

NORTH DAKOTA.

GENERAL STATISTICS.

General character of the state.—North Dakota has a gross area of 70,837 square miles, of which 70,183 represent land surface. The inhabitants of the state in 1900 numbered 319,146; in 1910, 577,056; and in 1920, 646,872. In total population North Dakota ranked thirty-sixth among the states in 1920. The number of inhabitants per square mile in 1910 was 8.2, the corresponding figure for 1920 being 9.2.

In 1920 there were three cities in the state—Fargo, Grand Forks, and Minot—having more than 10,000 inhabitants. These three cities, with a combined population of 46,447, formed 7.2 per cent of the total population for North Dakota in that year, and reported 33.3 per cent of the value of the state's manufactured products in 1919.

Importance and growth of manufactures (Table 1).—The large increases in wages, cost of materials, and the value of products, as presented in this table, are largely due to the change in industrial conditions brought about by the World War, and, therefore, can not properly be used to measure the growth of manufactures between the industrial censuses of 1914 and 1919. However, the increases in average number of wage earners and horsepower are evidences of the growth of the manufacturing activities of the state. The addition of the Federal income tax since 1914 will account for the increase in "rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of county totals for other censuses with those for 1919. Statistics presented in this table, however, show that four counties—Cass, Grand Forks, Morton, and Ward—reported 48.2 per cent of the total number of wage earners and of value added by manufacture in North Dakota in 1919.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is often misleading as to their true importance from a manufacturing standpoint. Their ranking might change materially if based upon the average number of wage earners or value added by manufacture.

Persons engaged in manufacturing industries (Table 4).—The age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." The classification by sex for 1919 was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures for individual industries will be found in Table 25.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table are those which employed more than 80 wage earners in 1919, and for which statistics can be shown without the possibility of disclosing the operations of individual establishments.

Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more (Table 6).—Comparative figures for Minot are not available, since the city had less than 10,000 inhabitants at censuses prior to 1919.

Wage earners, by months (Table 7).—The statistics for wage earners in this table are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the several census years.

Wage earners, by months, for selected industries and cities (Table 8).—In addition to the number of wage earners employed by months, similar data are given for males and females for all industries combined and for the cities of Fargo, Grand Forks, and Minot. There were few industries in the state in 1919 where the number of female wage earners predominated.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working day in North Dakota. In that year 23.4 per cent of the wage earners were included in the group "48 and under," as against 66.6 per cent in 1919. On the other hand, in 1914 the "60" and "over 60" groups constituted 41.6 per cent of the total wage earners, as compared with 15.9 per cent in 1919.

Size of establishments, by average number of wage earners, for selected industries and cities (Table 10).—The predominance of the number of small establishments, when based on the number of wage earners employed, is evidenced in this table by the fact that of the total number of establishments in the state, 86.2 per cent were in the classes having less than six wage earners, while such establishments employed but 23.4 per cent of the total number of wage earners.

Size of establishments, by value of products (Table 11).—At the censuses of 1909 and 1914 establishments with products valued at \$100,000 to \$1,000,000 constituted one group, but at the census of 1919 this group was subdivided into "\$100,000 to \$500,000" and "\$500,000 to \$1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups in the case of all items for 1909,

and in the case of average number of wage earners and value added by manufacture for 1914.

Size of establishments, by value of products, for selected industries (Table 12).—In the preparation of this table it was necessary in several instances to combine the establishments of one group with those of some other group to avoid the possibility of disclosing the operations of individual establishments.

Size of establishments, by value of products, for cities of 10,000 inhabitants or more (Table 13).—This table illustrates the fact that the number of establishments of itself is no real index of manufacturing activities. Minot, for instance, with only 2.9 per cent of the total number of establishments in the state, reported 9.7 per cent of the total value of products.

Character of ownership (Table 14).—The predominance of corporate ownership is clearly brought out in this table. Although corporations owned but 30 per cent of the number of establishments in the state in 1919, they reported 76.5 per cent of the average number of wage earners, and 79.4 per cent of the total value of products. During the five-year

period 1914 to 1919 the average number of wage earners in corporations increased 1,055, or 44.6 per cent, and the value of products, \$29,408,314, or 182.2 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the number of establishments in these three cities in 1919 represented but 19.5 per cent of the total in the state, while they reported 34.9 per cent of the average number of wage earners and 33.3 per cent of the value of products.

Number and horsepower of types of prime movers (Table 16).—Although both the owned and rented power increased from 1914 to 1919, the proportionate increase in rented power was the greater, being 86.9 per cent for the five-year period, as compared with 10.6 per cent for owned power.

Fuel consumed (Table 17).—This table shows the principal kinds of fuel used by the manufacturing plants in the state in 1919 and 1914, and gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, and 1899.

	MANUFACTURING INDUSTRIES.					PER CENT OF INCREASE. ¹			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	894	699	752	507	337	27.9	-7.0	43.3	50.4
Persons engaged.....	6,148	4,627	4,148	2,545	(²)	32.9	11.5	63.0	.....
Proprietors and firm members.....	774	643	723	494	(²)	23.4	-16.6	46.4	.....
Salaried employees.....	902	749	636	296	152	20.4	17.8	114.9	91.7
Wage earners (average number).....	4,472	3,275	2,789	1,755	1,358	36.5	17.4	58.9	23.2
Primary horsepower.....	17,791	14,062	13,196	9,873	7,351	26.5	6.6	33.7	34.3
Capital.....	\$24,549,838	\$14,213,362	\$11,584,747	\$5,703,837	\$3,511,968	72.7	22.7	103.1	62.4
Salaries and wages.....	6,835,367	3,302,200	2,416,135	1,289,119	800,833	107.0	36.7	87.4	61.0
Salaries.....	1,434,027	885,965	628,780	257,812	129,532	61.9	40.9	143.9	96.0
Wages.....	5,401,340	2,416,235	1,787,405	1,031,307	671,321	123.5	35.2	73.3	53.6
Paid for contract work.....	118,159	72,009	21,323	17,869	(²)	64.1	237.7	19.3	.....
Rent and taxes.....	654,239	213,328	159,787	77,961	(²)	206.7	33.5	.....	.....
Cost of materials.....	44,489,499	14,434,315	13,673,590	7,095,956	4,150,890	207.2	5.9	92.7	71.0
Value of products.....	57,373,622	21,147,431	19,137,506	10,217,914	6,239,840	171.3	10.5	87.3	63.2
Value added by manufacture ⁴	12,884,123	6,663,116	5,463,916	3,121,928	2,108,980	93.4	21.9	75.0	43.6

¹ A minus sign (-) denotes decrease.
² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

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TABLE 2.—STATISTICS FOR THE STATE, BY COUNTIES: 1919.

COUNTY.	Number of establishments.	WAGE EARNERS.		Rent and taxes.	Cost of materials.	Value of products.	Value added by manufacture.	Primary horsepower.
		Average number.	Wages.					
The state.....	894	4,472	\$5,401,330	\$654,239	\$44,489,499	\$57,373,622	\$12,884,123	17,791
Adams.....	7	6	7,738	1,522	54,090	83,671	29,581	99
Barnes.....	24	120	146,402	29,942	5,017,032	5,479,788	402,756	1,113
Benson.....	13	7	7,604	800	114,233	151,764	37,531	141
Billings and Sioux ¹	3	3	3,800	334	1,285	6,750	5,455	2
Bottineau.....	16	17	16,606	3,460	122,863	209,677	89,514	222
Bowman.....	12	11	9,218	1,886	79,466	109,265	29,799	150
Burke.....	9	36	55,685	1,729	144,541	246,925	102,384	82
Burleigh.....	23	140	168,348	29,686	1,406,017	1,967,081	501,064	316
Cass.....	127	903	1,103,784	119,939	6,490,815	9,237,911	2,777,096	2,538
Cavalier.....	12	14	15,695	2,040	39,644	90,837	51,193	91
Dickey.....	16	37	38,649	45,766	2,181,114	2,493,874	312,760	701
Divide.....	7	6	5,525	1,255	43,147	62,484	19,337	33
Dunn.....	10	6	4,039	1,061	81,685	112,280	30,575	159
Eddy.....	16	105	122,476	12,435	209,711	405,733	199,022	143
Emmons.....	9	7	8,635	1,306	18,485	45,270	26,785	51
Foster.....	13	15	18,058	2,771	129,841	202,367	75,526	105
Golden Valley.....	5	11	16,550	2,571	29,551	62,157	32,606	33
Grand Forks.....	65	546	582,902	110,912	5,378,185	6,925,029	1,548,844	1,301
Grant.....	10	7	8,025	1,444	29,219	49,520	20,301	79
Griggs.....	10	13	15,366	1,712	151,160	198,357	47,197	88
Hettinger.....	14	28	34,877	3,743	154,201	244,790	90,589	292
Kidder.....	6	3	3,971	446	46,909	57,708	10,799	41
La Moure.....	10	20	23,394	2,030	259,011	320,403	61,392	495
Logan.....	4	3	3,530	289	47,547	61,340	13,793	92
McHenry.....	11	17	24,055	1,840	63,562	110,097	46,535	93
McIntosh.....	8	33	46,326	1,967	149,074	232,572	83,496	113
McKenzie.....	10	12	13,988	2,778	134,216	175,036	40,820	166
McLean.....	16	15	14,920	2,110	227,257	292,399	65,142	179
Mercer.....	8	6	4,854	632	110,820	126,456	15,636	92
Morton.....	33	342	477,904	46,348	3,169,264	4,044,635	875,371	1,196
Mountrail.....	10	11	12,630	1,237	7,577	30,815	23,238	24
Nelson.....	19	21	21,914	2,133	27,889	85,230	57,341	69
Oliver.....	3	4	3,200	64	48,470	60,039	11,569	23
Pembina.....	15	17	20,923	2,334	352,971	417,316	64,345	159
Pierce.....	8	16	15,115	2,465	325,617	376,605	50,958	162
Ramsey.....	23	220	279,564	13,757	543,780	964,934	421,154	444
Ransom.....	12	152	215,135	5,777	682,054	989,070	307,016	467
Renville.....	7	8	6,525	1,146	76,025	100,929	24,904	130
Richland.....	45	131	154,932	15,207	1,224,486	1,635,296	410,810	679
Rolette.....	8	8	7,116	1,017	72,696	99,370	26,674	203
Sargent.....	10	12	13,005	1,483	90,447	135,280	35,833	44
Sheridan.....	4	2	2,197	804	1,450	9,038	7,588	4
Slope.....	5	149	240,924	292	71,119	331,599	260,480	22
Stark.....	26	210	274,219	38,301	2,675,109	3,325,794	650,685	1,252
Steele.....	8	11	13,253	846	43,360	74,675	31,315	98
Stutsman.....	33	290	288,965	40,799	4,202,683	4,997,222	794,539	1,183
Towner.....	8	6	6,068	2,107	10,902	33,065	22,163	81
Traill.....	14	30	29,188	2,750	82,578	135,316	52,738	161
Walsh.....	38	87	86,412	7,371	2,198,398	2,604,620	406,222	734
Ward.....	39	365	421,361	62,716	4,841,735	5,846,667	1,004,932	1,003
Wells.....	12	62	95,825	3,344	284,664	433,688	149,024	433
Williams.....	20	171	188,749	13,535	538,534	850,898	312,394	310

¹ Billings and Sioux Counties combined to avoid disclosure of individual operations.

TABLE 3.—PRINCIPAL INDUSTRIES, RANKED BY VALUE OF PRODUCTS: 1919.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.			Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.
All industries.....	894	4,472	100.0	\$57,374	100.0	\$12,884	100.0	Confectionery and ice cream.....	20	107	2.4	\$757	1.3	\$317	2.5
Flour-mill and gristmill products.....	87	568	12.7	29,282	51.0	3,059	23.7	Saddlery and harness.....	14	65	1.5	676	1.2	173	1.3
Butter.....	57	212	4.7	11,122	19.4	1,125	8.7	Printing and publishing, book and job.....	17	103	2.3	539	0.9	322	2.5
Cars and general shop construction and repairs by steam-railroad companies.....	21	1,539	34.4	3,183	5.5	2,241	17.4	Marble and stone work.....	12	33	0.7	496	0.9	193	1.5
Printing and publishing, newspapers and periodicals.....	301	557	12.5	2,686	4.7	2,052	15.9	Copper, tin, and sheet-iron work.....	16	55	1.2	411	0.7	194	1.5
Bread and other bakery products.....	68	242	5.4	1,950	3.4	737	5.7	Mineral and carbonated waters.....	22	31	0.7	389	0.7	191	1.5
Automobile repairing.....	139	303	6.8	1,232	2.1	686	5.3	Gas, illuminating and heating.....	5	43	1.0	384	0.7	229	1.8
								Foundry and machine-shop products.....	20	81	1.8	355	0.6	221	1.7
								Brick and terra-cotta products.....	5	140	3.1	309	0.5	227	1.8
								All other industries.....	90	393	8.8	3,603	6.3	915	7.1

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TABLE 4.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES: 1919, 1914, AND 1909.

CLASS.	Cen- sus year.	Total	Male.	Fe- male.	PER CENT OF TOTAL.		CLASS.	Cen- sus year.	Total	Male.	Fe- male.	PER CENT OF TOTAL.	
					Male.	Fe- male.						Male.	Fe- male.
All classes.....	1919	6,148	5,578	570	90.7	9.3	Clerks and other subordinate salaried employees.	1919	522	325	197	62.3	37.7
	1914	4,627	4,164	463	90.0	10.0		1914	492	350	136	72.4	27.6
	1909	4,148	3,777	371	91.1	8.9		1909	394	303	91	76.9	23.1
Proprietors and officials.....	1919	1,154	1,117	37	96.8	3.2	Wage earners (average number).....	1919	4,472	4,136	336	92.5	7.5
	1914	860	836	24	97.2	2.8		1914	3,275	2,972	303	90.7	9.3
	1909	905	936	29	97.0	3.0		1909	2,789	2,535	251	91.0	9.0
Proprietors and firm members.....	1919	774	745	29	96.3	3.7	16 years of age and over.....	1919	4,407	4,077	330	92.5	7.5
	1914	603	582	21	96.5	3.5		1914	3,245	2,945	300	90.8	9.2
	1909	723	697	26	96.4	3.6		1909	2,732	2,459	273	91.1	8.9
Salaried officers of corporations.....	1919	112	108	4	96.4	3.6	Under 16 years of age.....	1919	65	59	6	90.8	9.2
	1914	63	62	1	98.4	1.6		1914	30	27	3	90.0	10.0
	1909	64	64	.....	100.0	.....		1909	57	49	8	86.0	14.0
Superintendents and managers.....	1919	268	264	4	98.5	1.5							
	1914	194	192	2	99.0	1.0							
	1909	178	175	3	98.3	1.7							

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE: 1919 AND 1914.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Un- der 16 years of age.				16 years of age and over.		Un- der 16 years of age.
			Male.	Fe- male.					Male.	Fe- male.	
All industries.....	1919	4,472	91.2	7.4	1.5	Confectionery and ice cream.....	1919	107	42.1	57.9	.....
	1914	3,275	89.9	9.2	0.9		1914	109	36.7	63.3	.....
	1909	2,789	89.3	8.7	2.0	Flour-mill and gristmill products.....	1919	568	98.9	0.7	0.4
Automobile repairing.....	1919	303	99.7	0.3	.....		1914	424	100.0	.....	.....
	1914	13	100.0	.....	.....	Foundry and machine-shop products¹.....	1919	85	100.0	.....	.....
Bread and other bakery products.....	1919	242	64.9	33.9	1.2		1914	76	100.0	.....	.....
	1914	205	72.2	27.3	0.5	Printing and publishing, book and job.....	1919	103	75.7	18.4	5.8
Brick and terra-cotta products.....	1919	140	88.6	0.7	10.7		1914	127	76.4	22.8	0.8
	1914	171	100.0	.....	.....	Printing and publishing, newspapers and periodicals.	1919	557	77.2	16.9	5.9
Butter.....	1919	212	90.1	9.4	0.5		1914	625	80.6	16.0	3.4
	1914	115	97.4	0.9	1.7	All other industries.....	1919	616	94.6	4.5	0.8
Cars and general shop construction and re- pairs by steam-railroad companies.	1919	1,539	98.8	1.2	.....		1914	539	91.1	8.3	0.6
	1914	871	99.8	.....	0.2						

1 Includes "iron and steel, welding."

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY SEX AND AGE, AND VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	FARGO.			GRAND FORKS.			MINOT.
	1919	1914	1909	1919	1914	1909	1919
Wage earners (average number).....	723	690	510	501	343	350	336
16 years of age and over.....	720	689	506	491	341	336	334
Male.....	614	555	434	429	301	275	324
Female.....	106	134	72	62	40	61	10
Under 16 years of age.....	3	1	4	10	2	14	2
Value of products.....	\$8,770,575	\$3,006,043	\$2,476,845	\$6,779,123	\$1,815,669	\$1,910,002	\$5,561,236

TABLE 7.—WAGE EARNERS, BY MONTHS: 1919, 1914, AND 1909.

MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.			MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.		
	1919	1914	1909	1919	1914	1909		1919	1914	1909	1919	1914	1909
January.....	3,996	3,000	2,556	82.4	82.8	77.2	July.....	4,841	3,625	3,004	99.8	100.0	98.4
February.....	4,014	2,954	2,386	82.8	81.5	78.2	August.....	4,817	3,554	2,880	99.9	93.0	94.4
March.....	3,989	2,976	2,443	82.2	82.1	80.0	September.....	4,758	3,533	2,827	98.1	97.5	95.9
April.....	4,175	3,104	2,550	86.1	85.6	84.5	October.....	4,850	3,307	3,033	100.0	93.7	99.4
May.....	4,224	3,207	2,816	87.1	88.5	92.3	November.....	4,731	3,333	3,052	97.5	91.9	100.0
June.....	4,573	3,442	3,041	94.3	95.0	99.6	December.....	4,666	3,175	2,950	96.2	87.6	96.7

¹ The figures represent the number employed on the 15th of each month or the nearest representative day. Maximum number indicated by bold-faced figures, minimum by italic figures.

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TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

[The month of maximum employment for each industry is indicated by bold-faced figures and that of minimum employment by italic figures.]

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	4,472	3,996	4,014	3,989	4,175	4,224	4,573	4,841	4,847	4,758	4,850	4,731	4,566	82.2
Males.....	4,136	3,703	3,724	3,703	3,866	3,902	4,224	4,488	4,481	4,403	4,481	4,359	4,298	82.5
Females.....	336	293	290	<i>286</i>	309	322	349	353	366	355	369	372	268	76.9
Automobile repairing.....	303	<i>203</i>	209	229	301	323	368	392	359	374	337	273	228	51.8
Bread and other bakery products.....	242	213	209	<i>206</i>	216	224	246	255	270	273	263	264	255	75.5
Brick and terra-cotta products.....	140	114	114	118	121	129	204	208	169	134	162	119	88	42.3
Butter.....	212	<i>131</i>	133	135	208	239	308	326	271	224	204	193	172	40.2
Cars and general shop construction and repairs by steam-railroad companies.....	1,539	1,575	1,574	1,539	1,526	1,438	<i>1,418</i>	1,479	1,505	1,493	1,609	1,633	1,678	84.5
Confectionery and ice cream.....	107	82	91	92	94	105	111	113	119	111	122	121	123	66.7
Flour-mill and gristmill products.....	598	580	584	551	547	551	546	538	555	600	619	592	553	86.9
Foundry and machine-shop products.....	81	<i>59</i>	62	66	73	80	89	107	99	96	86	79	76	55.1
Printing and publishing, book and job.....	103	<i>94</i>	97	98	96	103	105	97	106	105	107	113	115	81.7
Printing and publishing, newspapers and periodicals.....	557	<i>538</i>	<i>534</i>	539	549	552	567	556	561	567	567	571	583	91.6
All other industries.....	620	<i>407</i>	<i>407</i>	416	444	480	611	760	803	781	774	773	784	51.9
<i>Industries showing large proportion of females.</i>														
Bread and other bakery products.....	82	67	65	<i>62</i>	68	71	85	90	95	97	94	98	92	63.3
Confectionery and ice cream.....	62	<i>50</i>	56	54	54	60	64	61	64	60	72	73	76	65.8
Printing and publishing, newspapers and periodicals.....	100	96	92	<i>91</i>	100	97	105	100	103	99	105	102	110	82.7
Total for cities.....	1,560	<i>1,355</i>	1,383	1,374	1,519	1,518	1,651	1,709	1,665	1,657	1,675	1,622	1,592	79.3
Males.....	1,382	<i>1,205</i>	1,230	1,227	1,366	1,356	1,471	1,528	1,468	1,465	1,470	1,411	1,357	78.9
Females.....	178	150	153	<i>147</i>	153	162	180	181	197	192	205	211	235	69.7
FARGO.....	723	605	<i>602</i>	614	678	706	795	824	787	791	777	755	743	73.1
Males.....	617	<i>514</i>	517	530	588	614	690	718	670	668	654	623	618	71.6
Females.....	106	91	85	84	90	92	105	106	117	123	123	132	125	63.6
GRAND FORKS.....	501	<i>427</i>	449	445	484	497	529	550	546	527	535	516	507	77.6
Males.....	439	<i>378</i>	389	389	429	437	468	489	480	470	463	446	434	76.9
Females.....	62	<i>49</i>	60	56	55	60	63	61	66	57	72	70	73	69.9
MINOT.....	336	323	332	<i>315</i>	357	<i>315</i>	327	336	332	339	343	351	342	86.8
Males.....	326	315	324	308	349	305	315	321	318	327	333	342	335	86.4
Females.....	10	8	8	7	8	10	12	15	14	12	10	9	7	46.7

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	4,472	28	167	2,782	109	439	234	633	80
	1914	3,275	(²)	(²)	765	116	560	472	996	366
	1909	2,789	(²)	(²)	423	186	542	227	1,303	108
Automobile repairing.....	1919	303			49	3	78	1	169	3
	1914	13					2	1	10	
Bread and other bakery products.....	1919	242			162		17	4	45	14
	1914	205	(²)	(²)	12	10	33	2	122	26
Brick and terra-cotta products.....	1919	140				7	85		48	
	1914	171					16		155	
Butter.....	1919	212			30	2	15	5	126	34
	1914	115	(²)	(²)	3		9	5	60	38
Cars and general shop construction and repairs by steam-railroad companies.....	1919	1,539		145	1,212		88	182		162
	1914	871	(²)	(²)	280			341		
Confectionery and ice cream.....	1919	107			60	12	26	1	6	2
	1914	109	(²)	(²)	3		60	46		
Flour-mill and gristmill products.....	1919	598	7		371	1	45		119	25
	1914	424					13	1	317	93
Foundry and machine-shop products ³	1919	85			6	28	7		44	
	1914	76	(²)	(²)	2		2		72	
Printing and publishing, book and job.....	1919	103			101	2				
	1914	127	(²)	(²)	97	27	3			
Printing and publishing, newspapers and periodicals.....	1919	557	12	2	472	20	32		17	2
	1914	625	(²)	(²)	308	64	183	9	59	2
All other industries.....	1919	616	9	20	319	34	134	41	59	
	1914	539	(²)	(²)	60	15	151	67	201	45
Total for cities.....	1919	1,560	9	20	999	74	236	39	160	23
	1914	1,033	(²)	(²)	218	43	172	114	347	139
FARGO.....	1919	723	9	20	361	74	129	32	75	23
	1914	690	(²)	(²)	136	41	147	27	259	80
GRAND FORKS.....	1919	501			340		103		58	
	1914	343	(²)	(²)	82	2	25	87	88	59
MINOT.....	1919	336			298		4	7	27	

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Includes "iron and steel, welding."

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING.—										
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.	
				Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries.....	834	4,472	211	560	1,046	84	860	24	765	5	380	10	1,421
Automobile repairing.....	139	303	12	118	216	9	87						
Bread and other bakery products.....	68	242	19	42	100	6	59			1	83		
Brick and terra-cotta products.....	5	140		1	1	2	27	1	27				
Butter.....	57	212	7	42	79	6	83	2	50				
Cars and general shop construction and repairs by steam-railroad companies.....	21	1,539		3	11	5	65	3	96	1	89	9	1,287
Confectionery and ice cream.....	20	107	3	13	21	2	19	2	67				
Flour-mill and gristmill products.....	87	568	14	51	99	15	130	5	207	2	132		
Foundry and machine-shop products.....	20	81	4	13	22	2	24	1	28				
Printing and publishing, book and job.....	17	103	5	7	17	4	61	1	25				
Printing and publishing, newspapers and periodicals.....	301	557	109	173	281	14	123	5	153				
All other industries.....	159	620	38	97	192	19	182	4	112			1	124
Total for cities.....	174	1,560	23	82	196	52	534	13	396	2	139	2	295
FARGO.....	101	723	15	45	110	34	369	6	161	1	83		
GRAND FORKS.....	47	501	2	28	62	9	92	7	235			1	112
MINOT.....	26	336	6	9	24	9	73			1	56	1	182

TABLE 11.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	894	699	752	4,472	3,275	2,789	\$57,373,622	\$21,147,431	\$19,137,506	\$12,884,123	\$6,663,116	\$5,463,916
Less than \$5,000.....	357	360	382	202	302	351	958,443	906,316	915,408	647,801	677,473	658,537
\$5,000 to \$20,000.....	282	206	238	582	581	628	2,800,704	2,000,450	2,350,795	1,589,010	1,009,318	1,103,610
\$20,000 to \$100,000.....	175	92	99	892	886	951	7,338,004	4,038,119	4,767,125	2,676,934	1,677,089	1,703,216
\$100,000 to \$500,000.....	63	33		2,104			13,341,254	6,074,865		4,585,937		
\$500,000 to \$1,000,000.....	5	18	133	145	1,506	1,850	3,069,209	18,127,681	11,104,180	470,701	3,299,238	1,998,553
\$1,000,000 and over.....	12			547			29,866,008			2,913,740		
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	39.9	51.5	50.8	4.5	9.2	12.6	1.7	4.3	4.8	5.0	10.2	12.1
\$5,000 to \$20,000.....	31.5	29.5	31.6	13.0	17.7	22.5	4.9	9.5	12.3	12.3	15.1	20.2
\$20,000 to \$100,000.....	19.6	13.2	13.2	19.9	27.1	34.1	12.8	19.1	24.9	20.8	25.2	31.2
\$100,000 to \$500,000.....	7.0	4.7		47.1			23.3	28.7		35.6		
\$500,000 to \$1,000,000.....	0.6	1.2	4.4	3.2	46.0	30.8	5.3	38.5	58.0	3.7	49.5	36.6
\$1,000,000 and over.....	1.3			12.2			52.1			22.6		

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

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TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1910 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
			Per cent distribution.				Per cent distribution.				Per cent distribution.				Per cent distribution.	
	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914
AUTOMOBILE REPAIRING.....	139	6	100.0	100.0	303	13	100.0	100.0	\$1,231,981	\$36,651	100.0	100.0	\$686,060	\$21,984	100.0	100.0
Less than \$5,000.....	63	3	45.3	50.0	51	1	16.8	7.7	174,218	9,200	14.1	25.1	114,777	6,046	16.7	27.4
\$5,000 to \$20,000.....	65	3	46.8	50.0	175	12	57.8	92.3	631,015	27,451	51.2	74.9	396,395	15,928	57.8	72.5
\$20,000 and over.....	11		7.9		77		25.4		426,748		34.6		174,888		25.5	
BREAD AND OTHER BAKERY PRODUCTS.....	68	58	100.0	100.0	242	205	100.0	100.0	1,949,673	810,465	100.0	100.0	736,937	365,785	100.0	100.0
Less than \$5,000.....	13	21	19.1	36.2	2	14	0.8	6.8	42,691	64,779	2.2	8.0	13,837	30,562	1.9	8.4
\$5,000 to \$20,000.....	28	32	41.2	55.2	30	86	12.4	42.0	313,551	313,551	14.9	38.7	116,267	143,013	15.8	39.1
\$20,000 and over.....	27	5	39.7	8.6	210	105	86.8	51.2	1,615,707	432,135	82.9	53.3	606,833	192,210	82.3	52.5
BUTTER.....	57	58	100.0	100.0	212	115	100.0	100.0	11,121,687	1,739,692	100.0	100.0	1,125,017	275,215	100.0	100.0
Less than \$5,000.....	3		5.3		1		0.5		8,783		0.1		2,654		0.2	
\$5,000 to \$20,000.....	6	136	10.5	62.1	2	133	0.9	28.7	81,925	1,434,887	0.8	25.0	22,008	157,595	2.0	29.9
\$20,000 to \$100,000.....	34	17	59.6	29.3	53	40	25.0	34.8	1,595,052	567,606	14.3	32.6	227,634	91,522	20.2	33.3
\$100,000 to \$500,000.....	8	5	14.0	8.6	39	42	18.4	36.5	1,583,208	737,199	14.2	42.4	203,337	126,098	18.1	45.8
\$500,000 and over.....	6		10.5		117		55.2		7,849,119		70.6		669,384		59.5	
FLOUR-MILL AND GRISTMILL PRODUCTS.....	87	59	100.0	100.0	568	424	100.0	100.0	29,282,056	12,029,905	100.0	100.0	3,058,961	1,957,661	100.0	100.0
Less than \$5,000.....	4	3	4.6	5.1		1		0.2	12,196	10,428	0.1	0.1	2,351	1,521	0.1	0.1
\$5,000 to \$20,000.....	17	11	19.5	18.6	9	14	1.6	3.3	214,197	113,789	0.7	0.9	29,297	21,036	1.0	1.1
\$20,000 to \$100,000.....	36	24	41.4	40.7	62	65	10.9	15.3	1,160,300	1,160,300	5.4	9.6	257,359	211,702	8.4	10.8
\$100,000 to \$500,000.....	21	* 21	24.1	35.6	139	* 344	24.5	81.1	4,900,312	* 10,745,388	16.7	89.3	516,154	* 1,723,102	16.9	88.0
\$500,000 and over.....	9		10.3		358		63.0		22,559,950		77.0		2,253,800		73.7	
PRINTING AND PUBLISHING, NEWS-PAPERS AND PERIODICALS.....	301	331	100.0	100.0	557	625	100.0	100.0	2,685,869	1,805,071	100.0	100.0	2,051,953	1,488,258	100.0	100.0
Less than \$5,000.....	207	256	68.8	77.3	115	225	20.6	36.0	552,838	637,645	20.6	35.3	416,348	525,780	20.3	35.3
\$5,000 to \$20,000.....	71	64	23.6	19.3	167	200	30.0	32.0	601,448	495,284	22.4	27.4	461,610	394,576	22.5	29.5
\$20,000 to \$100,000.....	19	* 11	6.3	3.3	158	* 200	28.4	32.0	775,995	* 672,142	28.9	37.2	614,740	* 557,902	30.0	38.2
\$100,000 to \$500,000.....	4		1.3		117		21.0		755,588		28.1		559,255		27.2	

* Includes the group "Less than \$5,000."

* Includes the group "\$500,000 and over."

* Includes the group "\$100,000 to \$500,000."

