

---

---

# CLAY PRODUCTS INDUSTRIES

---

---

(847)

# 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	42,577,391	35,566,725
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.

	CLAY PRODUCTS INDUSTRIES.											
	Number or amount.						Per cent of increase. <sup>1</sup>					
	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	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	23.9	11.4	11.2	.....	.....	.....
Proprietors and firm members.....	4,737	5,845	7,596	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	-37.6	-19.0	-23.1	.....	.....	.....
Salaried employees.....	9,353	7,442	5,203	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	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	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Primary horsepower.....	451,186	860,280	252,502	131,821	.....	12,708	73.7	25.2	42.7	91.5	.....	.....
Capital.....	\$316,022,470	\$230,892,977	\$148,038,323	\$108,705,070	\$35,039,930	\$26,776,011	113.5	35.0	66.0	36.2	210.2	30.9
Expenses.....	141,399,997	109,515,058	74,377,689	68,203,108	( <sup>2</sup> )	( <sup>2</sup> )	60.1	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	38.9	4.2	151.3	27.8
Salaries.....	11,252,037	8,158,213	5,030,195	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	123.4	37.9	62.0	.....	.....	.....
Wages.....	66,892,079	53,823,070	39,575,070	18,267,998	12,683,897	9,531,162	69.0	24.3	36.0	25.5	43.9	33.1
Materials.....	45,647,007	32,907,961	22,921,384	6,845,040	7,111,776	( <sup>2</sup> )	99.1	33.7	43.6	-3.8	.....	.....
Miscellaneous.....	17,608,874	14,625,214	6,845,040	89,827,785	41,810,920	36,368,151	157.3	20.4	113.7	6.4	114.8	15.0
Value of products.....	168,895,365	135,362,854	95,533,862	89,827,785	41,810,920	36,368,151	76.8	24.8	41.7	1.5	145.7	8.5
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

<sup>1</sup> A minus sign (-) denotes decrease. Where percentages are omitted, comparable figures are not available.

<sup>2</sup> Comparable figures not available.

<sup>3</sup> 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.
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	29,709,597	12,639,597	97,770,695	55,131,098
1879.....	5,631	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. <sup>1</sup>										
		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	1899-1904	1899-1909	1904-1909	1899-1904
		1909	1904	1909	1904	1909	1904	1909	1904	1909	1904	1909	1904	1899-1909	1904-1909	1899-1904	1899-1909	1904-1909	1899-1904			
<b>United States.</b>	<b>4,215</b>	<b>76,528</b>	<b>100.0</b>	.....	.....	<b>\$92,776,504</b>	<b>100.0</b>	.....	.....	<b>\$69,040,402</b>	<b>100.0</b>	.....	.....	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	8,058	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	40.6	19.2	18.0
New York.....	205	8,030	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	5	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	3,158	4.1	7	6	4,482,767	4.8	6	6	3,278,327	4.7	6	6	59.0	19.9	32.6	126.9	33.3	70.1	116.3	29.9	66.5
New Jersey.....	76	3,405	4.4	6	9	4,073,286	4.4	7	11	3,229,523	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	2,756,398	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	202.7	62.0
Texas.....	89	1,935	2.5	10	16	2,544,792	2.7	11	15	1,778,669	2.6	12	15	22.5	47.9	-17.2	149.5	95.0	27.9	126.3	89.5	19.5
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	1,555	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	2,000	2.7	9	8	1,922,476	2.1	14	12	1,412,002	2.0	14	11	47.4	6.4	88.5	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	81.3	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	60.0	85.4	15.2	60.9
Massachusetts.....	52	991	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
Nebraska.....	78	831	1.1	29	25	1,161,109	1.3	23	18	833,092	1.3	22	19	-2.8	-8.2	5.8	38.2	2.6	34.8	38.6	3.3	64.2
Alabama.....	71	1,353	1.8	16	21	1,135,134	1.2	24	25	847,145	1.2	23	26	20.6	29.6	-7.0	72.5	34.0	28.7	64.5	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	38.9	456.2	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	0.8	41.4
Maryland.....	40	1,226	1.6	20	12	970,625	1.0	27	20	721,189	1.0	27	18	-18.3	-16.3	-2.5	15.0	-11.5	30.0	4.8	-17.1	26.5
West Virginia.....	34	832	1.2	28	28	950,364	1.0	28	24	625,073	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	30.5	-2.6	43.3
South Carolina.....	45	838	1.2	27	27	730,543	0.8	30	31	462,640	0.7	32	31	-22.4	1.5	-23.6	27.4	11.4	14.3	4.8	-3.3	8.4
Utah.....	34	514	0.7	33	36	683,087	0.7	31	35	547,687	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	30	37	674,520	0.7	32	36	519,373	0.8	31	36	75.0	45.8	20.0	197.4	114.3	38.8	173.7	106.3	32.6
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	164.4
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	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> 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
16 years of age and over.....	75,258	75,178	80
Under 16 years of age.....	1,270	1,269	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.				Percent of increase: 1904-1909
	1909		1904		
	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: 1909<sup>1</sup>

STATE.	Average number during the year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<b>United States</b> .....	<b>76,528</b>	<b>38,312</b>	<b>38,703</b>	<b>51,316</b>	<b>77,878</b>	<b>96,992</b>	<b>103,017</b>	<b>104,930</b>	<b>102,001</b>	<b>98,704</b>	<b>84,514</b>	<b>66,663</b>	<b>55,300</b>
Alabama.....	1,353	927	<i>808</i>	1,122	1,447	1,404	1,564	1,609	1,633	1,689	1,452	1,385	1,222
Arkansas.....	585	<i>284</i>	302	463	691	882	730	790	765	747	612	498	455
California.....	1,703	993	<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>576</i>	629	697	798	1,112	1,248	1,308	1,222	1,198	888	710	679
Connecticut and Rhode Island.....	1,312	<i>253</i>	277	453	1,453	2,007	2,054	2,065	1,971	1,860	1,717	962	673
Georgia.....	1,901	<i>1,337</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	8,302	8,294	8,126	8,140	7,526	5,542	4,844
Indiana.....	3,788	<i>2,179</i>	2,307	2,848	3,940	4,644	4,703	4,673	4,621	4,560	4,105	3,568	3,234
Iowa.....	3,158	<i>1,694</i>	1,618	2,356	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	2,039	1,940	1,815	1,689
Kentucky.....	1,125	<i>356</i>	359	623	1,196	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	1,192	1,454	1,501	1,603	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	1,398	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	1,251	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.....	2,999	1,695	<i>1,635</i>	2,624	3,281	3,503	3,576	3,899	3,550	3,611	3,299	2,921	2,496
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>1,629</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	860
Ohio.....	7,466	<i>4,878</i>	4,928	5,665	7,460	8,086	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	767	739	784
Pennsylvania.....	8,058	4,751	<i>4,668</i>	6,004	8,100	9,219	9,702	9,927	9,899	9,853	9,066	8,117	7,310
South Carolina.....	888	<i>510</i>	510	640	957	997	1,049	1,134	1,230	1,130	903	817	683
Tennessee.....	1,281	<i>689</i>	682	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>367</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	2,515	2,603	2,641	2,586	2,222	1,872	1,604
Washington.....	1,300	<i>854</i>	978	1,109	1,302	1,540	1,690	1,643	1,538	1,490	1,233	1,085	1,042
West Virginia.....	882	<i>397</i>	<i>386</i>	710	1,023	1,062	1,179	1,086	1,046	1,121	980	920	665
Wisconsin.....	1,027	<i>299</i>	<i>280</i>	352	644	1,575	1,914	1,893	1,801	1,517	1,011	651	384

<sup>1</sup> 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.
<b>United States</b> .....	<b>76,528</b>	<b>7,949</b>	<b>1,557</b>	<b>9,361</b>	<b>4,578</b>	<b>50,613</b>	<b>1,979</b>	<b>493</b>
Alabama.....	1,353	140	13	16	64	1,008	97	18
Arkansas.....	585	.....	2	37	.....	546	.....	.....
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	278	2,481	50	.....
Indiana.....	3,788	212	86	428	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	110	25	126	47	766	52	.....
Louisiana.....	583	37	.....	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.....	2,999	17	5	42	26	2,814	83	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	258	4,667	49	69
North Carolina.....	1,460	19	86	22	288	992	43	10
Ohio.....	7,466	355	65	852	529	5,576	22	67
Oklahoma.....	730	15	.....	46	.....	669	.....	.....
Pennsylvania.....	8,058	562	383	791	1,206	5,084	147	32
South Carolina.....	888	68	12	46	.....	594	.....	21
Tennessee.....	1,281	28	27	43	51	1,017	26	89
Texas.....	1,935	20	30	222	43	1,488	128	4
Utah.....	514	253	.....	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	.....

THE CLAY PRODUCTS INDUSTRIES.

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.....	1,666	2,202	15,261,103	16,457,795
Firm.....	1,084	1,284	18,526,197	13,357,288
Corporation.....	1,465	1,138	63,989,204	41,215,003
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

<sup>1</sup> 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	\$46,781,674
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	397	48,370	94,563	468,101	37,032	76,835	316,086
California.....	17	7	54	102	111	1,490	194,240	154,174	2,407,894	132,013	119,378	1,553,098
Colorado.....	26	10	33	126	57	739	177,726	70,470	1,421,846	142,586	56,279	959,574
Connecticut and Rhode Island.....	12	8	18	317	171	824	345,975	218,253	910,349	279,489	179,982	714,431
Georgia.....	21	24	30	210	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	7,441,608	986,633	839,561	5,447,499
Indiana.....	157	79	75	865	388	2,535	962,442	493,389	3,293,092	729,736	307,045	2,315,955
Iowa.....	96	69	69	492	691	1,076	631,540	982,025	2,869,196	404,805	736,845	2,076,677
Kansas.....	5	7	42	17	69	1,743	24,380	63,640	2,248,418	17,003	57,525	1,780,506
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	139,950	104,179	252,328	108,817	32,498	193,797
Maryland.....	12	11	17	140	84	1,002	189,467	62,198	768,960	104,415	45,588	571,136
Massachusetts.....	31	9	12	462	138	391	645,388	151,708	546,149	407,735	116,307	389,305
Michigan.....	43	41	40	275	343	947	340,472	454,397	1,262,342	260,810	347,833	863,328
Minnesota.....	38	18	26	283	285	470	347,331	342,423	752,395	258,978	246,899	557,096
Mississippi.....	28	19	26	207	324	408	188,667	241,785	363,693	151,871	180,000	258,230
Missouri.....	50	24	40	194	121	2,684	204,639	111,648	3,359,987	160,222	86,425	2,417,306
Nebraska.....	36	19	23	150	181	500	225,609	205,225	730,272	168,241	170,657	544,194
New Jersey.....	33	12	31	582	289	2,534	597,706	276,774	3,195,806	600,009	222,062	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	461,334	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	1,096,681	5,122,662
Oklahoma.....	10	9	19	60	71	599	88,172	115,914	824,607	68,140	87,427	647,085
Pennsylvania.....	102	83	141	1,530	1,752	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	303,039	172,397	87,376	202,767
Tennessee.....	46	29	16	369	351	501	307,894	314,907	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	55,594	586,884	32,926	42,925	471,736
Virginia.....	34	22	30	471	299	1,320	384,712	289,438	1,248,326	286,118	208,089	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

<sup>1</sup> 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.

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	4,436	3,842	341,169	255,362	176,700	100.0	100.0	100.0
Owned.....	4,702	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	175,450	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	( <sup>1</sup> )	70	1	( <sup>1</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	.....
Other.....	5	.....	6	307	481	127	0.1	0.2	0.1
Rented.....	494	85	( <sup>1</sup> )	16,811	2,978	.....	4.9	1.2	.....
Electric.....	494	85	( <sup>1</sup> )	16,719	2,566	.....	4.9	1.0	.....
Other.....	.....	.....	.....	92	412	.....	( <sup>2</sup> )	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	( <sup>1</sup> )	16,719	2,566	.....	79.1	84.5	.....

<sup>1</sup> Not reported.

