9,859	397,729	(X)	13,960,545	273,867	(X)	9,391,421
Pennsylvania.....	2	7	103	683	(X)	23,047	.....	(X)	31,958,521	.....	(X)	19,557,523
Virginia.....	.....	.....	5	524	.....	631,900	.....	.....	631,900	.....	.....	431,113
West Virginia.....	5	4	42	44	80	6,066	49,969	72,213	7,657,301	37,189	59,101	5,387,265

NOTE.—In some states, in order to avoid disclosing the returns for individual establishments, the figures for one group have been consolidated with those for establishments under some other form of ownership. In such cases an (X) is placed in the column from which the figures have been omitted, and the figures for the group with which they have been combined are printed in italics.

In 1909, 1,317 wage earners, or 1.9 per cent of the total, were employed in establishments under individual ownership; 1,316, or 1.9 per cent, in those under firm ownership; and 66,278, or 96.2 per cent, in those owned by corporations.

Size of establishments.—Table 10 presents statistics for 1909 and 1904 for establishments grouped according to the value of their products.

There was a marked decline during the five years, 1904–1909, both in number and in value of products of establishments producing goods valued at less than \$100,000, whereas establishments with products valued at \$100,000 or more in each of the years showed an equally marked increase in number and in value of output. This latter class represented 68.4 per cent of the number of establishments in 1909, as compared with

58.9 per cent in 1904, and reported 93.6 per cent of the total value of products in 1909 as against 89.5 per cent in 1904.

VALUE OF PRODUCTS PER ESTABLISHMENT.	NUMBER OF ESTABLISHMENTS.		VALUE OF PRODUCTS.	
	1909	1904	1909	1904
Total.....	363	399	\$92,095,203	\$79,607,998
Less than \$5,000.....	11	9	33,445	24,738
\$5,000 and less than \$20,000.....	13	24	138,525	279,662
\$20,000 and less than \$100,000.....	91	131	5,091,849	8,030,808
\$100,000 and less than \$1,000,000.....	238	230	69,534,919	62,274,058
\$1,000,000 and over.....	10	5	16,090,465	8,992,772
Per cent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	3.0	2.3	(¹)	(¹)
\$5,000 and less than \$20,000.....	3.6	6.0	0.2	0.4
\$20,000 and less than \$100,000.....	25.1	32.8	6.2	10.1
\$100,000 and less than \$1,000,000.....	65.0	57.6	75.5	78.2
\$1,000,000 and over.....	2.8	1.3	18.1	11.3

¹ Less than one-tenth of 1 per cent.

The average value of products per establishment increased from \$199,519 in 1904 to \$253,706 in 1909, and the value added by manufacture, as computed from figures in Table 1, from \$133,991 to \$165,222, while the average number of wage earners per estab-

lishment increased from 160 to 190 during this period.

Classification by number of wage earners.—Table 11 classifies the establishments in 12 of the leading states according to the number of wage earners employed.

STATE.	TOTAL.		ESTABLISHMENTS EMPLOYING IN 1909—																
			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.
	Es-tab-lish-ments.	Wage earners (average number)	Es-tab-lish-ments.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.	Es-tab-lish-ments.	Wage earners.
United States....	363	68,911	.....	12	35	22	316	41	1,450	81	6,170	122	19,202	58	21,173	20	12,208	7	8,359
California.....	3	640	.....	.....	.....	.....	.....	1	44	1	100	.....	.....	1	406	.....	.....	.....	.....
Illinois.....	11	3,507	.....	.....	.....	1	15	1	24	2	174	3	490	2	707	1	637	1	1,400
Indiana.....	44	9,544	.....	.....	.....	5	90	1	25	6	428	10	3,361	10	3,916	1	612	1	1,112
Kansas.....	23	1,435	.....	3	5	1	6	7	240	7	532	5	652	.....	.....	.....	.....	.....	.....
Maryland.....	7	1,052	.....	.....	.....	1	11	1	30	2	151	1	181	2	679	.....	.....	.....	.....
Missouri.....	4	1,755	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	326	1	363	.....	.....	1	1,066
New Jersey.....	23	5,651	.....	2	10	.....	.....	1	33	5	388	6	876	7	2,398	1	617	1	1,329
New York.....	24	3,114	.....	1	5	1	9	4	162	8	604	9	1,357	.....	.....	1	977	.....	.....
Ohio.....	45	10,150	.....	.....	.....	3	54	5	164	8	544	16	2,659	6	2,260	6	3,440	1	1,038
Pennsylvania.....	112	23,710	.....	1	3	5	62	11	442	25	1,038	37	5,305	22	7,811	9	5,295	2	2,354
Virginia.....	5	524	.....	.....	.....	.....	.....	.....	.....	3	218	2	306	.....	.....	.....	.....	.....	.....
West Virginia.....	51	6,190	.....	5	12	4	51	7	214	11	864	18	2,647	5	1,774	1	628	.....	.....

Of the 363 establishments reported in 1909, 9.4 per cent employed from 1 to 20 wage earners each, 33.6 per cent from 21 to 100, 49.6 per cent from 101 to 500, and only 7.4 per cent over 500 each. Seven establishments employed 1,000 wage earners or more. Of the total number of wage earners, five-tenths of 1 per cent were reported by establishments employing from 1 to 20, 11.1 per cent by establishments employing from 21 to 100, 58.6 per cent by establishments employing from 101 to 500, and 29.8 per cent by establishments employing over 500. The seven largest establishments together reported 12.1 per cent of the total number of wage earners.

Expenses.—As stated in the Introduction, the census figures representing expenses do not purport to show the total cost of manufacture, since they take no account of interest or depreciation; hence they can not properly be used for determining profits. Facts of interest can be brought out, however, concerning the relative importance of the different classes of expenses which were reported. Table 1 shows the total expenses in 1909 to have been \$85,374,185, distributed as follows: Cost of materials, \$32,119,499, or 37.6 per cent; wages, \$39,299,624, or 46 per cent; salaries, \$4,993,591, or 5.8 per cent; and miscellaneous expenses, made up of advertising, ordinary repairs of buildings and machinery, insurance, traveling expenses, and other sundry expenses, \$8,961,471, or 10.5 per cent. These proportions, as may be seen by comparing the items in Table 20, vary somewhat in the several states.

Engines and power.—The amount of power used in the glass industry was first reported at the census of 1869. Table 1 shows that the total horsepower used increased from 1,857 in 1869 to 123,132 in

1909. Table 12 shows statistics of power as reported at the censuses of 1909, 1904, and 1899.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.			PER CENT DISTRIBUTION OF HORSEPOWER.		
	1909	1904	1899	1909	1904	1899	1909	1904	1899
Primary power, total.....	1,428	1,108	839	123,132	91,476	52,943	100.0	100.0	100.0
Owned.....	1,122	1,043	830	119,707	90,893	52,887	97.2	99.4	99.9
Steam.....	765	742	753	98,971	76,599	49,791	80.4	83.7	94.0
Gas.....	356	297	84	20,731	13,947	2,304	16.8	15.2	4.5
Water wheels.....	2	2	2	20	27	27	(1)	(1)	(1)
Water motors.....	1	2	(*)	5	11	(*)	(1)	(1)	(1)
Other.....	.....	.....	.....	316	705	.....	0.3	1.3	.....
Rented.....	306	65	(*)	3,425	583	56	2.8	0.6	0.1
Electric.....	306	65	(*)	3,425	583	44	2.8	0.6	0.1
Other.....	.....	.....	.....	.....	.....	12	.....	.....	(1)
Electric motors.....	2,510	965	178	43,589	16,769	6,030	100.0	100.0	100.0
Run by current generated by establishment.....	2,204	900	178	40,164	16,186	5,986	92.1	96.5	99.8
Run by rented power.....	306	65	(*)	3,425	583	44	7.9	3.5	0.7

* Less than one-tenth of 1 per cent.

† Not reported.

The total primary power used in the glass industry increased from 52,943 horsepower in 1899 to 123,132 horsepower in 1909, or 132.6 per cent during the decade. At each census, power generated by steam engines constituted more than four-fifths of the total primary power, but in spite of the fact that the amount of steam power almost doubled between 1899 and 1909, it represented a smaller proportion of the total at the later census than at the earlier. The amount of power produced by gas or other internal-combustion engines was nearly nine times as great in 1909 as in 1899, and the proportion which such power formed of the total primary power advanced during the decade from 4.5 per cent to 16.8 per cent.

The horsepower of electric motors used for distributing power by means of current generated in the establishment increased from 5,986 in 1899 to 40,164 in 1909.

Table 13 shows, for 1909, the amount of the several kinds of power and of the different kinds of fuel used in 12 of the states leading in the industry.

STATE.	PRIMARY HORSEPOWER.		ELECTRIC HORSEPOWER.						FUEL USED.							
	Number of establishments reporting.	Total horsepower.	Owned by establishments reporting.				Rented.		Total, rented and generated by establishment.	Generated in the establishment reporting.	Coal.		Coke (short tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
			Total.	Steam engines.	Gas engines.	Water wheels and motors.	Other.	Electric.			Other.	Anthracite (long tons).				
United States..	353	123,132	119,707	98,971	20,731	5	3,425	43,589	40,164	17,906	1,859,001	17,393	12,468	468,894	43,711,519	
California.....	3	592	295	295				297							72,808	
Illinois.....	11	6,638	6,205	6,155	50			1,619	1,186		270,826	4,713	10		33,693	
Indiana.....	44	21,031	20,687	17,951	2,736			4,045	4,301	443	457,900	736	175		68,657	
Kansas.....	23	1,031	978	603	373			55	85						1,020	
Maryland.....	7	427	257	235	22			170	230	60	21,388	175	331		5,642	
Missouri.....	4	8,820	8,770	8,770				50	11,833	11,783	169,028	30	100		27,000	
New Jersey.....	22	3,081	3,090	3,046	14			21	372	351	104,230	2,381	8,491		138,011	
New York.....	24	1,774	1,604	1,184	420			170	605	335	4,303	65,340	1,204	625	63,760	
Ohio.....	44	16,198	15,652	11,782	3,870			546	9,905	9,449	89	210,815	1,397	5	4,498	
Pennsylvania.....	111	55,182	54,284	43,393	10,886	5		898	12,804	11,906	6,788	453,613	4,093	2,079	34,966	
Virginia.....	5	245	170	170				75	85	10		17,053	1	2	1,047	
West Virginia.....	44	5,233	4,957	2,602	2,355			276	719	443		3,483			30	
All other states.....	11	2,880	2,790	2,785				90	345	255		81,725	2,663	670	19,462	

In 1909 Pennsylvania, Indiana, Ohio, Missouri, and Illinois together reported 107,869 horsepower, or 87.6 per cent of the aggregate for the industry. Steam power was the most important form of power in all of the states shown separately except California, where the amount of steam power was slightly less than that of rented electric power. The largest amount of steam power, 43,393 horsepower, was shown for Penn-

sylvania, this state also reporting more than half of the total amount of power generated by gas engines.

Fuel consumed.—Gas, which was practically all natural gas, was the most important class of fuel used, the quantity amounting to over 43 billion feet. The largest amount was reported by Pennsylvania. Bituminous coal was next in importance, 1,859,001 tons being consumed during 1909.

SPECIAL STATISTICS RELATING TO MATERIALS, PRODUCTS, AND EQUIPMENT.

Materials.—Table 14 shows statistics of the principal materials used in the industry for 1909, 1904, and 1899.

PRINCIPAL MATERIALS.	1909	1904	1899
Total cost of all materials.....	\$32,119,499	\$26,145,522	\$16,781,009
Glass sand, tons.....	1,004,086	769,792	581,720
Soda ash (carbonate of soda), tons.....	873,764	215,462	157,779
Salt cake (sulphate of soda), tons.....	76,540	53,905	53,237
Nitrate of soda, tons.....	19,676	11,915	10,770
Limestone, tons.....	156,377	115,655	91,015
Lime, bushels.....	1,256,117	1,166,342	993,349
Arsenic, pounds.....	3,140,720	2,676,650	2,349,261
Carbon, tons.....	5,480	3,750	4,155
Manganese, pounds.....	3,882,465	3,096,939	1,493,538
Litharge and red lead, pounds.....	11,653,149	9,613,649	8,386,106
Potash or pearl ash, pounds.....	6,938,355	5,446,338	4,406,211
Grinding sand, tons.....	706,689	410,856	265,438
Rouge, pounds.....	1,383,182	1,098,566	837,536

From 1899 to 1909 the total cost of materials used increased \$15,388,490, or 92 per cent. Of the several materials used, the grinding sand, manganese, and soda ash, increased in quantity considerably more than 100 per cent during the decade, and all of the materials were used in larger quantities in 1909 than in 1899.

Products.—Table 15 shows in some detail statistics of products manufactured in 1909, 1904, and 1899 by establishments in the industry.

Of the 363 establishments reported for 1909, 104 were engaged in the manufacture of building glass, 114 manufactured pressed and blown glass, and 166 produced bottles and jars, while of the 355 establishments in 1899, 124 produced building glass, 84 pressed and blown glass, and 147 bottles and jars. Of the total value of products in 1909, building glass contributed 28.6 per cent; pressed and blown glass, 29.8 per cent; bottles and jars, 39.1 per cent; and "all other products," 2.6 per cent. In 1899 building glass contributed 30.2 per cent; pressed and blown glass, 30.2 per cent; bottles and jars, 38.3 per cent; and "all other products," 1.2 per cent.

From 1899 to 1909 there was an increase of 53.9 per cent in the value of the building glass, due largely to the increased production of polished plate glass, which increased 180.6 per cent in quantity and 136.6 per cent in value during this period. The quantity and value of rough plate glass made for sale was less

in 1909 than in 1899, which is also true of the quantity of cathedral glass.

PRODUCT.	1909	1904	1899
Total value.....	\$92,095,203	\$79,607,938	\$56,539,712
Building glass.....	\$26,308,438	\$21,697,861	\$17,086,234
Window—			
60-foot boxes.....	6,921,611	4,852,315	4,341,282
Value.....	\$11,742,959	\$11,610,851	\$10,879,355
Plate—			
Total cast, square feet.....	60,105,694	34,804,086	21,172,129
Polished—			
Square feet.....	47,370,254	27,293,138	16,883,578
Value.....	\$12,204,875	\$7,978,253	\$5,158,598
Rough, made for sale—			
Square feet.....	205,699	17,784	628,684
Value.....	\$37,431	\$3,629	\$75,887
Cathedral—			
Square feet.....	7,405,980	6,615,093	8,846,361
Value.....	\$509,848	\$293,023	\$607,252
Skylight—			
Square feet.....	15,409,968	15,255,541	3,079,694
Value.....	\$783,726	\$678,391	\$165,086
All other.....	\$964,599	\$1,133,214	\$250,050
Pressed and blown glass.....	\$27,398,445	\$21,956,158	\$17,076,125
Tableware, 100 pieces.....	1,286,059	1,283,974	655,141
Jellies, tumblers, and goblets, dozens.....	11,687,936	7,346,214	8,644,050
Lamps, dozens.....	322,482	487,017	807,765
Chimneys, dozens.....	6,652,967	7,039,756	6,901,192
Lantern globes, dozens.....	652,620	1,765,247	1,044,810
Globes and other electrical goods, dozens.....	11,738,798	1,901,415	(*)
Shades, globes, and other gas goods, dozens.....	1,541,449	878,244	2,673,854
Blown tumblers, stem ware, and bar goods, dozens.....	9,182,060	6,282,000	6,127,367
Opal ware, dozens.....	3,095,666	1,091,208	3,750,443
Cut ware, dozens.....	206,336	83,736	134,726
Bottles and jars.....	\$36,018,333	\$33,631,063	\$21,076,791
Prescriptions, vials, and druggists' wares, gross.....	3,624,022	3,202,586	2,423,932
Beer, soda, and mineral, gross.....	2,345,204	2,351,852	1,351,118
Liquors and flasks, gross.....	1,887,344	2,157,801	985,374
Milk jars, gross.....	440,302	253,051	146,142
Fruit jars, gross.....	1,124,485	1,061,820	789,298
Battery jars and other electrical goods, gross.....	9,981	10,974	(*)
Patent and proprietary, gross.....	1,637,798	1,057,372	1,266,131
Packers and preservers, gross.....	1,237,175	1,237,065	784,588
Demijohns and carboys, dozens.....	122,570	64,450	83,243
All other products.....	\$2,369,987	\$2,322,916	\$680,562

¹ In addition, 42,639 gross of bottles and jars, valued at \$90,490, were made by establishments engaged primarily in the manufacture of products other than those covered by the industry designation.