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
FARGO.....	101	723	100.0	\$6,770,575	100.0	\$2,422,736	100.0
Less than \$5,000.....	19	7	1.0	40,465	0.6	31,199	1.3
\$5,000 to \$20,000.....	33	101	14.0	391,187	5.8	251,875	10.4
\$20,000 to \$100,000.....	30	221	30.6	1,202,838	17.8	627,390	25.9
\$100,000 and over.....	19	394	54.5	5,136,085	75.9	1,512,272	62.4
GRAND FORKS.....	47	501	100.0	6,779,123	100.0	1,460,803	100.0
Less than \$5,000.....	5	4	0.8	12,318	0.2	6,909	0.5
\$5,000 to \$20,000.....	20	55	11.0	208,315	3.1	124,908	8.6
\$20,000 to \$100,000.....	15	145	28.9	651,673	9.6	242,510	23.4
\$100,000 and over.....	7	207	59.3	5,906,817	87.1	986,476	67.5
MINOT.....	26	336	100.0	5,561,236	100.0	915,206	100.0
Less than \$5,000.....	3			6,927	0.1	5,269	0.6
\$5,000 to \$20,000.....	11	22	6.5	116,760	2.1	69,296	7.6
\$20,000 to \$100,000.....	7	47	14.0	336,652	6.1	165,049	18.0
\$100,000 and over.....	5	267	79.5	5,100,897	91.7	675,592	73.8

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TABLE 14.—CHARACTER OF OWNERSHIP FOR SELECTED INDUSTRIES AND CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
					Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.				
All industries.....	1919	451	268	175	4,472	583	3,421	468	13.0	76.5	10.5	\$57,373,622	\$5,191,635	\$45,548,509	\$6,633,478	9.0	79.4	11.6				
	1914	418	165	116	3,275	703	2,306	276	21.5	72.2	6.3	21,147,431	3,262,469	16,140,195	1,744,707	15.4	76.3	8.3				
	1909	472	133	147	2,789	775	1,752	262	27.8	62.8	9.4	19,137,506	3,555,937	13,586,008	1,994,961	18.6	71.0	10.4				
Automobile repairing.....	1919	68	29	42	303	92	132	79	30.4	43.6	26.1	1,231,981	346,252	534,914	350,815	28.1	43.4	28.5				
	1914	1	1	4	13			13				36,651			36,651							
Bread and other bakery prod- ucts.	1919	51	5	12	242	100	109	33	41.3	45.0	13.6	1,949,673	897,103	759,148	293,422	46.0	38.9	15.0				
	1914	48	5	5	205	99	91	15	48.3	44.4	7.3	810,465	374,288	353,506	82,671	46.2	43.6	10.2				
Butter.....	1919	21	18	18	212	28	140	44	13.2	66.0	20.8	11,121,687	918,285	8,187,298	2,016,104	8.3	73.6	18.1				
	1914	14	21	23	115	27	56	32	23.5	48.7	27.8	1,739,692	425,525	881,514	432,653	24.4	50.7	24.9				
Flour-mill and gristmill prod- ucts.	1919	23	49	15	568	32	501	35	5.6	88.2	6.2	29,282,056	1,073,858	27,095,305	1,112,893	3.7	92.5	3.8				
	1914	13	37	9	424	38	354	32	9.0	83.5	7.5	12,029,905	1,005,772	10,345,596	678,537	8.4	86.0	5.6				
Printing and publishing, newspapers and periodicals.	1919	179	77	45	557	154	358	45	27.6	64.3	8.1	2,685,899	788,009	1,598,017	299,843	29.3	59.5	11.2				
	1914	244	37	50	625	318	261	46	50.9	41.8	7.4	1,805,071	821,368	709,857	273,846	45.5	39.3	15.2				
Total for cities.....	1919	55	82	37	1,560	151	1,288	121	9.7	82.6	7.7	19,110,984	1,069,033	16,089,326	1,952,575	5.6	84.2	10.2				
	1914	37	55	16	1,033	137	862	34	13.3	83.4	3.3	4,821,712	456,632	4,170,158	194,922	9.5	86.5	4.0				
FARGO.....	1919	36	44	21	723	109	535	79	15.1	74.0	10.9	6,770,575	829,617	4,329,207	1,611,691	12.3	63.9	23.8				
	1914	28	36	12	690	109	552	29	15.8	80.0	4.2	3,006,043	396,715	2,504,307	105,021	13.2	83.3	3.5				
GRAND FORKS.....	1919	12	26	9	501	24	462	15	4.8	92.2	3.0	6,779,123	127,433	6,550,027	101,663	1.9	96.6	1.5				
	1914	9	19	4	343	28	310	5	8.2	90.4	1.4	1,815,669	59,917	1,665,851	89,901	3.3	91.7	5.0				
MINOT.....	1919	7	12	7	336	18	291	27	5.4	86.6	8.0	5,561,236	111,983	5,210,032	239,221	2.0	93.7	4.3				

¹ Includes the groups "Individuals" and "Corporations."

TABLE 15.—MANUFACTURES, BY POPULATION GROUPS, IN CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	Cen- sus year.	Aggregate.	CITIES HAVING A POPU- LATION OF 10,000 OR OVER.		THE STATE OUTSIDE OF CITIES HAVING A POPU- LATION OF 10,000 OR OVER.	
			Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.
Number of places.....	1919		3			
	1914		2			
	1909		2			
Population ¹	1920	640,872	46,447	7.2	600,425	92.8
	1915	686,966	31,173	4.5	655,788	95.5
	1910	577,056	26,809	4.6	550,247	95.4
Number of establishments.....	1919	894	174	19.5	720	80.5
	1914	699	108	15.5	591	84.5
	1909	752	99	13.2	653	86.8
Average number of wage earners.....	1919	4,472	1,590	34.9	2,912	65.1
	1914	3,275	1,033	31.5	2,242	68.5
	1909	2,789	860	30.8	1,929	69.2
Value of products.....	1919	\$57,373,622	\$19,110,934	33.3	\$38,262,688	66.7
	1914	21,147,431	4,821,712	22.8	16,325,719	77.2
	1909	19,137,506	4,386,907	22.9	14,750,599	77.1
Value added by manufacture.....	1919	12,884,123	4,798,745	37.2	8,085,378	62.8
	1914	6,663,116	2,087,718	31.3	4,575,398	68.7
	1909	5,463,916	1,726,061	31.6	3,737,855	68.4

¹ Population of 1920, as of Jan. 1, 1920; 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of Apr. 15, 1910.

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TABLE 16.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
				Amount.			Per cent distribution.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909
Primary power, total.....	1,639	1,036	749	17,791	14,062	13,196	100.0	100.0	100.0
Owned.....	409	438	442	12,301	11,124	12,004	69.1	79.1	91.0
Steam.....	114	135	169	10,060	9,627	10,170	56.5	68.5	77.1
Engines.....	103	(1)	(1)	9,589	(1)	(1)	53.9		
Turbines.....	11	(1)	(1)	471	(1)	(1)	2.6		
Internal-combustion engines.....	289	294	265	1,981	1,198	1,304	11.1	8.5	9.9
Water.....	6	9	8	260	299	530	1.5	2.1	4.0
Water wheels and turbines.....	5	6	8	250	273	530	1.4	1.9	4.0
Water motors.....	1	3		10	26		0.1	0.2	
Rented.....	1,230	598	307	5,490	2,938	1,192	30.9	20.9	9.0
Electric.....	1,230	598	307	5,490	2,856	1,164	30.9	20.3	8.8
Other.....					82	28		0.6	0.2
Electric.....	1,357	660	335	6,773	3,800	1,698	100.0	100.0	100.0
Rented.....	1,230	598	307	5,490	2,856	1,164	81.1	75.2	68.6
Generated by establishments reporting.....	127	62	28	1,283	944	534	18.9	24.8	31.4

¹ Not reported separately.

TABLE 17.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	1,736	192,434	1,498	2,559	2,324	6,451
Per cent of increase *.....	5,282 -67.1	145,871 31.9	1,371 9.3	3,280 48.9	(1) (1)	2,221 190.5
Automobile repairing.....	146	2,111	12	19	320	544
Bread and other bakery products.....	535	3,497	373	12	18	1,833
Brick and terra-cotta products.....		15,165				
Butter.....	266	6,015	72	22	125	
Cars and general shop construction and repairs by steam-railroad companies.....		56,519				
Flour-mill and gristmill products.....	283	79,962	2	814	970	
Gas, illuminating and heating.....		15,839	625	1,620		
Printing and publishing, newspapers and periodicals.....	289	3,026	17	45	488	1,933
All other industries.....	167	10,300	397	27	403	2,041
Total for cities.....	588	49,449	433		230	4,915
FARGO.....	304	16,541	149		48	3,063
GRAND FORKS.....	137	11,621	162		160	1,852
MINOT.....	147	21,287	122		22	

¹ Included in figures for fuel oils.² A minus sign (-) denotes decrease.

SPECIAL STATISTICS.

For a number of important industries the Census Bureau collects, by means of special schedules, certain details which do not appear on the general schedule. Data for three of these industries for North Dakota are here presented.

Flour-mill and gristmill products (Table 18).—Wheat flour is the predominating product at each of the censuses for which figures are shown, representing 77.3 per cent of the total value of products for the industry in 1909, 82 per cent in 1914, and 85.4 per cent in 1919. As illustrative of the high prices of commodities in 1919 as compared with 1914, the quantity of wheat flour increased 2.7 per cent during that five-year period, while the value shows a gain of 153.3 per cent.

TABLE 18.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$29,282,056	\$12,029,906	\$11,685,116
Wheat flour:			
Barrels.....	2,224,428	2,165,078	1,825,920
Value.....	\$24,980,758	\$9,864,400	\$9,034,418
Graham flour:			
Barrels.....	727		
Value.....	\$7,726		
Rye flour:			
Barrels.....	361	844	153
Value.....	\$3,357	\$4,037	\$581
Corn meal and corn flour:			
Barrels.....	205	445	1,626
Value.....	\$1,794	\$2,129	\$5,124
Buckwheat flour:			
Pounds.....	700		
Value.....	\$56		
Barley meal:			
Pounds.....	144,000		
Value.....	\$1,300		
Bran and middlings:			
Tons.....	68,267	80,415	
Value.....	\$2,779,831	\$1,594,885	
Feed and offal:			106,932
Tons.....	32,609	13,575	
Value.....	\$1,489,373	\$463,155	\$2,360,171
Breakfast foods:			
Pounds.....	13,260	363,761	
Value.....	\$362	\$18,480	
All other cereal products, value.....		\$74,619	\$266,213
All other products, value.....	\$5,999	\$3,200	\$18,509

Butter (Table 19).—From 1914 to 1919 there was a much greater increase in both the quantity and value of butter packed solid as compared with that for prints or rolls, the former increasing 277.7 per cent in quantity and 658.1 per cent in value, and the latter 90.5 per cent and 305.8 per cent, respectively.

TABLE 19.—BUTTER: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$11,121,687	\$1,739,692	\$1,029,135
Butter:			
Packed solid—			
Pounds.....	17,069,098	4,518,736	2,873,519
Value.....	\$8,807,596	\$1,161,820	\$756,158
Prints or rolls—			
Pounds.....	2,467,887	1,265,504	810,160
Value.....	\$1,398,802	\$344,672	\$225,197
Cream sold:			
Pounds.....	110,994	307,547	3,348
Value.....	\$22,396	\$30,941	\$496
All other products, value.....	\$92,893	\$202,259	\$47,284

Printing and publishing (Table 20).—This table shows the number and average circulation per issue of all newspapers and periodicals published in North Dakota during the years 1919, 1914, and 1909. Of the daily newspapers, 11, with a circulation of 52,819, were published in the afternoon. Nine publications were printed in foreign languages—4 in German, 3 weekly and 1 semiweekly; 2, weekly, in English and German; 2 in Norwegian, 1 weekly and 1 semiweekly; and 1, semiweekly, in English and Norwegian. The aggregate circulation of these was 15,370.

TABLE 20.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION, PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	324	341	333	495,118	457,595	372,642
Daily.....	16	12	16	110,669	74,660	80,854
Weekly.....	293	317	311	321,074	267,275	260,288
Monthly.....	10	12	6	63,375	115,660	31,500

¹ Includes 2 Sunday newspapers in 1919 and 1914 and 4 in 1909.

² Includes 3 semiweekly newspapers in 1919, 2 in 1914, and 1 in 1909.

³ Includes 2 bimonthly publications in 1914 and 1 in 1909.

Laundries (Table 21).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 21, however, summarizes the statistics for such laundries in the state of North Dakota for 1919 and 1914.

TABLE 21.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	29	30	.....
Persons engaged.....	438	478	2.1
Proprietors and firm members.....	27	31	.....
Salaried employees.....	35	33	.....
Wage earners (average number).....	426	409	4.2
Primary horsepower.....	506	725	-30.2
Capital.....	\$615,070	\$552,458	11.3
Salaries and wages.....	334,889	242,805	37.9
Salaries.....	57,592	34,852	65.2
Wages.....	277,297	207,953	33.3
Paid for contract work.....	1,233	2,155	-42.8
Rent and taxes.....	25,557	13,834	84.1
Cost of materials.....	255,235	142,804	78.7
Amount received for work done.....	844,433	592,843	42.4

¹ A minus sign (—) denotes decrease; percentages are omitted where base is less than 100.

Dyeing and cleaning (Table 22).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this table. Statistics for such establishments are not included in the general tables nor in the totals for manufacturing industries for censuses since 1900. This presentation is the first of its kind that has been made since the census statistics were confined to manufacturing industries as distinguished from the hand trades, household industries, etc.

TABLE 22.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	14
Persons engaged.....	90
Proprietors and firm members.....	20
Salaried employees.....	6
Wage earners (average number).....	64
Primary horsepower.....	77
Capital.....	\$140,535
Salaries and wages.....	62,408
Salaries.....	4,583
Wages.....	57,825
Paid for contract work.....	5,850
Rent and taxes.....	10,892
Cost of materials.....	40,952
Amount received for work done.....	201,056

Custom gristmills (Table 23).—A summary of the more important data for custom gristmills is presented in this table. These statistics are not included in the general tables nor in the totals for manufacturing industries.

TABLE 23.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, 1909-1919.
	1919	1909	
Number of establishments.....	98	58	
Persons engaged.....	109	79	
Proprietors and firm members.....	89	60	
Salaried employees.....	2	2	
Wage earners (average number).....	18	17	
Primary horsepower.....	2,636	1,270	69.3
Capital.....	\$357,070	\$168,192	112.3
Salaries and wages.....	17,225	8,560	91.4
Salaries.....	1,543	980	57.4
Wages.....	15,682	7,580	99.0
Rent and taxes.....	6,296	(?)	
Cost of materials.....	1,800,135	730,458	146.4
Value of products.....	2,124,677	824,782	157.0

¹ Percentages are omitted where base is less than 100.

² Figures not available.

³ Includes estimate of all grain ground.

GENERAL TABLES.

Table 24 gives the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products for all industries combined and for selected industries in the state; and for the cities, Fargo and Grand Forks, similar data for all industries combined, 1919, 1914, and 1909. Certain kindred industries are com-

bined in some instances for comparison with the 1909 figures.

Table 25 presents, for 1919, statistics in detail for the state as a whole and for each industry that can be shown without the disclosure of individual operations and the statistics for all industries combined for the three cities of 10,000 inhabitants or more.

TABLE 24.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND CITIES: 1919, 1914, AND 1909.

INDUSTRY.	Cen-sus year.	Num-ber of estab-lish-ments.	Wage earners (aver-age num-ber).	Pri-mary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY.	Cen-sus year.	Num-ber of estab-lish-ments.	Wage earners (aver-age num-ber).	Pri-mary horse-power.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.								Expressed in thousands.		
All industries.....	1919	891	4,472	17,791	\$5,401	\$44,489	\$57,374	Gas, illuminating and heating..	1919	5	43	66	\$60	\$155	\$384
	1914	699	3,275	14,062	2,416	14,484	21,147		1914	9	52	65	29	109	273
	1909	752	2,789	13,196	1,787	13,674	19,138		1909	6	28	52	13	78	199
Automobile repairing.....	1919	139	303	767	368	546	1,232	Lumber, planing-mill products, not including planing mills connected with sawmills.	1919	10	48	423	40	90	198
	1914	6	13	33	8	15	37		1914	6	69	289	53	167	249
	1909								1909	8	63	249	50	89	187
Bread and other bakery products.	1919	68	242	328	223	1,213	1,950	Marble and stone work.....	1919	12	33	71	48	303	496
	1914	58	205	226	121	445	810		1914	7	21	19	17	50	92
	1909	67	146	88	84	346	601		1909	7	15	13	11	43	96
Brick and terra-cotta products..	1919	5	140	901	157	81	309	Mineral and carbonated waters.	1919	22	31	76	34	198	389
	1914	9	171	1,728	101	59	270		1914	24	56	149	35	121	282
	1909	13	188	668	88	73	287		1909	26	63	103	38	133	304
Butter.....	1919	57	212	1,264	241	9,997	11,122	Printing and publishing.....	1919	318	660	1,278	781	851	3,225
	1914	58	115	669	93	1,464	1,740		1914	351	752	1,212	547	455	2,220
	1909	68	62	854	46	891	1,029		1909	330	788	948	533	440	1,910
Cars and general shop construction and repairs by steam-railroad companies.	1919	21	1,539	720	2,016	941	3,183	Saddlery and harness.....	1919	14	65	80	66	504	676
	1914	7	871	718	746	412	1,235		1914	10	88	57	63	274	422
	1909	5	463	332	340	300	680		1909	19	98	93	53	462	683
Confectionery and ice cream....	1919	20	107	172	79	440	757	All other industries.....	1919	76	341	1,626	432	2,590	3,384
	1914	6	109	90	52	322	474		1914	63	188	741	109	230	476
Copper, tin, and sheet-iron work.	1919	16	55	81	60	217	411	CITY.	1909	111	377	853	207	637	1,219
	1914	9	65	72	51	207	321								
	1909	8	63	36	41	127	258	FARGO.....	1919	101	723	1,627	861	4,348	6,771
Flour-mill and gristmill products.	1919	87	568	9,664	679	26,223	29,282		1914	76	690	1,275	447	1,741	3,006
	1914	59	424	7,810	330	10,072	12,030		1909	61	510	789	325	1,410	2,477
	1909	84	435	8,907	283	10,055	11,685	GRAND FORKS.....	1919	47	501	1,175	530	5,318	6,779
Foundry and machine-shop products. ¹	1919	24	85	274	117	140	376		1914	32	343	913	288	993	1,816
	1914	17	76	184	61	82	216		1909	38	350	773	218	1,251	1,910

¹ Includes "iron and steel, welding."