<sup>2</sup> 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.		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.	Oth- er.	Total rented and generated by establishment.	Gener- ated in the estab- lish- ment report- ing.	Coal.		Coke (short tons).	Wood (cords).	Oil, in- cluding gasoline (barrels).	Gas (1,000 feet).	
												Anthra- cite (long tons).	Bitumi- nous (short tons).					
United States..	3,523	341,169	324,358	313,184	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			15		21	6		113,766	946	24,224	29		
Arkansas.....	27	2,178	2,178	2,128				50					22,445		19,894	1	289,500	
California.....	68	8,972	5,821	5,607	214			3,151		3,219	68	1,220	8,936		1,042	507,017		
Colorado.....	45	3,923	3,298	3,292	5			625		705	80	2,732	110,420	195	1,682	1		
Connecticut and Rhode Island..	35	5,193	4,953	4,865	73	15		240		240		1,887	19,928		45,842	118		
Georgia.....	74	7,476	7,371	7,252	44		75	105		111	6	600	140,788	1,009	42,649	97		
Illinois.....	296	36,013	35,433	35,194	237		2	580		1,728	1,148	3,775	964,310	1,236	26,062	118,752	3,550	
Indiana.....	273	19,881	19,766	19,283	483			115		303	188	330	469,978	2,156	20,452	12,308	58,782	
Iowa.....	199	20,782	20,527	20,250	227		50	255		766	511	1,500	467,742	560	1,608	201		
Kansas.....	53	9,827	9,457	8,189	1,268			370		689	319		45,896	90	226	35,468	6,425,747	
Kentucky.....	65	4,463	4,413	4,376	37			50		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	2,967	2,672	2,585	62	25		295		295		1,513	10,257		58,200	68		
Michigan.....	120	8,346	8,305	7,942	313	50		41		116	75	2,326	97,977	1,124	24,770	76,488		
Minnesota.....	73	5,867	5,565	5,443	122			302		313	11	65	58,613	155	44,839	177		
Mississippi.....	57	3,653	3,553	3,553				100		150	50		41,897	295	39,575	4		
Missouri.....	84	8,274	7,994	7,498	560			190	90	190			287,021	2,104	30,877	38	598,609	
Nebraska.....	61	4,033	3,586	3,308	203		75	447		447			56,009	2,027	1,825	2,155		
New Jersey.....	71	11,419	10,093	9,943	60			1,416		1,549	133	29,870	188,403	4,202	8,425	133	708	
New York.....	192	28,734	26,671	25,794	807	70		2,063		2,273	210	124,523	138,501	4,138	61,986	7,159	46,632	
Louisiana.....	137	6,769	6,672	6,672				87		87		418	33,794	290	105,192	22		
Ohio.....	480	37,742	37,546	35,454	2,070	22		196		917	721	2,957	953,209	1,557	43,685	1,068	1,780,136	
Oklahoma.....	35	3,793	3,523	3,268	255			210		335	125		29,115		3,198	6	1,732,005	
Pennsylvania.....	297	38,247	37,814	34,938	2,876			433		677	244	67,513	590,730	6,758	4,386	1,517	3,852,614	
South Carolina.....	44	2,824	2,567	2,531	36			257		257			36,642		44,240	134		
Tennessee.....	62	4,631	4,564	4,524	36		4	67		67			107,726	3,502	23,121	72		
Texas.....	65	7,488	7,486	7,335	101		50		2	230	230		118,797		63,305	250,625	87,868	
Utah.....	12	1,556	426	360	4	62		1,130		1,130			27,222		1,047	2		
Virginia.....	73	5,540	5,435	5,400	35			105		125	20		140,895	1,056	19,358	50		
Washington.....	41	4,797	3,445	3,445				1,352		1,541	189		91,805	213	62,057	402		
West Virginia.....	34	4,983	4,808	4,790	18			175		175			72,137	373		2	1,054,611	
Wisconsin.....	86	5,640	5,455	5,209	158	28		185		235	50	4,018	108,653	2,184	31,278	324	288	
All other states.....	189	12,376	10,214	9,963	251			2,162		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.

857

## DETAILED STATE TABLES.

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

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

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

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	5,299	3,690	66,021	255,362	119,957	3,530	25,646	16,316	71,152	54,836
	1899	5,423	71,057	6,052	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	3,360	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	65	36	525	1,851	943	37	186	197	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	1,468	1,205	43	333	166	834	668
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	1,890	64	475	198	1,081	853
	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	479	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	365	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	7,546	5,841
	1899	566	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	601	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	48	362	170	887	711
	1899	84	1,051	97	36	918	1,890	805	26	252	128	631	508
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	2,613	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

## BRICK AND TILE—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.													
Michigan.....	1909	124	1,806	140	101	1,565	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	1,008	125	34	840	2,484	1,041	23	329	185	772	587
Mississippi.....	1909	73	1,088	78	76	930	3,653	1,288	65	287	204	794	500
	1904	74	1,054	88	63	903	2,368	847	45	272	177	783	606
	1899	74	1,040	94	38	908	1,483	495	20	201	99	522	423
Missouri.....	1909	120	3,289	121	169	2,999	8,274	7,138	226	1,469	1,012	3,676	2,664
	1904	162	2,679	181	161	2,337	6,945	7,458	170	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	893
	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	1,276	26	327	203	840	637
Nevada.....	1909	4	18	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	1	14	20	20	3	10	3	18	15
New Hampshire.....	1909	29	443	24	24	395	727	586	27	199	156	533	377
	1904	36	578	32	19	527	1,235	933	19	229	151	529	378
	1899	55	696	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	2,990	73	70	1,947	5,971	3,040	68	784	337	1,830	1,409
	1899	76	2,525	78	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	1,368	7,430	6,062
	1899	217	7,178	258	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	399	2,942	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	3,020	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	260	155	675	520
	1904	43	330	56	10	264	766	368	9	132	63	315	252
	1899	46	290	58	12	220	511	194	9	98	37	227	190
Pennsylvania.....	1909	326	8,043	349	530	8,058	38,247	20,150	546	3,881	2,453	9,225	6,772
	1904	370	8,430	445	424	7,601	31,235	13,887	355	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	517	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	4	48	162	64	3	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	8,397	1,609	74	470	366	1,305	939
	1899	143	1,804	161	64	1,579	2,456	1,283	51	420	234	1,020	786
Utah.....	1909	34	585	40	31	514	1,556	1,190	31	332	136	683	547
	1904	39	359	53	15	291	737	438	13	172	68	846	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	135	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	128	1,964	4,977	3,146	118	620	429	1,804	1,375
	1899	80	1,504	90	56	1,418	3,119	1,831	46	404	195	1,066	811

¹ Includes Indian Territory.

# THE CLAY PRODUCTS INDUSTRIES.

859

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	\$116	\$792	\$651	\$2,550	\$1,908
	1904	51	609	52	45	512	1,486	966	37	306	149	675	528
	1899	32	385	29	27	329	624	370	28	186	81	427	346
West Virginia.....	1900	34	979	17	80	882	4,983	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	108	1,095	105	61	1,469	5,156	2,211	48	542	730	1,706	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 1,680	Fe 808	1,657	1,589		68		5,127
3	Arizona .....	21	126	28				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 <sup>1</sup> 249	Ja 89	171	171				911
10	Florida .....	29	501	21	27	14		439	Ap 489	Fe 373	558	525		33		2,288
11	Georgia .....	75	2,085	73	82	26	3	1,901	My <sup>1</sup> 2,196	Ja 1,337	2,169	2,116	2	51		7,470
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	4,753	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	1,638	1,517		21		4,463
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		4,815
21	Massachusetts .....	52	1,104	53	38	18	4	991	Jy 1,808	Fe 160	1,127	1,125	1	1		2,907
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 <sup>1</sup> 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 3,898	Fe 1,635	3,246	3,151		95		8,274
26	Montana .....	21	230	24	12	5		189	Jy 386	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 <sup>2</sup> 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	3,019	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		6,750
34	North Dakota .....	13	214	11	13	1		188	Je <sup>1</sup> 385	Ja 40	284	277		7		668
35	Ohio .....	517	8,575	569	363	132	45	7,466	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	900	50	39	9	4	886	Au 1,230	Ja <sup>1</sup> 510	1,229	1,157		72		2,824
40	South Dakota .....	12	72	5	11	2		64	Je 106	Ja <sup>1</sup> 8	103	103				790
41	Tennessee .....	91	1,487	112	57	32	5	1,281	Jy 1,740	Fe 652	1,754	1,664	1	89		4,631
42	Texas .....	89	2,135	50	96	49	5	1,935	Je 2,303	Ja 1,467	2,109	2,058		51		7,488
43	Utah .....	34	585	40	15	16		514	Je 758	Ja 207	584	551		33		1,556
44	Vermont .....	7	80	6	4			70	Je 160	Ja 5	107	107				160
45	Virginia .....	86	2,311	87	88	39	7	2,096	Au 2,041	Ja 1,317	2,400	2,334	12	54		5,540
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 <sup>2</sup> 0	108	108				129

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

THE CLAY PRODUCTS INDUSTRIES.

STATISTICS, BY STATES: 1909.

	EXPENSES.										Value of products.	Value added by manufacture (value of products less cost of materials).	
	Capital.	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	23,382	3,504	600	588	-----	8,722	117,448	90,562
4	1,300,259	502,346	33,365	26,843	219,252	132,332	35,749	650	4,240	-----	-----	601,034	432,953
5	9,168,834	2,601,355	124,379	37,249	1,145,664	667,368	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	294,161	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	21,039	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	3,652	78,800	38,249	17,541	550	1,603	-----	18,526	181,519	155,729
10	778,382	328,093	30,147	8,851	138,389	83,334	29,205	995	2,562	27	34,583	370,021	266,482
11	2,771,068	1,395,535	111,089	21,014	546,967	480,961	82,975	3,837	11,571	1,500	105,444	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	4,380,001	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	198,486	52,280	1,834,927	832,182	473,405	25,405	43,053	85,888	326,290	4,718,923	3,413,335
15	7,326,525	3,539,584	200,652	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	910,734	447,827	82,978	2,980	18,587	17,642	250,061	2,336,438	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	32,684	3,400	204,165	98,144	13,241	330	5,365	300	70,559	496,497	385,112
19	628,785	300,432	14,930	4,475	150,142	97,560	7,444	3,453	5,861	300	14,737	390,167	285,163
20	5,117,008	874,324	65,703	11,640	462,570	212,818	36,668	2,001	11,553	1,749	69,432	970,025	721,139
21	1,476,337	1,030,100	50,304	10,912	509,302	295,175	34,723	9,062	16,553	-----	98,069	1,243,245	1,139,347
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	2,589,632	1,165,897	61,541	25,760	537,546	321,610	56,666	2,300	11,593	11,091	137,790	1,442,140	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	268,313	18,508	5,000	165,728	62,491	20,905	600	2,054	-----	23,027	370,574	287,178
27	2,640,362	928,468	40,100	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	440,617	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	13,804,023	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	235,175	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	516,078	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	406,691	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	535,825	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	7,226	27,504	19,838	10,730	5	1,126	-----	10,842	102,660	72,686
41	1,867,654	1,051,918	53,892	28,435	443,259	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	670,932	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	331,913	106,923	28,577	50	3,810	-----	17,996	683,087	547,587
44	107,821	50,143	3,368	-----	29,951	13,788	475	125	475	-----	1,931	64,744	50,481
45	3,983,120	1,540,155	111,211	31,007	731,707	416,509	93,815	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	2,300,220	831,675	52,667	20,605	383,019	167,088	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	14,890	2,978	113,602	1,191,379	909,657
49	95,690	49,892	1,900	-----	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.

**Table 18** MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.

CENSUS.	Number of establishments.	Wage earners (average number).	Wages.	Cost of materials.	Value of products.	Value added by manufacture.
1909.....	822	56,168	\$29,753,495	\$21,910,905	\$76,118,861	\$54,207,956
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	44,263,388	32,348,160
1889.....	707	18,980	8,809,032	5,618,401	22,057,090	16,438,689
1879.....	752	10,221	3,000,727	2,909,063	8,977,333	6,068,279
1869.....	777	6,116	2,247,173	1,702,705	6,045,536	4,342,831
1859.....	589	3,628	1,170,605	798,323	3,218,081	2,419,758
1849.....	518	2,456	655,334	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.

**Table 19** MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.

STATE.	Number of establishments: 1909	Wage earners.			Value of products.			Value added by manufacture.			Per cent of increase. <sup>1</sup>								
		Average number: 1909	Per cent of total: 1909	Rank: 1909 1904	Amount: 1909	Per cent of total: 1909	Rank: 1909 1904	Amount: 1909	Per cent of total: 1909	Rank: 1909 1904	Wage earners (average number).			Value of products.			Value added by manufacture.		
											1899-1909	1904-1909	1899-1904	1899-1909	1904-1909	1899-1904	1899-1909	1904-1909	1899-1904
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	18.6	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	59.2
New Jersey.....	88	9,815	17.5	2	13,139,000	17.3	2	9,587,832	17.7	2	20.9	3.5	18.0	47.0	12.1	31.0	46.2	9.4	33.6
Pennsylvania.....	139	9,003	16.0	3	13,072,106	17.2	3	8,962,738	16.5	3	1.5	3.9	-2.3	60.8	21.5	32.4	57.9	14.2	38.3
Illinois.....	39	3,167	5.6	4	4,614,728	6.1	4	3,488,282	6.4	4	87.5	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	23.9	57.6	144.8	32.0	85.5	131.7	28.4	80.4
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.....	16	2,034	3.6	8	2,678,673	3.5	8	1,893,026	3.5	8	60.3	60.2	0.1	142.4	108.3	16.4	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	102.7	19.4	119.9	130.3	2.0	184.5	163.7	-5.3	178.0
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	485,782	0.9	13	-20.4	-18.0	-2.9	-9.7	-10.3	0.7	-11.4	-14.4	3.4
Georgia.....	27	562	1.1	12	613,368	0.8	14	460,723	0.8	14	107.7	19.5	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	16	50.0	92.7	-22.1	210.0	62.6	70.3	171.0	56.4	73.6
Alabama.....	21	425	0.8	14	558,840	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	284,456	0.5	20	22.2	.....	-66.7	86.3	.....	-68.7	47.6	.....	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.....	6	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	59.3	-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	98	0.1	28	51,588	0.1	30	33,006	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	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arkansas.....	5	45	0.1	31	41,024	( <sup>2</sup> )	32	33,187	0.1	31	.....	.....	.....	.....	.....	.....	.....	.....	.....
Louisiana.....	4	20	( <sup>2</sup> )	34	34,642	( <sup>2</sup> )	34	23,490	( <sup>2</sup> )	34	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Carolina.....	4	36	( <sup>2</sup> )	32	28,347	( <sup>2</sup> )	35	20,081	( <sup>2</sup> )	35	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin.....	3	9	( <sup>2</sup> )	36	9,109	( <sup>2</sup> )	38	7,991	( <sup>2</sup> )	38	.....	.....	.....	.....	.....	.....	.....	.....	.....
All other states.....	24	958	1.7	.....	1,638,976	2.2	.....	1,177,217	2.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

<sup>1</sup> 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.  
<sup>2</sup> 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: <sup>1</sup> 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	52,428	92.4	7.1

<sup>1</sup> 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	
	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.	Num-ber.	Per cent distri-bution.
Total.....	56,168	100.0	52,428	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.