² In addition, glassware to the value of \$9,663 was made by establishments engaged primarily in the manufacture of products other than those covered by the industry designation.

³ Not reported.

The value of pressed and blown glass increased 60.4 per cent during the decade, the percentages of increase in this class of goods being largest for tableware, cut ware, and blown tumblers, stem ware, and bar goods. Globes and other electrical goods were not reported separately in 1899; between 1904 and 1909, however, there was an increase of 9,837,383 dozens, or 517.4 per cent. Decreases took place in the output of lamps and their appurtenances, in gas fixtures, and in opal ware. Few of the glass plants make finished cut glass, the item "cut ware" representing principally the glass blanks, which have not been cut and polished, and which are sold to establishments making a specialty of producing the finished ware. In the general census reports these latter establishments are included under the classification, "glass, cutting, staining, and ornamenting."

The increase from 1899 to 1909 in the value of bottles and jars amounted to \$14,341,542, or 66.2 per cent,

most of the different kinds reported showing large gains. The item "all other products," includes sundry unclassified glass products, paper and wooden boxes, barrels, metal tops and caps, pottery, and printed matter.

Table 16 shows, for 1909, 1904, and 1899, the value of each of the three classes of products in the leading states in the glass industry:

PRODUCT AND STATE.	1909	1904	1899
Total value.....	\$92,095,203	\$79,607,938	\$56,539,712
Building glass (including plate and window glass), total.....	26,308,438	21,697,861	17,086,234
Illinois.....	648,718	281,559	24,000
Indiana.....	1,616,092	3,790,618	5,711,948
Kansas.....	1,131,808	381,084	.....
Missouri.....	1,778,364	1,036,433	605,564
New Jersey.....	(1)	201,922	274,011
New York.....	173,357	456,310	346,790
Ohio.....	2,744,513	1,625,126	671,422
Pennsylvania.....	14,858,649	12,169,013	9,213,545
West Virginia.....	2,751,133	1,323,896	101,242
All other states.....	508,774	431,900	247,712
Pressed and blown glass, total.....	27,398,445	21,956,158	17,076,125
Indiana.....	2,774,128	2,859,087	2,691,787
Kansas.....	202,696	64,697	.....
Maryland.....	608,492	46,191	100,000
New Jersey.....	1,019,836	181,559	21,300
New York.....	1,926,852	1,932,524	1,173,784
Ohio.....	6,160,707	3,954,660	2,738,289
Pennsylvania.....	6,847,228	9,406,183	8,453,550
West Virginia.....	4,306,528	2,620,665	1,379,706
All other states.....	651,978	800,592	617,709
Bottles and jars, total.....	36,018,333	33,631,063	21,076,791
California.....	879,434	855,416	(1)
Illinois.....	4,304,795	4,949,156	2,678,780
Indiana.....	6,982,378	7,213,456	6,327,468
Kansas.....	651,376	407,868	.....
Maryland.....	628,767	536,478	346,633
Missouri.....	(1)	607,393	260,000
New Jersey.....	5,884,605	6,066,714	4,452,219
New York.....	1,884,394	1,866,245	1,105,276
Ohio.....	4,717,658	2,961,727	1,058,955
Pennsylvania.....	7,778,787	5,951,144	4,162,990
Virginia.....	681,900	549,031	(1)
West Virginia.....	646,521	602,002	381,847
All other states.....	1,083,718	1,064,413	812,623
All other products.....	2,369,987	2,322,916	680,562

¹ Included in "All other states," to avoid disclosure of individual operations.

Pennsylvania produced 56.9 per cent of the total value of building glass in 1909, 35.9 per cent of the value of pressed and blown glass, and 21.6 per cent of the bottles and jars, ranking first in the value of each of these products.

West Virginia ranked second in the value of building glass produced, and Ohio third, but in the production of pressed and blown glass the relative ranking of these states was reversed. Indiana was second in the value of bottles and jars produced, followed by New Jersey, Ohio, and Illinois, in the order named.

Equipment.—The measure of the productive power of a glass manufacturing establishment is the glass-melting capacity of its pot furnaces and tanks. Table 17 presents for 1909, 1904, and 1899, the statistics of such equipment by states for the establishments in the industry. The idle furnaces and tanks shown in this table represent the idle equipment of active establishments, and not the equipment of establishments which were idle throughout the year.

Table 17

STATE.	Census.	POT FURNACES.				TANKS.							
		Operated.		Idle.		Continuous.				Intermittent.			
		Number.	Number of pots.	Number.	Number of pots.	Operated.		Idle.		Operated.		Idle.	
						Number.	Number of rings.	Number.	Number of rings.	Number.	Capacity, tons.	Number.	Capacity, tons.
United States.....	1909 1904 1899	370 349 391	4,945 4,192 4,300	59 49 60	697 617 807	369 340 192	3,759 3,078 1,671	48 26 14	436 181 79	73 94 130	433 408 818	13 13 17	59 69 83
Illinois.....	1909 1904 1899	9 8 9	107 104 117	1 4 1	20 47 12	24 24 11	201 284 133	4	58	1 4 7	5 20 40	..... 1 .....	..... 10
Indiana.....	1909 1904 1899	18 63 116	307 670 1,220	2 7 9	40 70 134	61 87 71	533 749 564	6 4 4	34 25 12	2 3 33	14 20 208	..... 1 4	..... 8 12
Maryland.....	1909 1904 1899	11 6 10	109 74 91	1 2 2	12 17 16	3 1	21 5 .....	..... ..... .....	..... ..... .....	1 1 1	8 8 6	...............	...............
New Jersey.....	1909 1904 1899	16 19 27	130 147 200	6 4 6	42 36 55	36 35 31	329 310 293	12 11 6	90 71 40	9 11 12	106 60 72	1 2	11 7
New York.....	1909 1904 1899	35 28 24	798 257 200	9 3 5	66 27 47	19 22 14	167 179 115	1 2	7 15	3 3 7	7 10 49	1 1 1	1 6 3
Ohio.....	1909 1904 1899	50 39 37	593 551 444	12 4 5	143 69 95	49 34 12	434 283 95	8 2	98 20	11 12 3	27 33 13	2 2 3	3 9 12
Pennsylvania.....	1909 1904 1899	144 120 143	2,086 1,715 1,758	23 17 25	301 222 359	99 87 43	1,178 584 404	12 6 1	93 54 8	26 36 44	145 137 232	6 3 5	27 12 42
West Virginia.....	1909 1904 1899	37 43 14	339 393 144	2 6 1	24 88 12	33 18	422 155	2 1	45 6	12 19 19	96 90 85	2 5 1	11 24 5
All other states.....	1909 1904 1899	44 23 11	476 281 126	3 2 6	49 32 77	45 32 10	474 247 67	3 3	16 19	5 8 4	25 28 113	1 1	3 2

Active pot furnaces decreased 5.4 per cent in number from 1899 to 1909, but at the same time the number of pots operated (which are of uniform size) increased 15 per cent, indicating an actual increase in the capacity of this sort of equipment.

The number of continuous tanks almost doubled and the number of rings more than doubled from 1899 to 1909. Intermittent or day tanks, on the other hand, decreased 57, or 43.8 per cent, in number, while

their capacity decreased 385 tons, or 47.1 per cent. Of the leading states shown, Indiana alone reported a loss for all classes of equipment, the decline in the glass industry in that state being due to the decrease in the supply of natural gas.

Imports and exports.—Table 18 shows the value of glass imported and exported during each census year from 1869 to 1899 and for each year from 1899 to 1909, inclusive.

VALUE OF GLASS IMPORTED AND OF DOMESTIC GLASS EXPORTED: 1869 TO 1909.¹

Table 18

YEAR.	IMPORTS.									EXPORTS.			
	Total value.	Bottles, vials, carboys, etc.	Cylinder and common window glass, unpolished.	Cylinder and crown glass, polished.		Plate glass.			Glass plates or disks for optical instruments.	All other.	Total value.	Window glass.	All other.
				Unsilvered.	Silvered.	Fluted, rolled, or rough.	Cast, polished, unsilvered.	Cast, polished, silvered.					
1909.....	\$5,262,100	\$638,034	\$760,164	\$212,690	(2)	\$111,377	\$515,642	(2)	\$455,807	\$2,567,576	\$2,173,193	\$59,427	\$2,113,766
1908.....	6,570,123	904,773	824,616	265,281	.....	115,890	805,656	.....	360,278	3,284,944	2,505,417	107,596	2,397,821
1907.....	7,596,631	997,295	1,037,770	343,208	582	107,343	1,420,109	11,022	218,491	3,460,811	2,604,717	95,388	2,509,329
1906.....	7,507,823	805,752	1,306,723	291,037	1,371	55,934	1,575,375	6,817	199,500	3,265,314	2,433,904	68,327	2,365,577
1905.....	5,948,839	671,699	627,618	259,708	2,393	28,657	1,184,088	4,096	177,457	2,963,123	2,252,799	65,860	2,186,939
1904.....	6,583,168	540,460	1,381,104	322,492	7,004	28,140	945,048	6,631	215,583	3,136,706	1,978,481	71,498	1,906,983
1903.....	7,255,879	493,712	1,762,767	525,380	1,532	57,900	1,432,297	6,991	217,612	2,757,598	2,150,690	59,519	2,091,180
1902.....	6,295,652	458,454	1,827,498	356,518	641	12,581	999,934	6,528	191,089	2,351,809	1,960,106	51,952	1,908,154
1901.....	5,010,675	505,283	908,044	456,947	488	5,931	787,450	18,819	161,512	2,166,201	2,128,309	55,288	2,071,023
1900.....	5,037,931	464,483	1,555,924	539,032	286	7,915	226,295	12,413	125,449	2,106,084	1,936,119	36,218	1,899,901
1899.....	4,303,660	371,394	1,275,184	521,957	622	9,528	233,190	419	119,832	1,771,534	1,503,651	32,690	1,470,961
1898.....	7,724,682	825,411	1,444,982	91,105	756,577	130,172	983,316	1,243,455	10,741	2,238,903	894,200	16,864	877,336
1879.....	3,222,479	(2)	595,070	11,110	(3)	6,527	699,459	575,549	(4)	1,334,764	768,644	(5)	798,644
1869.....	3,895,739	(2)	1,466,138	25,885	(3)	22,173	717,952	625,338	(4)	1,038,253	580,718	(5)	580,718

¹ "Commerce and Navigation of the United States," Bureau of Statistics, Department of Commerce and Labor.
² Included in "all other" glass and glassware imported.
³ Included in "unsilvered" cylinder and crown glass, polished.
⁴ Not reported separately.
⁵ Included in "all other" glass and glassware exported.

At no time during the years covered by the table has the value of exports of glass been as much as half the total value of the glass imported, the nearest approach to this proportion being in 1901, when the value exported equaled 42.4 per cent of the value imported. The exports of glass, however, show a much greater relative increase than the imports, their value being equal in 1909 to 41.3 per cent of the value of the imports, as compared with only 14.9 per cent in 1869. The increased demand for glass products in this coun-

try has been met almost entirely by the growth of the domestic industry, as is shown by the fact that the value of products of the industry in this country was nearly five times as great in 1909 as in 1869, while the value of the imports of glass shows a comparatively small increase during the period. In 1869 the value of the imports represented 21.1 per cent of the value of glass manufactured in this country, but in 1909 it represented only 5.7 per cent.

DETAILED STATE TABLES.

The principal statistics secured by the census inquiry concerning the glass industry are presented, by states, in Tables 19 and 20.

Table 19 shows, for 1909, 1904, and 1899, the number of establishments, number of persons engaged in

the industry, primary horsepower, capital invested, salaries, wages, cost of materials, value of products, and value added by manufacture.

Table 20 gives the more detailed statistics for the industry for 1909 only.

GLASS—COMPARATIVE STATISTICS, BY STATES: 1909, 1904, AND 1899.

STATE.	Census.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.				Primary horsepower.	Capital.	Salaries.	Wages.	Cost of materials.	Value of products.	Value added by manufacture (value of products less cost of materials).
			Total.	Proprietors and firm members.	Salaried employees.	Wage earners (average number).							
Expressed in thousands.													
United States.....	1909	363	72,573	87	3,575	68,911	123,132	\$129,288	\$4,994	\$39,300	\$32,119	\$92,095	\$59,976
	1904	399	67,105	96	3,040	63,869	91,476	89,389	3,940	37,288	26,146	76,608	53,462
	1899	355	65,256	170	2,268	62,818	52,943	61,424	2,792	27,085	16,731	66,540	39,809
Illinois.....	1909	11	3,686	3	176	3,507	6,638	7,738	231	2,182	1,541	5,047	3,506
	1904	13	4,895	8	119	4,778	1,583	3,576	151	3,012	1,400	5,620	4,220
	1899	6	3,380	1	75	3,304	700	2,182	110	1,621	674	2,834	2,160
Indiana.....	1909	44	9,936	3	389	9,544	21,031	13,149	528	4,942	4,728	11,593	6,885
	1904	96	12,470	18	432	12,020	14,666	13,884	549	6,638	5,559	14,707	9,148
	1899	110	13,548	24	509	13,015	10,918	12,775	649	7,226	4,582	14,768	10,176
Kansas.....	1909	23	1,511	7	69	1,435	1,031	1,769	65	956	672	2,037	1,365
	1904	9	745	.....	27	718	462	591	29	447	355	959	604
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Maryland.....	1909	7	1,105	6	47	1,052	427	857	64	505	237	1,038	801
	1904	6	682	5	23	640	426	523	35	354	159	590	431
	1899	7	777	4	31	742	230	581	39	340	152	558	406
Missouri.....	1909	4	1,830	.....	75	1,755	8,820	6,739	150	758	947	1,993	1,046
	1904	6	1,672	.....	111	1,561	5,755	3,219	159	938	708	1,781	1,073
	1899	3	676	.....	26	650	3,110	2,198	47	341	232	768	534
New Jersey.....	1909	23	6,159	6	502	5,651	3,031	7,415	517	3,340	1,999	6,961	4,962
	1904	22	5,851	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	1,439	5,094	3,605
New York.....	1909	24	3,295	7	174	3,114	1,774	4,318	272	1,806	1,159	4,509	3,350
	1904	28	3,304	9	142	3,163	1,604	3,455	202	1,825	1,412	4,280	2,888
	1899	27	2,690	17	117	2,556	1,127	2,243	140	1,305	900	2,757	1,857
Ohio.....	1909	45	10,630	8	463	10,159	16,198	16,201	716	5,977	4,688	14,358	9,670
	1904	37	8,163	10	309	7,844	11,266	9,254	444	4,512	2,837	9,026	6,189
	1899	28	4,754	9	199	4,546	3,721	5,462	249	2,067	1,253	4,547	3,294
Pennsylvania.....	1909	112	24,924	34	1,180	23,710	55,182	58,632	1,730	13,436	12,634	32,818	20,184
	1904	122	21,993	32	1,167	20,794	47,750	40,612	1,597	12,518	9,325	27,672	18,347
	1899	119	20,343	31	842	19,420	29,595	28,287	1,110	10,287	6,435	22,011	15,576
Virginia.....	1909	5	549	.....	25	524	245	526	41	306	251	682	431
	1904	4	485	.....	1 ¹	472	100	402	18	264	169	549	380
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Virginia.....	1909	51	6,599	13	306	6,190	5,233	7,369	435	3,628	2,296	7,779	5,483
	1904	39	3,867	5	189	3,673	2,346	4,300	209	2,054	1,259	4,599	3,340
	1899	16	2,040	6	85	1,949	938	1,338	98	789	593	1,872	1,279
All other states.....	1909	14	2,439	.....	169	2,270	3,472	4,045	247	1,434	697	3,280	2,312
	1904	17	2,948	.....	136	2,810	2,887	3,269	183	1,531	1,107	3,375	2,298
	1899	13	1,330	10	67	1,263	848	970	65	646	421	1,343	923

¹ Figures can not be shown without disclosing individual operations.

MANUFACTURES.

GLASS—DETAILED STATISTICS, BY STATES: 1909.