MANUFACTURES—NORTH DAKOTA.

TABLE 25.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.		
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.		Female.	
								Maximum month.							Minimum month.

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

		591	6,148	774	380	325	197	4,472	Oct 4,550	Mar 3,989	(*)	(*)	(*)	(*)	(*)	Dollars.
1	All industries.....	591	6,148	774	380	325	197	4,472	Oct 4,550	Mar 3,989	(*)	(*)	(*)	(*)	(*)	24,549,838
2	Artificial stone products.....	8	36	9	4	.....	.....	23	Jy 51	Ja 2	36	36	.....	.....	.....	33,860
3	Automobile bodies and parts.....	5	18	4	2	.....	.....	12	Oct 16	Ja 10	15	15	.....	.....	.....	27,282
4	Automobile repairing.....	139	500	159	20	10	8	303	Jy 392	Ja 203	293	291	2	.....	.....	1,723,901
5	Bread and other bakery products.....	68	359	78	10	20	9	242	Se 273	Mh 206	257	163	91	3	.....	843,216
6	Brick and terra-cotta products.....	5	152	3	6	1	2	140	Jy 208	De 88	114	102	1	11	.....	217,551
7	Butter.....	57	316	31	31	37	35	212	Jy 326	Ja 131	184	166	17	1	.....	1,021,167
8	Carriages and wagons, including repairs.....	3	7	4	.....	.....	.....	3	Jy 4	Ja 2	3	3	.....	.....	.....	17,406
9	Cars and general shop construction and repairs by steam-railroad companies.....	21	1,617	.....	53	17	8	1,539	De 1,679	Je 1,418	1,540	1,521	19	.....	.....	2,839,577
10	Condensed milk.....	3	8	.....	2	1	2	3	Se 6	Ja 1	6	6	.....	.....	.....	96,071
11	Confectionery and ice cream.....	20	157	18	16	13	3	107	Oct 80	Ja 57	133	56	77	.....	.....	596,894
12	Confectionery.....	6	96	6	8	12	3	67	Oct 80	Ja 57	81	28	53	.....	.....	391,497
13	Ice cream.....	14	61	12	8	1	.....	40	Aug 51	Ja 25	52	28	24	.....	.....	205,397
14	Copper, tin, and sheet-iron work.....	16	87	10	6	9	1	55	Jy 77	Ja 37	54	54	.....	.....	.....	319,675
15	Flour-mill and gristmill products.....	87	748	53	73	42	12	563	Oct 619	Jy 538	582	577	3	2	.....	7,745,781
16	Foundry and machine-shop products.....	20	118	22	9	3	3	81	Jy 107	Ja 59	79	79	.....	.....	.....	301,146
17	Fur goods.....	3	27	4	.....	.....	.....	22	No 30	Ap 17	24	8	16	.....	.....	76,676
18	Gas, illuminating and heating.....	5	69	.....	9	14	3	43	Oct 51	Fe 37	43	43	.....	.....	.....	1,005,972
19	Iron and steel, welding.....	4	9	5	.....	.....	.....	4	Jy 7	Ja 2	6	6	.....	.....	.....	34,976
20	Lumber, planing-mill products, not including planing mills connected with saw-mills.....	10	63	6	6	2	1	48	Se 57	Fe 40	52	52	.....	.....	.....	214,716
21	Marble and stone work, monuments and tombstones.....	12	60	11	2	11	3	33	Je 39	Oct 29	30	29	1	.....	.....	251,158
22	Mineral and carbonated waters.....	22	65	17	8	7	2	31	Jy 43	Ja 23	34	34	.....	.....	.....	309,275
23	Printing and publishing, book and job.....	17	149	17	12	10	7	103	De 115	Ja 94	114	85	23	6	.....	435,538
24	Printing and publishing, newspapers and periodicals.....	301	1,040	253	84	75	71	557	.....	.....	595	460	101	28	6	2,739,607
25	Printing and publishing.....	9	136	4	16	18	25	75	(*) 75	(*) 75	74	64	2	8	.....	388,151
26	Printing, publishing, and job printing.....	276	881	230	59	55	40	477	De 503	Fe 454	510	392	93	20	6	2,308,065
27	Publishing without printing.....	16	43	19	9	4	6	5	(*) 5	(*) 5	5	4	1	.....	.....	43,391
28	Saddlery and harness.....	14	96	13	8	7	3	65	Fe 70	Se 58	67	67	.....	.....	.....	634,001
29	Tobacco, cigars.....	14	31	18	1	.....	.....	12	Aug 15	Ja 10	15	14	1	.....	.....	40,328
30	All other industries *.....	40	386	33	18	46	23	266	.....	.....	.....	.....	.....	.....	.....	2,423,745

* All other industries embrace—	Cars and general shop construction	Dental goods, other than teeth.....	2	Engines, steam, gas, and water.....	1
Agricultural implements.....	1	and repairs by electric-railroad com-	2	Flax and hemp, dressed.....	1
Awnings, tents, and sails.....	1	panies.....	2	Grease and tallow, not including	1
Carriage and wagon materials.....	1	Coffee, roasting and grinding.....	1	lubricating greases.....	1
		Corsets.....	1	Electroplating.....	2

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

1	FARGO.....	101	1,056	78	89	100	66	723	Jy 823	Fe 602	768	639	126	3	.....	4,102,057
2	GRAND FORKS.....	47	683	35	47	62	38	501	Jy 550	Ja 427	504	421	73	10	.....	2,030,209
3	MINOT.....	26	402	22	17	18	9	336	Oct 363	Mh 315	329	317	10	2	.....	1,072,433

1 Includes water wheels and turbines (irrespective of ownership of water supply) and water motors (operated by water from city mains).
2 Electric motors operated by rented (or purchased) current.

MANUFACTURES—NORTH DAKOTA.

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COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		Rent-^{2}

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

Dollars. 858,097	Dollars. 575,940	Dollars. 5,401,330	Dollars. 118,159	Dollars. 176,291	Dollars. 477,948	Dollars. 43,477,254	Dollars. 1,012,245	Dollars. 57,373,622	Dollars. 12,884,123	17,791	9,589	471	1,981	200	5,490	1,283	1
3,484	900	21,475	75	396	35,609	819	85,147	48,719	17	17	2	15	2	15	2	2	2
27,156	15,524	22,945	1,570	246	26,054	1,689	62,923	35,185	26	26	323	444	10	10	303	21	3
23,480	33,288	367,920	23,907	18,161	505,501	40,420	1,231,981	686,060	767	767	10	303	1	1	792	5	4
12,650	5,617	222,629	22,507	14,834	1,167,647	45,089	1,949,673	736,937	323	323	600	300	1	1	3	8	5
92,620	87,543	156,566	10,675	6,448	59,707	60,001	308,550	227,330	901	901	347	80	95	8	15,888	350	6
143,495	28,664	241,340	5,986	87	4,402	461	11,121,687	1,125,017	1,264	1,264	522	30	8	8	198	350	9
2,240	2,296	5,398	2,112	273	33,206	1,126	48,152	13,820	630	630	42	39	12	12	630	23	10
24,684	37,259	78,904	4,508	44,342	428,647	11,716	757,057	316,604	172	172	42	39	12	12	61	28	11
15,284	35,259	45,287	3,113	40,144	178,963	4,774	394,662	210,925	63	63	42	39	12	12	70	28	12
9,400	2,000	32,617	1,395	4,198	249,684	6,942	362,395	105,769	109	109	39	12	12	12	60	14	13
14,832	14,922	59,036	1,034	4,728	213,595	3,478	411,278	194,205	81	81	7,407	85	1,062	250	860	688	14
152,756	62,819	679,496	1,245	173,707	25,901,190	321,905	29,282,056	3,058,961	9,604	9,604	19	19	19	19	242	6	15
14,141	5,937	111,355	3,792	3,151	122,977	10,715	354,612	220,920	201	201	86	10	10	10	13	13	17
17,279	15,019	22,092	480	1,099	21,800	630	58,556	36,126	6	6	86	10	10	10	13	13	18
17,058	3,540	60,076	1,342	13,688	7,373	147,835	384,467	228,253	13	13	37	37	37	37	386	386	19
		5,200	1,695	337	4,586	1,679	21,250	14,964	423	423							20
		89,748	1,252	2,675	83,432	6,780	197,773	107,561									
5,600	32,700	48,413	10,000	459	1,763	299,513	3,647	496,038	192,878	71	2	69	2	69	2	21	
14,349	12,381	33,977	302	5,284	15,890	192,690	5,538	388,777	190,549	76	8	68	8	68	8	22	
31,709	18,450	106,814	6,811	12,030	3,072	204,655	12,580	539,158	321,923	144	2	142	2	142	2	23	
183,097	148,837	674,011	74,692	59,078	25,846	564,201	69,715	2,685,869	2,051,953	1,134	7	5	347	775	38	24	
36,338	36,577	119,841	600	4,164	2,912	90,766	8,958	421,385	321,661	159	5	5	5	144	144	25	
124,597	109,885	547,874	14,700	53,149	22,838	458,855	60,733	2,075,014	1,553,426	975	2	342	342	631	38	26	
22,162	5,375	6,296	59,392	1,760	96	14,580	24	189,470	174,866	80				80	2	27	
15,500	11,280	65,999	503	3,066	7,297	490,478	4,640	676,300	172,182							28	
1,200	14,112	1,023	9,597	34,933	975	72,284	36,376	14,964								29	
59,807	38,794	340,965	2,725	10,605	18,446	2,377,643	49,839	3,036,572	609,090	936	608	41	14	273	150	30	

Ice, manufactured.....	1	Optical goods.....	2	Signs, electric.....	1	Trunks and valises.....	1
Jewelry.....	1	Patent medicines.....	2	Slaughtering and meat packing.....	1	Upholstering materials.....	2
Leather, tanned, curried, and finished.....	2	Perfumery and cosmetics.....	1	Smelting and refining, not from the ore.....	1	Windmills.....	1
Mattresses and spring beds.....	1	Photo-engraving.....	1	Tools, not elsewhere specified.....	1	Wooden goods, not elsewhere specified.....	1
Oil, composition oil.....	1	Pickles, preserves, and sauces.....	2				

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

208,232	178,370	861,241	52,999	48,527	53,070	4,160,966	186,873	6,770,575	2,422,736	1,627	103	6	20	10	1,488	128	1
113,478	119,995	529,516	2,825	23,248	77,131	5,239,385	78,935	6,779,123	1,460,803	1,175	579	44	4		596	76	2
38,780	31,111	382,836	6,300	13,351	43,502	4,592,840	53,190	5,561,236	915,206	962	735				179		3

* No figures given for reasons stated under "Explanation of terms."

† Same number reported for one or more other months.

‡ Same number reported throughout the year.

OHIO.

GENERAL STATISTICS.

General character of the state.—Ohio has a gross area of 41,040 square miles, of which 40,740 represent land surface. The inhabitants of the state in 1900 numbered 4,157,545; in 1910, 4,767,121; and in 1920, 5,759,394. In total population Ohio ranked fourth among the states in 1920. The number of inhabitants per square mile in 1910 was 117, the corresponding figure for 1920 being 141.4.

In 1920 there were 50 cities in the state having more than 10,000 inhabitants, for 48 of which manufacturing statistics are shown. Statistics for Cleveland Heights and East Youngstown can not be shown without the possibility of disclosing the operations of individual establishments. The combined population of these 48 cities in that year was 3,137,372, which formed 54.5 per cent of the total population for Ohio; and in 1919, 79.6 per cent of the state's manufactured products were reported from these cities.

Importance and growth of manufactures (Table 1).—The large increases in salaries and wages, cost of materials, and value of products, as presented in Table 1, are largely due to the changes in industrial conditions brought about by the World War, and, therefore, can not properly be used to measure the growth of manufactures during the census period 1914 to 1919. The increases shown, however, in number of wage earners and horsepower are indicative of a decided growth in the manufacturing activities of the state. The addition of the Federal income tax since 1914 will account for the exceptional increase in "Rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of the totals for the 88 counties in 1919 with those of prior censuses.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is not always satisfactory as indicating their importance from a manufacturing standpoint. Their ranking in many instances would change materially if based upon the average number of wage earners or value added by manufacture.

Persons engaged in manufacturing industries (Table 4).—The age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." The classification by sex for 1919 was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures for individual industries will be found in Table 46.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table

are those which employed more than 2,000 wage earners in 1919, and for which statistics can be shown without the possibility of disclosing the operations of individual establishments.

Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more (Table 6).—Each of the 48 cities for which comparative figures are presented in this table shows an increase in value of products from 1914 to 1919. Increases in the total number of wage earners are also shown for all such cities, except Bellaire, East Cleveland, East Liverpool, Findlay, Marietta, Newark, Steubenville, Warren, and Zanesville.

Wage earners, by months (Table 7).—The statistics for wage earners in this table are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the several census years.

Wage earners, by months, for selected industries and for cities (Table 8).—In addition to the number of wage earners employed by months, similar data are given for males and females for all industries combined, and also for each of the 48 cities. The table also shows a number of industries in the state in 1919 which employed a large number of female wage earners. Of the total number of female wage earners in the state, 85.4 per cent were in the 48 cities, while of the male wage earners only 77.9 per cent were reported by the cities.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working day in Ohio. In that year 13.7 per cent of the wage earners were included in the group "48 and under" as against 40.5 per cent in 1919. In 1914, the "60" and "Over 60" groups constituted 23.3 per cent of the total wage earners as compared with 12.4 per cent in 1919.

Size of establishments, by average number of wage earners, for selected industries and for cities (Table 10).—The predominance of the number of small establishments, when based on the number of wage earners employed, is evidenced in this table by the fact that of the total number of establishments in the state, 91.6 per cent were in the several classes having fewer than 101 wage earners, while such establishments employed but 23.5 per cent of the total number of wage earners. On the other hand, the establishments employing an average of more than 100 wage earners represented only 8.4 per cent of the total number of manufacturing establishments in the state, but reported 76.5 per cent of the total number of wage earners.

Size of establishments, by value of products (Table 11).—At the censuses of 1909 and 1914 establishments with products valued at "\$100,000 to \$1,000,000" constituted one group, but at the census of 1919 this group was subdivided into "\$100,000 to \$500,000" and "\$500,000 to \$1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups for all items for 1909, and for the average number of wage earners and value added by manufacture for 1914.

Size of establishments, by value of products, for selected industries (Table 12).—In the preparation of this table it was necessary in several instances to combine the establishments of one group of the industry with those of some other group of that industry to avoid the possibility of disclosing the operations of individual establishments.

Size of establishments, by value of products, for cities of 10,000 inhabitants or more (Table 13).—This table strikingly illustrates the fact that the number of establishments of itself is no real index of manufacturing activities.

Character of ownership (Table 14).—The preponderance of corporate ownership is clearly brought out in this table. Corporations owned 42 per cent of the manufacturing establishments in the state in 1919, and reported 92.9 per cent of the average number of wage earners and 93.9 per cent of the total value of products. During the five-year period 1914 to 1919 the average number of wage earners in corporations increased 229,605, or 51.1 per cent, and the value of products \$3,188,836,309, or 199.1 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the combined number of establishments in the 48 cities in 1919 represented 65.3 per cent of the total for the state. They reported in that year 79 per cent of the average number of wage earners and 79.6

per cent of the value of products. These proportions do not differ materially from those of 1914.