Table 23

STATE.	WAGE EARNERS EMPLOYED IN THE MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS: 1909 <sup>1</sup>												
	Average number during the year	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<b>United States</b> .....	<b>56,168</b>	<b>50,383</b>	<b>52,284</b>	<b>54,419</b>	<b>55,088</b>	<b>55,509</b>	<b>56,094</b>	<b>56,485</b>	<b>57,715</b>	<b>58,299</b>	<b>59,200</b>	<b>59,355</b>	<b>59,208</b>
California.....	1,027	<i>879</i>	912	918	978	1,031	1,075	1,081	<b>1,120</b>	1,092	1,007	1,066	1,077
Georgia.....	592	<i>590</i>	551	550	557	600	502	620	612	621	629	613	598
Illinois.....	3,157	<i>2,552</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	<i>2,058</i>	<i>2,045</i>	2,147	2,118	2,122	2,128	2,150	2,229	2,242	2,295	2,345	2,354
Kentucky.....	1,319	<i>1,224</i>	<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	<i>664</i>	729	730	696	734	700	724	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	3,586
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	10,425
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	16,568	16,568	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	9,307	9,555	9,600	9,583	9,638
West Virginia.....	2,034	<i>1,769</i>	1,803	1,901	1,991	1,976	1,966	2,018	2,127	2,147	2,190	2,205	2,235

<sup>1</sup> 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

STATE.	AVERAGE NUMBER OF WAGE EARNERS EMPLOYED IN THE MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRECLAY PRODUCTS: 1909							
	Total.	In establishments with prevailing hours—						
		48 and under.	Be- tween 48 and 54.	54.	Be- tween 54 and 60.	60.	Be- tween 60 and 72.	72 and over.
<b>United States</b> .....	<b>56,168</b>	<b>6,488</b>	<b>5,709</b>	<b>10,071</b>	<b>10,590</b>	<b>21,908</b>	<b>987</b>	<b>434</b>
California.....	1,027	18	.....	660	.....	250	99	.....
Georgia.....	592	3	.....	87	.....	270	232	.....
Illinois.....	3,157	613	2	141	1,185	1,216	.....	.....
Indiana.....	2,186	142	.....	512	500	972	.....	.....
Kentucky.....	1,319	378	.....	68	299	574	.....	.....
Maryland.....	720	337	.....	101	20	262	.....	.....
Missouri.....	3,138	65	.....	241	1,708	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	579	404	1,789	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

CHARACTER OF OWNERSHIP.	MANUFACTURE OF POTTERY, TERRA-COTTA, AND FIRE-CLAY PRODUCTS.			
	Number of establishments.		Value of products.	
	1909	1904	1909	1904
<b>Total</b> .....	<b>822</b>	<b>873</b>	<b>\$76,118,861</b>	<b>\$84,200,792</b>
Individual.....	190	193	2,978,895	3,144,655
Firm.....	96	134	3,127,978	3,140,485
Corporation.....	536	546	70,011,988	57,915,652
<b>Per cent of total</b> .....	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
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.

# THE CLAY PRODUCTS INDUSTRIES.

865

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.	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.
<b>United States</b> .....	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)	585,713	<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	1,938,801
Kentucky.....	5	1	13	17	(X)	1,302	<i>17,864</i>	(X)	1,451,893	<i>15,012</i>	(X)	1,072,387
Maryland.....	2	4	10	(X)	77	643	(X)	<i>74,288</i>	682,507	(X)	<i>54,494</i>	496,189
Missouri.....	9	1	19	402	(X)	2,730	<i>806,835</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	19,340,718	669,217	345,803	13,696,772
Pennsylvania.....	22	22	95	231	895	7,877	323,139	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>2,878,073</i>	(X)	(X)	<i>1,895,025</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.	Number of establishments.		Value of products.	
	1909	1904	1909	1904
<b>Total</b> .....	822	873	\$76,118,861	\$64,200,792
Less than \$5,000.....	178	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	
<b>Per cent of total</b> .....	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.
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	191	2	217	1	400				
Georgia.....	27	592	7	11	18	2	23	2	68	4	331	1	152						
Illinois.....	30	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	209				
Maryland.....	16	720		4	8	4	38	3	115	2	115	3	444						
Missouri.....	29	3,133		7	13	2	20	3	122	6	438	7	1,007	3	832	1	706		
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.....	183	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
	<b>Primary power, total.....</b>	<b>1,408</b>	<b>1,251</b>	<b>1,108</b>	<b>110,017</b>	<b>104,918</b>	<b>75,802</b>	<b>100.0</b>	<b>100.0</b>
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	99,086	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		(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	
<b>Electric motors.....</b>	<b>693</b>	<b>265</b>	<b>78</b>	<b>10,643</b>	<b>4,684</b>	<b>1,892</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Run by current generated by establishments.....	446	191	78	7,099	2,337	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.										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.					
			Total.	Steam engines.	Gas engines.	Water wheels and motors.	Other.	Electric.	Other.			Anthracite (long tons).	Bituminous (short tons).	Coke (short tons).	Wood (cords).	Oil, including gasoline (barrels).	Gas (1,000 feet).
United States . . . . .	703	110,017	106,463	101,965	4,353	95	50	3,544	10	10,643	7,089	88,348	3,026,546	4,562	38,743	370,334	10,365,943
California . . . . .	21	2,856	2,211	2,167	44			645		945	300		138		309	200,347	
Georgia . . . . .	8	1,640	1,640	1,640									45,253		5,325		
Illinois . . . . .	29	7,985	7,345	7,290	15		40	650		770	120		189,448		903	36,031	
Indiana . . . . .	29	5,089	4,964	4,962	2			125		297	172	1	205,376		55		40,000
Kentucky . . . . .	15	3,554	3,429	3,417	12			125		160	35		102,299	1,906	470	4	5,400
Maryland . . . . .	13	1,336	1,324	1,318	6			2	10	2		8	37,357	28	198	53	210
Missouri . . . . .	26	7,848	7,715	7,657	53			133		1,334	1,201		284,316	30	307	6,091	500
New Jersey . . . . .	83	11,817	11,501	11,427	74			316		2,476	2,160		80,785	1,142	1,238	703	126
New York . . . . .	35	4,039	3,958	3,538	420			81		602	521	6,580	74,069	586	501	30,230	30,503
Ohio . . . . .	182	26,778	26,534	24,334	2,200			244		2,049	1,805	1,286	781,527		388	2,670	7,369,525
Pennsylvania . . . . .	129	23,142	22,622	21,523	1,014	85		520		918	398	8,643	711,840	415	701	142	1,432,335
West Virginia . . . . .	16	1,674	1,521	1,403	118			153		153			18,535				1,279,930
All other states . . . . .	117	12,349	11,799	11,389	390		10	550		937	387	1,045	234,531	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
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

<sup>1</sup> 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).							
Expressed in thousands.													
United States.....	1909	822	61,022	452	4,402	56,168	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	110,928	4,628	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	399
	1904	16	305	19	21	205	805	445	20	87	78	273	195
	1899	21	270	28	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	24	.....	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	1,701	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	3,489
	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	1,588
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	146	2,019	5,387	3,837	183	981	646	2,643	1,997
	1899	49	1,350	40	60	1,250	2,621	1,626	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	228	715	455	49	135	74	373	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	1,406	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	310	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	170	644	465
	1904	25	644	22	55	567	1,216	1,592	61	294	175	718	543
	1899	29	682	26	72	584	1,209	1,628	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	1,682	1,292
New Jersey.....	1909	88	10,542	38	689	9,815	11,817	22,349	1,036	5,661	3,551	13,139	9,588
	1904	90	10,177	42	648	9,487	13,463	21,047	843	4,722	2,956	11,717	8,761
	1899	81	8,048	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	3,403	2,528
	1904	43	2,979	28	256	2,695	4,212	5,111	328	1,333	872	3,289	2,417
	1899	52	2,489	43	178	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.

869

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

Table 32—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	60	1,163	10,519	26,778	\$32,107	\$1,443	\$8,628	\$6,461	\$21,173	\$14,712
	1904	205	17,072	106	1,047	15,919	24,764	26,360	1,177	7,677	4,823	18,551	13,728
	1899	248	12,918	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	158	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	2,462	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	40	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	105	138
	1904	6	42	3	5	34	175	91	6	20	29	77	48
	1899	7	46	8	2	36	150	38	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	295
	1899	8	149	8	15	126	155	437	18	60	29	157	128
West Virginia.....	1909	16	2,149	6	109	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	2,460	1,716	95	446	378	1,261	883

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 horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.					Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.		Male.	Female.			
								Maximum month.	Minimum month.								
United States..	822	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	565	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	1,129	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	4			49	Ap	57	Oc	42	48	48				200
Georgia.....	27	650	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		14	5,089
Iowa.....	10	322	5	14	15	2	286	Au	337	Ja	216	257	255		25		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 <sup>1</sup>	27	Ja <sup>1</sup>	26	26	21		5		40
Maryland.....	16	799	12	35	27	5	720	No	747	Ja	654	724	565	92	10		1,336
Massachusetts.....	20	541	9	27	24	16	465	No	507	Fe	360	509	470	27	12	6	932
Michigan.....	7	230	7	10	5	2	206	My	225	No	190	197	196				426
Missouri.....	20	3,437	11	74	181	33	3,138	De	3,566	Ja	2,653	3,573	3,561	7	5		7,848
New Jersey.....	88	10,542	38	245	347	97	9,315	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		143	Au	174	Ja	104	143	133		10		770
Ohio.....	186	17,751	69	469	498	199	16,519	Oc	17,044	Ja	15,197	17,323	13,847	3,298	110	70	28,778
Pennsylvania.....	139	9,784	99	301	304	77	9,003	De	9,638	Ja	8,090	10,290	9,387	509	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	262	292	292				1,263
West Virginia.....	16	2,149	6	46	40	23	2,034	De	2,235	Ja	1,769	2,245	1,600	624	15	6	1,674
Wisconsin.....	3	12	2	1			9	Ja <sup>1</sup>	10	Je	7	10	9		1		33
All other states <sup>2</sup> .....	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	\$7,560,532	\$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	171,081	1,797,129	1,291,940
Colorado.....	1,078,694	330,267	15,545	10,550	142,741	35,941	69,330	98	4,347		48,717	435,622	327,551
District of Columbia	48,724	37,831	3,900		20,127	6,138	2,200		373	100	3,683	44,425	36,037
Georgia.....	932,299	502,410	29,792	28,010	233,748	86,271	66,874	304	4,222	550	52,639	613,568	460,723
Illinois.....	14,900,981	3,946,183	190,795	186,052	1,884,879	433,231	693,215	3,894	23,434	45,668	479,117	4,614,728	3,488,282
Indiana.....	4,805,630	2,566,674	125,695	87,115	1,180,598	339,413	519,611	145	19,101	2,513	283,483	2,965,798	2,106,744
Iowa.....	792,426	434,832	10,815	16,122	173,377	127,830	51,949		1,772		43,667	464,265	284,486
Kansas.....	464,724	297,728	27,523	21,320	135,018	33,202	41,151		2,280		37,234	378,176	303,822
Kentucky.....	2,339,729	1,252,597	64,646	49,840	538,161	162,811	229,547	433	10,036		207,123	1,469,757	1,087,399
Louisiana.....	60,445	25,189	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	1,595	57,197	756,795	550,683
Massachusetts.....	1,169,667	583,330	43,197	32,862	255,970	67,627	110,377	4,454	10,350	1,216	56,777	644,286	465,732
Michigan.....	325,427	195,452	10,613	3,722	35,457	35,457	35,446		1,613		17,079	245,677	171,872
Missouri.....	13,246,816	3,493,528	192,648	212,224	1,554,141	499,731	576,438	9,650	40,016	4,757	403,923	4,068,701	2,992,532
New Jersey.....	22,348,615	11,349,670	627,917	407,646	5,661,153	1,171,326	2,379,342	14,972	76,337	17,385	993,092	13,130,000	9,587,832
New York.....	5,342,721	2,519,354	139,890	1,205,514	271,101	603,571	22,997	32,653	5,722	355,617	3,408,496	3,528,824	2,528,824
North Carolina.....	153,903	115,005	17,450	450	41,779	10,401	34,576		943	100	9,306	148,774	101,767
Ohio.....	32,166,300	18,838,269	801,509	641,338	8,627,779	2,025,175	4,436,305	15,859	151,374	98,159	2,040,771	21,173,272	14,711,792
Pennsylvania.....	27,225,266	10,811,423	535,732	320,614	4,357,336	1,149,042	2,960,326	39,406	84,916	15,807	1,348,154	13,072,106	8,962,738
South Carolina.....	51,212	25,935	3,000	720	9,333	7,895	371		148		4,518	28,347	20,081
Tennessee.....	356,887	201,059	14,280	17,680	126,338	67,680	41,850		2,772		20,459	327,610	218,080
Texas.....	794,914	503,676	28,295	18,169	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	58,577	25,341	31,160		1,983	5,385	10,304	194,834	138,333
Virginia.....	94,397	43,760	2,920	650	20,175	7,425	11,155		210		1,225	51,586	33,006
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	2,421,204	92,585	67,429	1,255,844	167,810	617,838	4,830	10,619		204,339	2,673,673	1,893,025
Wisconsin.....	22,222	6,178	1,040		3,525	507	611		192		2,303	9,109	7,991
All other states <sup>2</sup> .....	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

<sup>1</sup> Same number reported for one or more other months.  
<sup>2</sup> "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	\$95,533,892
Brick and tile, terra-cotta, and fire-clay products.....	\$130,887,840	\$109,003,308	\$78,551,645
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	\$51,280,871	\$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	\$26,142	\$45,420
Value.....	\$9,886,292	\$7,335,511	\$5,176,492
Sand lime.....	\$1,150,580	\$698,003	(?)
Enameled.....	\$993,902	\$445,985	\$329,969
Drain tile.....	\$9,798,978	\$5,622,198	\$3,662,184
Sewer pipe.....	\$10,822,324	\$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	\$4,817,312	\$1,665,031
Tile, not drain.....	\$5,201,963	\$2,725,717	\$1,276,300
Stove lining.....	\$123,583	(?)	\$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.....	\$5,989,295	\$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.....	\$1,766,766	\$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	\$1,760,177

<sup>1</sup> 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.