Table 20

STATE.	Number of establishments.	PERSONS ENGAGED IN INDUSTRY.									WAGE EARNERS—DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Primary horsepower.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.	
								Maximum month.	Minimum month.						
United States..	363	72,573	87	1,289	1,618	670	68,911	De 81,665	Jy 40,222	85,285	76,285	4,593	3,948	459	123,132
Illinois.....	11	3,686	3	38	98	40	3,507	Ap 14,396	Se 1,441	4,385	3,075	203	202	5	6,638
Indiana.....	44	9,936	3	167	147	75	9,544	De 11,731	Jy 5,867	12,031	10,766	650	573	42	21,031
Kansas.....	23	1,511	7	37	19	13	1,435	De 2,033	Jy 433	2,317	2,227	76	14	.....	1,031
Maryland.....	7	1,105	6	21	23	3	1,052	Ap 1,279	Au 417	1,348	1,152	90	97	9	427
Missouri.....	4	1,830	.....	18	45	12	1,755	No 2,175	Ja 1,490	2,170	2,135	20	15	.....	8,820
New Jersey.....	23	6,159	6	115	287	100	5,651	Ap 7,280	Au 1,161	7,575	7,046	143	384	2	3,081
New York.....	24	3,295	7	77	69	28	3,114	My 3,789	Au 1,497	3,818	3,598	130	84	6	1,774
Ohio.....	45	10,630	8	184	178	101	10,159	De 11,814	Jy 5,888	12,540	10,983	1,023	483	51	16,198
Pennsylvania.....	112	24,924	34	424	543	213	23,710	De 26,711	Jy 16,242	27,857	24,571	1,485	1,516	285	55,182
Virginia.....	5	549	.....	14	10	1	524	Je 663	Jy 46	609	552	3	54	.....	245
West Virginia.....	51	6,599	13	135	121	50	6,190	De 7,669	Jy 3,316	7,655	6,589	669	341	56	5,233
All other states ¹	14	2,439	.....	59	70	34	2,270	.....	.....	2,980	2,691	101	185	3	3,472

STATE.	Capital.	EXPENSES.									Value of products.	Value added by manufacture (value of products less cost of materials).	
		Total.	Services.			Materials.		Miscellaneous.					
			Officials.	Clerks.	Wage earners.	Fuel and rent of power.	Other.	Rent of factory.	Taxes, including internal revenue.	Contract work.			Other.
United States..	\$129,268,384	\$55,374,185	\$2,944,861	\$2,048,730	\$39,299,624	\$7,523,937	\$24,595,562	\$92,400	\$414,133	\$85,864	\$8,369,074	\$92,095,203	\$59,975,704
Illinois.....	7,738,236	4,664,447	126,669	104,784	2,181,683	468,582	1,072,872	1,320	25,634	636	682,367	5,047,333	3,505,879
Indiana.....	13,148,780	11,053,028	326,510	199,626	4,941,599	988,149	3,729,354	10,000	44,530	6,595	825,605	11,593,094	6,855,591
Kansas.....	1,769,326	1,840,346	44,153	21,211	986,189	85,523	585,221	2,400	13,093	.....	101,550	2,036,673	1,364,829
Maryland.....	887,464	885,093	39,622	24,539	504,634	69,518	167,301	1,120	4,936	.....	73,223	1,038,368	801,549
Missouri.....	6,739,193	2,038,901	94,945	55,026	758,491	323,963	622,783	.....	13,981	.....	169,712	1,992,883	1,046,137
New Jersey.....	7,415,413	6,500,780	230,145	286,597	3,340,284	527,853	1,470,744	550	41,730	.....	602,871	6,961,088	4,902,491
New York.....	4,817,663	3,839,887	190,764	81,502	1,806,470	325,958	833,119	15,263	14,050	16,887	555,274	4,508,790	3,349,713
Ohio.....	16,201,190	12,753,518	456,835	259,528	5,976,989	1,091,415	3,596,571	31,979	68,177	19,321	1,252,703	14,358,274	9,070,288
Pennsylvania.....	58,632,212	31,102,894	1,029,465	700,491	13,436,405	2,898,532	9,735,381	19,833	144,455	11,267	3,127,065	32,817,936	20,184,023
Virginia.....	526,462	628,027	25,525	15,580	305,719	50,896	199,891	.....	574	.....	29,842	681,000	431,113
West Virginia.....	7,368,665	7,045,622	240,939	194,408	3,628,117	406,055	1,895,873	5,885	25,667	28,778	625,970	7,779,483	5,493,555
All other states ²	4,043,780	2,991,572	139,089	105,438	1,433,044	283,493	688,452	4,050	10,700	2,480	321,826	3,279,481	2,310,595

¹ Same number reported for one or more other months.

² All other states embrace: California, 3 establishments; Georgia, 1; Kentucky, 1; Massachusetts, 2; Michigan, 2; Oklahoma, 1; South Carolina, 1; Tennessee, 1; Texas, 1; Wisconsin, 1.

LAUNDRIES, STEAM

(885)

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STEAM LAUNDRIES.

Scope of the statistics.—Laundries are not considered as manufacturing establishments, and no statistics for them were gathered at censuses of manufactures prior to that of 1909. The industry has, however, reached such proportions during recent years that it should no longer be omitted from the industrial census. This report is confined to power laundries and does not include figures for hand laundries using no power. As a rule, establishments included in the census were operated by steam power and are known as steam laundries. In some, however, electric power is employed exclusively, steam and hot water being used only for washing purposes.

Partly by reason of the fact that laundries are not ordinarily considered manufacturing establishments, but chiefly in order to preserve the comparability of the general totals for manufactures, the statistics for steam laundries for 1909 have not been included in the totals relating to all manufacturing industries combined, and the data are not presented in the various general tables giving figures for individual manufacturing industries which appear in Volumes VIII and IX of the Thirteenth Census Reports. A summary of the data for laundries in the United States as a whole is, however, given separately in Volume VIII, and a summary of the data for each state in Volume IX.

Summary for the United States.—Table 1 presents a summary of the statistics for the laundry industry for 1909. As the industry was not reported at prior censuses, there are no comparative statistics.

Table 1	Number or amount: 1909
Number of establishments.....	5,186
Persons engaged in the industry.....	124,214
Proprietors and firm members.....	5,580
Salaried employees.....	9,170
Wage earners (average number).....	109,484
Primary horsepower.....	123,477
Capital.....	\$68,935,226
Expenses.....	85,187,604
Services.....	53,007,747
Salaries.....	8,180,769
Wages.....	44,826,978
Materials.....	17,696,360
Miscellaneous.....	14,483,497
Amount received for work done.....	104,680,086

The 5,186 laundries included in the census of 1909 gave employment to 124,214 persons and paid out \$53,007,747 in salaries and wages, \$17,696,360 for materials, and \$14,483,497 for miscellaneous expenses. The expenditure for materials includes the cost of fuel, power, water, soap, starch, bluing, soda ash and other chemicals, boxes, tags, oil and waste for machinery, and similar commodities used in the operation of the laundries. The 5,186 establishments reported receipts for the work done during the year

amounting to \$104,680,086. In this industry there would, of course be no significance in a figure showing the difference between cost of materials and value of products, an item of much significance in the case of manufacturing industries.

Summary by states.—Table 2 summarizes the more important statistics by states, the states being arranged according to the receipts for work done.

The laundry business is usually local in character, and it naturally attains its greatest importance in the states containing the largest population, and in those where the proportions residing in urban communities are highest. To some extent, however, the rank of the states in the steam-laundry business is affected by differences in the relative importance of steam and hand laundries and still more by differences in the relative extent to which washing is done in the homes. New York, the most populous state, ranked first in the industry. There were 508 steam laundries reported for the state, and they gave employment to 12,578 wage earners, or 11.5 per cent of the total for the United States. The receipts for work done amounted to \$11,446,663, or 10.9 per cent of the total for the industry in the United States. Pennsylvania, which ranked second in population, however, was fourth in the steam-laundry industry, being outranked by Illinois and California.

Leaving California and Washington out of account, the 10 states ranking highest in the laundry industry in 1909, as measured by the amount received for work done, were the 10 which ranked the highest in population. California ranked twelfth and Washington thirtieth in population in 1910, but in the laundry industry these states held third and eighth places, respectively. While more than half of the population of both states resided in cities and other incorporated places of 2,500 inhabitants or more, the concentration in urban districts was much less than in a number of other states. The high rank of these two states in the laundry industry is therefore evidently due to local conditions and customs; it is probable that a much smaller proportion of the washing is done at home than in most other states, one reason for this being the difficulty of securing satisfactory domestic help. The higher prices charged by laundries in the Pacific and Mountain states also tend to increase the relative importance of the industry in these states as measured by the amount received for work done.

The rank of the states according to the average number of wage earners employed differs somewhat from their rank according to receipts for work done, partly because of the varying prices charged in different

states. With the exception of New Mexico, all the Pacific Coast and Mountain states rank higher in amount received for work done than in number of wage earners. For the majority of the other states the rank in number of wage earners is the same as or slightly higher than the rank in the amount received for work done. The 15 states ranking highest in the

laundry industry as measured by value of work done contained 59.2 per cent of the population of the United States. The amount received for laundry work in these states formed 74.3 per cent of the total receipts, and their laundries gave employment to 73.1 per cent of the total number of wage earners employed in the industry.

Table 2

STATE.	POPULATION: 1910				Number of establishments: 1909	WAGE EARNERS: 1909			AMOUNT RECEIVED FOR WORK DONE: 1909		
	Number.	Rank.	Per cent urban.	Per cent rural.		Average number.	Percent of total.	Rank.	Amount.	Per cent of total.	Rank.
United States.....	91,972,266	.....	46.3	53.7	5,186	109,484	100.0	.....	\$104,680,086	100.0	.....
New York.....	9,113,614	1	78.8	21.2	508	12,578	11.5	1	11,446,663	10.9	1
Illinois.....	5,638,691	3	61.7	38.3	448	9,705	8.9	2	10,049,445	9.6	2
California.....	2,377,549	12	61.8	38.2	321	8,038	7.3	3	9,541,795	9.1	3
Pennsylvania.....	7,665,111	2	60.4	39.6	385	9,639	8.8	4	8,331,834	8.0	4
Massachusetts.....	3,366,416	6	92.8	7.2	280	5,958	5.4	5	5,754,572	5.5	5
Ohio.....	4,767,121	4	55.9	44.1	253	5,893	5.4	6	5,388,954	5.1	6
Missouri.....	3,293,335	7	42.5	57.5	171	5,438	5.0	7	4,904,249	4.7	7
Washington.....	1,141,990	30	53.0	47.0	172	3,204	3.0	9	3,814,825	3.6	8
Michigan.....	2,810,173	8	47.2	52.8	219	3,729	3.4	8	3,261,841	3.1	9
Texas.....	3,896,542	5	24.1	75.9	127	3,073	2.8	10	3,220,315	3.1	10
Minnesota.....	2,075,708	19	41.0	59.0	158	2,916	2.7	12	2,855,738	2.7	11
New Jersey.....	2,637,167	11	75.2	24.8	112	2,984	2.7	11	2,779,277	2.7	12
Indiana.....	2,760,876	9	42.4	57.6	163	2,901	2.6	13	2,448,355	2.3	13
Iowa.....	2,224,771	15	30.6	69.4	181	2,123	1.9	15	2,063,451	2.0	14
Colorado.....	799,024	32	50.7	49.3	99	1,833	1.7	17	1,980,693	1.9	15
Wisconsin.....	2,333,860	13	43.0	57.0	147	2,014	1.8	10	1,840,327	1.8	16
Tennessee.....	2,184,789	17	20.2	79.8	63	2,149	2.0	14	1,643,407	1.6	17
Oregon.....	672,765	35	45.6	54.4	58	1,457	1.3	20	1,569,932	1.5	18
Kansas.....	1,690,949	22	29.2	70.8	138	1,490	1.4	19	1,485,967	1.4	19
Connecticut.....	1,114,756	31	89.7	10.3	95	1,441	1.3	21	1,416,122	1.3	20
Kentucky.....	2,289,005	14	24.3	75.7	73	1,554	1.4	18	1,208,811	1.2	21
Oklahoma.....	1,657,155	23	19.3	80.7	93	1,101	1.0	27	1,197,978	1.1	22
Nebraska.....	1,192,214	29	26.1	73.9	76	1,110	1.0	25	1,197,374	1.1	23
Rhode Island.....	542,610	38	96.7	3.3	53	1,076	1.0	28	1,019,404	1.0	24
Georgia.....	2,609,121	10	20.6	79.4	42	1,332	1.2	23	1,006,724	1.0	25
Virginia.....	2,061,612	20	23.1	76.9	57	1,351	1.2	22	1,003,191	1.0	26
Maryland.....	1,295,346	27	50.8	49.2	41	1,278	1.2	24	993,766	0.9	27
Montana.....	376,053	40	35.5	64.5	26	652	0.6	36	935,260	0.9	28
Alabama.....	2,138,093	18	17.3	82.7	38	1,108	1.0	26	909,130	0.9	29
Louisiana.....	1,656,388	24	30.0	70.0	25	1,036	0.9	29	852,021	0.8	30
District of Columbia.....	331,069	43	100.0	.....	17	993	0.9	30	795,999	0.8	31
Utah.....	373,351	41	46.3	53.7	22	738	0.7	34	794,091	0.8	32
Maine.....	742,371	34	51.4	48.6	78	816	0.7	31	736,367	0.7	33
Arkansas.....	1,574,449	25	12.9	87.1	45	741	0.7	33	684,036	0.7	34
West Virginia.....	1,221,119	28	18.7	81.3	43	679	0.6	35	581,865	0.6	35
North Carolina.....	2,206,287	16	14.4	85.6	43	812	0.7	32	559,949	0.5	36
North Dakota.....	577,056	37	11.0	89.0	34	434	0.4	40	548,175	0.5	37
New Hampshire.....	430,572	39	59.2	40.8	61	608	0.6	37	518,660	0.5	38
Florida.....	752,619	33	29.1	70.9	28	571	0.5	38	474,088	0.4	39
Mississippi.....	1,797,114	21	11.5	88.5	30	529	0.5	39	440,579	0.4	40
South Dakota.....	553,888	36	13.1	86.9	28	386	0.4	41	423,092	0.4	41
Idaho.....	325,594	45	21.5	78.5	24	357	0.3	43	394,226	0.4	42
Arizona.....	204,354	46	31.0	69.0	13	283	0.3	45	369,282	0.3	43
South Carolina.....	1,515,400	26	14.8	85.2	24	373	0.3	42	269,112	0.3	44
Vermont.....	358,956	42	47.5	52.5	32	299	0.3	44	243,753	0.2	45
Wyoming.....	145,965	48	29.6	70.4	14	171	0.2	47	216,847	0.2	46
Delaware.....	202,322	47	48.0	52.0	15	222	0.2	46	187,038	0.2	47
Nevada.....	81,875	49	16.3	83.7	5	105	0.1	49	165,037	0.2	48
New Mexico.....	327,301	44	14.2	85.8	8	146	0.1	48	156,419	0.2	49

Persons engaged in the operation of laundries.—Table 3 shows the number of persons engaged in the steam-laundry industry in 1909, classified according to occupational status and sex, and in the case of wage earners according to age. The table also shows the percentage of males and females in each class. It should be borne in mind 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.

There were 124,214 persons reported as engaged in the industry in 1909. This includes all classes of employees—collectors and delivery men, as well as the office force and workers in the laundry proper. Of the total number, 109,484, or 88.1 per cent, were wage earners, 8,579, or 6.9 per cent, proprietors and officials,

and 6,151, or 5 per cent, clerks and other subordinate salaried employees.

Table 3

CLASS.	PERSONS ENGAGED IN THE INDUSTRY: 1909			PER CENT OF TOTAL.	
	Total.	Male.	Female.	Male.	Female.
All classes.....	124,214	42,381	81,833	34.1	65.9
Proprietors and officials.....	8,579	8,065	514	94.0	6.0
Proprietors and firm members.....	5,660	5,212	348	93.7	6.3
Salaried officers of corporations.....	1,089	1,016	53	95.0	5.0
Superintendents and managers.....	1,950	1,837	113	94.2	5.8
Clerks.....	6,151	2,837	3,314	46.1	53.9
Wage earners (average number).....	109,484	81,479	28,005	28.8	71.2
16 years of age and over.....	108,541	81,211	27,330	28.8	71.2
Under 16 years of age.....	943	268	675	28.4	71.6

The laundry industry is one of the few covered by the census of manufactures in which the number of female employees exceeds the number of males. The 81,833 females employed in 1909 formed 65.9 per cent of the total number of persons engaged in the industry. Of the total number of wage earners, 71.2 per cent were females. Females also predominate in the clerical force, forming 53.9 per cent of the total number. There were 943 children (persons under 16 years of age) employed as wage earners, and of this number, 71.6 per cent were females. Men, however, predominate in the administrative force of the laundries.