Principal industries in the nine cities of 50,000 inhabitants or more in 1920, with per cent of total for state (Table 16).—This table shows for Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Springfield, Toledo, and Youngstown industries of most importance for which figures can be shown without disclosing the operations of individual establishments. The names of a number of important industries are also given for which figures can not be shown without the possibility of disclosing the operations of individual establishments.

Number and horsepower of types of prime movers (Table 17).—The total horsepower reported in 1919, as compared with that for 1914, shows an increase of 904,417 horsepower, or 45.4 per cent. This increase is due chiefly to the gain of 676,887, or 240.9 per cent, in the use of rented electric power. Of the total horsepower in 1914, 85.9 per cent represented owned power and 14.1 per cent rented. The corresponding proportions for 1919 were 66.9 per cent and 33.1 per cent, respectively.

Fuel consumed (Table 18).—This table shows the principal kinds of fuel used by the manufacturing plants in the state in 1919 and 1914, and gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel, and by manufacturing enterprises in the 48 cities having 10,000 inhabitants or more. In 1919 four industries combined—coke, not including gas-house coke; iron and steel, steel works and rolling mills; brick and tile, terra-cotta, and fire-clay products; and rubber tires, tubes, and rubber goods, not elsewhere specified—consumed 61.7 per cent of the bituminous coal, using more than a million tons each. Iron and steel blast furnaces consumed 89.6 per cent of the coke. The statistics indicate the diminishing use of gas as fuel for manufacturing in Ohio.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	MANUFACTURING INDUSTRIES.					PER CENT OF INCREASE. ¹			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	16,125	15,658	15,138	13,785	13,868	3.0	3.4	9.8	-0.6
Persons engaged.....	882,918	606,807	523,004	417,946	(2)	45.5	16.0	25.1	.....
Proprietors and firm members.....	12,823	13,624	14,719	13,657	(2)	-5.9	-7.4	7.8	.....
Salaried employees.....	139,862	82,745	61,351	39,991	28,109	68.4	34.9	53.4	42.3
Wage earners (average number).....	730,733	510,435	446,934	394,298	308,109	43.2	14.2	22.7	18.2
Primary horsepower.....	2,897,497	1,993,080	1,583,155	1,116,932	783,665	44.7	26.5	41.7	42.5
Capital.....	\$3,748,743,996	\$1,677,551,633	\$1,300,732,732	\$556,988,830	\$570,908,968	123.5	29.0	51.8	50.1
Salaries and wages.....	1,218,366,093	423,188,649	317,597,403	225,864,293	164,579,020	187.2	33.6	40.6	37.2
Salaries.....	273,714,359	105,294,836	72,147,499	43,434,868	28,151,441	160.0	45.9	66.1	54.3
Wages.....	944,651,734	317,893,813	245,449,904	182,429,425	136,427,579	197.1	29.5	34.5	33.7
Paid for contract work.....	17,609,025	5,437,428	6,717,474	5,377,027	(3)	223.8	-19.1	24.9	.....
Rent and taxes.....	195,393,167	37,433,583	29,413,298	8,016,126	(3)	422.0	27.3	.....	.....
Cost of materials.....	2,911,947,571	1,029,782,015	824,201,947	527,636,585	409,302,501	185.3	23.8	56.2	28.9
Value of products.....	5,100,808,723	1,782,308,279	1,437,935,817	950,811,857	748,670,855	186.1	24.0	49.7	28.3
Value added by manufacture.....	2,188,360,857	762,026,264	613,733,870	433,175,272	339,368,354	157.2	24.2	41.7	27.6

¹ A minus sign (—) denotes decrease.² Figures not available.³ Exclusive of internal revenue.⁴ Value of products less cost of materials.

MANUFACTURES—OHIO.

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TABLE 2.—STATISTICS FOR THE STATE, BY COUNTIES: 1919.

COUNTY.	Number of establishments.	WAGE EARNERS.		Rent and taxes.	Cost of materials.	Value of products.	Value added by manufacture.	Primary horse-power.
		Average number.	Wages.					
The state.....	16,125	730,733	\$944,651,734	\$195,393,167	\$2,911,947,871	\$5,100,308,728	\$2,188,360,837	2,897,497
Adams.....	64	326	218,875	40,184	697,277	1,276,750	579,473	1,985
Allen.....	190	7,621	8,407,828	2,461,062	28,588,357	48,238,716	19,650,359	20,814
Ashland.....	70	1,851	1,646,903	277,182	5,446,626	11,936,871	6,549,245	4,100
Ashtabula.....	145	5,880	7,642,792	1,458,293	16,212,394	31,841,390	15,628,996	14,041
Athens.....	65	583	539,566	91,915	2,723,929	4,041,343	1,317,414	3,176
Auglaize.....	87	2,228	1,807,965	343,938	5,815,664	10,041,459	4,225,795	6,442
Belmont.....	189	5,643	7,256,992	974,467	23,925,038	37,103,142	13,178,104	30,245
Brown.....	48	322	218,229	37,009	1,059,830	1,591,791	531,961	1,202
Butler.....	224	15,518	19,533,588	11,379,910	62,601,049	115,174,575	52,571,526	90,529
Carroll.....	38	827	931,043	65,039	1,586,706	3,271,562	1,684,836	3,967
Champaign.....	68	931	1,020,397	135,864	4,681,918	7,156,056	2,474,138	3,312
Clark.....	238	12,813	13,923,412	2,297,962	36,394,482	71,839,890	35,445,498	23,237
Clermont.....	61	961	676,870	245,351	2,720,701	4,474,226	1,763,465	2,211
Clinton.....	71	538	550,634	32,114	1,125,470	2,432,463	1,396,993	2,122
Columbiana.....	215	12,663	15,537,697	1,493,751	28,104,257	61,100,183	32,995,926	34,442
Coshocton.....	84	2,510	2,233,692	266,835	4,766,947	9,754,782	4,987,835	7,200
Crawford.....	118	3,626	4,394,876	291,414	7,944,015	16,425,704	8,481,659	9,060
Cuyahoga.....	3,132	167,630	225,001,354	49,380,487	649,933,366	1,158,921,941	508,998,573	507,706
Darke.....	105	495	381,009	82,345	2,163,968	3,016,935	852,967	1,782
Defiance.....	72	1,354	1,433,567	183,060	3,280,928	6,009,876	2,788,948	4,394
Delaware.....	70	892	706,879	64,019	2,015,104	4,087,530	2,072,426	3,266
Eric.....	166	4,448	4,703,544	944,892	13,233,658	23,720,637	10,496,979	23,310
Fairfield.....	89	3,111	3,189,723	506,746	9,404,597	16,203,220	6,798,683	7,000
Fayette.....	35	435	331,465	150,561	2,312,097	3,559,719	1,247,622	1,475
Franklin.....	774	31,573	37,446,748	6,961,986	125,465,722	208,347,572	82,881,850	88,411
Fulton.....	46	564	569,966	95,338	5,399,008	7,365,405	1,966,397	1,955
Gallia.....	32	134	88,822	8,261	733,465	965,521	232,066	966
Geauga.....	23	112	99,404	110,539	472,193	741,222	269,029	724
Greene.....	64	1,246	1,071,117	128,439	5,864,039	8,415,359	2,551,320	5,859
Guernsey.....	68	2,477	3,645,575	214,289	6,800,067	13,065,344	6,264,677	6,361
Hamilton.....	2,466	88,912	89,622,629	27,166,595	424,443,583	688,530,229	264,066,646	185,507
Hancock.....	106	2,116	2,116,555	319,040	7,773,205	11,911,268	4,138,082	6,709
Hardin.....	81	1,041	1,088,719	129,408	2,455,605	4,867,243	2,411,638	6,498
Harrison.....	47	116	125,075	7,002	570,302	896,294	325,992	1,103
Henry.....	59	288	219,359	37,520	907,772	1,432,852	525,060	1,566
Highland.....	92	953	734,478	213,477	3,538,825	6,096,384	2,557,559	4,643
Hocking.....	42	1,032	1,140,769	45,425	1,487,175	3,360,995	1,873,820	4,981
Holmes.....	47	265	262,967	29,733	858,667	1,440,907	582,240	1,662
Huron.....	104	1,846	2,121,050	152,577	4,251,283	8,432,221	4,180,333	7,500
Jackson.....	65	1,604	1,757,259	289,110	4,536,318	7,542,583	3,006,265	10,820
Jefferson.....	104	7,054	12,232,974	4,009,740	37,742,599	61,792,420	24,049,821	97,838
Knox.....	66	1,877	2,478,317	349,586	4,232,209	8,300,851	4,068,642	4,491
Lake.....	50	2,183	3,325,931	880,741	5,516,564	14,387,325	6,020,761	12,853
Lawrence.....	67	2,587	3,108,744	648,565	11,890,625	18,704,695	6,808,070	24,263
Licking.....	118	5,550	5,712,768	518,669	10,546,781	20,975,892	10,426,111	12,967
Logan.....	86	1,139	1,402,370	79,937	3,388,169	5,693,910	2,305,741	3,810
Lorain.....	183	17,352	30,209,276	5,851,759	79,190,393	148,134,011	68,943,618	168,318
Lucas.....	714	44,713	56,909,816	10,946,699	179,424,363	305,091,520	125,667,157	101,793
Madison.....	35	218	186,945	23,689	1,227,739	1,771,191	543,452	988
Mahoning.....	333	32,967	62,608,687	7,401,472	223,863,994	344,207,078	120,343,064	493,471
Marion.....	98	4,395	5,128,980	895,067	11,578,948	22,627,945	11,048,997	11,752
Medina.....	53	1,678	1,956,871	495,204	4,553,627	10,107,344	5,553,717	11,140
Meigs.....	40	656	642,617	35,941	913,354	2,044,465	1,131,111	3,185
Mercer.....	72	1,241	1,088,220	115,434	3,763,552	6,758,715	2,995,163	2,838
Miami.....	157	5,060	4,858,307	1,067,407	17,250,032	31,368,127	14,118,095	12,199
Monroe.....	52	137	89,999	30,367	573,095	833,985	260,890	858
Montgomery.....	670	33,085	41,844,580	7,495,794	85,140,401	185,759,071	100,618,670	70,664
Morgan.....	28	270	217,287	40,101	829,255	1,673,607	844,352	1,215
Morrow.....	25	218	217,267	62,026	873,814	1,407,441	533,627	976
Muskingum.....	162	6,295	6,823,034	474,750	19,631,589	39,553,813	13,922,224	16,532
Noble.....	37	77	63,115	6,852	635,406	803,664	168,258	768
Ottawa.....	47	1,272	1,547,334	387,823	2,317,820	5,641,681	3,223,851	14,463
Paulding.....	42	178	266,313	96,627	1,178,578	1,474,577	796,999	1,697
Perry.....	56	1,457	1,551,281	100,743	1,643,925	3,858,168	2,212,242	5,319
Pickaway.....	63	554	367,079	52,814	1,710,478	2,662,643	932,165	4,026
Pike.....	22	43	35,376	2,411	428,306	538,527	112,221	731
Portage.....	97	3,052	3,667,451	355,625	8,646,115	17,414,964	8,768,839	11,919
Preble.....	72	291	209,125	18,514	584,666	800,517	266,951	2,716
Putnam.....	76	529	475,456	94,310	1,964,981	3,116,195	1,151,214	3,309
Richland.....	191	7,319	8,943,809	2,211,821	26,275,253	47,628,663	21,353,410	26,194
Ross.....	58	1,718	1,882,786	129,861	4,769,464	8,277,376	3,507,912	5,727
Sandusky.....	100	4,076	4,155,577	361,440	9,723,224	19,671,461	9,948,237	11,593
Scioto.....	92	9,096	11,327,991	1,660,120	26,917,991	50,398,501	23,480,510	37,095
Seneca.....	178	3,837	4,121,052	800,297	14,630,337	24,532,788	9,902,451	15,216
Shelby.....	65	2,300	2,016,021	497,632	5,230,870	10,178,402	4,947,832	4,157
Stark.....	584	34,182	47,876,368	5,547,409	113,639,983	222,309,894	108,669,911	132,137
Summit.....	405	71,050	102,708,324	26,304,107	333,933,524	586,108,643	261,175,119	211,778
Trumbull.....	254	15,168	25,122,447	3,269,016	78,531,337	124,743,657	46,212,320	125,692
Tuscarawas.....	218	7,751	10,548,477	832,112	22,459,994	39,197,409	16,737,415	30,037
Union.....	41	439	361,113	31,912	3,774,806	4,427,836	653,030	1,429
Van Wert.....	51	586	600,725	74,553	1,561,717	2,827,422	1,265,705	4,253
Vinton.....	18	137	161,561	8,789	143,142	527,627	384,485	1,095
Warren.....	71	1,994	1,882,464	481,155	5,890,381	10,993,914	5,103,533	9,132
Washington.....	105	2,174	2,108,587	485,997	5,912,766	11,225,910	5,313,144	7,090
Wayne.....	120	1,910	2,284,439	286,190	8,419,871	13,687,355	5,567,484	8,153
Williams.....	77	731	714,029	40,075	3,075,138	4,667,462	1,562,324	2,229
Wood.....	82	2,146	2,743,019	669,363	12,179,569	18,423,158	6,243,589	29,479
Wyandot.....	54	506	525,600	23,142	1,381,911	2,386,698	1,004,787	2,359