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

<sup>3</sup> 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).	Quantity (thousands).	Quantity (thousands).
<b>Common brick</b> .....	\$57,216,789	9,787,671	8,683,897	7,654,528
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	275,078	201,551
Illinois.....	5,927,054	1,267,255	990,362	657,202
Indiana.....	1,879,185	251,227	308,133	363,282
Iowa.....	1,072,340	153,065	213,501	218,931
Kansas.....	1,160,877	254,890	215,651	76,605
Maryland.....	914,420	148,673	159,467	111,459
Massachusetts.....	1,177,281	183,584	177,971	230,437
Massachusetts.....	1,250,787	219,820	238,141	199,764
Michigan.....	969,729	161,685	173,153	145,226
Minnesota.....	1,961,805	276,408	257,500	250,355
Missouri.....	946,532	139,151	132,000	118,982
Nebraska.....	2,609,605	460,966	303,117	394,643
New Jersey.....	7,760,746	1,542,552	1,226,561	1,240,634
North Carolina.....	1,140,727	188,313	120,349	126,458
Ohio.....	2,429,879	420,899	462,656	465,986
Oklahoma.....	952,453	156,889	64,797	22,958
Oklahoma.....	5,607,490	872,658	809,154	780,387
Pennsylvania.....	1,022,282	159,328	150,522	112,520
Tennessee.....	1,890,601	293,660	198,141	173,006
Texas.....	1,540,648	249,794	202,458	128,455
Virginia.....	1,081,579	143,198	73,705	65,444
Washington.....	956,232	147,741	220,607	178,497
Wisconsin.....				
<b>Fire brick</b> .....	16,620,695	838,167	678,362	800,862
Illinois.....	682,793	31,210	12,941	11,500
Kentucky.....	899,363	51,645	36,617	21,340
Missouri.....	1,598,302	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
<b>Vitrified paving brick or block</b> .....	11,269,586	1,023,654	715,559	580,720
Illinois.....	1,562,373	140,105	101,617	88,047
Indiana.....	659,201	58,697	47,608	28,120
Kansas.....	922,419	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

<sup>1</sup> Includes Indian Territory.

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

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
<b>Front, including fancy colored and fancy or ornamental brick</b> .....	\$9,886,292	\$7,335,511	\$5,170,492	<b>Tile, not drain</b> .....	\$5,291,963	\$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	241,663	130,065
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	508,592	<b>Stove lining</b> .....	423,583	(*)	418,235
Pennsylvania.....	2,139,519	1,350,147	1,010,299	Maryland.....	25,925		32,457
Texas.....	1,407,023	71,991	62,968	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		7,583
				Pennsylvania.....	97,270		106,851
<b>Sand-lime brick</b> .....	1,150,580	698,003	(2)	<b>White ware, including C. C. ware, white granite, semiporcelain ware, and semivitreous porcelain ware</b> .....	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.....	8,884,189	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	48,560		<b>Sanitary ware</b> .....	5,989,295	3,932,506	2,211,877
New Jersey.....	21,925	15,380		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	
<b>Enameled brick</b> .....	993,902	445,985	329,969	<b>Stoneware and yellow and Rockingham ware</b> .....	3,993,859	3,481,521	2,130,263
<b>Drain tile</b> .....	9,798,978	5,522,198	3,662,184	Illinois.....	702,411	750,821	572,075
Illinois.....	1,613,593	1,042,056	1,025,469	Kentucky.....	126,172	129,410	93,835
Indiana.....	2,018,401	1,235,585	833,347	Ohio.....	1,806,798	1,146,718	741,685
Iowa.....	2,830,910	1,299,766	359,258	Pennsylvania.....	297,029	386,423	174,450
Michigan.....	364,006	221,502	138,889	Texas.....	111,539	121,766	67,647
Ohio.....	2,032,528	1,174,290	968,483	<b>Porcelain electrical supplies</b> .....	3,047,499	1,500,283	470,355
<b>Sewer pipe</b> .....	10,322,324	8,416,009	4,560,334	New Jersey.....	823,056	328,524	154,807
California.....	904,473	679,804	479,537	New York.....	752,185	452,019	125,234
Georgia.....	351,492	174,000	100,612	Ohio.....	1,146,694	584,243	100,314
Illinois.....	394,461	391,453	229,040	<b>Red earthenware</b> .....	804,806	821,695	762,260
Indiana.....	332,449	257,618	161,935	California.....	42,404	24,133	24,474
Iowa.....	282,637	94,200	47,719	Illinois.....	31,771	16,850	52,300
Missouri.....	1,162,730	792,710	436,624	Massachusetts.....	154,887	181,771	163,231
Ohio.....	3,009,798	2,939,772	1,680,724	Michigan.....	60,939	20,600	20,641
Pennsylvania.....	445,594	809,374	204,400	New Jersey.....	36,573	30,634	24,000
Washington.....	737,847	214,720	76,694	New York.....	30,200	31,275	33,955
				Ohio.....	145,137	183,236	164,708
<b>Architectural terra cotta</b> .....	6,251,625	3,792,763	2,027,532	Pennsylvania.....	159,796	130,532	99,786
California.....	345,402	223,000	76,000	<b>All other pottery products, including china, bone china, delft, and belleek ware</b> .....	3,484,566	6,902,805	5,270,934
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	139,100				
Washington.....	206,324	19,632	9,300				
<b>Fireproofing, including terra-cotta lumber, etc.</b> .....	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	1,270,121	653,144				
New York.....	199,999	267,680	108,926				
Ohio.....	804,637	917,176	346,090				

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

<sup>2</sup> Not reported.

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

---

---

# GLASS

---

(873)

# 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.

Table 1	NUMBER OR AMOUNT.						PER CENT OF INCREASE. <sup>1</sup>					
	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	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	31.3	8.1	21.4			
Proprietors and firm members.....	87	96	170	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	-48.8	-9.4	-43.5			
Salaried employees.....	3,575	3,040	2,268	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	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	( <sup>3</sup> )	( <sup>3</sup> )
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	60,196,736	36,527,203	( <sup>2</sup> )	( <sup>2</sup> )	70.1	16.5	46.0	37.4		
Services.....	44,293,215	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.....	4,993,591	3,940,293	2,792,376	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	78.8	26.7	41.1			
Wages.....	39,299,624	37,288,148	27,084,710	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	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	3,588,641	2,267,696	( <sup>2</sup> )	( <sup>2</sup> )	149.7	51.6	64.7	58.2		
Value of products.....	92,095,203	79,607,998	56,539,712	41,051,004	21,154,571	18,407,507	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

<sup>1</sup> A minus sign (-) denotes decrease. Where percentages are omitted, comparable figures are not available.

<sup>2</sup> Comparable figures not available.

<sup>3</sup> 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.

**Table 2**

STATE.	Number of establishments: 1909	WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.				PER CENT OF INCREASE. <sup>1</sup>									
		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	1899-1909	1904-1909	1899-1904	1899-1909	1904-1909	1899-1904	1899-1909	1904-1909
United States.	363	68,911	100.0	.....	.....	\$92,095,203	100.0	.....	.....	\$59,976,704	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	32,817,936	35.6	1	1	20,184,023	33.7	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	14,358,274	15.6	2	3	9,670,288	16.1	2	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	11,593,094	12.6	3	2	0,865,591	11.4	3	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	7,779,483	8.4	4	6	5,483,555	9.1	4	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	6,961,088	7.6	5	4	4,962,491	8.3	5	4	5.0	2.6	2.3	36.6	7.9	26.0	37.0	8.0	27.4	
Illinois.....	11	3,607	5.1	6	5	5,047,333	5.5	6	5	3,505,879	5.8	6	5	6.1	-26.4	44.3	78.1	-10.2	98.3	62.3	-18.9	95.4	
New York.....	24	3,114	4.5	7	7	4,508,790	4.9	7	7	3,349,713	5.6	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	2,036,573	2.2	8	10	1,304,829	2.3	8	11	.....	99.9	.....	112.4	.....	.....	126.0	.....	.....	
Missouri.....	4	1,755	2.5	8	8	1,992,883	2.2	9	8	1,046,137	1.7	9	8	170.0	12.4	140.2	160.2	11.9	132.5	95.9	-2.5	100.9	
Maryland.....	7	1,622	1.5	10	12	1,038,368	1.1	10	12	801,549	1.3	10	12	41.7	62.1	-12.5	86.0	75.9	5.7	97.3	85.8	6.2	
Virginia.....	5	624	0.8	13	13	681,900	0.7	13	13	431,113	0.7	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	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	

<sup>1</sup> 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.				
	1909		1904		Percent of increase: <sup>1</sup> 1904-1909
	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

<sup>1</sup> 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**

STATE.	WAGE EARNERS EMPLOYED IN THE INDUSTRY: 1909 <sup>1</sup>												
	Average number during the year.	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	5,807	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	3,789	3,397	1,743	1,497	2,025	3,174	3,591	3,714
Ohio.....	10,156	11,051	11,282	11,312	11,039	11,065	10,286	5,888	6,790	8,985	10,779	11,567	11,814
Pennsylvania.....	23,710	24,057	24,901	26,256	25,861	25,464	25,303	16,242	18,019	21,098	24,378	25,630	26,711
Virginia.....	524	583	600	600	620	637	663	46	52	654	636	589	609
West Virginia.....	6,190	5,363	6,021	6,033	6,399	6,621	6,145	3,310	4,856	6,170	6,894	7,393	7,669

<sup>1</sup> 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.	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.
<b>United States</b> .....	<b>68,911</b>	<b>11,358</b>	<b>16,603</b>	<b>8,707</b>	<b>13,923</b>	<b>10,764</b>	<b>3,423</b>	<b>4,133</b>
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	108	39	273	.....	.....
Maryland.....	1,052	181	482	389	.....	.....	.....	.....
Missouri.....	1,755	.....	102	.....	224	.....	1,066	303
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	1,045	6,235	5,468	1,267	1,650
Virginia.....	524	.....	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
<b>Total</b> .....	<b>363</b>	<b>399</b>	<b>\$92,095,203</b>	<b>\$79,607,998</b>
Individual.....	23	21	1,529,780	1,234,651
Firm.....	19	26	1,426,929	2,019,890
Corporation.....	321	337	89,138,494	74,330,170
Other.....	.....	15	.....	917,387
<b>Per cent of total</b> .....	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
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—		
	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.
<b>United States</b> .....	<b>23</b>	<b>19</b>	<b>321</b>	<b>1,317</b>	<b>1,316</b>	<b>66,278</b>	<b>\$1,529,780</b>	<b>\$1,426,929</b>	<b>\$89,138,494</b>	<b>\$1,031,246</b>	<b>\$1,069,150</b>	<b>\$57,875,308</b>
Illinois.....	.....	1	10	.....	(X)	3,507	.....	(X)	5,047,333	.....	(X)	3,505,379
Indiana.....	3	.....	41	454	.....	0,090	430,916	.....	11,162,178	254,597	.....	6,610,994
Kansas.....	5	1	17	148	(X)	1,289	207,517	(X)	1,829,056	148,408	(X)	1,218,421
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	529,938	(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)	3,214,030
Ohio.....	3	2	40	300	(X)	9,859	397,729	(X)	13,960,545	273,867	(X)	9,391,421
Pennsylvania.....	2	7	103	663	(X)	23,047	.....	(X)	31,958,521	.....	(X)	19,557,523
Virginia.....	.....	.....	5	.....	.....	524	.....	.....	681,900	.....	.....	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
<b>Total</b> .....	<b>363</b>	<b>399</b>	<b>\$92,095,203</b>	<b>\$79,607,998</b>
Less than \$5,000.....	11	9	33,445	24,738
\$5,000 and less than \$20,000.....	13	24	138,525	279,692
\$20,000 and less than \$100,000.....	91	131	5,691,849	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	16,696,465	8,992,772
<b>Per cent of total</b> .....	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Less than \$5,000.....	3.0	2.3	( <sup>1</sup> )	( <sup>1</sup> )
\$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