The average number of wage earners for each state, as reported for the census of 1909, is given in Table 14. The distribution of the average number by sex and age is not shown for the individual states, but Table 14 gives such a distribution of the number employed on December 15, or the nearest representative day.

The greatest number of women (16 years of age or over), 9,164, is shown for New York. Illinois ranked second with 7,323, and Pennsylvania third with 7,048. The largest number of children (persons under 16 years of age), 197, was reported for Pennsylvania, and of these, 158 were females. There are seven states in which more than 4,000 female wage earners 16 years of age or over were employed.

Table 4 shows, in percentages, for each state in which more than 1,000 wage earners were employed, the distribution according to sex and age of the wage earners employed December 15, 1909, or the nearest representative day.

STATE.	PERCENTAGE OF TOTAL NUMBER OF WAGE EARNERS IN THE INDUSTRY: 1909				
	16 years of age and over.		Under 16 years of age.		
	Male.	Female.	Total.	Male.	Female.
United States.....	28.5	70.6	0.9	0.3	0.6
Alabama.....	29.9	68.4	1.7	0.8	0.9
California.....	39.6	60.3	0.1	(¹)	(¹)
Colorado.....	28.2	71.7	0.1	0.1	0.1
Connecticut.....	34.1	64.4	1.4	0.4	1.0
District of Columbia.....	26.8	73.1	0.1	0.1	0.1
Georgia.....	30.8	67.3	1.9	1.9	0.9
Illinois.....	24.6	74.7	0.7	0.1	0.6
Indiana.....	25.4	74.3	0.3	0.1	0.2
Iowa.....	26.3	73.1	0.6	0.5	0.1
Kansas.....	26.6	72.8	0.6	0.3	0.3
Kentucky.....	29.9	69.2	0.9	0.1	0.8
Louisiana.....	26.5	72.4	1.0	0.3	0.7
Maryland.....	24.7	71.0	4.3	0.7	3.6
Massachusetts.....	30.8	67.9	1.3	0.4	0.9
Michigan.....	22.9	76.3	0.8	0.1	0.7
Minnesota.....	20.0	79.9	(¹)	(¹)	0.4
Missouri.....	24.3	75.1	0.5	0.1	0.4
Nebraska.....	24.7	75.1	0.3	0.3	0.3
New Jersey.....	29.5	67.8	2.7	0.3	2.4
New York.....	29.4	70.3	0.3	0.1	0.2
Ohio.....	24.1	75.3	0.6	0.2	0.4
Oklahoma.....	32.6	67.3	0.1	0.1	0.4
Oregon.....	25.0	74.6	0.4	0.4	1.6
Pennsylvania.....	26.5	71.5	2.0	0.4	1.6
Rhode Island.....	39.1	58.9	2.0	0.5	1.5
Tennessee.....	27.2	71.7	1.1	0.6	0.5
Texas.....	36.2	62.4	1.4	0.7	0.7
Virginia.....	30.4	69.0	0.5	0.4	0.1
Washington.....	35.0	64.8	0.1	0.1	(¹)
Wisconsin.....	23.1	75.9	0.9	0.1	0.8

¹ Less than one-tenth of 1 per cent.

Females formed two-thirds or more of the wage earners in all but five of the states for which more than 1,000 wage earners were reported. The three adjoining states of Minnesota, Michigan, and Wisconsin show the largest proportion of females, the percentages being 79.9, 77, and 76.7, respectively. The smallest proportion, 60.3 per cent, is shown for California. The proportion of children under 16 was highest, 4.3 per cent, in Maryland.

Prevailing hours of labor.—In Table 5 the wage earners employed in the industry in the leading states have been classified according to the number of hours of labor per week prevailing in the establishments in which they were employed. In making this classification, the average number of wage earners employed during the year in each establishment is classified as a total according to the hours prevailing in that establishment, even though a few employees worked a greater or less number of hours.

STATE.	AVERAGE NUMBER OF WAGE EARNERS IN THE INDUSTRY: 1909							
	Total.	In establishments with prevailing hours—						
		48 and under.	Between 48 and 54.	54.	Between 54 and 60.	60.	Between 60 and 72.	72 and over.
United States.....	109,484	9,216	17,285	20,790	24,564	30,884	598	147
Alabama.....	1,108	35	57	192	142	682	.....	20
Arkansas.....	741	20	39	120	122	420	.....	64
California.....	8,038	1,470	1,270	2,301	616	2,241	178	89
Colorado.....	1,833	359	415	495	204	264	89	4
Connecticut.....	1,441	160	104	227	739	211	.....	.....
District of Columbia.....	993	130	222	205	245	190	.....	.....
Florida.....	571	40	25	103	15	449	.....	83
Georgia.....	1,332	40	25	4	274	910	.....	6
Illinois.....	9,705	510	1,550	1,594	2,073	4,032	.....	8
Indiana.....	2,901	80	105	440	921	1,257	.....	.....
Iowa.....	2,123	115	210	339	416	1,042	.....	1
Kansas.....	1,490	88	252	370	302	474	.....	4
Kentucky.....	1,554	259	542	166	170	408	.....	9
Louisiana.....	1,036	19	34	212	16	755	.....	1
Maine.....	816	49	56	66	184	460	.....	.....
Maryland.....	1,278	39	357	136	237	509	.....	.....
Massachusetts.....	5,958	806	1,075	708	3,077	292	.....	.....
Michigan.....	3,729	109	947	1,574	517	582	.....	.....
Minnesota.....	2,916	202	328	419	935	1,032	.....	.....
Mississippi.....	529	39	51	10	53	334	.....	42
Missouri.....	5,438	328	797	2,043	546	1,724	.....	.....
Montana.....	652	27	39	345	33	205	.....	.....
Nebraska.....	1,110	29	84	195	115	687	.....	.....
New Hampshire.....	608	18	58	63	291	178	.....	.....
New Jersey.....	2,984	658	452	317	456	1,075	.....	22
New York.....	12,578	831	2,269	2,095	3,809	3,551	22	1
North Carolina.....	812	13	4	48	39	703	.....	9
Ohio.....	5,893	694	818	1,681	1,134	1,257	6	3
Oklahoma.....	1,101	49	99	198	285	470	.....	.....
Oregon.....	1,457	37	214	534	464	203	.....	.....
Pennsylvania.....	9,639	564	2,980	1,082	2,891	2,122	.....	.....
Rhode Island.....	1,076	173	132	70	631	68	.....	2
Tennessee.....	2,149	120	338	521	444	731	.....	.....
Texas.....	3,073	60	42	197	294	2,446	34	.....
Utah.....	738	76	335	141	102	84	.....	.....
Virginia.....	1,351	97	126	60	228	804	30	6
Washington.....	3,264	134	317	417	610	1,774	.....	12
West Virginia.....	679	40	33	223	125	253	.....	.....
Wisconsin.....	2,014	119	289	462	505	636	.....	3

In the United States as a whole 43.2 per cent of the wage earners employed in steam laundries during 1909 were in establishments where the prevailing number of hours was 54 or less per week. Of the 7 groups shown in Table 5, the largest was that made up of the 36,884 wage earners in establishments where the prevailing hours were 60 per week, who constituted 33.7

per cent of the total number. Of the total number of wage earners employed in the industry, 82,238, or 75.1 per cent, were engaged in laundries in which the hours of employment ranged from 54 to 60, inclusive, per week, these being the most common hours in a majority of the states listed.

Wage earners employed, by months.—Table 6 gives the number of wage earners employed in the laundry industry on the 15th (or nearest representative day) of each month during the year 1909 for the 39 states in which 500 or more wage earners were employed during the year.

The largest number of wage earners reported for any month of 1909 was 114,539 in August, and the

smallest number, 103,746, in January, the minimum number forming 90.6 per cent of the maximum. The greatest number of wage earners is employed during the summer months, and the table shows that in 34 states the largest number was reported for either July, August, or September, while in 35 states the smallest number was shown for either January or February. Employment in the industry, however, is not subject to any great changes from season to season. It is probable that receipts for work done would show a greater variation from season to season than the number of employees, as adjustments in the working force can not be made to follow closely upon changes in the amount of laundry work available.

Table 6 WAGE EARNERS EMPLOYED IN THE INDUSTRY: 1909¹

STATE.	Average number during the year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
United States	108,484	103,746	103,937	104,970	106,422	108,149	111,313	114,211	114,539	113,738	111,500	110,479	110,805
Alabama.....	1,108	<i>903</i>	1,043	1,062	1,093	1,107	1,137	1,158	1,175	1,187	1,134	1,106	1,103
Arkansas.....	741	<i>681</i>	703	726	733	752	766	795	771	763	754	721	724
California.....	8,038	7,632	<i>7,560</i>	7,828	7,911	7,985	8,107	8,366	8,277	8,350	8,209	8,118	8,116
Colorado.....	1,833	1,695	<i>1,684</i>	1,707	1,756	1,763	1,844	1,990	2,046	1,962	1,855	1,850	1,835
Connecticut.....	1,441	1,350	<i>1,342</i>	1,343	1,363	1,399	1,497	1,564	1,547	1,503	1,485	1,461	1,451
District of Columbia.....	993	1,020	1,009	1,013	1,017	1,013	965	927	<i>916</i>	935	1,001	1,027	1,089
Florida.....	571	566	565	578	592	550	<i>542</i>	548	553	555	570	620	647
Georgia.....	1,332	1,292	<i>1,285</i>	1,303	1,318	1,325	1,342	1,366	1,387	1,366	1,351	1,342	1,323
Illinois.....	9,705	9,238	9,369	9,425	9,522	9,741	9,862	10,042	10,141	10,008	9,718	9,657	9,686
Indiana.....	2,901	2,789	2,777	2,786	2,807	2,872	2,984	2,959	2,985	2,969	2,949	2,952	2,973
Iowa.....	2,123	2,030	<i>2,021</i>	2,031	2,053	2,074	2,130	2,195	2,242	2,248	2,180	2,130	2,139
Kansas.....	1,490	<i>1,388</i>	1,383	1,401	1,440	1,449	1,499	1,549	1,558	1,562	1,551	1,556	1,539
Kentucky.....	1,554	<i>1,387</i>	1,395	1,419	1,547	1,576	1,611	1,658	1,649	1,628	1,617	1,575	1,593
Louisiana.....	1,036	1,010	1,029	1,030	<i>1,005</i>	1,026	1,042	1,070	1,047	1,055	1,035	1,022	1,058
Maine.....	816	<i>687</i>	701	699	764	775	851	984	1,016	911	826	778	789
Maryland.....	1,278	1,257	<i>1,252</i>	1,260	1,265	1,285	1,272	1,288	1,287	1,283	1,300	1,304	1,285
Massachusetts.....	5,958	5,071	<i>5,068</i>	5,077	5,734	5,839	6,039	6,220	6,136	6,235	6,113	6,006	6,096
Michigan.....	3,729	3,434	<i>3,423</i>	3,463	3,567	3,639	3,821	4,060	4,096	3,987	3,795	3,726	3,732
Minnesota.....	2,916	<i>2,715</i>	2,725	2,729	2,816	2,896	2,996	3,101	3,111	3,085	2,956	2,925	2,939
Mississippi.....	529	<i>496</i>	493	507	530	542	549	561	554	548	524	521	513
Missouri.....	5,438	5,199	<i>5,171</i>	5,235	5,275	5,281	5,525	5,641	5,689	5,652	5,556	5,522	5,505
Montana.....	652	608	<i>597</i>	610	631	629	663	697	710	698	667	654	660
Nebraska.....	1,110	<i>1,041</i>	1,050	1,061	1,074	1,080	1,114	1,143	1,168	1,162	1,148	1,135	1,140
New Hampshire.....	603	<i>536</i>	542	545	600	615	652	672	691	671	620	601	698
New Jersey.....	2,984	2,800	2,821	2,841	2,838	2,881	3,054	3,194	3,276	3,145	2,994	2,967	2,997
New York.....	12,578	12,129	12,160	<i>12,107</i>	12,155	12,312	12,702	13,010	13,046	12,899	12,782	12,735	12,897
North Carolina.....	812	<i>745</i>	754	750	785	815	852	877	883	871	822	786	798
Ohio.....	5,893	5,641	<i>5,626</i>	5,794	5,800	5,897	6,043	6,054	5,976	6,069	5,958	5,912	5,946
Oklahoma.....	1,101	<i>933</i>	995	1,022	1,040	1,064	1,099	1,160	1,167	1,179	1,171	1,151	1,167
Oregon.....	1,457	<i>1,371</i>	1,374	1,392	1,411	1,439	1,482	1,504	1,499	1,497	1,512	1,505	1,497
Pennsylvania.....	9,639	<i>9,531</i>	9,557	9,380	9,474	9,630	9,771	9,756	9,716	9,820	9,849	9,802	9,782
Rhode Island.....	1,076	1,041	<i>1,010</i>	1,041	1,047	1,070	1,083	1,105	1,101	1,104	1,091	1,095	1,095
Tennessee.....	2,140	2,041	<i>2,039</i>	2,059	2,130	2,117	2,196	2,236	2,246	2,183	2,189	2,171	2,177
Texas.....	3,073	2,791	2,847	2,891	2,976	3,043	3,160	3,232	3,284	3,277	3,172	3,112	3,060
Utah.....	738	699	<i>690</i>	690	693	700	740	814	838	829	742	742	744
Virginia.....	1,351	1,283	<i>1,275</i>	1,279	1,314	1,370	1,390	1,412	1,401	1,395	1,376	1,361	1,354
Washington.....	3,284	2,946	2,957	2,986	3,066	3,169	3,330	3,537	3,663	3,579	3,391	3,282	3,229
West Virginia.....	679	<i>653</i>	644	644	654	684	696	713	708	712	689	677	694
Wisconsin.....	2,014	1,921	<i>1,917</i>	1,936	1,937	1,987	2,035	2,136	2,138	2,105	2,030	2,009	2,018

¹ The month of maximum employment for each state is indicated by boldface figures and that of minimum employment by italic figures.

Character of ownership.—Table 7 presents data with respect to the character of ownership of the laundries in the various states.

The most important distinction shown is that between corporate and all other forms of ownership. Of the total number of laundries covered by the census, about 22 per cent were under corporate ownership. While corporations thus controlled less than one-fourth of the total number of establishments, they gave employment to about one-half of the wage earners and reported about one-half of the total amount received for work done during the census year. Establishments operated by individuals were second in importance to

those operated by corporations, comprising 53.4 per cent of the total number of laundries, giving employment to 29.9 per cent of the wage earners, and reporting 29 per cent of the total amount received for work done. Partnerships or firms operated 24.3 per cent of the laundries, these establishments giving employment to 19.4 per cent of the total number of wage earners, and reporting 19.3 per cent of the total amount received for work done. From the standpoint of number of wage earners employed, the corporate was the most important form of ownership in all but 18 of the states, and the individual was the most important in 14 states.

STEAM LAUNDRIES.