TABLE 3.—PRINCIPAL INDUSTRIES, RANKED BY VALUE OF PRODUCTS: 1919.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.			Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.
All industries.....	10, 125	730, 733	100.0	\$5, 100, 309	100.0	\$2, 188, 361	100.0	Tinware, not elsewhere specified.....	14	2, 608	0.4	\$16, 981	0.3	\$6, 293	0.3
Iron and steel, steel works and rolling mills.....	86	73, 025	10.0	626, 370	12.3	245, 310	11.2	Hardware.....	50	4, 576	0.6	16, 694	0.3	9, 172	0.4
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	96	63, 637	8.7	551, 118	10.8	251, 756	11.5	Screws, machine.....	19	4, 226	0.6	16, 599	0.3	11, 201	0.5
Foundry and machine-shop products.....	1, 000	72, 227	9.9	347, 635	6.8	200, 337	9.2	Copper, tin, and sheet-iron work.....	262	2, 650	0.4	15, 809	0.3	7, 320	0.3
Automobiles.....	44	29, 212	4.0	287, 040	5.6	88, 607	4.0	Stamped and enameled ware, not elsewhere specified.....	49	3, 834	0.5	15, 466	0.3	8, 094	0.4
Iron and steel, blast furnaces.....	42	9, 793	1.3	179, 233	3.5	41, 547	1.9	Paper goods, not elsewhere specified.....	22	1, 755	0.2	15, 368	0.3	7, 358	0.3
Slaughtering and meat packing.....	141	5, 336	0.7	170, 338	3.3	19, 739	0.9	Steel barrels, drums, and tanks, portable.....	13	1, 581	0.2	14, 553	0.3	4, 850	0.2
Electrical machinery, apparatus, and supplies.....	189	26, 672	3.7	156, 924	3.1	84, 627	3.9	Fertilizers.....	23	1, 197	0.2	14, 042	0.3	5, 971	0.3
Cars and general shop construction and repairs by steam-railroad companies.....	117	35, 245	4.8	96, 484	1.9	56, 894	2.6	Varnishes.....	33	732	0.1	13, 629	0.3	4, 920	0.2
Automobile bodies and parts.....	237	16, 670	2.3	92, 391	1.8	39, 849	1.8	Roofing materials.....	20	1, 138	0.2	12, 785	0.3	4, 576	0.2
Flour-mill and gristmill products.....	577	2, 122	0.3	89, 397	1.8	12, 295	0.6	Bags, paper, exclusive of those made in paper mills.....	11	694	0.1	12, 610	0.3	3, 470	0.2
Bread and other bakery products.....	1, 621	9, 091	1.2	78, 819	1.6	28, 863	1.3	Lumber and timber products.....	514	3, 135	0.4	12, 031	0.2	6, 836	0.3
Boots and shoes, not including rubber boots and shoes.....	60	14, 092	1.9	71, 355	1.4	30, 552	1.4	Steam fittings and steam and hot-water heating apparatus.....	29	2, 723	0.4	11, 852	0.2	7, 903	0.4
Machine tools.....	102	13, 855	1.9	62, 554	1.2	45, 077	2.1	Aluminum manufactures.....	20	1, 840	0.3	11, 132	0.2	4, 460	0.2
Printing and publishing, newspapers and periodicals.....	794	7, 627	1.0	58, 567	1.2	40, 125	1.8	Motorcycles, bicycles, and parts.....	9	2, 480	0.3	10, 874	0.2	5, 744	0.3
Clothing, men's.....	246	9, 939	1.4	58, 169	1.1	28, 099	1.3	Patent medicines and compounds.....	202	889	0.1	10, 861	0.2	6, 514	0.3
Shipbuilding, steel, new vessels and repair work.....	9	11, 192	1.5	56, 482	1.1	33, 128	1.5	Pickles, preserves, and sauces.....	37	1, 375	0.2	10, 451	0.2	3, 249	0.2
Paper and wood pulp.....	49	6, 890	0.9	55, 098	1.1	19, 388	0.9	Automobile repairing.....	540	2, 430	0.3	10, 245	0.2	5, 751	0.3
Clothing, women's.....	175	8, 258	1.1	48, 704	1.0	22, 627	1.0	Ice, manufactured.....	141	1, 952	0.3	10, 208	0.2	7, 310	0.3
Coke, not including gas-house coke.....	13	3, 407	0.5	46, 514	0.9	13, 342	0.6	Boxes, paper and other, not elsewhere specified.....	58	2, 952	0.4	10, 030	0.2	5, 225	0.2
Food preparations, not elsewhere specified.....	98	1, 857	0.2	46, 340	0.9	8, 926	0.4	Coal-tar products.....	15	834	0.1	9, 495	0.2	4, 105	0.2
Petroleum, refining.....	11	2, 431	0.3	43, 233	0.9	11, 325	0.5	Safes and vaults.....	18	1, 821	0.2	9, 478	0.2	6, 038	0.3
Engines, steam, gas, and water.....	44	6, 218	0.9	42, 851	0.8	22, 507	1.0	Oils, linseed.....	3	270	(1)	9, 369	0.2	1, 008	0.1
Structural ironwork, not made in steel works or rolling mills.....	93	5, 231	0.7	41, 793	0.8	17, 022	0.8	Lithographing.....	28	1, 939	0.3	9, 151	0.2	5, 007	0.3
Butter.....	141	1, 362	0.2	41, 062	0.8	6, 335	0.3	Oil, not elsewhere specified.....	21	302	(1)	8, 986	0.2	2, 440	0.1
Iron and steel forgings, not made in steel works or rolling mills.....	38	5, 931	0.8	39, 563	0.8	20, 877	1.0	Boxes, wooden packing, except cigar boxes.....	98	1, 874	0.3	8, 937	0.2	3, 584	0.2
Printing and publishing, book and job.....	871	8, 505	1.2	39, 202	0.8	24, 020	1.1	Wirework, including wire rope and cable, not elsewhere specified.....	47	1, 822	0.2	8, 710	0.2	4, 375	0.2
Confectionery and ice cream.....	380	8, 451	0.7	39, 185	0.8	17, 363	0.8	Plumbers' supplies, not elsewhere specified.....	48	1, 897	0.3	8, 083	0.2	4, 398	0.2
Iron and steel, wrought pipe.....	8	4, 434	0.6	37, 068	0.7	14, 238	0.6	Signs and advertising novelties.....	70	1, 907	0.3	7, 904	0.2	4, 737	0.2
Paints.....	61	2, 197	0.3	36, 848	0.7	13, 251	0.6	Gloves and mittens, cloth, not including gloves made in textile mills.....	35	2, 162	0.3	7, 568	0.2	2, 659	0.1
Glass.....	44	10, 935	1.5	35, 241	0.7	22, 588	1.0	Pumps, not including power pumps.....	20	1, 265	0.2	7, 393	0.1	4, 626	0.2
Furniture.....	162	8, 346	1.1	35, 224	0.7	20, 645	0.9	Shirts.....	32	1, 900	0.3	7, 390	0.1	5, 631	0.2
Chemicals.....	37	3, 670	0.5	32, 719	0.6	17, 424	0.8	Sugar, beet.....	5	630	0.1	7, 249	0.1	2, 141	0.1
Tools, not elsewhere specified.....	149	6, 961	1.0	32, 527	0.6	21, 792	1.0	Marble and stone work, except slate.....	191	1, 504	0.2	7, 202	0.1	4, 684	0.2
Lumber, planing-mill products, not including planing mills connected with sawmills.....	378	4, 495	0.6	32, 429	0.6	12, 077	0.6	Lamps and reflectors.....	14	1, 095	0.1	7, 187	0.1	3, 017	0.1
Brick and tile, terra-cotta, and fire-clay products.....	341	12, 060	1.6	32, 173	0.6	22, 212	1.0	Awnings, tents, and sails.....	41	851	0.1	6, 937	0.1	3, 202	0.1
Coffee and spice, roasting and grinding.....	43	1, 088	0.1	29, 271	0.6	6, 394	0.3	Minerals and earths, ground or otherwise treated.....	44	1, 960	0.3	6, 861	0.1	4, 642	0.2
Tobacco, cigars and cigarettes.....	676	10, 995	1.5	28, 854	0.6	15, 739	0.7	Canning and preserving, fruits and vegetables.....	87	1, 576	0.2	6, 838	0.1	2, 426	0.1
Pottery.....	95	11, 339	1.6	28, 675	0.6	19, 663	0.9	Mineral and soda waters.....	217	867	0.1	6, 769	0.1	3, 515	0.2
Cars, steam-railroad, not including operations of railroad companies.....	8	2, 177	0.3	28, 146	0.6	6, 830	0.3	Flavoring extracts.....	44	325	(1)	6, 596	0.1	1, 796	0.1
Brass, bronze, and copper products.....	92	4, 264	0.6	27, 802	0.5	11, 624	0.5	Coffins, burial cases, and undertakers' goods.....	20	1, 148	0.2	6, 475	0.1	3, 635	0.2
Agricultural implements.....	46	4, 931	0.7	26, 556	0.5	13, 589	0.6	Phonographs and graphophones.....	20	1, 424	0.2	6, 221	0.1	3, 265	0.1
Liquors, malt.....	73	3, 327	0.5	25, 161	0.5	18, 066	0.8	Carriage and wagon materials.....	33	1, 219	0.2	5, 932	0.1	2, 670	0.1
Stoves and hot-air furnaces.....	67	6, 069	0.8	25, 009	0.5	14, 212	0.6	Envelopes.....	7	1, 021	0.1	5, 893	0.1	2, 015	0.1
Leather, tanned, curried, and finished.....	24	1, 565	0.2	25, 008	0.5	6, 190	0.3	Grease and tallow, not including lubricating greases.....	54	711	0.1	5, 639	0.1	1, 846	0.1
Stoves, gas and oil.....	34	4, 329	0.6	23, 578	0.5	12, 747	0.6	Ink, printing.....	8	397	0.1	5, 515	0.1	1, 940	0.1
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	23	4, 778	0.7	23, 451	0.5	13, 102	0.6	Models and patterns, not including paper patterns.....	138	1, 192	0.2	5, 460	0.1	3, 756	0.2
Knit goods.....	34	4, 407	0.6	18, 779	0.4	7, 700	0.4	Sausage, not made in slaughtering and meat-packing establishments.....	30	269	(1)	5, 355	0.1	1, 157	0.1
Condensed milk.....	30	711	0.1	17, 198	0.3	8, 035	0.1	Saddlery and harness.....	106	799	0.1	5, 143	0.1	2, 106	0.1
								Carriages and wagons, including repairs.....	119	994	0.1	5, 014	0.1	2, 621	0.1
								All other industries.....	2, 747	81, 628	11.2	554, 245	10.9	239, 757	11.0

¹ Less than one-tenth of 1 per cent.² Among the industries for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments are a number having products in excess of some for which figures are shown in the table. Of these industries the most important are the following: "Bags, other than paper, not including bags made in textile mills"; "cash registers and calculating machines"; "oleomargarine"; "soap"; "springs, steel, automobile"; "tin plate andterneplate"; "tobacco, chewing and smoking, and snuff"; "wire"; and "woolen goods."

MANUFACTURES—OHIO.

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TABLE 4.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES: 1919, 1914, AND 1909.

CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.		CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.	
					Male.	Fe- male.						Male.	Fe- male.
All classes.....	1919	882,918	739,167	143,751	83.7	16.3	Clerks and other subordinate	1919	109,097	71,636	37,461	65.7	34.3
	1914	606,807	512,621	94,186	84.5	15.5	salaried employees.	1914	63,790	46,357	17,433	72.7	27.3
	1909	523,004	430,811	83,193	84.1	15.9		1909	44,857	34,101	10,756	76.0	24.0
Proprietors and officials.....	1919	43,088	41,863	1,225	97.2	2.8	Wage earners (average number).	1919	730,733	625,668	105,065	85.6	14.4
	1914	32,582	31,622	960	97.1	2.9		1914	510,435	434,642	75,793	85.2	14.8
	1909	31,213	30,341	872	97.2	2.8		1909	446,934	375,369	71,565	84.0	16.0
Proprietors and firm members..	1919	12,823	12,292	531	95.9	4.1	16 years of age and over.....	1919	727,333	622,697	104,636	85.6	14.4
	1914	13,624	13,001	623	95.4	4.6		1914	508,693	433,325	75,368	85.2	14.8
	1909	14,719	14,141	578	96.1	3.9		1909	441,690	372,694	68,996	84.4	15.6
Salaried officers of corporations.	1919	9,825	9,540	285	97.1	2.9	Under 16 years of age.....	1919	3,400	2,971	429	87.4	12.6
	1914	7,114	6,945	169	97.6	2.4		1914	1,742	1,317	425	75.6	24.4
	1909	6,371	6,258	113	98.2	1.8		1909	5,244	2,675	2,569	51.0	49.0
Superintendents and managers.	1919	20,440	20,031	409	98.0	2.0							
	1914	11,844	11,676	168	98.6	1.4							
	1909	10,123	9,942	181	98.2	1.8							

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE: 1919 AND 1914.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Un- der 16 years of age.				16 years of age and over.		Un- der 16 years of age.
			Male.	Fe- male.					Male.	Fe- male.	
All industries.....	1919	730,733	85.2	14.3	0.5	Flour-mill and gristmill products.....	1919	2,122	98.8	0.9	0.2
	1914	510,435	84.9	14.8	0.3		1914	2,303	99.1	0.8	0.1
	1909	446,934	83.4	15.4	1.2	Foundry and machine-shop products ²	1919	87,808	97.3	2.6	0.1
Agricultural implements.....	1919	4,931	98.6	1.4	.....		1914	51,553	98.9	1.0	0.1
	1914	5,464	99.4	0.4	0.2	Furniture.....	1919	8,346	90.7	8.7	0.6
Automobile bodies and parts.....	1919	16,670	94.0	5.7	0.4		1914	7,750	94.5	4.4	1.0
	1914	4,128	96.1	3.9	.....	Glass.....	1919	10,935	83.5	16.1	0.4
Automobiles.....	1919	29,212	96.1	3.9	.....		1914	10,997	91.6	7.9	0.5
	1914	14,624	98.3	1.6	0.1	Gloves and mittens, cloth, not including gloves made in textile mills ⁴	1919	2,162	12.8	83.2	4.0
Automobile repairing.....	1919	2,430	98.3	1.2	0.5						
	1914	215	99.5	0.5	.....	Hardware.....	1919	4,576	84.9	14.8	0.3
Boots and shoes, not including rubber boots and shoes.	1919	14,092	57.7	41.4	0.9		1914	4,803	90.9	8.7	0.5
	1914	14,461	58.3	40.8	0.9	Iron and steel, blast furnaces.....	1919	9,793	99.9	0.1	.....
Boxes, paper and other, not elsewhere speci- fied.	1919	2,952	35.5	63.7	0.8		1914	5,786	100.0	(¹)	.....
	1914	2,456	35.1	64.5	0.4	Iron and steel, steel works and rolling mills..	1919	73,025	98.6	1.3	0.1
Brass, bronze, and copper products.....	1919	4,264	96.5	3.3	0.2		1914	46,397	99.3	0.7	(¹)
	1914	2,277	98.6	1.4	.....	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	1919	4,778	82.3	17.0	0.7
Bread and other bakery products.....	1919	9,091	72.4	26.8	0.8		1914	2,365	88.1	11.8	(¹)
	1914	7,665	79.1	20.5	0.4	Iron and steel forgings, not made in steel works or rolling mills.	1919	5,931	99.6	0.3	0.1
Brick and tile, terra-cotta, and fire-clay products.	1919	12,060	95.5	3.9	0.6		1914	2,308	99.7	0.1	0.2
	1914	10,238	96.7	3.2	0.1	Iron and steel, wrought pipe.....	1919	4,434	98.5	1.5	.....
Cars and general shop construction and repairs by steam-railroad companies.	1919	35,245	99.2	0.8	.....		1914	2,285	100.0	.....	.....
	1914	21,639	99.9	0.1	.....	Knit goods.....	1919	4,407	20.6	78.3	1.1
Cars, steam-railroad, not including opera- tions of railroad companies.	1919	2,177	99.9	0.1	(¹)		1914	3,411	22.9	76.4	0.7
	1914	2,885	99.8	0.2	.....	Liquors, malt.....	1919	3,327	99.2	0.8	.....
Chemicals.....	1919	3,670	95.0	4.9	0.1		1914	5,340	99.8	0.2	.....
	1914	2,017	98.3	1.7	.....	Lumber and timber products.....	1919	3,135	99.5	0.4	0.1
Clothing, men's.....	1919	9,939	31.1	68.5	0.4		1914	4,798	99.2	0.8	(¹)
	1914	8,661	34.6	64.7	0.6	Lumber, planing-mill products, not in- cluding planing mills connected with saw- mills.	1919	4,495	98.7	1.2	0.1
Clothing, women's.....	1919	8,258	31.5	68.2	0.3		1914	5,516	99.4	0.5	(¹)
	1914	9,775	35.4	64.4	0.1	Motorcycles, bicycles, and parts.....	1919	2,480	88.7	11.3	.....
Coke, not including gas-house coke.....	1919	3,407	85.9	0.1	14.0		1914	752	95.0	4.0	.....
	1914	489	100.0	.....	.....	Paints.....	1919	2,197	88.9	11.1	.....
Confectionery and ice cream ²	1919	5,451	46.2	52.9	0.9		1914	1,697	92.1	7.9	.....
	1914	3,965	45.1	54.2	0.7	Paper and wood pulp.....	1919	6,899	87.2	12.6	0.1
Copper, tin, and sheet-iron work.....	1919	2,650	94.9	5.0	0.1		1914	5,430	87.7	11.7	0.6
	1914	2,335	96.2	3.5	0.3	Petroleum, refining.....	1919	2,431	99.2	0.8	.....
Electrical machinery, apparatus, and sup- plies.	1919	26,672	72.4	27.5	0.1		1914	1,519	98.6	1.4	.....
	1914	12,695	77.9	22.0	0.1	Pottery.....	1919	11,339	70.5	29.0	0.4
Engines, steam, gas, and water.....	1919	6,218	99.4	0.6	.....		1914	11,096	72.9	26.5	0.6
	1914	2,962	99.5	0.3	0.2						

¹ Less than one-tenth of 1 per cent.² Includes "chewing gum" in 1914.³ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."⁴ Not reported separately in 1914.