<sup>1</sup> 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	12,206	7	8,359		
California.....	3	640	.....	.....	.....	.....	.....	1	44	1	100	.....	.....	1	496	.....	.....	.....	.....		
Illinois.....	11	3,507	.....	.....	.....	1	15	1	24	2	174	3	490	2	707	1	637	1	1,480		
Indiana.....	44	9,544	.....	.....	.....	5	90	1	25	6	428	20	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	1,938	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	839	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	2,364	16.8	15.2	4.5
Water wheels.....	2	2	2	.....	20	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	(*)	.....	.....
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	99.3
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	12,488	468,894	43,711,518	
California.....	3	592	295	295			297	297								
Illinois.....	11	6,638	6,205	6,155	50		433	1,619	1,186		270,826	4,713	10	72,808	870	
Indiana.....	44	21,031	20,687	17,951	2,738		844	4,045	4,301	443	457,900	736	175	33,693	75,000	
Kansas.....	23	1,031	976	603	373		55	140	85					66,957	146,069	
Maryland.....	7	427	257	235	22		170	230	60	640	21,388	175	331	1,020	2,289,789	
Missouri.....	4	8,820	8,770	8,770			50	11,833	11,783		169,028	30	100	5,642	17,680	
New Jersey.....	22	3,081	3,060	3,046	14		21	372	351		104,230	2,381	8,491	27,000		
New York.....	24	1,774	1,604	1,184	420		170	505	335	4,303	68,340	1,204	625	138,011	1,993	
Ohio.....	44	16,198	15,852	11,782	3,870		546	9,995	9,449	89	210,815	1,397	5	63,760	93,899	
Pennsylvania.....	111	55,182	54,284	43,393	10,886	5	898	12,804	11,906	6,788	453,613	4,093	2,079	4,498	12,728,097	
Virginia.....	5	245	170	170			75	85	10		17,653	1	2	34,966	22,605,773	
West Virginia.....	44	5,233	4,957	2,602	2,355		276	719	443		3,483			1,047		
All other states.....	11	2,880	2,790	2,785	5		90	345	265		81,725	2,663	670	30	5,734,514	

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	\$16,731,009
Glass sand, tons.....	1,004,086	769,792	581,720
Soda ash (carbonate of soda), tons.....	373,704	215,462	157,779
Salt cake (sulphate of soda), tons.....	76,540	53,905	53,257
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	3,090,939	1,493,638
Litharge and red lead, pounds.....	11,653,149	9,613,649	8,386,106
Potash or pearlash, pounds.....	6,938,365	5,446,338	4,406,211
Grinding sand, tons.....	706,689	410,856	265,438
Rouge, pounds.....	1,383,182	1,098,566	837,636

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
<b>Total value.....</b>	<b>1 \$92,095,203</b>	<b>2 \$79,607,938</b>	<b>\$56,539,712</b>
<b>Building glass.....</b>	<b>\$26,308,438</b>	<b>\$21,697,861</b>	<b>\$17,096,234</b>
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.....	205,690	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	3,679,694
Value.....	\$783,726	\$678,391	\$165,086
All other.....	\$964,599	\$1,133,214	\$250,056
<b>Pressed and blown glass.....</b>	<b>\$27,398,445</b>	<b>\$21,956,158</b>	<b>\$17,076,125</b>
Tableware, 100 pieces.....	1,286,059	1,283,974	655,141
Jellies, tumblers, and goblets, dozens.....	11,087,036	7,346,214	8,644,050
Lamps, dozens.....	822,482	487,017	807,765
Chimneys, dozens.....	6,652,967	7,089,756	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
<b>Bottles and jars.....</b>	<b>\$36,018,333</b>	<b>\$33,631,063</b>	<b>\$21,076,791</b>
Prescriptions, vials, and druggists' wares, gross.....	3,024,022	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	253,651	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.....	1,037,708	1,057,372	1,296,131
Packers and preservers, gross.....	1,237,175	1,237,065	784,588
Demijohns and carboys, dozens.....	122,570	64,450	83,243
<b>All other products.....</b>	<b>\$2,369,987</b>	<b>\$2,322,916</b>	<b>\$680,562</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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
<b>Total value.....</b>	<b>\$92,095,203</b>	<b>\$79,607,938</b>	<b>\$56,539,712</b>
<b>Building glass (including plate and window glass), total.....</b>	<b>26,308,438</b>	<b>21,697,861</b>	<b>17,096,234</b>
Illinois.....	648,718	281,559	24,000
Indiana.....	1,616,092	3,790,618	5,711,948
Kansas.....	1,131,808	381,054	.....
Missouri.....	1,778,364	1,036,433	505,564
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.....	14,958,649	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
<b>Pressed and blown glass, total.....</b>	<b>27,398,445</b>	<b>21,956,158</b>	<b>17,076,125</b>
Indiana.....	2,774,128	2,839,087	2,691,787
Kansas.....	202,696	64,697	.....
Maryland.....	508,492	46,191	100,000
New Jersey.....	1,019,536	181,559	21,300
New York.....	1,926,852	1,932,524	1,173,784
Ohio.....	6,160,707	3,954,060	2,738,289
Pennsylvania.....	6,847,228	9,406,183	8,458,550
West Virginia.....	4,306,528	2,620,665	1,379,706
All other states.....	651,978	890,592	617,709
<b>Bottles and jars, total.....</b>	<b>36,018,333</b>	<b>33,631,063</b>	<b>21,076,791</b>
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.....	528,767	536,478	346,633
Missouri.....	(1)	607,353	260,000
New Jersey.....	5,884,605	6,068,714	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	5,961,144	4,162,990
Virginia.....	681,900	549,031	(1)
West Virginia.....	646,521	602,002	381,847
All other states.....	1,033,718	1,064,413	812,623
<b>All other products.....</b>	<b>2,369,987</b>	<b>2,322,916</b>	<b>680,562</b>

<sup>1</sup> 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.

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	370 349 381	4,945 4,192 4,800	59 49 60	637 617 807	369 340 192	3,759 3,076 1,671	48 26 14	436 191 79	73 94 130	433 406 818	13 13 17	56 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 ..... .....	53 ..... .....	1 4 4	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 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	0 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 3	7 10 49	1 1 1	1 6 3
Ohio.....	1909 1904 1899	56 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	1,178 864 404	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	8 5 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.<sup>1</sup>

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.....	\$5,262,190	\$638,934	\$760,164	\$212,690	(2)	\$111,377	\$515,642	(2)	\$455,807	\$2,507,576	\$2,173,193	\$59,427	\$2,113,766
1908.....	6,570,123	904,773	821,616	265,281	\$2,784	115,890	805,656	\$5,901	360,278	3,284,944	2,505,417	107,593	2,397,821
1907.....	7,596,631	997,235	1,037,770	343,208	582	107,343	1,420,109	11,022	218,491	3,460,811	2,604,717	95,383	2,509,329
1906.....	7,507,833	805,732	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	671,639	627,618	289,708	2,393	28,657	1,184,088	4,006	177,457	2,963,123	2,252,799	65,869	2,186,930
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	71,408	1,906,983
1903.....	7,255,879	493,712	1,762,767	525,380	1,532	57,990	1,432,297	6,991	217,612	2,757,598	2,150,689	59,519	2,091,190
1902.....	6,205,052	458,454	1,827,498	356,518	641	12,581	999,934	6,528	191,080	2,351,809	1,969,106	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	2,126,308	55,286	2,071,023
1900.....	5,037,931	464,483	1,553,924	539,082	286	7,915	226,295	12,413	125,449	2,106,084	1,636,119	36,218	1,609,901
1899.....	4,303,660	371,304	1,275,184	521,957	622	9,528	233,190	419	119,832	1,771,534	1,503,651	32,660	1,470,991
1898.....	7,724,662	828,411	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	699,450	578,549	(4)	1,334,764	768,644	(5)	768,644
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

<sup>1</sup> "Commerce and Navigation of the United States," Bureau of Statistics, Department of Commerce and Labor.

<sup>2</sup> Included in "all other" glass and glassware imported.

<sup>3</sup> Included in "unsilvered" cylinder and crown glass, polished.

<sup>4</sup> Not reported separately.

<sup>5</sup> 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	55,256	170	2,268	52,518	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	4,788	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	11,563	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	986	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	1,330	.....	75	1,255	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	5,881	5	369	5,507	2,661	6,304	359	3,145	1,856	6,450	4,594
	1899	26	5,718	18	317	5,383	1,756	5,398	285	2,463	1,459	5,094	3,605
New York.....	1909	24	3,295	7	174	3,114	1,774	4,818	272	1,806	1,159	4,509	3,350
	1904	28	3,304	9	142	3,163	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	11,256	9,254	444	4,512	2,837	9,026	6,189
	1899	28	4,754	9	199	4,546	3,721	5,452	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	2	1 <sup>1</sup>	472	100	402	18	264	169	549	380
	1899	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
West Virginia.....	1909	51	6,509	13	306	6,199	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	693	1,872	1,279
All other states.....	1909	14	2,439	.....	169	2,270	3,472	4,045	247	1,434	667	3,280	2,313
	1904	17	2,948	2	136	2,810	2,887	3,269	183	1,531	1,107	3,375	2,268
	1899	13	1,330	10	67	1,253	848	970	65	646	421	1,343	922

<sup>1</sup> 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 horse-power.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 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	3,636	3	38	98	40	3,507	Ap 14,396	Se 1,441	4,385	3,975	203	202	5	6,638
Indiana.....	44	9,936	3	167	147	75	9,544	De 11,731	Jy 5,837	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	-----	13	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 7,289	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	10,198
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 609	Jy 46	609	552	3	54	-----	245
West Virginia.....	51	6,509	13	135	121	50	6,199	De 7,669	Jy 3,316	7,655	6,589	669	341	56	5,233
All other states <sup>2</sup> .....	14	2,439	-----	59	76	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..	\$129,288,384	\$85,374,185	\$2,944,861	\$2,048,730	\$39,299,624	\$7,523,937	\$24,595,562	\$92,400	\$414,133	\$85,864	\$3,369,074	\$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	25,034	536	682,367	5,047,333	3,505,879
Indiana.....	13,148,780	11,083,028	326,510	199,626	4,941,599	998,149	3,729,354	10,000	44,530	6,595	826,665	11,593,094	6,865,591
Kansas.....	1,769,326	1,840,346	44,153	21,211	986,189	85,523	586,221	2,400	13,093	-----	101,556	2,036,573	1,364,829
Maryland.....	887,464	885,093	39,822	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	41,736	-----	602,871	6,961,088	4,962,491
New York.....	4,817,663	3,839,887	190,764	81,502	1,806,470	325,968	833,119	15,263	14,650	16,887	555,274	4,608,790	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	9,670,288
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	50,899	199,891	-----	574	-----	29,842	681,900	431,113
West Virginia.....	7,368,665	7,045,692	240,939	194,408	3,628,117	400,055	1,895,873	5,885	25,667	28,778	625,970	7,779,483	5,483,555
All other states <sup>2</sup> .....	4,043,780	2,991,572	139,089	105,438	1,433,044	283,493	685,452	4,050	16,700	2,480	321,826	3,279,481	2,310,536

<sup>1</sup> Same number reported for one or more other months.  
<sup>2</sup> 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)

## 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.....	5,560
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.....	8,180,789
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.....	5,638,591	3	61.7	38.3	448	9,705	8.9	2	10,049,445	9.6	3
California.....	2,377,549	12	61.8	38.2	321	8,038	7.3	4	9,541,795	9.1	2
Pennsylvania.....	7,665,111	2	60.4	39.6	385	9,639	8.8	3	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	5,388,054	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	3,264	3.0	9	3,314,825	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.....	2,537,167	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	16	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	1,569,882	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	80.7	10.3	95	1,441	1.3	21	1,410,122	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.....	642,610	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	60.8	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	1,009,130	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	730,367	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.....	583,888	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.....	355,956	42	47.5	52.5	32	299	0.3	44	243,753	0.2	45
Wyoming.....	145,065	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.....	5,560	5,212	348	93.7	6.3
Salaried officers of corporations.....	1,069	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	31,479	78,005	28.8	71.2
16 years of age and over.....	108,541	31,211	77,330	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	( <sup>1</sup> )	( <sup>1</sup> )
Colorado.....	28.2	71.7	0.1	4	0.1
Connecticut.....	34.1	64.4	1.4	0.4	1.0
District of Columbia.....	26.8	73.1	0.1	0.1	.....
Georgia.....	30.8	67.3	1.9	1.9	.....
Illinois.....	24.6	74.7	0.7	0.1	0.6
Indiana.....	25.4	74.3	0.3	0.1	0.2
Iowa.....	28.3	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	( <sup>1</sup> )	( <sup>1</sup> )	.....
Missouri.....	24.3	75.1	0.5	0.1	0.4
Nebraska.....	24.7	75.1	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	.....
Oregon.....	25.0	74.6	0.4	.....	0.4
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	( <sup>1</sup> )
Wisconsin.....	23.1	75.9	0.9	0.1	0.8

<sup>1</sup> 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.	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	.....	.....
Arkansas.....	741	20	39	120	122	420	.....	20
California.....	8,083	1,470	1,270	2,301	516	2,241	176	64
Colorado.....	1,833	359	415	498	204	264	89	4
Connecticut.....	1,441	160	104	227	730	211	.....	.....
District of Columbia.....	993	130	222	205	245	190	.....	.....
Florida.....	571	.....	4	103	15	449	.....	.....
Georgia.....	1,332	40	25	4	274	910	83	.....
Illinois.....	9,705	510	1,550	1,594	2,073	4,032	.....	6
Indiana.....	2,901	80	195	490	921	1,257	8	.....
Iowa.....	2,123	115	210	339	416	1,012	.....	1
Kansas.....	1,490	83	252	370	302	474	4	.....
Kentucky.....	1,554	259	542	166	170	408	.....	9
Louisiana.....	1,036	19	34	212	16	755	.....	.....
Maine.....	816	49	56	66	184	460	.....	1
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	325	410	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	208	.....	.....
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	4
New York.....	12,578	831	2,209	2,095	3,809	3,551	22	1
North Carolina.....	812	13	4	48	39	703	.....	9
Ohio.....	5,893	994	818	1,681	1,134	1,257	6	3
Oklahoma.....	1,101	49	99	198	285	470	.....	.....
Oregon.....	1,457	37	214	534	464	208	.....	.....
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	333	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	258	.....	.....
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: 1909<sup>1</sup>