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Table 7

STATE.	STEAM LAUNDRIES: 1909											
	Number of establishments owned by—			Wage earners in establishments owned by—			Cost of materials in establishments owned by—			Amount received for work done in establishments owned by—		
	Individu-als.	Firms.	Corpora-tions.	Individu-als.	Firms.	Corpora-tions.	Individu-als.	Firms.	Corpora-tions.	Individu-als.	Firms.	Corpora-tions.
United States.....	2,770	1,258	1,158	32,754	21,245	55,485	\$5,127,488	\$3,351,973	\$9,216,899	\$30,320,840	\$20,247,268	\$64,111,978
Alabama.....	15	5	18	237	57	814	28,850	8,597	109,201	171,699	59,944	677,287
Arizona.....	7	2	4	156	(X)	128	49,610	(X)	24,543	205,685	(X)	163,299
Arkansas.....	22	14	9	226	243	272	39,754	43,366	39,686	201,684	225,556	256,796
California.....	146	66	109	1,293	1,105	5,640	243,503	215,088	1,133,523	1,008,513	1,393,952	6,029,330
Colorado.....	45	28	26	500	280	1,053	75,211	44,893	170,210	311,899	311,899	1,118,387
Connecticut.....	53	23	19	630	246	565	115,480	40,917	89,669	616,449	254,560	545,113
Delaware.....	9	3	3	110	60	52	16,988	7,030	5,615	90,258	49,280	47,500
District of Columbia.....	8	2	7	423	(X)	570	60,541	(X)	75,715	312,185	(X)	453,814
Florida.....	13	7	8	132	109	330	16,821	16,854	43,546	136,793	96,114	241,181
Georgia.....	15	10	17	275	182	875	28,159	23,515	139,980	139,983	136,631	680,110
Idaho.....	13	9	2	164	193	(X)	32,284	62,595	(X)	163,488	230,738	(X)
Illinois.....	250	100	98	2,822	1,806	5,077	515,969	285,444	920,412	2,882,560	1,784,263	5,382,622
Indiana.....	90	41	32	1,169	544	1,188	137,352	65,805	104,961	975,655	487,869	1,004,831
Iowa.....	122	39	20	904	570	649	191,591	91,549	145,631	909,688	529,575	624,183
Kansas.....	96	34	8	807	423	260	144,527	105,370	35,837	779,994	444,959	261,014
Kentucky.....	30	17	26	548	259	747	65,843	37,584	98,802	425,858	206,960	575,993
Louisiana.....	11	3	11	334	32	670	31,255	3,072	98,001	246,076	18,620	587,325
Maine.....	54	15	9	482	176	158	61,626	24,413	29,622	431,109	164,191	141,087
Maryland.....	19	11	11	518	164	596	53,467	15,108	87,120	391,340	125,672	476,754
Massachusetts.....	168	67	45	2,463	1,359	2,136	405,411	197,548	300,886	2,356,819	1,289,320	2,108,433
Michigan.....	137	49	33	1,034	903	1,702	184,248	114,755	322,783	882,209	790,353	1,589,279
Minnesota.....	99	35	24	1,091	585	1,240	202,976	99,190	212,188	1,024,675	583,597	1,237,526
Mississippi.....	14	9	7	177	204	148	26,083	33,581	21,309	135,466	182,189	122,484
Missouri.....	62	40	69	720	677	4,041	104,031	90,431	697,685	666,104	625,370	3,612,775
Montana.....	8	7	11	151	103	398	37,662	25,456	91,310	203,398	153,979	577,883
Nabraska.....	43	19	14	390	266	454	96,947	44,713	113,900	406,274	285,692	505,408
Nevada.....	1	1	4	(X)	105	(X)	(X)	(X)	(X)	26,918	(X)	166,037
New Hampshire.....	43	18	13	417	191	101	53,491	26,536	270,998	343,754	174,908	1,534,502
New Jersey.....	62	18	32	810	472	1,702	118,462	50,401	270,998	812,794	431,981	1,534,502
New Mexico.....	4	1	3	45	(X)	101	7,151	(X)	13,330	45,898	(X)	110,551
New York.....	292	105	111	3,442	2,141	6,995	483,535	349,595	1,023,573	3,170,473	1,981,643	6,294,542
North Carolina.....	18	12	13	362	137	313	48,482	19,197	40,186	228,295	104,128	227,526
North Dakota.....	20	9	5	201	124	109	48,791	28,542	25,079	242,880	171,470	133,825
Ohio.....	125	69	59	1,505	1,053	3,335	209,706	171,929	490,057	1,255,180	951,020	3,182,754
Oklahoma.....	47	27	19	403	315	383	83,050	55,020	62,609	468,325	345,163	354,490
Oregon.....	20	16	22	245	167	1,045	36,174	25,679	201,740	213,089	187,790	1,169,103
Pennsylvania.....	218	100	67	3,430	2,057	4,152	450,220	337,217	662,080	2,853,064	1,774,912	3,703,858
Rhode Island.....	28	20	5	450	223	403	66,174	53,021	39,248	388,068	229,837	401,499
South Carolina.....	8	8	8	75	130	168	10,552	16,834	24,379	98,975	90,142	119,995
South Dakota.....	16	8	4	126	158	102	26,799	37,911	17,060	144,933	178,195	99,964
Tennessee.....	22	22	19	408	831	910	45,165	103,981	148,545	272,739	663,876	706,792
Texas.....	50	41	36	721	847	1,505	108,817	112,827	249,777	688,475	866,906	1,664,934
Utah.....	10	3	9	85	11	642	15,067	2,533	125,441	78,813	11,250	704,028
Vermont.....	27	5	5	215	84	101	21,826	10,391	169,383	74,370	74,370	321,916
Virginia.....	28	17	12	588	306	397	72,497	43,472	57,128	412,251	269,624	321,916
Washington.....	86	47	39	877	543	1,844	144,784	96,782	304,979	656,631	659,610	2,198,575
West Virginia.....	14	11	18	177	109	393	32,315	13,615	56,127	90,337	353,835	353,835
Wisconsin.....	77	38	32	639	437	938	117,733	64,013	150,161	568,539	412,522	861,246
Wyoming.....	6	7	1	44	127	(X)	13,242	24,696	(X)	62,980	153,897	(X)

NOTE.—In some states, in order to avoid disclosing the returns for individual establishments, the figures for one group have been consolidated with those for establishments under some other form of ownership. In such cases an (X) is placed in the column from which the figures have been omitted and the figures for the group with which they have been combined are printed in italics. The figures for corporations include those for the few comparatively unimportant establishments operated by cooperative associations or under other miscellaneous forms of ownership.

Steam laundries classified according to size.—Table 8 presents statistics for laundries grouped according to the amount received for the work done.

Table 8	Number of establishments.	Wage earners (average number).	Cost of materials.	Amount received for work done.
AMOUNT RECEIVED PER ESTABLISHMENT FOR WORK DONE.				
Total.....	5,186	109,484	\$17,696,360	\$104,880,086
Less than \$5,000.....	1,341	4,268	689,566	3,779,904
\$5,000 and less than \$20,000.....	2,359	27,522	4,215,896	25,027,052
\$20,000 and less than \$100,000.....	1,346	56,605	9,173,358	54,383,064
\$100,000 and over.....	140	21,089	3,617,540	21,489,526
Percent of total.....	100.0	100.0	100.0	100.0
Less than \$5,000.....	25.9	3.9	3.9	3.6
\$5,000 and less than \$20,000.....	45.5	25.1	23.8	23.9
\$20,000 and less than \$100,000.....	26.0	51.7	51.8	52.0
\$100,000 and over.....	2.7	19.3	20.4	20.5

Of the 5,186 laundries covered by the census of 1909 none reported receipts amounting to as much as \$1,000,000, and only 140, or 2.7 per cent, reported receipts amounting to \$100,000 or over. While these large establishments represented a very small proportion of the total number, they reported 20.4 per cent of the total amount received for work done. On the other hand, the small establishments, those that reported less than \$20,000 as received for work done during the year, represented 71.4 per cent of the total number, while their receipts formed 27.5 per cent of the total receipts for all laundries.

Table 9 gives a classification of the laundries in each state according to the average number of wage earners.

Table 9

STATE.	TOTAL.		STEAM LAUNDRIES EMPLOYING IN 1909—																		
	Estab- lish- ments.	Wage earn- ers (average num- ber).	No wage earn- ers.	1 to 5 wage earn- ers.	6 to 20 wage earn- ers.	21 to 50 wage earn- ers.	51 to 100 wage earn- ers.	101 to 250 wage earn- ers.	251 to 500 wage earn- ers.	501 to 1,000 wage earn- ers.	1 to 100		101 to 250		251 to 500		501 to 1,000				
			Estab- lish- ments.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.	Estab- lish- ments.	Wage earn- ers.
United States	5,186	109,484	59	1,434	4,655	2,200	25,707	1,000	32,719	350	24,244	128	17,569	14	4,103	1	587				
Alabama.....	38	1,108		3	8	19	231	9	361	6	406	1	102								
Arkansas.....	45	741		14	58	20	199	8	274	3	210										
California.....	321	8,038	9	85	254	120	1,353	58	1,976	32	2,197	17	2,253								
Colorado.....	99	1,833	3	29	97	40	435	18	603	9	698										
Connecticut.....	95	1,441		29	95	43	534	22	742	1	70										
District of Columbia.....	17	993	1	2	2	3	50	2	72	5	386	4	483								
Florida.....	28	571		9	30	8	101	8	269	3	171										
Georgia.....	42	1,332	1	3	11	17	211	15	456	2	175	4	479								
Illinois.....	448	9,705	4	119	390	190	2,177	96	3,234	28	1,861	9	1,204	1	252	1	587				
Indiana.....	163	2,901		33	120	87	932	31	999	11	728	1	102								
Iowa.....	181	2,123	5	78	227	70	798	21	659	7	439										
Kansas.....	138	1,490	4	49	142	68	745	15	457	2	148										
Kentucky.....	73	1,554		6	20	42	534	20	687	5	309										
Louisiana.....	25	1,036		4	16	8	96	6	213	4	265										
Maine.....	78	816	1	34	109	35	303	7	221			3	446								
Maryland.....	41	1,278		7	24	16	177	11	389	5	380	2	308								
Massachusetts.....	269	5,958	1	68	234	127	1,465	55	1,700	20	1,424	9	1,135								
Michigan.....	219	3,729	6	95	272	68	806	35	1,290	10	658	5	773								
Minnesota.....	153	2,916	2	51	155	66	800	24	682	14	907	1	112								
Mississippi.....	30	529		2	4	19	241	9	284												
Missouri.....	171	5,438	3	33	83	64	898	37	1,189	24	1,716	9	1,314	1	328						
Montana.....	26	652		9	32	15	215	9	286	2	151										
Nebraska.....	76	1,110	4	30	89	25	330	13	371	4	320										
New Hampshire.....	61	608		22	71	35	301	3	90	1	56										
New Jersey.....	112	2,984	1	22	71	49	580	25	782	10	618	4	620	1	313						
New York.....	508	12,578	4	165	531	199	2,297	73	2,500	46	3,248	16	2,426	5	1,576						
North Carolina.....	43	812		9	32	23	302	9	325	2	153										
Ohio.....	253	5,893	1	68	214	108	1,193	52	1,698	12	961	10	1,302	2	525						
Oklahoma.....	93	1,101		23	64	55	589	15	448												
Oregon.....	58	1,457		14	54	25	295	10	358	7	513	2	237								
Pennsylvania.....	355	9,629	1	92	314	158	1,886	92	2,905	23	1,465	17	2,502	2	567						
Rhode Island.....	53	1,076		19	59	18	101	10	302	4	270										
Tennessee.....	63	2,149		8	28	26	284	14	416	11	749	3	304	1	278						
Texas.....	127	3,073		28	94	47	588	40	1,295	10	820	2	276								
Utah.....	22	738	1	8	22	5	77	4	168	3	207										
Virginia.....	57	1,351		3	10	30	335	17	543	6	302	1	101								
Washington.....	172	3,264	4	49	154	75	889	29	966	10	632	5	623								
West Virginia.....	43	670	1	6	23	23	261	12	329	1	66										
Wisconsin.....	147	2,014	1	53	165	64	771	24	742	5	336										

Of the 5,186 laundries reported, there were 59 in which no wage earners were employed. Some of these small establishments were operated in accordance with a cooperative arrangement under which two or more persons did all of the work and shared the profits. There were only 143 laundries in which more than 100 wage earners were employed. Of the 8 groups of establishments, the largest consisted of those with from 6 to 20 wage earners, but the greatest number of wage earners was reported for the 1,000 establishments in which from 21 to 50 wage earners were employed.

Expenses of steam laundries.—As stated in the Introduction, the census figures for expenses do not purport to represent the total cost of the operation of the laundries, since they take no account of depreciation, and consequently they can not properly be used for determining profits. Facts of interest can be brought out, however, concerning the relative importance of the different classes of expenses which were reported. Table 1 shows the total expenses reported by laundries to have been \$85,187,604, divided as follows:

Materials, \$17,696,360, or 20.8 per cent; services, including all salaries and wages, \$53,007,747, or 62.2 per cent; and miscellaneous expenses, made up of advertising, ordinary repairs of buildings and machinery, rent, insurance, keep of animals and repair of vehicles, expenses of agencies, and other sundries, \$14,483,497, or 17 per cent.

Table 10 shows for each state the percentage of the total expenses represented, respectively, by salaries, wages, cost of materials, and miscellaneous expenses.

Payments for salaries and wages together comprised more than three-fifths of the total expenses of the operation of laundries, the percentage of such expenses in the different states ranging from 50.5 per cent in North Dakota to 68.2 per cent in Montana. The cost of materials also forms an important item of expense, ranging from 16 per cent of the total in New Mexico to 29 per cent in Idaho. The percentages for miscellaneous expenses range from 9.4 in Idaho to 25.5 in Maryland.

STEAM LAUNDRIES.

Table 10

STATE.	PER CENT OF TOTAL EXPENSES REPORTED: 1909				STATE.	PER CENT OF TOTAL EXPENSES REPORTED: 1909			
	Salaries.	Wages.	Materials.	Miscellaneous ex-penses.		Salaries.	Wages.	Materials.	Miscellaneous ex-penses.
United States	9.6	52.6	20.8	17.0	Montana.....	8.4	59.8	20.2	11.6
Alabama.....	16.0	43.5	18.6	21.9	Nebraska.....	12.4	46.2	27.0	14.4
Arizona.....	5.4	50.6	24.5	19.6	Nevada.....	10.6	54.7	17.9	16.8
Arkansas.....	8.6	50.8	23.5	16.0	New Hampshire.....	2.5	58.9	21.1	17.4
California.....	9.7	54.7	19.7	16.0	New Jersey.....	9.6	54.2	20.1	16.1
Colorado.....	9.4	56.7	18.2	15.7	New Mexico.....	9.7	50.8	16.0	23.5
Connecticut.....	9.1	53.7	22.6	14.6	New York.....	9.2	55.0	19.6	16.3
Delaware.....	17.4	48.1	19.8	14.7	North Carolina.....	12.3	48.5	24.7	14.5
District of Columbia.....	10.4	50.7	18.4	20.5	North Dakota.....	4.3	45.5	24.8	24.7
Florida.....	9.7	52.9	20.8	16.6	Ohio.....	11.6	51.1	19.7	17.7
Georgia.....	15.8	46.2	23.0	14.9	Oklahoma.....	8.2	52.6	21.6	17.7
Idaho.....	6.9	54.7	23.0	9.4	Oregon.....	12.8	54.7	21.0	11.5
Illinois.....	8.7	52.4	20.9	18.0	Pennsylvania.....	10.0	51.1	21.2	17.7
Indiana.....	9.0	52.7	19.2	18.2	Rhode Island.....	7.3	54.8	18.8	19.0
Iowa.....	6.6	49.9	25.5	17.0	South Carolina.....	14.6	42.1	24.9	18.4
Kansas.....	6.1	51.2	25.9	16.8	South Dakota.....	7.3	53.6	26.1	15.0
Kentucky.....	10.3	53.7	20.9	15.2	Tennessee.....	10.3	50.2	22.2	17.5
Louisiana.....	12.1	53.6	19.5	14.8	Texas.....	9.6	49.2	17.9	22.9
Maine.....	6.8	55.2	21.4	16.6	Utah.....	10.6	50.1	20.9	18.4
Maryland.....	14.1	41.8	18.6	25.5	Vermont.....	1.3	65.5	20.7	11.9
Massachusetts.....	7.1	54.4	19.0	19.4	Virginia.....	11.4	52.7	22.0	13.9
Michigan.....	10.6	51.2	24.0	14.3	Washington.....	9.0	57.7	17.9	15.3
Minnesota.....	9.5	51.0	23.1	16.4	West Virginia.....	11.8	52.5	22.1	13.6
Mississippi.....	12.2	51.2	25.4	11.1	Wisconsin.....	8.8	51.3	23.1	16.7
Missouri.....	10.3	51.3	21.4	17.1	Wyoming.....	7.0	52.8	25.6	14.6

Engines and power.—The statistics of power used in laundries are shown by states in Table 11, which table also gives the quantity of the different kinds of fuel reported as consumed in the industry.