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE: 1919 AND 1914—Continued.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Un- der 16 years of age.				16 years of age and over.		Un- der 16 years of age.
			Male.	Fe- male.					Male.	Fe- male.	
Printing and publishing, book and job.....	1919	8,505	69.3	29.9	0.8	Stoves and hot-air furnaces.....	1919	6,069	97.4	2.6	0.1
	1914	7,978	73.9	25.6	0.5		1914	5,041	99.5	0.4	0.1
Printing and publishing, newspapers and periodicals.	1919	7,627	81.5	17.5	1.0	Stoves, gas and oil.....	1919	4,329	88.1	11.8	0.2
	1914	7,274	80.8	17.3	1.9		1914	3,534	99.0	0.4	0.6
Rubber tires, tubes, and rubber goods, not elsewhere specified.	1919	63,637	88.8	9.8	1.4	Structural ironwork, not made in steel works or rolling mills.	1919	5,231	99.8	0.2	0.1
	1914	21,705	88.8	11.1	0.1		1914	6,657	98.9	0.9	0.2
Screws, machine.....	1919	4,226	82.4	17.6	.....	Tinware, not elsewhere specified.....	1919	2,608	66.9	33.0	0.1
	1914	1,464	92.8	7.0	0.2		1914	2,260	68.9	31.1	.....
Shipbuilding, steel, new vessels and repair work.	1919	11,192	99.9	0.1	.....	Tobacco, cigars and cigarettes.....	1919	10,095	22.8	77.0	0.2
	1914	2,623	99.9	.....	0.1		1914	12,025	31.3	68.6	0.1
Slaughtering and meat packing.....	1919	5,336	92.4	7.5	0.1	Tools, not elsewhere specified.....	1919	6,961	93.0	6.6	0.4
	1914	3,480	97.6	2.3	0.1		1914	2,227	92.6	7.3	(1)
Stamped and enameled ware, not elsewhere specified.	1919	3,834	75.3	24.5	0.2	All other industries.....	1919	133,456	78.2	21.2	0.6
	1914	2,853	79.4	20.4	0.3		1914	117,753	79.4	19.9	0.7
Steam fittings and steam and hot-water heating apparatus.	1919	2,723	97.3	2.6	0.1						
	1914	2,414	99.7	.....	0.3						

¹ Less than one-tenth of 1 per cent.

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY SEX AND AGE, AND VALUE OF PRODUCTS FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

CITY.	AVERAGE NUMBER OF WAGE EARNERS IN MANUFACTURING INDUSTRIES.												VALUE OF PRODUCTS.		
	Total.			16 years of age and over.						Under 16 years of age.			1919	1914	1909
				Male.			Female.								
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
Akron.....	65,054	24,680	15,831	59,094	21,825	13,387	5,914	2,802	2,223	46	53	221	\$558,962,067	\$122,291,600	\$73,158,206
Alliance.....	5,117	2,333	2,524	4,865	2,266	2,385	252	64	131	.....	3	8	32,871,087	7,174,766	6,135,429
Ashtabula.....	4,172	1,868	1,471	3,946	1,770	1,334	225	95	128	1	3	9	23,098,509	5,020,991	3,458,612
Barberton.....	4,762	3,118	.....	4,336	2,696	.....	426	421	.....	.....	1	.....	27,713,226	8,843,422	.....
Bellaire.....	2,277	2,603	2,597	1,879	2,357	2,301	394	234	254	4	12	42	14,502,401	12,170,206	10,091,554
Bucyrus.....	1,861	.....	.....	1,718	.....	.....	142	.....	.....	1	.....	.....	8,435,746	.....	.....
Cambridge.....	1,782	1,455	1,230	1,652	1,353	1,174	125	98	56	5	4	.....	11,226,809	3,923,788	4,200,560
Canton.....	20,336	12,255	9,064	18,365	10,823	8,892	1,965	1,393	955	6	39	117	124,292,924	43,713,446	28,582,811
Chillicothe.....	1,638	1,557	1,674	1,364	1,239	1,157	269	315	517	5	3	.....	7,667,182	4,083,486	4,345,224
Cincinnati.....	69,680	59,861	60,182	51,354	44,991	43,889	18,100	14,509	14,949	226	361	1,344	500,040,996	210,860,388	192,515,692
Cleveland.....	157,730	103,317	84,728	130,840	85,069	69,643	25,384	17,756	13,746	1,506	492	1,339	1,091,577,490	352,418,052	271,990,833
Columbus.....	26,751	17,236	16,428	22,022	14,209	13,137	4,639	2,922	3,146	90	45	145	184,021,849	57,608,084	49,031,872
Coshocton.....	1,959	1,614	.....	1,253	991	.....	702	623	.....	4	.....	.....	7,684,762	3,476,686	.....
Cuyahoga Falls.....	784	.....	.....	753	.....	.....	22	.....	.....	9	.....	.....	5,829,347	.....	.....
Dayton.....	31,131	24,061	21,549	25,934	20,222	17,876	5,153	3,812	3,572	44	27	101	174,990,607	71,071,374	60,378,376
East Cleveland.....	88	129	.....	68	124	.....	20	5	.....	.....	.....	.....	420,505	295,786	.....
East Liverpool.....	4,311	4,830	4,873	3,037	3,566	3,587	1,225	1,238	1,218	29	26	68	12,501,181	7,092,903	6,629,076
Elyria.....	4,690	2,735	2,673	3,858	2,355	2,357	729	376	289	8	4	27	25,191,454	8,791,734	8,064,914
Findlay.....	1,715	1,737	1,376	1,204	1,020	921	483	709	454	23	8	1	7,924,282	4,682,778	3,486,793
Fremont.....	2,999	2,063	.....	2,369	1,682	.....	628	379	.....	2	2	.....	12,915,095	4,779,982	.....
Hamilton.....	8,553	6,043	6,895	7,571	5,252	6,047	974	775	752	8	16	96	47,024,031	16,877,260	18,183,693
Ironton.....	1,971	1,420	.....	1,551	1,193	1,647	384	207	269	36	20	4	14,071,850	4,666,185	7,118,299
Kenmore.....	135	.....	.....	128	.....	.....	7	.....	.....	.....	.....	.....	844,303	.....	.....
Lakewood.....	1,821	1,774	(1)	1,547	1,555	(1)	274	219	.....	1	.....	(1)	7,602,803	3,606,498	(1)
Lancaster.....	2,024	1,583	1,532	1,571	1,134	1,118	452	449	412	1	.....	2	11,478,883	4,602,615	4,074,004
Lima.....	4,901	4,876	3,607	3,609	3,676	2,474	1,233	1,199	1,082	59	1	51	23,638,764	11,598,580	7,763,877
Lorain.....	11,677	6,436	6,697	12,565	6,357	6,674	97	77	20	15	2	3	116,908,616	29,110,037	38,986,996
Mansfield.....	4,711	3,398	3,204	3,812	2,663	2,201	894	730	984	5	5	19	31,877,551	10,281,968	8,172,911
Marietta.....	1,285	1,401	1,288	1,153	1,317	1,181	129	80	106	3	4	1	5,917,469	4,128,618	3,214,553
Marion.....	4,125	2,577	2,619	3,637	2,323	2,344	458	248	272	30	6	3	20,712,973	6,384,864	5,666,976
Martins Ferry.....	1,517	.....	.....	1,458	.....	.....	57	.....	.....	2	.....	.....	15,402,280	.....	.....
Massillon.....	2,153	1,768	1,934	1,941	1,591	1,820	204	177	87	8	.....	21	13,954,871	5,293,124	4,787,772
Middletown.....	6,442	4,003	2,576	5,349	3,523	1,835	1,091	480	769	2	.....	2	62,838,289	21,787,151	16,516,785
Newark.....	4,570	4,583	3,913	3,954	4,132	3,576	864	440	286	12	11	51	16,563,149	9,276,762	7,881,118
New Philadelphia.....	1,247	.....	.....	1,105	.....	.....	134	.....	.....	8	.....	.....	8,445,658	.....	.....
Niles.....	2,945	.....	.....	2,815	.....	.....	128	.....	.....	2	.....	.....	18,358,773	.....	.....
Northwood.....	8,283	5,808	3,907	6,802	4,538	3,215	1,450	1,269	684	1	1	8	47,947,183	16,724,360	9,684,332
Piqua.....	3,293	2,777	2,683	2,273	1,923	1,913	1,017	850	751	3	4	19	19,921,345	7,988,279	6,930,672
Portsmouth.....	5,914	3,697	3,728	4,235	2,441	2,237	1,491	1,137	1,390	188	19	101	26,645,736	7,682,145	7,276,893
Salem.....	2,237	.....	.....	2,138	.....	.....	99	.....	.....	.....	.....	.....	11,069,550	.....	.....
Sandusky.....	3,447	2,727	2,118	2,805	2,403	1,608	632	322	466	10	2	44	19,248,571	8,284,865	5,946,853
Springfield.....	12,264	7,868	7,405	10,420	7,074	6,616	1,832	786	777	12	8	12	67,759,001	27,721,789	19,246,141
Steuersville.....	3,855	4,506	4,267	3,628	4,294	4,045	208	202	196	19	10	26	30,903,344	16,953,987	21,187,127
Tiffin.....	2,213	1,577	1,632	1,948	1,775	1,289	261	248	278	4	54	65	10,516,369	4,995,880	3,234,328
Toledo.....	42,090	27,076	18,878	35,608	22,859	15,279	6,232	4,115	3,827	159	102	272	293,520,900	115,049,426	61,229,542
Warren.....	2,433	2,882	1,798	1,808	2,347	1,190	620	511	547	5	4	61	19,747,395	10,399,737	5,988,174
Youngstown.....	19,414	15,881	10,498	18,542	14,997	10,214	867	860	272	5	4	12	241,458,370	92,111,272	81,270,747
Zanesville.....	3,014	3,035	2,932	2,316	2,540	2,582	659	492	325	39	3	25	13,437,777	8,300,231	8,020,433

¹ Figures can not be shown without disclosing individual operations.

TABLE 7.—WAGE EARNERS, BY MONTHS: 1919, 1914, AND 1909.

MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.			MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.		
	1919	1914	1909	1919	1914	1909		1919	1914	1909	1919	1914	1909
January.....	714,195	511,055	<i>414,278</i>	90.3	95.6	86.2	July.....	740,188	506,133	435,241	93.6	94.7	90.6
February.....	698,911	524,603	421,945	88.4	98.2	87.8	August.....	768,579	506,991	448,898	97.2	94.8	93.4
March.....	694,564	534,537	432,343	88.0	100.0	90.0	September.....	773,510	510,037	465,351	97.8	95.4	96.9
April.....	688,040	533,186	432,828	87.0	99.7	90.1	October.....	740,570	501,396	474,448	93.8	93.8	98.8
May.....	<i>687,689</i>	523,053	436,450	87.1	98.0	90.8	November.....	761,688	478,412	476,023	96.4	89.5	99.1
June.....	710,187	518,316	444,998	89.8	97.0	92.6	December.....	790,681	<i>476,847</i>	480,405	100.0	89.2	100.0

¹ The figures represent the number employed on the 15th of each month or the nearest representative day. Maximum number indicated by bold-faced figures, minimum by *italic* figures.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

(The month of maximum employment for each industry is indicated by bold-faced figures and that of minimum employment by *italic* figures.)

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	730,733	714,195	698,911	694,564	688,040	<i>687,689</i>	710,187	740,188	768,579	773,510	740,570	761,688	790,681	87.9
Males.....	625,668	611,400	598,494	594,994	590,613	<i>590,210</i>	610,378	637,165	660,714	663,495	628,424	646,009	676,120	87.3
Females.....	105,065	102,795	100,417	99,570	97,427	<i>97,479</i>	99,809	103,023	107,865	110,015	112,142	115,679	114,561	84.2
Agricultural implements.....	4,931	5,263	5,344	5,411	5,032	4,813	4,609	<i>4,466</i>	4,642	4,741	4,765	4,938	5,148	81.4
Automobile bodies and parts.....	16,670	13,797	<i>12,635</i>	13,244	13,693	15,029	15,318	16,328	17,890	19,001	19,976	20,950	21,679	75.3
Automobiles.....	29,212	28,464	28,699	29,575	30,086	<i>29,474</i>	22,740	28,035	29,594	30,439	32,583	34,124	35,931	56.4
Automobile repairing.....	2,430	<i>2,166</i>	2,194	2,247	2,326	2,418	2,452	2,524	2,556	2,532	2,798	2,472	2,485	77.1
Boots and shoes, not including rubber boots and shoes.....	14,092	13,654	13,846	13,568	13,173	13,805	14,061	14,292	14,449	14,279	14,236	14,478	14,963	90.0
Boxes, paper and other, not elsewhere specified.....	2,952	2,856	2,909	2,907	2,570	2,773	2,745	2,949	2,977	2,930	3,096	3,233	3,179	84.9
Brass, bronze, and copper products.....	4,264	3,716	<i>3,681</i>	3,744	3,843	3,840	3,968	4,338	4,594	4,632	4,843	5,036	4,933	73.1
Bread and other bakery products.....	9,091	<i>8,477</i>	8,507	8,588	8,666	8,778	8,910	9,220	9,299	9,418	9,571	9,794	9,866	85.9
Brick and tile, terra-cotta, and fire-clay products.....	12,060	<i>9,453</i>	9,452	10,163	11,193	12,217	13,014	13,667	13,510	13,817	13,666	12,817	11,771	68.3
Cars and general shop construction and repairs by steam-railroad companies.....	35,245	34,896	34,292	33,047	<i>32,688</i>	34,196	34,898	35,451	35,812	36,515	36,914	36,995	37,236	87.8
Cars, steam-railroad, not including operations of railroad companies.....	2,177	2,494	2,213	2,242	2,134	1,952	1,847	1,921	1,934	2,091	2,332	2,425	2,539	72.7
Chemicals.....	3,670	3,901	3,462	3,315	<i>3,022</i>	3,062	3,247	3,569	3,762	4,155	4,210	4,135	4,167	71.8
Clothing, men's.....	9,039	8,761	8,972	9,016	8,588	9,000	9,405	9,924	10,694	11,167	11,581	11,680	11,680	74.5
Clothing, women's.....	8,258	<i>7,694</i>	8,145	8,145	8,214	8,214	8,214	8,321	9,128	9,061	8,390	7,771	7,892	83.1
Coke, not including gas-house coke.....	3,407	4,257	3,838	3,047	3,575	3,242	3,474	3,533	3,416	2,258	2,961	3,161	3,100	83.0
Confectionery and ice cream.....	5,451	4,931	4,913	4,753	<i>4,588</i>	4,698	5,023	5,046	5,819	6,361	6,689	6,984	6,007	68.6
Copper, tin, and sheet-iron work.....	2,650	2,638	2,351	2,288	2,364	2,468	2,613	2,671	2,783	2,845	2,801	2,934	2,955	77.4
Electrical machinery, apparatus, and supplies.....	26,672	25,300	25,021	25,262	24,841	<i>22,600</i>	23,970	25,350	27,478	28,377	29,496	30,558	31,551	72.6
Engines, steam, gas, and water.....	6,218	6,351	6,041	6,175	5,969	6,673	6,829	6,829	6,231	6,202	6,213	6,477	6,477	85.1
Flour-mill and gristmill products.....	2,122	2,084	1,897	2,003	2,067	2,030	2,033	2,022	2,280	2,281	2,243	2,252	2,272	84.9
Foundry and machine-shop products.....	72,227	75,538	70,460	69,652	68,523	<i>67,690</i>	67,455	69,697	71,668	72,489	73,859	78,068	79,985	84.1
Furniture.....	8,346	7,617	<i>7,614</i>	7,673	7,820	7,836	8,045	8,332	8,694	8,741	9,002	9,247	9,541	79.8
Glass.....	10,935	9,851	10,961	11,094	11,517	11,177	10,943	<i>9,077</i>	10,239	10,818	11,516	11,942	12,085	75.1
Gloves and mittens, cloth, not including gloves made in textile mills.....	2,162	2,745	2,450	2,162	1,882	1,733	1,810	2,096	2,109	2,060	2,147	2,178	2,651	63.1
Hardware.....	4,676	<i>4,172</i>	4,351	4,629	4,634	4,635	4,528	4,611	4,904	4,455	4,573	4,588	4,532	85.1
Iron and steel, blast furnaces.....	9,793	12,137	11,086	10,247	9,634	9,322	9,465	9,935	10,163	10,440	6,105	8,881	10,201	50.3
Iron and steel, steel works and rolling mills.....	73,025	<i>85,394</i>	80,123	75,342	69,910	70,438	72,505	80,007	81,136	80,241	41,747	60,712	78,745	48.9
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	4,778	5,334	4,998	4,980	4,824	4,365	4,816	4,705	4,819	4,860	3,975	4,698	4,962	74.5
Iron and steel forgings, not made in steel works or rolling mills.....	5,931	6,563	6,302	5,842	5,737	5,712	5,803	5,727	6,072	5,701	5,761	5,933	5,990	86.9
Iron and steel, wrought pipe.....	4,434	4,659	4,493	4,317	4,460	4,444	4,606	4,793	4,970	4,955	5,115	5,550	4,546	68.7
Knit goods.....	4,407	3,877	<i>3,686</i>	3,688	3,850	4,006	4,263	4,525	4,879	4,883	5,075	5,123	5,149	69.6
Liquors, malt.....	3,327	3,221	3,121	3,142	3,204	3,416	3,788	3,935	3,806	3,474	3,206	2,835	2,776	70.5
Lumber and timber products.....	3,135	<i>2,860</i>	2,881	3,035	3,133	3,054	3,228	2,904	3,002	3,160	3,399	3,431	3,543	80.4
Lumber, planing-mill products, not including planing mills connected with sawmills.....	4,495	<i>3,786</i>	3,740	3,803	4,077	4,332	4,656	4,804	4,926	4,879	4,968	4,968	5,021	74.4
Motorcycles, bicycles, and parts.....	2,480	<i>2,995</i>	2,616	2,392	2,264	2,285	<i>2,224</i>	2,236	2,328	2,402	2,561	2,709	2,745	74.3
Paints.....	2,197	<i>1,930</i>	1,949	1,976	2,067	2,192	2,300	2,320	2,351	2,273	2,321	2,379	2,306	81.1
Paper and wood pulp.....	6,899	6,838	6,463	6,384	6,306	6,438	6,726	7,171	7,382	6,894	7,431	7,464	7,291	84.5
Petroleum, refining.....	2,431	2,416	2,431	2,351	2,331	2,356	2,389	2,524	2,556	2,495	2,477	2,449	2,397	91.2
Pottery.....	11,339	<i>10,698</i>	10,728	10,926	11,074	11,163	11,171	11,301	11,597	11,596	11,894	11,991	11,929	89.2
Printing and publishing, book and job.....	8,505	<i>7,837</i>	7,922	7,949	8,132	8,222	8,445	8,696	8,700	8,705	8,854	9,252	9,346	83.9
Printing and publishing, newspapers and periodicals.....	7,627	<i>7,241</i>	7,267	7,418	7,483	7,585	7,574	7,545	7,690	7,719	7,895	8,088	8,069	89.7
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	63,637	<i>53,904</i>	56,340	56,747	58,382	61,209	63,649	67,157	71,484	71,834	74,720	63,864	64,354	72.1
Screws, machine.....	4,226	<i>3,511</i>	3,642	3,830	4,025	4,130	4,146	4,204	4,470	4,582	4,748	4,644	4,782	74.5
Shipbuilding, steel, new vessels and repair work.....	11,192	10,606	11,419	12,081	11,925	12,068	12,057	11,146	11,740	11,054	10,992	9,837	9,879	78.8
Slaughtering and meat packing.....	5,336	5,844	5,348	5,148	4,906	4,896	5,366	5,316	5,033	5,063	5,193	5,738	5,984	83.5
Stamped and enameled ware, not elsewhere specified.....	3,834	3,489	3,462	<i>3,444</i>	3,628	3,684	3,727	3,848	3,973	4,018	4,220	4,328	4,187	79.6
Steam fittings and steam and hot-water heating apparatus.....	2,723	2,709	2,603	2,574	2,545	2,618	2,567	2,718	2,826	2,822	2,872	2,861	3,061	82.3
Stoves and hot-air furnaces.....	6,069	5,666	5,762	<i>5,486</i>	5,641	5,733	6,028	5,487	6,370	6,526	6,539	6,766	6,824	80.4
Stoves, gas and oil.....	4,329	3,651	3,727	3,669	3,624	3,672	3,767	4,353	4,606	4,683	5,195	5,508	5,492	65.8
Structural ironwork, not made in steel works or rolling mills.....	5,231	5,502	5,088	4,826	<i>4,553</i>	4,605	4,843	5,147	5,470	5,621	5,286	5,900	5,971	76.3
Tinware, not elsewhere specified.....	2,608	2,491	2,352	2,312	<i>2,295</i>	2,472	2,625	2,727	2,812	2,789	2,803	2,780	2,738	78.8
Tobacco, cigars and cigarettes.....	10,995	10,845	11,064	10,610	10,563	10,603	10,558	<i>10,529</i>	10,644	11,398	11,794	12,316	12,316	85.5
Tools, not elsewhere specified.....	6,961	7,415	6,905	6,800	6,308	6,398	6,359	6,608	6,858	7,058	7,270	7,615	7,938	79.5
All other industries.....	149,032	139,820	137,205	138,397	137,307	142,753	149,091	152,552	159,217	159,884	156,793	157,288	157,782	85.8