STATE.	Average number during the year.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
<b>United States</b> .....	<b>109,484</b>	<b>103,746</b>	<b>103,937</b>	<b>104,970</b>	<b>106,422</b>	<b>108,149</b>	<b>111,313</b>	<b>114,211</b>	<b>114,539</b>	<b>113,738</b>	<b>111,500</b>	<b>110,479</b>	<b>110,805</b>
Alabama.....	1,108	<i>908</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	<b>7,632</b>	<b>7,660</b>	7,528	7,911	7,985	8,107	8,366	8,277	8,350	8,209	8,118	8,116
Colorado.....	1,833	1,696	<i>1,684</i>	1,707	1,756	1,763	1,844	1,990	2,040	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	1,451	1,451
District of Columbia.....	993	1,020	1,099	1,013	1,017	1,013	965	927	<i>916</i>	935	1,001	1,027	1,069
Florida.....	571	566	565	578	562	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	1,367	1,366	1,351	1,342	1,323
Illinois.....	9,705	<b>9,238</b>	<b>9,959</b>	9,425	9,522	9,741	9,862	10,042	<b>10,141</b>	10,008	9,718	9,657	9,686
Indiana.....	2,901	<b>2,769</b>	<b>2,777</b>	2,786	2,807	2,872	2,984	2,959	<b>2,985</b>	2,969	2,949	2,982	2,973
Iowa.....	2,123	2,030	<i>2,021</i>	2,031	2,053	2,074	2,130	2,195	2,242	<b>2,248</b>	2,180	2,180	2,130
Kansas.....	1,490	<i>1,388</i>	<i>1,388</i>	1,401	1,440	1,449	1,499	1,549	1,558	<b>1,562</b>	1,551	1,556	1,539
Kentucky.....	1,554	<i>1,387</i>	<i>1,395</i>	1,419	1,547	1,576	1,611	1,658	1,649	1,628	1,617	1,575	1,593
Louisiana.....	1,056	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>697</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.....	5,058	5,071	<i>5,068</i>	5,077	5,734	5,839	6,039	6,226	6,136	<b>6,235</b>	6,113	6,066	6,096
Michigan.....	3,729	3,434	<i>3,423</i>	3,463	3,567	3,639	3,821	4,066	4,096	3,987	3,795	3,726	3,732
Minnesota.....	2,016	<i>2,715</i>	<b>2,729</b>	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	606	<i>587</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.....	608	<i>536</i>	542	545	560	615	652	672	691	671	620	601	598
New Jersey.....	2,984	<b>2,800</b>	2,821	2,841	2,838	2,881	3,054	3,194	<b>3,276</b>	3,145	2,994	2,967	2,997
New York.....	12,578	12,129	<b>12,160</b>	<i>12,107</i>	12,155	12,812	12,702	13,010	<b>13,046</b>	12,899	12,782	12,735	12,897
North Carolina.....	812	<i>745</i>	754	756	785	815	862	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	<b>6,069</b>	5,958	5,912	5,946
Oklahoma.....	1,101	<i>933</i>	955	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	1,490	1,497	1,512	1,505	1,497
Pennsylvania.....	9,639	<i>9,531</i>	9,357	9,380	9,474	9,630	9,771	9,756	9,716	9,820	<b>9,849</b>	9,802	9,782
Rhode Island.....	1,076	1,041	<i>1,040</i>	1,041	1,047	1,070	1,083	1,105	1,101	1,104	1,091	1,095	1,085
Tennessee.....	2,149	2,041	<i>2,039</i>	2,050	2,130	2,117	2,196	2,236	2,246	2,183	2,180	2,171	2,177
Texas.....	3,073	<b>2,791</b>	<b>2,847</b>	2,881	2,976	3,048	3,160	3,232	<b>3,284</b>	3,277	3,172	3,112	3,090
Utah.....	738	699	<i>690</i>	690	693	700	740	814	838	759	742	742	744
Virginia.....	1,351	1,283	<i>1,275</i>	1,279	1,314	1,370	1,399	1,412	1,401	1,395	1,376	1,361	1,354
Washington.....	3,264	<b>2,846</b>	<b>2,957</b>	2,986	3,066	3,169	3,339	3,537	3,663	3,579	3,391	3,262	3,229
West Virginia.....	679	<i>633</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

<sup>1</sup> 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.

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—		
	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.	Individuals.	Firms.	Corporations.
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	\$54,111,978
Alabama.....	15	5	18	237	57	814	28,859	8,597	100,201	171,899	59,944	677,287
Arizona.....	7	2	4	155	(X)	128	40,610	(X)	24,543	205,085	(X)	165,299
Arkansas.....	22	14	9	226	243	272	39,754	43,366	39,686	201,684	225,556	256,798
California.....	146	66	109	1,293	1,105	5,640	243,503	215,086	1,153,523	1,608,613	1,303,952	6,629,330
Colorado.....	45	28	28	500	280	1,053	75,211	44,863	170,210	550,407	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)	483,814
Florida.....	13	7	8	132	109	330	16,821	16,554	43,546	130,793	96,114	241,181
Georgia.....	15	10	17	275	182	875	28,159	23,515	139,980	189,983	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	515,959	285,444	920,412	2,882,560	1,784,263	5,382,622
Indiana.....	90	41	32	1,189	544	1,188	137,352	68,865	164,961	975,655	407,809	1,004,831
Iowa.....	122	39	20	1,904	570	649	191,591	91,549	145,631	909,688	529,575	624,188
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	141,067
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	1,580,279
Minnesota.....	99	35	24	1,091	585	1,240	202,976	99,190	212,188	1,034,675	583,597	1,237,526
Mississippi.....	14	9	7	177	204	148	26,083	33,581	21,309	135,406	182,189	122,484
Missouri.....	62	40	69	720	677	4,041	104,013	90,481	697,655	666,104	625,704	3,182,775
Montana.....	8	7	11	151	103	398	37,662	25,456	91,310	203,398	153,979	577,883
Nebraska.....	43	19	14	390	266	454	96,947	44,713	113,960	406,274	285,692	505,408
Nevada.....	1	1	4	(X)	(X)	105	(X)	(X)	26,918	(X)	(X)	166,037
New Hampshire.....	43	18	13	417	191	191	53,491	26,536	26,536	343,754	174,906	1,534,502
New Jersey.....	62	18	32	810	472	1,702	118,462	50,401	270,998	812,794	431,981	1,105,561
New Mexico.....	4	1	3	45	(X)	101	7,161	(X)	13,330	45,868	(X)	110,561
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	227,528
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	1,255,189	951,020	3,182,754
Oklahoma.....	47	27	19	403	315	383	83,050	55,020	62,609	468,325	345,163	384,490
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	1,774,412	3,703,658
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	58,975	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	10	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	850,906	1,664,834
Utah.....	10	3	9	85	11	642	16,067	2,533	125,441	78,813	11,250	704,028
Vermont.....	27	5	5	215	84	21,826	21,826	10,391	169,353	169,353	74,370	321,316
Virginia.....	28	17	12	588	366	397	72,497	43,472	57,128	412,351	269,624	321,316
Washington.....	86	47	39	877	543	1,844	144,784	96,782	304,079	656,631	650,619	2,198,575
West Virginia.....	14	11	18	177	109	393	32,315	13,615	56,127	137,693	90,337	353,835
Wisconsin.....	77	38	32	639	437	938	117,733	64,013	150,161	666,559	412,522	861,246
Wyoming.....	6	7	1	44	127	(X)	13,242	27,896	(X)	62,980	163,867	(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	\$104,680,086
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	54,383,604
\$100,000 and over.....	140	21,089	3,617,540	21,489,526
Per cent 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