Table 11

STATE.	Number of establishments reporting.	Total horsepower.	PRIMARY HORSEPOWER.						ELECTRIC HORSEPOWER.		FUEL USED.					
			Owned by establishments reporting.				Rented.		Total, rented and generated by establishment reporting.	Generated in the establishment reporting.	Coal.		Coke (short tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
			Total.	Steam engines.	Gas engines.	Water wheels and motors.	Elec-tric.	Other.			Anthra-cite (long tons).	Bitumi-nous (short tons).				
United States	5,186	123,477	109,870	105,272	4,073	525	11,157	2,450	23,918	12,759	178,640	886,734	14,785	94,723	373,586	2,729,324
Alabama.....	38	1,041	838	834	4		203		293	90		14,317	1,216	360	48	3,006
Arizona.....	13	298	283	283			15		15		620	1,357		1,282	3,782	1,000
Arkansas.....	46	900	855	837	18		30	15	192	162		9,091	6	1,082	138	129,582
California.....	321	8,061	7,679	7,504	15	160	1,224	58	1,700	476	222	2,640	19	3,496	270,910	50,267
Colorado.....	99	1,443	1,443	1,423		15	272	180	278	6	428	25,685		20	65	7,433
Connecticut.....	95	1,852	1,695	1,695			135	22	256	121	3,492	10,448	11	39	101	12,249
Delaware.....	15	235	215	215			20		20		12	2,836	31		5	1,060
District of Columbia.....	17	998	926	926			32	40	254	222	1,500	7,003	961		4	1,253
Florida.....	28	628	478	467	9		43	9	43			1,265		7,820	244	1,417
Georgia.....	42	1,180	1,101	1,101			76	3	156	80	310	12,279	204	4,334	212	1,695
Idaho.....	24	489	379	377	2		110		133	23		4,680		1,498	51	718
Illinois.....	448	10,780	9,680	9,494	171	15	1,044	66	1,986	942	12,854	126,068	551	89	2,172	47,655
Indiana.....	163	3,746	3,303	3,240	68	5	318	125	389	71	201	44,364	183	108	248	22,073
Iowa.....	181	2,941	2,668	2,557	111		273		286	13	812	44,733	36	264	710	10,739
Kansas.....	138	1,958	1,781	1,825	266		107	70	150	43		12,180			1,566	364,702
Kentucky.....	73	2,139	2,070	2,068	2		69		187	118		24,121		52	22	13,507
Louisiana.....	25	1,109	1,061	1,049	12		48		479	431	1,534	5,940		2,144	810	58,574
Maine.....	78	1,085	856	811	10	35	224	5	200	36	2,236	6,163	17	502	74	16,264
Maryland.....	41	1,091	1,023	1,019	4		8	60	102	94	1,067	10,390		7	29	4,089
Massachusetts.....	280	6,802	5,702	5,514	78	110	666	434	4,079	3,413	7,051	37,423	2,211	167	57	30,452
Michigan.....	219	4,071	3,638	3,537	100	1	430	3	874	444	854	43,090	361	2,041	640	14,981
Minnesota.....	158	2,919	2,610	2,530	80		304	5	713	469	2,287	28,131	252	4,248	424	10,832
Mississippi.....	30	821	765	765			36	20	36			7,048		3,184	106	366
Missouri.....	171	5,727	5,577	5,288	289		150		609	459	676	52,650	10	224	26,126	207,828
Montana.....	26	851	639	639			212		250	38	326	9,979		1,300	46	2,905
Nebraska.....	76	1,510	1,354	1,282	72		156		159	3		17,554	28		649	0,046
Nevada.....	5	149	149	149								520		880	1,244	
New Hampshire.....	61	988	881	825	7	29	82	45	82		470	4,632	223	79	21	2,560
New Jersey.....	112	3,917	3,828	3,794	29	5	63	26	633	590	25,969	4,873		5	1,921	15,974
New Mexico.....	8	146	89	89			57		57			1,690			31	33
New York.....	508	12,637	10,208	9,614	528	66	1,437	992	2,437	1,000	63,770	29,547	2,842	796	618	106,760
North Carolina.....	43	1,000	867	867			133		143	10		8,872		2,497	101	1,468
North Dakota.....	34	900	500	485	15		106		106		161	5,888		1,767	180	1,840
Ohio.....	263	7,431	7,022	6,235	737	50	401	8	1,739	1,338	398	59,799	77	26	73	640,446
Oklahoma.....	93	1,484	1,248	1,195	53		231	5	239	8	696	9,377		393	1,340	224,175
Oregon.....	58	1,585	1,486	1,400	70	10	96	3	268	172	11	729		11,753	21,888	2,732
Pennsylvania.....	385	10,730	10,111	9,124	987		549	70	1,313	764	48,729	42,139	444	71	166	433,028
Rhode Island.....	53	1,368	1,275	1,252	23		20	73	65	45	1,099	8,031	50	71	25	2,927
South Carolina.....	24	691	540	540			51		105	54		4,575	50	1,095	48	538
South Dakota.....	28	619	396	360	36		123		123		19	6,265		1	215	5,236
Tennessee.....	63	1,863	1,802	1,797	5		61		379	318		29,395	313	12	94	9,168
Texas.....	127	3,195	2,822	2,865	57		263	10	387	124	4	41,990	53	4,275	17,410	67,080
Utah.....	22	969	927	927			42		42		257	8,978			18	272
Vermont.....	32	849	296	293	11	22	43	10	43		313	2,225	24	218	63	1,070
Virginia.....	57	1,199	1,048	1,031	17		151		166	15	84	12,909	2,515	38	38	7,215
Washington.....	172	3,084	2,418	2,392	24	2	594	72	787	193	8	10,279	1,883	34,697	17,499	14,765
West Virginia.....	43	1,648	902	762	150		131	15	160	29		3,369				145,061
Wisconsin.....	147	2,373	2,137	2,104	33		220	16	322	102	170	25,349	214	1,772	366	9,073
Wyoming.....	14	319	221	221			98		98			3,865		10	32	632

The total primary power used in laundries amounted to 123,477 horsepower. Steam was the most important kind of power reported, the power of steam engines amounting to 105,272 horsepower and forming 85.3 per cent of the total primary power used in the industry. Rented electric power (motors run by purchased current) was next in importance, with 11,157 horsepower, or 9 per cent of the total. This form of power was used to some extent by laundries in all of the states except Nevada. In a large majority of the states electric motors were also used for the distribution of power by means of electric current generated in the same establishment. The states which ranked highest with respect to the total primary power used were New York, Illinois, Pennsylvania, California, and Ohio, the largest amount, 12,637 horsepower, being reported for New York.

Fuel consumed.—Closely related to the question of the kind of power employed in laundries is that of the fuel consumed in generating this power, or otherwise used in the industry. Fuel is one of the important items of expense in the conduct of a laundry. Table 11 shows that coal was the principal class of fuel used, the laundries consuming 1,065,374 tons during 1909. Oil and gas were also used to a considerable extent, by far the largest quantity of oil being consumed in California and the largest quantity of gas in Ohio.

Laundries in cities.—Laundries are naturally located in places where a considerable local population is to be served. All of the establishments returned at the

census of 1909 were in cities or in towns of considerable size. Table 12 shows the more important statistics of laundries located in cities and towns of 10,000 inhabitants or over in comparison with those located outside such places.

	Total.	In cities having a population of 10,000 or over.		In districts outside of cities having a population of 10,000 or over.	
		Number or amount.	Per cent of total.	Number or amount.	Per cent of total.
Number of establishments..	5,186	3,104	59.9	2,082	40.1
Total number of persons engaged in the industry...	124,214	103,503	83.3	20,711	16.7
Wage earners (average number).....	109,484	92,233	84.2	17,251	15.8
Wages.....	\$44,820,978	\$38,274,513	85.4	\$6,546,465	14.6
Amount received for work done.....	\$104,680,086	\$88,428,911	84.5	\$16,251,175	15.5

This table shows that 59.9 per cent of the total number of laundries reported were located in cities having a population of 10,000 or over. These establishments employed 83.3 per cent of the total number of persons reported as engaged in the industry, and reported 84.5 per cent of the total receipts for work done.

Data for each city having 10,000 inhabitants or over in 1910, so far as they can be presented without disclosing the operations of individual establishments, are given in Table 13.

STATISTICS FOR CITIES WITH A POPULATION OF 10,000 OR OVER: 1909.

STATE AND CITY.	Number of establishments.	Persons engaged in the industry.	Wage earners (average number).	Wages.	Amount received for work done.	STATE AND CITY.	Number of establishments.	Persons engaged in the industry.	Wage earners (average number).	Wages.	Amount received for work done.
Total for 557 cities.....	3,104	103,503	92,233	\$38,274,513	\$88,428,911						
ALABAMA:						FLORIDA:					
Birmingham.....	11	634	608	217,031	521,761	Jacksonville.....	6	248	220	\$62,073	\$167,726
Mobile.....	4	101	162	44,002	120,183	Pensacola.....	3	86	78	18,803	46,067
Montgomery.....	3	124	106	26,614	90,663	Tampa.....	4	130	120	62,932	138,465
ARIZONA:						GEORGIA:					
Phoenix.....	3	90	82	38,038	97,077	Atlanta.....	10	775	663	175,680	515,816
ARKANSAS:						Macon.....	3	120	111	27,896	69,275
Fort Smith.....	3	98	86	31,541	79,151	Savannah.....	4	222	199	79,865	157,569
Hot Springs.....	3	105	93	39,280	106,600	IDAHO:					
Little Rock.....	6	232	262	103,949	253,413	Boise.....	3	81	74	37,000	87,623
CALIFORNIA:						ILLINOIS:					
Alameda.....	9	105	89	44,168	109,066	Aurora.....	5	105	93	41,496	78,784
Berkeley.....	5	102	90	47,934	103,733	Bloomington.....	4	145	133	51,766	127,380
Eureka.....	4	59	49	26,936	65,667	Champaign.....	3	44	34	12,482	27,328
Fresno.....	4	98	93	67,300	130,661	Chicago.....	226	7,321	6,601	3,133,790	7,108,126
Long Beach.....	3	93	83	37,490	85,785	Danville.....	3	116	102	37,111	109,439
Los Angeles.....	31	2,385	2,209	1,201,049	2,364,051	Decatur.....	6	136	120	44,496	97,256
Oakland.....	41	993	845	468,218	1,066,514	East St. Louis.....	3	91	70	31,159	86,780
Pasadena.....	3	210	177	99,257	225,901	Elgin.....	3	63	55	24,681	53,922
Sacramento.....	10	293	259	155,511	333,755	Evanston.....	7	148	133	64,112	164,058
San Diego.....	8	251	230	102,873	226,907	Galesburg.....	4	88	78	30,795	64,543
San Francisco.....	87	2,257	2,001	1,266,299	2,693,235	Jacksonville.....	3	45	38	10,572	32,060
San Jose.....	7	200	170	103,665	193,781	Joliet.....	4	79	67	28,860	85,978
Santa Barbara.....	4	61	54	33,235	60,731	Moline.....	5	71	59	24,930	65,500
Stockton.....	7	173	160	82,235	167,149	Peoria.....	7	295	268	104,084	239,158
COLORADO:						Quincy.....	5	185	161	37,449	117,317
Colorado Springs.....	4	197	185	90,045	177,973	Rock Island.....	5	62	46	19,843	53,038
Denver.....	36	1,174	1,049	528,889	1,172,363	Rockford.....	8	160	145	46,419	118,060
Pueblo.....	5	182	166	76,473	144,073	Springfield.....	6	275	252	89,816	227,866
CONNECTICUT:						Waukegan.....	3	52	47	21,470	44,985
Bridgeport.....	7	166	150	59,451	156,031	INDIANA:					
Danbury.....	4	80	71	30,505	66,676	Evansville.....	7	304	280	93,093	208,368
Hartford.....	12	278	243	110,903	262,916	Fort Wayne.....	3	133	122	46,483	107,881
Meriden.....	4	64	58	23,796	55,460	Hammond.....	3	51	46	20,684	54,088
New Haven.....	15	318	282	121,627	276,926	Indianapolis.....	23	973	883	319,668	748,258
New London.....	5	65	60	13,816	38,854	Kokomo.....	3	37	33	12,450	23,230
Norwich.....	3	56	50	18,039	59,671	Lafayette.....	3	70	61	22,189	61,406
Stamford.....	4	65	59	18,527	49,187	Logansport.....	3	53	73	25,902	58,235
Waterbury.....	7	111	97	38,317	87,941	Marion.....	3	80	39	15,172	46,609
DELAWARE:						Michigan City.....	3	44	40	12,357	39,327
Wilmington.....	11	257	201	65,393	164,960	Muncie.....	3	65	62	21,560	48,200
DISTRICT OF COLUMBIA:						Richmond.....	4	62	54	15,860	44,742
Washington.....	17	1,096	993	347,793	795,999	South Bend.....	6	162	146	63,941	114,844
						Terre Haute.....	5	160	138	62,565	119,012
						Vincennes.....	3	64	55	15,680	42,210

¹ Includes the cities shown in note on page 896, with establishments as there indicated, statistics for which can not be shown separately without disclosing individual operations.

STEAM LAUNDRIES.

STATISTICS FOR CITIES WITH A POPULATION OF 10,000 OR OVER: 1909—Continued.

Table 13—Continued.											
STATE AND CITY.	Number of establishments.	Persons engaged in the industry.	Wage earners (average number).	Wages.	Amount received for work done.	STATE AND CITY.	Number of establishments.	Persons engaged in the industry.	Wage earners (average number).	Wages.	Amount received for work done.
IOWA:						NEW JERSEY—Continued.					
Burlington.....	3	76	60	\$23,495	\$54,581	Jersey City.....	17	871	788	\$272,051	\$681,132
Cedar Rapids.....	8	140	117	36,614	112,250	Newark.....	17	470	412	186,111	419,293
Council Bluffs.....	3	150	138	44,924	110,984	Orange.....	3	126	115	60,726	106,590
Davenport.....	8	154	139	51,756	128,561	Passaic.....	4	148	140	51,438	85,760
Des Moines.....	15	388	355	158,573	347,711	Paterson.....	6	123	104	47,109	117,532
Dubuque.....	5	76	68	19,777	57,848	Plainfield.....	4	62	56	20,695	58,600
Iowa City.....	3	30	25	10,164	26,690	Trenton.....	5	244	221	77,185	182,388
Keokuk.....	3	21	15	6,822	12,850	NEW YORK:					
Muscatine.....	4	36	32	12,857	33,600	Albany.....	10	295	267	109,463	252,800
Sioux City.....	8	234	213	92,340	220,903	Amsterdam.....	3	29	22	8,771	20,245
Waterloo.....	3	114	102	44,624	95,691	Auburn.....	7	90	79	29,674	77,570
KANSAS:						Binghamton.....	10	161	139	52,760	115,920
Atchison.....	3	68	61	17,735	36,516	Buffalo.....	25	1,333	1,176	438,933	1,044,945
Independence.....	3	34	31	10,576	36,020	Elmira.....	6	131	111	32,293	83,586
Kansas City.....	6	80	70	27,209	74,402	Geneva.....	3	38	32	13,000	30,507
Lawrence.....	3	47	42	11,224	26,733	Glens Falls.....	3	90	78	40,223	73,536
Leavenworth.....	3	70	49	13,417	50,880	Gloversville.....	4	62	54	19,613	52,140
Parsons.....	3	42	35	13,635	36,104	Gloversville.....	3	89	83	25,613	69,041
Pittsburg.....	3	35	30	11,780	31,801	Jamestown.....	6	80	72	28,357	65,077
Topeka.....	7	201	175	56,139	155,508	Johnstown.....	3	18	14	5,975	13,080
Wichita.....	11	209	233	106,261	270,391	Kingston.....	4	42	29	12,527	31,447
KENTUCKY:						Mount Vernon.....	4	131	122	63,501	138,003
Lexington.....	6	207	189	54,918	122,964	New York.....	126	6,273	5,651	2,422,324	5,862,722
Louisville.....	22	799	718	252,965	583,448	Newburgh.....	4	29	35	16,109	37,583
Owensboro.....	3	53	48	13,778	34,777	Niagara Falls.....	3	130	119	52,008	107,275
Paducah.....	4	64	55	19,232	55,233	Ogdensburg.....	3	34	27	6,647	16,012
LOUISIANA:						Olean.....	3	34	26	9,474	20,671
New Orleans.....	9	708	663	220,956	522,690	Oswego.....	5	28	19	11,104	25,650
MAINE:						Poughkeepsie.....	10	159	139	71,024	131,907
Bangor.....	5	105	89	27,463	73,254	Rensselaer.....	3	27	23	10,768	22,487
Lewiston.....	3	30	25	10,712	28,000	Rochester.....	16	1,003	939	380,519	834,484
Portland.....	12	312	276	107,929	252,211	Rome.....	4	26	20	7,329	17,368
MARYLAND:						Schenectady.....	7	101	89	38,353	94,400
Baltimore.....	18	1,141	969	263,909	773,225	Syracuse.....	23	411	360	151,944	355,709
Cumberland.....	4	116	102	30,151	83,891	Troy.....	15	932	894	400,837	675,060
MASSACHUSETTS:						Utica.....	12	214	177	66,133	171,404
Beverly.....	3	51	44	12,014	34,950	Watertown.....	7	73	62	19,563	56,882
Boston.....	53	1,860	1,700	700,077	1,577,643	Yonkers.....	3	109	99	36,199	88,053
Brockton.....	3	129	110	57,884	115,308	NORTH CAROLINA:					
Cambridge.....	7	532	481	216,961	494,843	Asheville.....	3	138	125	37,251	77,462
Clinton.....	3	25	21	8,508	18,280	Charlotte.....	3	202	188	50,562	130,008
Fall River.....	10	210	190	97,652	216,838	Charlotte.....	3	70	66	15,455	48,299
Fitchburg.....	4	68	62	25,197	52,096	Raleigh.....	3	90	81	17,940	52,697
Haverhill.....	6	97	87	40,940	89,034	Wilmington.....	3	90	81	17,940	52,697
Holyoke.....	4	86	78	39,860	89,800	NORTH DAKOTA:					
Hyde Park.....	3	29	25	11,267	29,488	Fargo.....	6	128	119	51,098	131,636
Lawrence.....	9	81	68	20,024	66,405	Grand Forks.....	4	128	114	44,708	126,941
Lowell.....	9	207	188	80,577	170,085	OHIO:					
Lynn.....	10	297	270	118,929	276,314	Akron.....	7	151	129	53,280	111,632
Malden.....	3	91	82	42,349	64,986	Canton.....	3	132	122	64,158	86,148
New Bedford.....	10	193	180	85,740	175,172	Cincinnati.....	18	1,414	1,256	489,780	1,144,866
Newburyport.....	3	28	25	10,021	25,253	Cleveland.....	22	1,461	1,254	529,549	1,255,547
Northampton.....	3	42	39	15,281	31,551	Columbus.....	11	538	471	183,009	485,402
Quincy.....	4	52	40	20,666	56,393	Dayton.....	6	336	301	116,517	288,663
Salem.....	3	160	149	69,614	152,212	East Liverpool.....	3	65	50	21,420	50,734
Somerville.....	5	68	59	26,977	64,676	Hamilton.....	5	69	54	19,238	53,676
Springfield.....	12	287	252	97,406	284,732	Lorain.....	4	60	52	21,894	52,995
Taunton.....	5	108	92	34,508	72,216	Mansfield.....	4	64	57	17,877	38,811
Warefield.....	3	97	83	30,734	68,433	Marion.....	4	47	38	13,654	46,929
Waltham.....	3	90	75	31,536	73,708	Piqua.....	3	34	30	11,848	28,000
Worcester.....	13	387	357	144,116	316,215	Springfield.....	4	100	87	27,484	61,800
MICHIGAN:						Steubenville.....	3	92	83	28,825	58,020
Adrian.....	4	46	38	11,872	22,362	Tiffin.....	3	21	17	5,874	13,272
Ann Arbor.....	5	85	52	16,512	55,754	Toledo.....	19	380	335	139,939	330,336
Battle Creek.....	5	145	109	37,555	105,518	Warren.....	3	48	40	10,916	40,334
Detroit.....	35	1,717	1,508	536,474	1,345,728	Youngstown.....	4	242	227	74,288	159,185
Flint.....	3	96	82	35,776	69,507	Zanesville.....	3	102	94	31,963	78,643
Grand Rapids.....	5	396	361	132,167	333,911	OKLAHOMA:					
Jackson.....	4	84	76	31,408	62,800	Enid.....	3	69	60	25,380	64,443
Kalamazoo.....	3	149	142	55,504	118,854	Muskogee.....	6	181	153	56,015	158,252
Lansing.....	8	127	110	45,203	101,365	Oklahoma City.....	9	235	200	94,756	229,763
Muskegon.....	3	52	46	19,389	38,100	Tulsa.....	5	82	72	39,322	81,344
Port Huron.....	4	115	99	27,253	80,460	OREGON:					
Saginaw.....	4	169	156	54,743	117,225	Portland.....	20	1,181	986	474,210	1,130,701
MINNESOTA:						PENNSYLVANIA:					
Duluth.....	10	369	315	130,022	352,325	Allentown.....	5	49	39	15,232	35,640
Minneapolis.....	43	1,237	1,112	445,329	1,084,260	Altoona.....	4	74	65	22,940	47,324
St. Paul.....	22	939	830	325,544	773,862	Beaver Falls.....	3	39	34	12,748	33,106
Winona.....	3	77	72	21,324	57,433	Bethlehem.....	3	33	28	9,158	21,633
MISSOURI:						Easton.....	3	81	66	17,826	58,756
Joplin.....	7	134	117	38,969	97,476	Erie.....	7	166	151	56,176	119,124
Kansas City.....	32	1,830	1,735	725,721	1,656,680	Harrisburg.....	9	328	302	94,636	188,100
St. Joseph.....	6	269	232	85,280	218,017	Lancaster.....	3	166	136	53,519	130,573
St. Louis.....	40	2,722	2,414	945,419	2,100,604	Lebanon.....	4	89	67	23,119	49,616
Sedalia.....	3	97	85	28,561	85,494	Meadville.....	3	32	20	7,770	28,157
Springfield.....	8	152	131	38,180	117,728	New Castle.....	3	71	62	21,672	55,010
MONTANA:						Philadelphia.....	92	4,148	3,777	1,372,765	3,208,369
Butte.....	4	235	221	170,619	342,463	Pittsburgh.....	26	1,877	1,668	695,139	1,668,441
Great Falls.....	3	72	63	45,333	95,014	Pottsville.....	3	54	50	15,629	31,600
Missoula.....	3	90	76	42,449	100,419	Reading.....	8	159	142	53,436	96,940
NEBRASKA:						Seranton.....	4	295	275	102,028	235,486
Lincoln.....	7	224	201	82,439	213,800	Sunbury.....	3	25	21	7,906	19,781
Omaha.....	17	573	475	190,854	538,539	Wilkes-Barre.....	7	197	177	57,241	119,616
NEW HAMPSHIRE:						Williamsport.....	7	117	106	29,168	68,415
Concord.....	4	137	127	40,903	85,525	York.....	7	145	123	46,078	130,574
Dover.....	3	23	17	5,928	18,500	RHODE ISLAND:					
Keene.....	3	48	42	17,100	41,368	Newport.....	5	135	122	36,556	73,192
Manchester.....	13	132	106	40,669	104,227	Pawtucket.....	5	166	154	65,960	142,500
Nashua.....	5	56	47	20,165	49,528	Providence.....	24	739	600	304,511	669,435
Portsmouth.....	3	45	42	13,335	34,442	Warwick.....	3	23	17	5,343	14,408
NEW JERSEY:						Woonsocket.....	5	69	50	20,882	52,415
Asbury Park.....	3	52	47	17,584	39,716	SOUTH CAROLINA:					
Atlantic City.....	3	98	91	31,150	82,788	Charleston.....	3	123	107	20,844	68,000
Camden.....	8	168	152	52,992	149,292	Greenville.....	3	65	52	14,798	43,300
East Orange.....	3	28	23	10,186							

MANUFACTURES.

STATISTICS FOR CITIES WITH A POPULATION OF 10,000 OR OVER: 1909—Continued.

STATE AND CITY.	Number of establishments.	Persons engaged in the industry.	Wage earners (average number).	Wages.	Amount received for work done.	STATE AND CITY.	Number of establishments.	Persons engaged in the industry.	Wage earners (average number).	Wages.	Amount received for work done.
TENNESSEE:						WASHINGTON:					
Chattanooga.....	6	335	298	\$100,055	\$251,693	Bellingham.....	6	122	114	\$52,833	\$105,452
Jackson.....	3	55	49	16,662	46,095	Everett.....	7	103	88	45,232	113,691
Knoxville.....	7	257	218	77,722	156,410	Seattle.....	51	1,520	1,327	765,079	1,697,325
Memphis.....	8	892	837	282,750	634,289	Spokane.....	23	646	575	328,245	680,391
Nashville.....	10	535	476	125,378	364,494	Tacoma.....	14	426	385	189,328	399,739
TEXAS:						WEST VIRGINIA:					
Austin.....	3	90	71	24,664	68,757	Walla Walla.....	4	111	103	57,713	95,608
Beaumont.....	3	146	117	59,249	175,527	Charleston.....	4	86	75	31,361	62,801
Dallas.....	6	400	364	146,026	401,091	Huntington.....	3	62	55	18,196	41,208
Denison.....	3	44	36	16,735	33,684	Parkersburg.....	3	106	93	32,128	78,688
El Paso.....	5	185	160	53,754	167,532	Wheeling.....	5	185	172	62,936	147,039
Fort Worth.....	9	366	341	157,197	328,558	WISCONSIN:					
Galveston.....	3	145	126	56,805	136,578	Appleton.....	3	21	18	7,412	18,220
Houston.....	9	463	422	224,395	499,705	Beloit.....	3	49	43	13,476	40,043
San Antonio.....	8	360	301	103,287	339,007	Janesville.....	3	56	50	17,786	40,143
Waco.....	5	214	205	74,402	133,300	Kenosha.....	4	56	50	20,652	57,336
UTAH:						La Crosse.....					
Ogden.....	4	117	110	53,388	111,577	Madison.....	4	132	122	43,624	120,702
Salt Lake City.....	7	605	554	258,188	610,330	Manitowoc.....	3	123	109	44,426	122,158
VERMONT:						Manitowish.....					
Burlington.....	3	75	70	21,128	46,876	Milwaukee.....	33	920	817	326,223	712,054
Rutland.....	3	34	29	13,135	27,238	Oshkosh.....	3	51	45	14,492	37,696
VIRGINIA:						Racine.....					
Lynchburg.....	3	168	140	35,110	105,401	Wyoming.....	3	84	75	34,070	91,483
Norfolk.....	6	227	203	67,021	186,223						
Petersburg.....	3	53	42	13,907	34,140						
Richmond.....	9	430	397	141,114	285,814						
Roanoke.....	4	92	81	24,440	65,838						

NOTE.—The cities referred to in footnote 1 on page 894, with the number of establishments in each, are as follows:

ALABAMA:	LOUISIANA:	NEBRASKA:	PENNSYLVANIA—Continued.
Anniston..... 2	Alexandria..... 2	Grand Island..... 2	Carnegie..... 1
Gadsden..... 1	Baton Rouge..... 1	South Omaha..... 2	Chambersburg..... 2
Selma..... 2	Lake Charles..... 2	NEVADA:	Cotatesville..... 1
ARIZONA:	Monroe..... 1	Reno..... 1	Columbia..... 2
Tucson..... 2	Shreveport..... 2	NEW HAMPSHIRE:	Connellsville..... 1
ARKANSAS:	MAINE:	Berlin..... 1	Dubois..... 1
Pine Bluff..... 2	Auburn..... 2	Laconia..... 2	Greensburg..... 2
CALIFORNIA:	Augusta..... 2	NEW JERSEY:	Hazleton..... 2
Bakersfield..... 2	Biddeford..... 2	Bayonne..... 1	Homestead..... 2
Pomona..... 2	Waterville..... 2	Bloomfield..... 1	Johnstown..... 2
Redlands..... 2	MARYLAND:	Hackensack..... 1	McKeesport..... 2
Riverside..... 2	Frederick..... 2	Irvington..... 2	Mahanoy City..... 1
San Bernardino..... 2	Hagerstown..... 2	Montclair..... 2	Monessen..... 1
Santa Cruz..... 2	MASSACHUSETTS:	Morristown..... 1	Mount Carmel..... 1
Vallejo..... 2	Adams..... 1	New Brunswick..... 1	Nanticoke..... 1
COLORADO:	Attleborough..... 2	Perth Amboy..... 2	Norristown..... 2
Trinidad..... 2	Brookline..... 2	Phillipsburg..... 1	Oil City..... 2
CONNECTICUT:	Chelsea..... 2	Union..... 1	Phoenixville..... 1
Ansonia..... 1	Everett..... 2	West New York..... 1	Pitston..... 1
Middletown..... 2	Frammingham..... 2	NEW MEXICO:	Plymouth..... 1
New Britain..... 2	Gardner..... 1	Albuquerque..... 2	Potstown..... 2
Torrington..... 2	Gloucester..... 2	NEW YORK:	Shamokin..... 2
Wallingford..... 1	Greenfield..... 2	Batavia..... 2	Sharon..... 2
Williamantic..... 2	Leominster..... 2	Cohoes..... 1	South Bethlehem..... 1
FLORIDA:	Marlborough..... 2	Corning..... 1	Stelton..... 2
Key West..... 1	Medford..... 2	Cortland..... 2	Uniontown..... 2
GEORGIA:	McLrose..... 1	Dunkirk..... 1	Warren..... 2
Athens..... 1	Methuen..... 2	Fulton..... 2	Washington..... 3
Augusta..... 2	Milford..... 2	Hornell..... 1	West Chester..... 1
Brunswick..... 1	North Adams..... 1	Hudson..... 1	Wilkesburg..... 1
Columbus..... 2	Peabody..... 1	Little Falls..... 1	RHODE ISLAND:
Rome..... 1	Pittsfield..... 2	Lockport..... 2	Central Falls..... 2
Waycross..... 1	Plymouth..... 2	Middletown..... 2	SOUTH CAROLINA:
ILLINOIS:	Southbridge..... 2	New Rochelle..... 2	Columbia..... 2
Alton..... 2	Watertown..... 1	North Tonawanda..... 1	Spartanburg..... 2
Belleville..... 2	Webster..... 1	Ossining..... 2	TEXAS:
Cairo..... 1	Westfield..... 2	Peekskill..... 2	Cleburne..... 2
Canton..... 1	Weymouth..... 1	Plattsburg..... 1	Palestine..... 2
Chicago Heights..... 1	Winthrop..... 1	Port Chester..... 1	Paris..... 2
Freeport..... 2	Woburn..... 1	Saratoga Springs..... 1	San Angelo..... 2
Kankakee..... 1	MICHIGAN:	Watervliet..... 1	Sherman..... 2
La Salle..... 2	Alpena..... 2	White Plains..... 2	Temple..... 2
Lincoln..... 1	Bay City..... 2	NORTH CAROLINA:	Tyler..... 1
Mattoon..... 2	Escanaba..... 1	Durham..... 2	VERMONT:
Oak Park..... 2	Holland..... 2	Greensboro..... 2	Barre..... 1
Streator..... 2	Ironwood..... 1	OHIO:	VIRGINIA:
INDIANA:	Ishpeming..... 1	Alliance..... 2	Alexandria..... 2
Anderson..... 2	Manistee..... 2	Ashtabula..... 2	Danville..... 1
Elkhart..... 2	Marquette..... 2	Bellaire..... 2	Newport News..... 2
Elwood..... 1	Menominee..... 1	Cambridge..... 2	Portsmouth..... 2
Gary..... 2	Pontiac..... 2	Chillicothe..... 2	Staunton..... 2
Huntington..... 2	Sault Ste. Marie..... 1	Elyria..... 2	WASHINGTON:
Jeffersonville..... 1	Traverse City..... 2	Findlay..... 2	Aberdeen..... 2
Laporte..... 1	MINNESOTA:	Fronton..... 2	North Yakima..... 2
Mishawaka..... 2	Mankato..... 2	Lancaster..... 2	WEST VIRGINIA:
New Albany..... 2	St. Cloud..... 1	Lima..... 2	Bluefield..... 2
Peru..... 2	Stillwater..... 2	Massillon..... 2	Martinsburg..... 2
IOWA:	Virginia..... 1	Middletown..... 2	WISCONSIN:
Boona..... 2	MISSISSIPPI:	Newark..... 2	Ashland..... 2
Clinton..... 2	Hattiesburg..... 2	Portsmouth..... 2	Eau Claire..... 2
Fort Dodge..... 2	Jackson..... 2	Sandusky..... 2	Fond du Lac..... 2
Marshalltown..... 2	Meridian..... 2	OKLAHOMA:	Green Bay..... 2
Mason City..... 2	Natchez..... 2	Chickasha..... 2	Marinette..... 2
Ottumwa..... 2	Viicksburg..... 2	Guthrie..... 2	Sheboygan..... 2
KANSAS:	MISSOURI:	MoAlister..... 2	Superior..... 2
Coffeyville..... 2	Hannibal..... 2	Shawnee..... 2	Wausau..... 2
Fort Scott..... 2	Jefferson City..... 1	OREGON:	
Hutchinson..... 2	Moberly..... 2	Salem..... 2	
KENTUCKY:	Webb City..... 2	PENNSYLVANIA:	
Covington..... 1	MONTANA:	Bradock..... 1	
Frankfort..... 2	Anaconda..... 1	Bradford..... 2	
Henderson..... 2	Billings..... 2	Butler..... 2	
Newport..... 2	Helena..... 2	Carbondale..... 1	