STEAM LAUNDRIES EMPLOYING IN 1909—

STATE.	TOTAL.		STEAM LAUNDRIES EMPLOYING IN 1909—														
	Estab-lish-ments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners.		6 to 20 wage earners.		21 to 50 wage earners.		51 to 100 wage earners.		101 to 250 wage earners.		251 to 500 wage earners.		501 to 1,000 wage earners.	
			Estab-lish-ments.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.	Estab-lish-ments.	Wage earners.
United States .....	5,186	109,484	59	1,434	4,555	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	2,258	.....	.....	.....	.....
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	455	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	952	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	146	.....	.....	.....	.....	.....	.....
Kentucky .....	73	1,554	.....	4	20	42	538	20	657	5	309	.....	.....	.....	.....	.....	.....
Louisiana .....	25	1,036	.....	4	16	8	96	6	213	4	265	3	446	.....	.....	.....	.....
Maine .....	78	816	1	34	109	35	368	7	221	.....	.....	1	118	.....	.....	.....	.....
Maryland .....	41	1,278	.....	7	24	16	177	11	389	5	380	2	308	.....	.....	.....	.....
Massachusetts .....	260	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	800	35	1,220	10	658	5	773	.....	.....	.....	.....
Minnesota .....	158	2,916	2	51	155	66	800	24	832	14	907	1	112	.....	.....	.....	.....
Mississippi .....	30	529	.....	2	4	.....	19	241	.....	.....	.....	.....	.....	.....	.....	.....	.....
Missouri .....	171	5,438	3	33	83	64	898	37	1,189	24	1,716	9	1,314	1	328	.....	.....
Montana .....	26	652	.....	15	215	9	215	9	236	2	151	.....	.....	.....	.....	.....	.....
Nebraska .....	76	1,110	4	30	69	25	330	13	371	4	320	.....	.....	.....	.....	.....	.....
New Hampshire .....	61	608	.....	22	71	35	301	3	40	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	190	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	991	10	1,302	2	625	.....	.....
Oklahoma .....	93	1,101	.....	23	64	55	589	15	448	.....	.....	.....	.....	.....	.....	.....	.....
Oregon .....	53	1,457	.....	14	54	25	295	10	358	7	513	2	237	.....	.....	.....	.....
Pennsylvania .....	385	9,639	1	92	314	158	1,886	92	2,905	23	1,465	17	2,592	2	567	.....	.....
Rhode Island .....	53	1,076	.....	19	59	18	191	10	302	4	270	2	254	.....	.....	.....	.....
Tennessee .....	63	2,149	.....	8	28	26	284	14	416	11	749	3	394	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	.....	.....	1	264	.....	.....
Virginia .....	57	1,351	.....	3	10	30	335	17	543	6	392	1	101	.....	.....	.....	.....
Washington .....	172	3,264	4	49	154	75	880	29	966	10	682	5	623	.....	.....	.....	.....
West Virginia .....	43	679	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.
<b>United States.....</b>	<b>9.6</b>	<b>52.6</b>	<b>20.8</b>	<b>17.0</b>					
Alabama.....	16.0	43.5	18.6	21.9	Montana.....	8.4	59.8	20.2	11.6
Arizona.....	5.4	50.6	24.5	19.6	Nebraska.....	12.4	46.2	27.0	14.4
Arkansas.....	9.6	50.8	23.5	16.0	Nevada.....	10.6	54.7	17.9	16.8
California.....	9.7	54.7	19.7	16.0	New Hampshire.....	2.5	58.9	21.1	17.4
Colorado.....	9.4	56.7	18.2	15.7	New Jersey.....	9.6	54.2	20.1	16.1
Connecticut.....	9.1	53.7	22.6	14.6	New Mexico.....	6.7	50.8	16.0	23.5
Delaware.....	17.4	48.1	10.8	14.7	New York.....	9.2	55.0	19.6	16.3
District of Columbia.....	10.4	50.7	18.4	20.5	North Carolina.....	12.3	48.5	24.7	14.5
Florida.....	9.7	52.9	20.8	16.6	North Dakota.....	4.9	45.5	24.8	24.7
Georgia.....	15.8	46.2	23.0	14.9	Ohio.....	11.6	51.1	19.7	17.7
Idaho.....	6.9	54.7	20.0	9.4	Oklahoma.....	8.2	52.6	21.6	17.7
Illinois.....	8.7	52.4	20.9	18.0	Oregon.....	12.8	54.7	21.0	11.5
Indiana.....	9.9	52.7	19.2	18.2	Pennsylvania.....	10.0	51.1	21.2	17.7
Iowa.....	6.6	49.0	26.5	17.0	Rhode Island.....	7.3	54.8	18.8	19.0
Kansas.....	6.1	51.2	25.9	16.8	South Carolina.....	14.6	42.1	24.9	18.4
Kentucky.....	10.3	53.7	20.9	15.2	South Dakota.....	7.3	53.6	26.1	13.0
Louisiana.....	12.1	53.6	19.5	14.8	Tennessee.....	10.3	50.2	22.2	17.3
Maine.....	6.8	55.2	21.4	16.6	Texas.....	9.9	49.2	17.9	22.9
Maryland.....	14.1	41.8	18.6	25.5	Utah.....	10.6	50.1	20.9	18.4
Massachusetts.....	7.1	54.4	19.0	19.4	Vermont.....	1.9	65.5	20.7	11.9
Michigan.....	10.6	51.2	24.0	14.3	Virginia.....	11.4	52.7	22.0	13.0
Minnesota.....	9.5	51.0	23.1	16.4	Washington.....	9.0	57.7	17.9	15.3
Mississippi.....	12.2	51.2	25.4	11.1	West Virginia.....	11.8	52.5	22.1	13.6
Missouri.....	10.3	51.3	21.4	17.1	Wisconsin.....	8.8	51.3	23.1	16.7
					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 establishments 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.	Electric.	Other.			Anthracite (long tons).	Bituminous (short tons).				
<b>United States.....</b>	<b>5,180</b>	<b>123,477</b>	<b>109,870</b>	<b>105,272</b>	<b>4,073</b>	<b>525</b>	<b>11,157</b>	<b>2,450</b>	<b>23,916</b>	<b>12,759</b>	<b>178,640</b>	<b>886,734</b>	<b>14,785</b>	<b>94,723</b>	<b>372,586</b>	<b>2,729,324</b>
Alabama.....	38	1,041	838	834	4		203		293	90						
Arizona.....	13	298	283	283			15		15		620	1,357	1,216	360	48	3,006
Arkansas.....	46	900	855	837	18		30	15	192	162		9,091	6	1,282	3,782	1,000
California.....	321	8,961	7,679	7,504	15	160	1,224	58	1,700	476	222	2,640	19	1,682	138	129,582
Colorado.....	99	1,895	1,443	1,428		15	272	180	278	6	428	25,685		3,496	270,010	50,267
Connecticut.....	95	1,852	1,695	1,695			135	22	256	121	3,492	10,448	11	20	65	7,433
Delaware.....	15	235	215	215			20		20		12	2,536	31			12,249
District of Columbia.....	17	998	926	926			32	40	254	222	1,500	7,693	961	5		1,060
Florida.....	28	528	476	467	9		43	9	43			1,265		4		1,253
Georgia.....	42	1,180	1,101	1,101			76	3	156	80	310	12,279	204	7,826	244	1,417
Idaho.....	24	489	379	377	2		110		133	23		4,680		212		1,695
Illinois.....	448	10,780	9,680	9,494	171	15	1,044	56	1,986	942	12,854	126,068	551	1,498	51	718
Indiana.....	163	3,746	3,303	3,240	58	5	318	125	389	71	201	44,364	183	108	248	47,655
Iowa.....	181	2,941	2,668	2,557	111		273		285	13	812	44,733	36	264	710	22,073
Kansas.....	138	1,958	1,781	1,525	266		107	70	150	43		12,180		1,566	364,702	50,267
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	1,634	5,940	2,144	810	58	5,574
Maine.....	78	1,085	856	811	10	35	224	5	200	36	2,236	6,193	17	36	74	16,284
Maryland.....	41	1,091	1,023	1,019	4		8	60	102	94	1,067	10,300		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	30,432
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	409	2,287	28,131	252	4,248	424	10,832
Mississippi.....	30	821	705	705			36	20	36	20		7,048		106	306	306
Missouri.....	171	5,727	5,577	5,288	289		150		609	459	676	52,650	10	224	26,126	207,928
Montana.....	26	851	639	639			212		269	38	326	9,979		1,300	46	2,905
Nebraska.....	76	1,510	1,354	1,282	72		156		159	3		17,554	25		649	6,046
Nevada.....	5	149	149	149								520		880	1,244	
New Hampshire.....	61	988	861	825	7	29	82	45	82		470	4,932	223	79	21	2,586
New Jersey.....	112	3,917	3,828	3,794	29	5	63	26	638	500	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		101	1,468	
North Dakota.....	34	606	500	485	15		106		166		161	5,888		170	1,840	
Ohio.....	253	7,431	7,022	6,235	737	50	401	8	1,739	1,338	398	59,799	77	26	73	649,446
Oklahoma.....	93	1,484	1,248	1,195	53		231	5	239	8	966	9,377		393	1,340	224,176
Oregon.....	58	1,585	1,486	1,406	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	45	1,099	8,031	50	71	25	22	927
South Carolina.....	24	591	540	540			51		105	54		4,575	50	1,095	48	538
South Dakota.....	28	519	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	2,922	2,865	57		263	10	357	124	4	41,690	53	4,275	17,410	67,066
Utah.....	22	969	927	927			42		345	303	257	8,978		18	272	
Vermont.....	32	349	296	263	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	12,006	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	1,048	902	752	150		131	15	160	29		3,360			145,661	
Wisconsin.....	147	2,373	2,137	2,104	33		220	16	322	102	170	25,349	214	1,772	366	9,973
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	\$6,552,465	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.
<b>Total for 557 cities<sup>1</sup>...</b>	<b>3,104</b>	<b>103,503</b>	<b>92,233</b>	<b>\$38,274,513</b>	<b>\$88,428,911</b>						
<b>ALABAMA:</b>						<b>FLORIDA:</b>					
Birmingham.....	11	684	608	217,031	521,761	Jacksonville.....	6	248	229	\$62,073	\$167,726
Mobile.....	4	191	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
<b>ARIZONA:</b>						<b>GEORGIA:</b>					
Phoenix.....	3	90	82	38,038	97,077	Atlanta.....	10	775	663	175,680	515,816
<b>ARKANSAS:</b>						Macon.....	3	120	111	27,896	69,275
Fort Smith.....	3	98	86	31,541	79,151	Savannah.....	4	222	199	70,805	157,568
Hot Springs.....	3	105	93	39,280	106,600	<b>IDAHO:</b>					
Little Rock.....	6	232	262	103,949	253,413	Boise.....	3	81	74	37,000	87,623
<b>CALIFORNIA:</b>						<b>ILLINOIS:</b>					
Alameda.....	9	105	89	44,188	109,066	Aurora.....	5	105	93	41,496	78,784
Berkeley.....	5	102	90	47,034	103,733	Bloomington.....	4	145	133	51,766	127,380
Eureka.....	4	59	49	26,936	65,667	Chicago.....	3	44	34	12,482	27,328
Fresno.....	4	98	93	67,300	130,651	Champaign.....	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	225,991	Elgin.....	3	63	55	24,681	53,922
Sacramento.....	10	293	250	155,511	333,755	Evanston.....	7	148	133	64,112	164,058
San Diego.....	8	251	230	102,873	226,997	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	65,600
Stockton.....	7	173	160	82,235	167,149	Peoria.....	7	295	268	104,084	239,158
<b>COLORADO:</b>						Quincy.....	5	185	161	37,449	117,317
Colorado Springs.....	4	197	185	60,045	177,973	Rock Island.....	5	62	46	19,843	53,088
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
<b>CONNECTICUT:</b>						Waukegan.....	3	52	47	21,470	44,985
Bridgeport.....	7	166	150	59,451	156,031	<b>INDIANA:</b>					
Danbury.....	4	80	71	30,505	56,076	Evansville.....	7	304	280	93,093	208,368
Hartford.....	12	278	248	110,903	262,916	Fort Wayne.....	3	133	122	46,463	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	50	50	18,039	59,671	Lafayette.....	3	70	61	22,189	61,406
Stamford.....	4	65	59	18,527	49,137	Logansport.....	3	80	73	25,902	58,235
Waterbury.....	7	111	97	38,317	87,941	Marion.....	3	53	39	15,172	48,609
<b>DELAWARE:</b>						Michigan City.....	3	44	40	12,357	39,327
Wilmington.....	11	257	201	65,393	164,960	Muncie.....	3	65	62	21,500	48,200
<b>DISTRICT OF COLUMBIA:</b>						Richmond.....	4	62	54	15,800	44,742
Washington.....	17	1,096	993	347,793	795,999	South Bend.....	6	162	146	53,941	114,844
						Terre Haute.....	5	160	138	52,565	119,012
						Vincennes.....	3	64	58	15,680	42,210

<sup>1</sup> 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.
<b>IOWA:</b>						<b>NEW JERSEY—Continued.</b>					
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	185,111	419,293
Council Bluffs.....	3	150	138	44,924	110,984	Orange.....	3	126	115	60,726	106,590
Davenport.....	3	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	28,695	58,600
Iowa City.....	3	30	25	10,164	26,600	Trenton.....	5	244	221	77,185	182,388
Keokuk.....	3	21	15	5,822	12,850	<b>NEW YORK:</b>					
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
<b>KANSAS:</b>						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	82,293	83,686
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	Ithaca.....	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	155,506	Johnstown.....	3	18	14	5,975	13,080
Wichita.....	11	269	233	106,261	270,391	Kingston.....	4	42	29	12,527	31,447
<b>KENTUCKY:</b>						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	5,802,722
Louisville.....	22	799	718	252,965	583,448	Newburgh.....	4	39	35	16,109	37,523
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	16,612
<b>LOUISIANA:</b>						Olean.....	3	34	26	9,474	20,571
New Orleans.....	9	708	663	220,956	522,690	Oswego.....	5	28	19	11,104	25,650
<b>MAINE:</b>						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	17,363
<b>MARYLAND:</b>						Schenectady.....	7	101	89	38,353	94,400
Baltimore.....	18	1,141	969	263,909	773,225	Syracuse.....	23	411	360	151,944	355,700
Cumberland.....	4	116	102	30,151	83,891	Troy.....	15	932	894	400,857	675,060
<b>MASSACHUSETTS:</b>						Utica.....	12	214	177	66,153	171,404
Beverly.....	3	51	44	12,014	34,950	Watertown.....	7	73	62	19,563	56,882
Boston.....	53	1,860	1,700	709,077	1,577,643	Yonkers.....	3	109	99	36,199	88,053
Brockton.....	3	129	116	57,884	115,308	<b>NORTH CAROLINA:</b>					
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	262	188	50,562	130,008
Fall River.....	10	219	190	97,652	216,838	Raleigh.....	3	90	66	15,455	48,299
Fitchburg.....	4	68	62	25,197	52,066	Wilmington.....	3	90	81	17,940	52,697
Haverhill.....	6	97	87	40,940	86,034	<b>NORTH DAKOTA:</b>					
Holyoke.....	4	86	78	39,860	82,800	Fargo.....	6	128	119	61,098	131,636
Hyde Park.....	3	29	25	11,267	23,488	Grand Forks.....	4	128	114	44,708	120,941
Lawrence.....	9	81	68	26,024	66,405	<b>OHIO:</b>					
Lowell.....	9	207	188	80,577	170,085	Akron.....	7	151	129	53,280	111,632
Lynn.....	10	297	270	118,929	276,314	Canton.....	3	132	122	54,158	86,148
Malden.....	3	91	82	42,349	64,986	Cincinnati.....	18	1,414	1,256	489,780	1,144,866
New Bedford.....	10	193	180	85,740	175,172	Cleveland.....	22	1,461	1,254	529,549	1,255,547
Newburyport.....	3	28	25	10,021	25,253	Columbus.....	11	538	471	183,009	485,402
Northampton.....	3	42	39	15,281	31,551	Dayton.....	6	336	301	116,517	288,663
Quincy.....	4	52	40	20,666	56,393	East Liverpool.....	3	65	50	21,420	50,734
Salem.....	3	160	149	69,614	152,212	Hamilton.....	5	69	54	19,238	53,676
Somerville.....	5	68	59	26,977	64,676	Lorain.....	4	60	52	21,894	52,995
Springfield.....	12	287	252	97,406	284,732	Mansfield.....	4	64	57	17,877	38,811
Taunton.....	5	108	92	34,508	72,216	Marion.....	4	47	38	13,654	46,929
Wakefield.....	3	27	23	9,734	25,234	Piqua.....	3	34	30	11,848	28,000
Waltham.....	3	90	75	31,536	73,708	Springfield.....	4	100	87	27,484	61,800
Worcester.....	13	387	357	144,116	316,215	Steubenville.....	3	92	83	28,825	58,020
<b>MICHIGAN:</b>						Tiffin.....	3	21	17	5,874	13,272
Adrian.....	4	46	38	11,872	22,362	Toledo.....	19	380	335	139,939	330,336
Ann Arbor.....	5	85	52	16,512	55,754	Warren.....	3	48	40	16,916	40,334
Battle Creek.....	5	145	109	37,555	105,518	Youngstown.....	4	242	227	74,288	159,185
Detroit.....	35	1,717	1,508	536,474	1,845,728	Zanesville.....	3	102	94	31,963	78,643
Flint.....	3	96	82	35,776	69,507	<b>OKLAHOMA:</b>					
Grand Rapids.....	5	390	361	132,167	333,911	Enid.....	3	69	60	25,380	64,443
Jackson.....	4	84	76	31,408	62,800	Muskogee.....	6	181	153	56,015	158,252
Kalamazoo.....	3	149	142	55,504	118,854	Oklahoma City.....	9	235	200	84,756	229,703
Lansing.....	8	127	110	45,203	101,365	Tulsa.....	5	82	72	39,322	81,344
Muskegon.....	3	52	46	19,389	38,100	<b>OREGON:</b>					
Port Huron.....	4	115	99	27,253	80,460	Portland.....	20	1,131	986	474,216	1,130,701
Saginaw.....	4	169	156	54,743	117,225	<b>PENNSYLVANIA:</b>					
<b>MINNESOTA:</b>						Allentown.....	5	49	39	15,232	35,640
Duluth.....	10	369	315	130,022	352,325	Altoona.....	4	74	65	22,940	47,324
Minneapolis.....	43	1,237	1,112	445,329	1,084,260	Beaver Falls.....	3	39	34	12,748	33,106
St. Paul.....	22	939	830	325,544	773,862	Bethlehem.....	3	33	28	9,158	21,633
Winona.....	3	77	72	21,324	57,433	Easton.....	3	81	66	17,826	53,756
<b>MISSOURI:</b>						Erie.....	7	166	151	56,176	119,124
Joplin.....	7	134	117	38,969	97,476	Harrisburg.....	9	328	302	94,636	188,100
Kansas City.....	32	1,830	1,735	725,721	1,656,680	Lancaster.....	3	166	136	53,519	130,573
St. Joseph.....	6	269	232	85,280	218,017	Lebanon.....	4	99	67	23,119	49,618
St. Louis.....	40	2,722	2,414	945,419	2,100,604	Meadville.....	3	32	26	7,770	28,157
Sedalia.....	3	97	85	28,561	85,494	New Castle.....	3	71	62	21,672	50,010
Springfield.....	8	152	131	38,180	117,728	Philadelphia.....	82	4,148	3,777	1,372,765	3,208,369
<b>MONTANA:</b>						Pittsburgh.....	26	1,877	1,668	695,139	1,668,441
Butte.....	4	235	221	170,619	342,463	Pottsville.....	3	54	50	15,623	31,600
Great Falls.....	3	72	63	45,333	95,014	Reading.....	8	159	142	53,436	96,940
Missoula.....	3	90	76	42,449	100,419	Scranton.....	4	235	275	102,028	235,486
<b>NEBRASKA:</b>						Sunbury.....	3	25	21	7,006	19,781
Lincoln.....	7	224	201	82,439	213,800	Wilkes-Barre.....	7	197	177	57,241	119,618
Omaha.....	17	573	475	190,854	538,539	Williamsport.....	7	117	106	29,168	68,415
<b>NEW HAMPSHIRE:</b>						York.....	7	145	123	46,078	130,574
Concord.....	4	137	127	40,903	85,525	<b>RHODE ISLAND:</b>					
Dover.....	3	23	17	5,928	18,500	Newport.....	5	135	122	36,555	73,192
Keene.....	3	48	42	17,100	31,568	Pawtucket.....	5	166	154	65,960	142,500
Manchester.....	13	132	106	40,669	104,227	Providence.....	24	739	660	304,811	669,435
Nashua.....	5	56	47	20,165	49,528	Warwick.....	3	22	17	5,243	14,408
Portsmouth.....	3	45	42	13,335	34,442	Woonsocket.....	5	69	50	20,882	52,415
<b>NEW JERSEY:</b>						<b>SOUTH CAROLINA:</b>					
Asbury Park.....	3	52	47	17,584	39,716	Charleston.....	3	123	107	20,844	68,000
Atlantic City.....	3	98	91	31,150	82,758	Greenville.....	3	65	52	14,798	43,300
Camden.....	8	168	152	52,992	149,292	<b>SOUTH DAKOTA:</b>					
East Orange.....	3	28	23	10,186	21,806	Aberdeen.....	4	90	80	29,834	73,700
Elizabeth.....	3	198	187	87,649	180,908	Sioux Falls.....	3	73	66	28,885	64,898
Hoboken.....	3	121	115	60,496	139,646						