It is probable that laundries of some character existed in all of the 601 cities and towns that had a population of 10,000 or over in 1910, but steam laundries were reported for only 557 of these places. There were only six cities in which as many as 2,000 persons were engaged in the laundry industry, or in which the receipts for work done during the year amounted to \$2,000,000 or over. These cities, in the order of their importance as measured by receipts for work done, were Chicago, Ill., New York, N. Y., Philadelphia, Pa., San Francisco, Cal., Los Angeles, Cal., and St. Louis, Mo. The population of New York was more than double that of Chicago, but the receipts for laundry work in steam laundries were only about three-fourths as great. The population of St. Louis was 687,029, while that of San Francisco and Los Angeles was 416,912 and 319,198, respectively, though both of these cities outranked St. Louis in receipts for laundry work. There were, however, 2,722 persons

engaged in the industry in St. Louis, as compared with 2,385 in Los Angeles and 2,257 in San Francisco. Boston, which ranked fifth in population, having 670,585 inhabitants in 1910, ranked tenth in the laundry industry in 1909. In addition to the cities named, Cleveland, Baltimore, Pittsburgh, Detroit, and Buffalo all have a larger population than San Francisco, and yet San Francisco outranked all of them in its laundries. Los Angeles is the seventeenth city in population, but in 1909 ranked fifth in the amount received for laundry work, and fifth in the number of persons engaged in the laundry industry. It is probable that in some cities a larger proportion of the laundry work is done by hand laundries, the statistics for which are not included in this report, than in others.

Detailed statistics, by states.—The statistics secured by the census inquiry concerning laundries are presented in detail, by states, in Table 14.

Table 14		PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS—DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Primary horse-power.
STATE.	Number of establishments.	Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.				
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.			
								Maximum month.	Minimum month.								
1	United States.....	5,186	124,214	5,560	3,019	2,837	3,314	109,484	Au 114,539	Ja 103,748	112,064	51,947	79,152	274	691	123,477	
2	Alabama.....	38	1,274	26	49	64	27	1,108	Se 1,187	Ja 993	1,104	330	755	9	10	1,041	
3	Arizona.....	13	309	11	9	2	4	283	De ¹ 291	Au 266	291	60	211	.....	.....	298
4	Arkansas.....	45	850	53	23	17	16	741	Jy 795	Ja 681	747	218	523	4	2	900	
5	California.....	321	9,060	308	223	306	185	8,038	Jy 8,368	Fe 7,560	8,216	3,258	4,953	8	2	8,961	
6	Colorado.....	99	2,076	103	37	45	58	1,833	Au 2,046	Fe 1,684	1,895	525	1,338	.....	2	1,895
7	Connecticut.....	95	1,638	101	44	19	33	1,441	Jy 1,564	Fe 1,342	1,457	497	939	6	15	1,852	
8	Delaware.....	15	283	17	8	20	16	222	Jy ¹ 228	Ja ¹ 215	236	43	193	.....	.....	235
9	District of Columbia.....	17	1,096	13	26	10	54	993	De 1,069	Au 916	1,099	287	781	1	.....	998
10	Florida.....	28	638	28	20	9	10	542	De 647	Fe 542	647	199	438	2	8	528	
11	Georgia.....	42	1,625	37	45	77	34	1,332	Au 1,367	Fe 1,285	1,284	399	871	24	.....	1,180
12	Idaho.....	24	410	31	14	1	7	357	Au 372	Ja 338	374	114	259	1	.....	489
13	Illinois.....	448	10,916	470	261	186	294	9,705	Au 10,141	Ja 9,288	9,802	2,414	7,323	6	59	10,780	
14	Indiana.....	163	3,308	184	106	34	83	2,901	Au 2,985	Ja 2,769	2,978	756	2,212	4	6	3,746	
15	Iowa.....	181	2,468	206	52	17	70	2,123	Se 2,248	Fe 2,024	2,180	574	1,594	10	2	2,941	
16	Kansas.....	138	1,761	168	26	39	28	1,490	Se 1,562	Ja ¹ 1,383	1,542	410	1,123	5	4	1,958	
17	Kentucky.....	73	1,749	67	48	31	49	1,554	Jy 1,658	Ja 1,387	1,593	477	1,102	1	13	2,139	
18	Louisiana.....	25	1,117	19	27	16	19	1,036	Jy 1,070	Ap 1,005	1,089	281	767	3	8	1,109	
19	Maine.....	78	956	87	25	6	22	816	Au 1,016	Ja 697	806	268	533	1	4	1,085	
20	Maryland.....	41	1,497	44	43	52	80	1,278	Ne 1,304	Fe 1,252	1,285	818	912	9	46	1,091	
21	Massachusetts.....	280	6,655	313	133	79	172	5,958	Se 6,235	Fe 5,608	6,175	1,901	4,193	25	56	6,802	
22	Michigan.....	219	4,328	249	97	115	138	3,729	Au 4,096	Fe 3,423	3,758	862	2,866	3	27	4,071	
23	Minnesota.....	158	3,338	187	60	85	90	2,916	Au 3,111	Ja 2,715	2,991	593	2,367	1	.....	2,919
24	Mississippi.....	30	603	32	22	9	11	529	Jy 561	Ja 495	519	146	360	10	4	821	
25	Missouri.....	171	6,113	162	157	150	216	5,438	Au 5,889	Fe 5,171	5,625	1,308	4,227	7	23	5,727	
26	Montana.....	26	723	24	21	14	12	652	Au 710	Fe 597	662	182	480	.....	.....	851
27	Nebraska.....	76	1,314	84	46	46	28	1,110	Au 1,168	Ja 1,041	1,155	285	867	.....	3	1,510
28	Nevada.....	5	110	2	2	2	2	105	Ja 112	No 100	110	43	67	.....	.....	149
29	New Hampshire.....	61	706	82	5	1	10	608	Au 691	Ja 536	626	223	401	1	1	988	
30	New Jersey.....	112	3,334	101	60	101	82	2,984	Au 3,276	Ja 2,800	3,005	888	2,038	9	73	3,917	
31	New Mexico.....	8	168	6	7	1	8	146	Oc 164	Fe 133	145	41	102	.....	2	146
32	New York.....	508	14,063	523	336	227	399	12,578	Au 13,046	Mh 12,107	13,043	3,837	9,164	12	30	12,637	
33	North Carolina.....	43	924	43	34	16	19	812	Au 883	Ja 745	839	281	534	11	13	1,000	
34	North Dakota.....	34	503	39	10	12	8	434	Au 460	Ja 394	406	99	365	2	.....	606
35	Ohio.....	253	6,773	277	176	206	221	5,893	Se 6,069	Fe 5,626	6,019	1,451	4,534	9	25	7,431	
36	Oklahoma.....	93	1,301	105	48	27	20	1,101	Se 1,179	Ja 993	1,173	383	789	1	.....	1,484
37	Oregon.....	58	1,674	54	43	67	53	1,457	Oc 1,512	Ja 1,371	1,497	374	1,117	.....	6	1,585
38	Pennsylvania.....	385	10,015	436	212	305	323	9,639	Oc 9,849	Ja 9,331	9,855	2,610	7,048	39	153	10,730	
39	Rhode Island.....	53	1,211	70	22	4	39	1,076	Jy 1,105	Fe 1,040	1,122	430	661	5	17	1,368	
40	South Carolina.....	24	440	26	19	12	10	373	Jy 392	Au 361	392	124	260	3	5	591	
41	South Dakota.....	28	447	33	10	11	7	386	Au 414	Ja ¹ 352	403	92	307	1	3	519	
42	Tennessee.....	63	2,392	68	52	74	49	2,149	Au 2,246	Fe 2,039	2,220	603	1,592	13	12	1,863	
43	Texas.....	127	3,514	150	90	147	54	3,073	Au 3,284	Ja 2,781	3,196	1,157	1,995	21	23	3,195	
44	Utah.....	22	811	16	31	7	19	738	Au 838	Fe ¹ 690	750	177	571	.....	2	969
45	Vermont.....	32	342	37	.....	1	5	299	Jy 337	Fe 269	297	81	215	.....	1	349
46	Virginia.....	57	1,523	63	42	26	41	1,351	Jy 1,412	Fe 1,275	1,353	412	934	5	2	1,199	
47	Washington.....	172	3,731	195	85	92	95	3,264	Au 3,663	Ja 2,946	3,240	1,135	2,101	3	1	3,084	
48	West Virginia.....	43	793	41	37	11	25	670	Jy 713	Ja 633	697	195	495	1	6	1,048	
49	Wisconsin.....	147	2,332	159	58	35	66	2,014	Au 2,138	Fe 1,917	2,036	471	1,546	3	16	2,373	
50	Wyoming.....	14	203	20	6	3	3	171	Au 183	Fe 159	177	47	129	.....	1	319

¹Same number reported for one or more other months.

STEAM LAUNDRIES.

STATISTICS, BY STATES: 1909.

	Capital.	EXPENSES.										Amount received for work done.
		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	\$68,935,226	\$85,187,604	\$4,507,076	\$3,673,693	\$44,826,978	\$5,131,532	\$12,564,828	\$2,276,840	\$500,031	\$239,090	\$11,467,536	\$104,680,086
2	545,892	789,656	66,218	60,361	843,183	40,978	105,079	36,291	6,580	1,874	128,492	909,130
3	193,351	309,206	11,880	4,400	153,467	35,029	39,124	10,580	1,319	-----	47,407	366,282
4	568,411	823,658	31,995	18,537	266,279	43,257	79,519	9,085	3,000	1,000	70,956	684,936
5	6,205,915	8,177,759	330,468	459,258	4,471,017	470,202	1,141,910	142,081	42,571	51,428	1,068,824	9,541,795
6	1,270,656	1,595,638	72,530	77,577	905,354	74,973	215,341	52,223	10,341	5,780	181,510	1,980,693
7	870,567	1,089,900	73,478	26,057	584,838	72,817	173,249	31,412	5,152	-----	122,897	1,416,122
8	103,025	149,365	9,668	16,264	71,844	10,264	19,369	6,373	286	-----	16,297	187,038
9	699,007	888,057	43,574	27,918	347,793	36,003	90,253	6,879	4,903	-----	128,634	795,999
10	461,038	371,750	25,480	10,850	196,509	26,239	48,932	9,645	2,107	-----	50,138	474,088
11	654,756	832,036	61,110	70,767	384,198	54,936	136,718	25,520	6,157	-----	92,610	1,006,724
12	252,110	327,375	18,709	3,912	179,215	35,361	59,518	5,405	1,755	1,200	22,300	394,226
13	5,540,003	8,239,441	441,913	277,073	4,316,666	449,242	1,272,603	253,166	30,698	5,664	1,190,016	10,049,445
14	1,236,060	1,937,207	137,465	54,418	1,020,675	119,069	232,109	71,135	8,543	12,799	261,084	2,448,355
15	1,261,954	1,617,651	68,016	39,484	806,489	146,252	282,519	52,569	8,402	3,462	210,358	2,063,451
16	1,026,904	1,105,239	29,678	37,651	566,423	76,394	209,340	31,996	8,349	9,610	135,798	1,486,967
17	730,112	987,610	64,743	34,520	519,442	52,714	149,515	35,106	8,219	-----	103,351	1,208,811
18	795,667	679,382	55,023	27,410	363,945	36,503	95,825	6,038	9,251	-----	65,100	852,021
19	536,361	540,777	24,035	12,867	298,338	52,605	63,056	18,233	4,012	-----	76,387	736,367
20	643,458	834,614	58,501	59,495	348,573	43,172	112,523	18,651	5,441	160	186,358	693,766
21	2,961,025	4,745,135	203,391	132,935	2,582,693	273,665	630,180	137,758	23,607	26,167	728,849	5,754,572
22	2,009,251	2,594,945	136,666	138,477	1,327,818	166,188	455,598	72,642	16,691	3,191	277,684	3,261,841
23	1,821,191	2,223,019	98,330	111,993	1,132,851	163,160	351,194	81,459	13,794	3,058	267,180	2,856,738
24	332,302	318,354	28,776	10,149	162,983	26,887	54,086	4,332	4,153	-----	26,988	440,579
25	3,407,985	4,167,030	235,856	192,407	2,135,742	193,808	698,389	97,897	17,096	16,277	679,558	4,904,249
26	677,089	764,904	37,260	27,105	457,643	59,012	95,416	17,980	5,372	-----	65,116	935,260
27	871,600	946,140	66,500	50,967	436,778	73,890	181,730	17,103	4,816	889	113,467	1,197,374
28	166,131	150,181	12,740	3,160	82,129	11,085	15,828	3,000	1,201	-----	21,038	165,037
29	303,013	379,299	4,760	4,781	223,555	32,429	47,598	14,529	1,675	2,187	47,795	518,660
30	2,137,243	2,187,794	104,711	104,698	1,185,926	115,563	324,298	57,910	13,451	1,640	279,597	2,776,277
31	164,187	128,344	8,500	3,955	65,243	8,725	11,756	-----	932	-----	28,453	156,419
32	7,316,808	9,483,116	552,768	316,415	5,212,128	559,638	1,297,065	328,125	44,963	9,457	1,162,557	11,446,663
33	424,642	435,951	37,310	16,209	211,519	41,857	66,008	10,201	4,190	261	48,396	559,949
34	444,817	413,161	9,393	10,973	188,126	44,379	58,033	8,995	4,567	5,466	83,229	548,175
35	3,802,957	4,425,294	274,649	238,309	2,259,179	218,880	652,842	92,582	30,000	23,874	634,979	5,388,954
36	781,631	928,217	47,102	28,588	487,995	65,521	135,158	25,365	8,270	541	129,677	1,197,978
37	991,017	1,252,614	63,546	97,001	684,767	76,946	186,647	24,315	8,902	-----	110,490	1,689,982
38	6,685,132	6,821,427	331,095	349,748	3,486,993	348,450	1,101,067	135,022	51,038	20,007	998,007	8,331,834
39	612,524	841,748	40,702	21,059	461,284	45,871	112,572	18,599	3,210	916	137,526	1,019,404
40	183,975	207,717	18,156	12,188	87,428	21,468	30,297	8,452	2,173	2,645	24,910	269,112
41	336,276	313,492	12,124	10,740	167,966	37,201	44,569	8,430	1,986	-----	30,476	423,092
42	1,283,583	1,340,732	75,600	62,080	673,533	65,008	232,663	33,681	15,222	6,612	176,313	1,643,407
43	2,005,200	2,629,766	118,624	142,574	1,293,801	164,760	306,661	59,512	13,702	6,035	524,097	3,220,315
44	500,276	684,434	52,769	19,948	342,592	31,927	111,114	3,569	3,966	360	118,189	794,091
45	144,393	155,436	-----	3,024	101,745	16,245	15,972	6,672	798	233	10,747	243,753
46	835,607	789,733	58,046	31,523	414,377	49,419	123,678	14,504	8,048	296	86,842	1,003,191
47	2,165,715	3,046,673	133,369	141,688	1,757,646	181,750	364,795	99,787	13,793	11,692	342,153	3,814,825
48	415,216	462,687	38,401	16,418	242,922	24,840	77,217	17,698	2,529	905	41,757	581,865
49	1,379,730	1,436,389	75,608	51,430	736,557	119,749	212,158	45,293	10,133	-----	184,461	1,840,327
50	99,573	149,361	5,860	4,532	78,911	15,171	23,067	4,947	871	-----	16,002	216,847