MANUFACTURES.

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

Table 13—Continued.	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	\$105,453
Jackson	7	55	49	16,602	46,095	Everett	7	103	85	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	282,250	634,289	Spokane	23	645	575	328,245	680,391
Nashville	10	535	476	125,378	364,494	Tacoma	14	426	385	189,328	399,739
TEXAS:						Walla Walla	4	111	103	57,713	95,606
Austin	3	96	71	24,664	68,757	WEST VIRGINIA:					
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	224,905	499,705	Beloit	3	49	43	15,478	40,943
San Antonio	3	360	301	103,287	339,007	Janesville	3	56	50	17,786	40,143
Waco	5	214	205	74,432	133,300	Kenosha	4	56	50	20,652	57,336
UTAH:						La Crosse	4	132	122	43,624	120,702
Ogden	4	117	110	53,388	111,577	Madison	3	123	109	44,426	122,158
Salt Lake City	7	605	554	258,188	610,330	Manitowoc	3	24	19	8,813	16,813
VERMONT:						Milwaukee	33	920	817	320,223	712,084
Burlington	3	75	70	21,128	46,876	Oshkosh	3	51	45	14,492	37,696
Rutland	3	34	29	13,135	27,238	Racine	5	82	72	25,930	59,740
VIRGINIA:						WYOMING:					
Lynchburg	3	166	146	35,119	105,401	Cheyenne	3	84	75	34,070	91,483
Norfolk	6	227	203	67,021	186,228						
Petersburg	3	53	42	13,907	34,140						
Richmond	9	430	397	141,114	295,814						
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:	2	LOUISIANA:	2	NEBRASKA:	2	PENNSYLVANIA—Continued.	1
Anniston	1	Alexandria	2	Grand Island	2	Carnegie	2
Gadsden	1	Baton Rouge	1	South Omaha	2	Chambersburg	1
Selma	2	Lake Charles	1	NEVADA:	1	Colesville	2
ARIZONA:	2	Monroe	1	Reno	1	Columbia	1
Tucson	2	Shreveport	2	NEW HAMPSHIRE:	1	Connellsville	1
ARKANSAS:	2	MAINE:	2	Berlin	1	Dubois	1
Pine Bluff	2	Auburn	2	Laconia	2	Greensburg	2
CALIFORNIA:	2	Augusta	2	New Jersey:	1	Hazleton	2
Bakersfield	2	Biddeford	2	Bayonne	1	Homestead	2
Pomona	2	Waterville	2	Bloomfield	1	Johnstown	1
Redlands	2	MARYLAND:	2	Hackensack	1	McKeesport	2
Riverside	2	Frederick	2	Irvington	1	Maharaj City	1
San Bernardino	2	Hagerstown	2	Montclair	2	Monessen	1
Santa Cruz	2	MASSACHUSETTS:	1	Morristown	1	Mount Carmel	1
Vallejo	2	Adams	1	New Brunswick	1	Nanticoke	1
COLORADO:	2	Attleborough	2	Perth Amboy	2	Norristown	2
Trinidad	2	Brookline	2	Phillipsburg	1	Oil City	2
CONNECTICUT:	1	Chelsea	2	Union	1	Phoenixville	1
Ansonia	1	Everett	2	West New York	1	Pittston	1
Middletown	2	Framingham	2	New Mexico:	2	Plymouth	1
New Britain	2	Gardner	1	Albuquerque	2	Potstown	2
Torrington	2	Gloucester	2	NEW YORK:	2	Shamokin	2
Wallingford	1	Greenfield	2	Batavia	2	Sharon	1
Williamantic	2	Leominster	1	Cohoes	2	South Bethlehem	2
FLORIDA:	1	Marlborough	2	Corning	1	Steeleton	1
Key West	1	Medford	1	Cortland	2	Uniontown	2
GEORGIA:	1	Melrose	2	Dunkirk	1	Warren	2
Athens	1	Methuen	2	Fulton	2	Washington	2
Augusta	2	Milford	2	Hornell	2	West Chester	1
Brunswick	1	North Adams	1	Hudson	1	Wilkinsburg	1
Columbus	2	Peabody	2	Little Falls	2	RHODE ISLAND:	2
Rome	1	Pittsfield	2	Lackport	2	Central Falls	2
Waycross	1	Plymouth	2	Middletown	2	SOUTH CAROLINA:	2
ILLINOIS:	2	Southbridge	2	New Rochelle	2	Columbia	2
Alton	2	Watertown	1	North Tonawanda	1	Spartanburg	2
Belleville	2	Webster	1	Ossining	2	TEXAS:	2
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	1
Kankakee	2	MICHIGAN:	2	Watervliet	1	Sherman	2
La Salle	2	Alpena	2	White Plains	2	Temple	2
Lincoln	1	Bay City	2	North CAROLINA:	2	Tyler	1
Mattoon	2	Escanaba	1	Durham	2	VERMONT:	1
Oak Park	1	Holland	2	Greensboro	2	Barre	1
Streator	2	Ironwood	1	OHIO:	2	VIRGINIA:	2
INDIANA:	2	Ishpeming	1	Alliance	2	Alexandria	2
Anderson	2	Manistee	2	Ashtabula	2	Danville	1
Elkhart	2	Marquette	2	Bellaire	2	Newport News	1
Elwood	1	Menominee	1	Cambridge	2	Portsmouth	2
Gary	2	Pontiac	2	Chillicothe	2	Stanton	2
Huntington	2	Sault Ste. Marie	2	Elyria	2	WASHINGTON:	2
Jeffersonville	1	Traverse City	2	Findlay	2	Aberdeen	2
Laporte	1	MINNESOTA:	2	Ironton	2	North Yakima	2
Mishawaka	2	Mankato	2	Lancaster	2	WEST VIRGINIA:	2
New Albany	2	St. Cloud	1	Lima	2	Bluefield	2
Peru	2	Stillwater	2	Massillon	2	Martinsburg	2
IOWA:	2	Virginia	2	Middletown	2	WISCONSIN:	2
Boone	2	Mississippi:	2	Newark	3	Ashland	2
Clinton	2	Hattiesburg	2	Portsmouth	2	Bau Claire	1
Fort Dodge	2	Jackson	2	Sandusky	2	Pond du Lac	2
Marshalltown	2	Meridian	2	OKLAHOMA:	2	Green Bay	2
Mason City	2	Natchez	2	Chickasha	2	Marquette	2
Ottumwa	2	Vicksburg	2	Guthrie	2	Shobogyan	2
KANSAS:	2	Missouri:	2	McAlester	2	Superior	2
Coffeyville	2	Hannibal	2	Shawnee	2	Wausau	2
Fort Scott	2	Jefferson City	1	OREGON:	2		
Hutchinson	2	Moberly	1	Salem	2		
KENTUCKY:	1	Webb City	2	PENNSYLVANIA:	1		
Covington	2	MONTANA:	2	Braddock	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.

MANUFACTURES.

STEAM LAUNDRIES—DETAILED

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.		Average number.	Wage earners.		Total.	16 and over.		Under 16.				
					Male.	Female.		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 103,746	112,084	51,947	79,152	274	691	123,477	
2	Alabama.....	38	1,274	26	49	64	27	1,108	Se 1,187	Ja 998	1,104	380	755	9	10	1,041	
3	Arizona.....	13	309	11	9	2	4	283	De <sup>1</sup> 291	Au 266	291	80	211			298	
4	Arkansas.....	45	850	53	23	17	16	741	Jy 795	Ja 651	747	218	523	4	2	900	
5	California.....	321	9,060	308	223	806	185	8,038	Jy 8,366	Fe 7,560	8,216	3,258	4,958	8	2	8,961	
6	Colorado.....	99	2,076	103	37	45	58	1,833	Au 2,046	Fe 1,084	1,865	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 <sup>1</sup> 228	Ja <sup>1</sup> 215	236	43	193			235	
9	District of Columbia.....	17	1,096	13	26	10	54	995	De 1,069	Au 916	1,069	287	781	1		998	
10	Florida.....	28	638	28	20	9	10	571	De 647	Je 542	647	199	438	2	8	528	
11	Georgia.....	42	1,525	37	45	77	34	1,332	Au 1,367	Fe 1,285	1,294	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	1,751	168	26	39	28	1,490	Se 1,562	Ja <sup>1</sup> 1,388	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	1,059	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	32	80	1,278	Ne 1,304	Fe 1,252	1,285	318	912	9	46	1,991	
21	Massachusetts.....	280	6,655	313	133	79	172	5,958	Se 6,235	Fe 5,068	6,175	1,901	4,193	25	56	6,802	
22	Michigan.....	219	4,328	249	97	115	138	3,729	Au 4,006	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	2,981	598	2,367	1		2,919	
24	Mississippi.....	30	603	32	22	9	11	529	Jy 561	Ja 495	519	145	360	10		521	
25	Missouri.....	171	6,113	152	157	150	216	5,438	Au 5,689	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	450			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	119	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 586	628	223	401	1	1	988	
30	New Jersey.....	112	3,334	101	66	101	82	2,984	Au 3,276	Ja 2,800	3,008	888	2,088	9	73	3,917	
31	New Mexico.....	8	188	6	7	1	8	140	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 304	466	99	365	2		606	
35	Ohio.....	253	6,773	277	178	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	10,915	436	212	305	323	9,639	Oc 9,849	Ja 9,331	9,855	2,610	7,048	39	158	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	7	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 <sup>1</sup> 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 2,701	3,196	1,157	1,995	21	23	3,195	
44	Utah.....	22	811	16	31	7	1	738	Au 838	Fe <sup>1</sup> 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	1,185	2,101	3	1	3,084	
48	West Virginia.....	43	793	41	37	11	25	679	Jy 713	Ja 633	687	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 185	Fe 150	177	47	129		1	319	

<sup>1</sup>Same 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 \$68,935,236	\$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	303,206	11,880	4,400	153,467	35,029	39,124	10,580	1,319	-----	47,407	369,282
4 568,411	823,658	31,995	18,537	266,279	43,287	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	905,854	74,978	215,341	52,223	10,841	5,780	181,510	1,980,693
7 870,567	1,089,900	73,478	26,057	584,338	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	688,057	43,574	27,018	347,793	36,003	90,253	6,879	4,903	-----	128,534	795,999
10 461,038	371,750	25,480	10,850	196,569	26,239	48,982	9,645	2,107	-----	50,138	474,088
11 654,756	832,036	61,110	70,767	384,198	54,036	136,718	25,620	6,157	-----	92,630	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	5,684	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	3,492	210,956	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	139,798	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
18 795,687	679,365	55,023	27,410	363,945	36,503	95,825	9,251	6,038	267	85,100	852,021
19 536,361	540,777	24,035	12,867	298,338	52,605	63,056	18,233	4,012	787	66,844	736,367
20 643,458	834,514	58,501	59,495	348,573	43,172	112,523	18,651	5,441	100	188,358	693,766
21 2,961,025	4,745,135	203,391	132,935	2,582,593	273,665	630,180	137,758	29,607	26,167	729,849	5,764,572
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	103,160	351,194	81,459	13,794	3,058	267,180	2,855,738
24 332,302	318,354	28,776	10,149	162,983	26,887	64,086	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	764,004	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	379,290	4,760	4,781	223,555	32,429	47,598	14,529	1,675	2,187	47,795	618,660
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	2,770,277
31 164,187	128,344	8,500	3,956	65,243	8,725	11,756	780	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	1,669,982
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	3,219	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	232,683	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	786,557	119,749	212,153	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