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
<i>Industries showing large proportion of females.</i>														
Boots and shoes, not including rubber boots and shoes.	5,865	5,843	5,907	5,699	5,506	5,708	5,846	6,005	6,077	5,950	5,785	5,927	6,127	89.9
Boxes, paper and other, not elsewhere specified.	1,901	1,828	1,871	1,870	1,844	1,792	1,762	1,924	1,897	1,870	1,990	2,116	2,036	83.3
Bread and other bakery products.	2,435	2,428	2,377	2,201	2,252	2,284	2,307	2,517	2,557	2,607	2,680	2,725	2,709	82.5
Clothing, men's.	6,836	6,094	6,211	6,169	6,008	6,210	6,443	6,801	7,101	7,306	7,052	7,992	8,039	74.7
Clothing, women's.	5,054	6,184	5,545	5,444	5,556	5,345	5,640	6,088	6,308	6,220	5,759	5,862	5,397	82.2
Confectionery and ice cream.	2,895	2,753	2,712	2,565	2,296	2,297	2,201	2,201	2,575	3,505	3,900	3,547	3,405	58.0
Electrical machinery, apparatus, and supplies.	7,341	7,231	7,142	7,529	6,962	6,118	6,727	6,737	7,494	7,841	7,953	8,131	8,222	74.4
Glass.	1,771	1,039	1,777	1,843	1,843	1,836	1,851	1,424	1,558	1,667	1,872	1,976	1,960	72.1
Gloves and mittens, cloth, not including gloves made in textile mills.	1,862	2,401	2,127	1,890	1,627	1,476	1,536	1,710	1,803	1,772	1,839	1,863	2,300	61.5
Hardware.	679	698	665	689	663	638	678	656	696	693	753	726	733	78.8
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	816	806	788	767	763	769	833	804	841	840	732	859	920	79.6
Knit goods.	3,471	3,016	2,763	2,877	2,935	3,131	3,337	3,502	3,855	3,803	4,050	4,053	4,100	67.1
Paper and wood pulp.	874	874	798	801	803	846	864	885	918	851	930	955	963	82.9
Pottery.	3,309	3,078	3,112	3,176	3,211	3,269	3,277	3,261	3,382	3,418	3,498	3,528	3,498	87.2
Printing and publishing, book and job.	2,550	2,358	2,352	2,310	2,410	2,472	2,537	2,661	2,596	2,606	2,621	2,533	2,845	81.2
Printing and publishing, newspapers and periodicals.	1,338	1,363	1,326	1,360	1,357	1,381	1,327	1,290	1,298	1,285	1,338	1,361	1,370	93.0
Rubber tires, tubes, and rubber goods, not elsewhere specified.	6,223	6,276	6,177	5,821	5,754	5,540	5,572	5,726	5,985	6,125	6,481	8,197	7,022	67.6
Screws, machine.	742	618	661	706	727	708	692	714	719	727	985	852	795	62.7
Stoves, gas and oil.	508	442	462	456	452	466	468	520	540	548	561	609	624	68.3
Tinware, not elsewhere specified.	880	872	808	782	764	830	875	901	932	913	878	886	859	82.0
Tobacco, cigars and cigarettes.	8,451	8,452	8,688	8,505	8,337	8,212	8,191	8,101	8,001	8,099	8,095	9,029	9,462	84.6
Total for cities ¹	577,271	561,688	553,007	551,468	545,555	541,708	557,890	582,876	604,870	606,131	590,601	604,995	626,495	86.5
Males.	457,498	478,446	466,765	466,222	461,901	468,166	472,823	495,015	513,260	513,097	495,002	505,829	528,468	86.7
Females.	89,772	88,242	86,242	85,246	83,654	83,541	85,067	87,861	91,610	93,034	95,599	99,166	98,027	84.2
AKRON.	65,054	65,897	67,575	67,455	68,879	62,119	65,258	69,013	73,074	72,507	75,929	68,395	66,547	78.6
Males.	59,138	49,668	61,840	61,902	53,544	56,918	59,995	63,598	67,448	66,743	69,574	58,316	59,730	71.8
Females.	5,916	5,939	5,735	5,453	5,335	5,201	5,263	5,415	5,626	5,764	6,355	8,079	6,817	64.4
ALLIANCE.	5,117	5,898	5,836	5,501	5,249	5,158	5,031	5,004	5,014	4,894	4,842	4,497	4,482	76.0
Males.	4,865	5,666	5,614	5,285	5,010	4,921	4,789	4,761	4,770	4,629	4,568	4,228	4,129	72.9
Females.	252	232	222	216	239	237	242	243	244	265	274	269	351	58.7
ASHTABULA.	4,172	3,952	4,021	4,119	4,103	4,301	4,391	4,403	4,485	3,953	3,985	4,192	4,219	87.5
Males.	3,947	3,753	3,808	3,927	3,906	4,078	4,139	4,116	4,226	3,697	3,673	3,974	4,067	86.9
Females.	225	199	213	192	197	223	252	287	259	256	252	218	152	53.0
BARBERTON.	4,762	5,681	4,967	4,679	4,423	4,408	4,364	4,570	4,643	4,738	4,841	4,861	4,989	77.1
Males.	4,336	5,168	4,476	4,234	4,034	4,028	3,969	4,160	4,220	4,318	4,410	4,427	4,562	77.2
Females.	426	493	491	445	389	380	376	410	423	420	425	434	427	76.1
BELLAIRE.	2,277	2,563	2,501	2,309	2,148	2,004	2,065	2,538	2,734	2,687	1,918	1,906	1,951	69.7
Males.	1,882	2,198	2,167	1,917	1,740	1,624	1,676	2,209	2,349	2,281	1,465	1,406	1,492	62.4
Females.	395	365	334	392	408	380	389	329	385	406	453	440	459	71.7
BUYRUS.	1,861	2,421	2,023	1,815	1,637	1,696	1,795	1,817	1,818	1,796	1,854	1,844	1,816	67.6
Males.	1,719	2,267	1,872	1,665	1,508	1,567	1,656	1,674	1,682	1,666	1,716	1,698	1,657	66.5
Females.	142	154	151	150	129	129	139	143	136	130	138	146	159	81.1
CAMBRIDGE.	1,782	1,808	1,654	1,676	1,679	1,681	1,773	1,840	1,880	1,832	1,866	1,813	1,882	87.9
Males.	1,657	1,693	1,648	1,561	1,561	1,550	1,643	1,741	1,764	1,694	1,716	1,675	1,738	87.8
Females.	125	115	106	115	118	131	130	99	116	138	150	138	144	66.0
CANTON.	20,336	19,368	19,695	20,016	19,210	19,626	20,098	20,948	21,623	20,748	18,845	21,950	21,905	85.9
Males.	18,371	17,488	17,781	18,075	17,312	17,762	18,170	18,953	19,598	18,716	16,773	19,889	19,835	84.1
Females.	1,965	1,880	1,914	1,941	1,898	1,864	1,928	1,995	2,025	2,032	2,072	2,061	1,970	90.0
CHILLICOTHE.	1,638	1,424	1,428	1,389	1,430	1,542	1,996	1,817	1,940	1,751	1,751	1,584	1,604	69.6
Males.	1,368	1,212	1,231	1,198	1,224	1,255	1,709	1,432	1,487	1,431	1,479	1,379	1,379	70.1
Females.	270	212	197	191	206	287	287	385	453	320	272	205	225	42.2
CINCINNATI.	69,680	66,318	65,805	65,385	64,807	65,304	67,171	69,742	72,042	72,860	73,706	75,871	77,149	84.0
Males.	51,495	48,587	48,318	48,290	47,871	48,145	49,547	51,569	53,386	54,060	54,660	56,993	57,405	83.4
Females.	18,185	17,731	17,487	17,096	16,936	17,159	17,624	18,173	18,656	18,800	19,046	18,778	19,744	85.6
CLEVELAND.	157,730	153,839	149,085	148,963	147,365	150,237	153,748	159,223	164,754	165,455	159,310	167,909	172,842	85.2
Males.	132,295	129,126	125,326	125,150	123,623	126,634	129,552	133,934	137,841	138,499	131,752	140,317	145,477	85.2
Females.	25,435	24,713	23,759	23,834	23,742	23,603	24,196	25,289	26,913	26,956	27,558	27,592	27,365	85.0
COLUMBUS.	26,751	26,188	26,017	25,574	25,062	25,407	25,743	26,564	27,545	27,534	28,117	28,673	28,598	87.4
Males.	22,067	21,920	21,563	21,108	20,601	20,970	21,277	22,049	22,853	22,795	23,015	23,551	23,297	88.2
Females.	4,684	4,268	4,454	4,466	4,461	4,437	4,466	4,515	4,692	4,739	5,102	5,122	5,301	80.2
COSHOCTON.	1,950	1,778	1,820	1,788	1,854	1,897	1,928	2,018	2,061	2,098	2,081	2,094	2,097	84.5
Males.	1,257	1,111	1,169	1,122	1,180	1,206	1,232	1,318	1,328	1,354	1,339	1,353	1,367	81.3
Females.	702	661	651	666	674	691	696	700	733	744	742	736	730	87.5
CUYAHOGA FALLS.	784	700	712	714	741	789	785	843	899	819	798	789	819	77.9
Males.	762	681	696	699	723	770	767	819	871	799	771	761	787	78.2
Females.	22	19	16	15	18	19	18	24	28	20	27	28	32	46.9
DAYTON.	31,131	28,443	28,887	27,911	28,616	30,661	30,691	31,765	31,958	33,220	34,324	34,586	35,110	76.6
Males.	25,971	23,190	21,905	23,109	23,853	25,165	25,690	26,665	26,896	27,798	28,801	29,066	29,514	74.2
Females.	5,160	5,253	4,982	4,802	4,763	4,896	5,001	5,100	5,062	5,422	5,523	5,520	5,596	85.1
EAST CLEVELAND.	88	85	90	89	90	92	84	94	89	85	85	81	82	85.3
Males.	68	76	71	70	72	73	65	73	69	64	63	59	61	77.6
Females.	20	19	19	19	18	19	19	21	20	21	22	22	21	81.8
EAST LIVERPOOL.	4,311	4,191	4,116	4,131	4,184	4,220	4,274	4,315	4,420	4,406	4,518	4,502	4,455	91.1
Males.	3,082	3,005	2,917	2,937	2,999	3,009	3,064	3,114	3,161	3,137	3,243	3,215	3,183	89.9
Females.	1,229	1,186	1,199	1,194	1,185	1,211	1,210	1,201	1,259	1,269	1,275	1,287	1,272	92.1

¹ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
ELYRIA.....	4,590	3,848	4,270	4,328	4,288	4,486	4,051	4,350	4,562	4,834	5,092	5,421	5,555	69.2
Males.....	3,881	3,249	3,635	3,651	3,631	3,822	3,336	3,598	3,804	4,059	4,294	4,558	4,695	69.2
Females.....	729	594	635	677	657	664	715	752	758	775	798	863	860	68.8
FINDLAY.....	1,715	1,560	1,609	1,555	1,563	1,667	1,660	1,743	1,880	1,786	1,821	1,837	1,900	81.8
Males.....	1,210	1,020	1,062	1,042	1,050	1,165	1,180	1,265	1,378	1,310	1,352	1,345	1,336	74.5
Females.....	505	533	547	513	504	502	480	478	502	476	469	492	564	83.2
FREMONT.....	2,999	2,983	2,871	2,865	2,783	2,903	2,957	2,953	3,006	2,986	3,168	3,283	3,230	84.8
Males.....	2,371	2,360	2,299	2,283	2,206	2,318	2,371	2,352	2,388	2,351	2,461	2,544	2,532	80.7
Females.....	628	623	572	582	578	585	586	601	620	635	707	739	698	77.4
HAMILTON.....	8,553	8,086	7,927	8,004	7,953	8,142	8,110	8,997	9,251	8,982	9,076	8,997	9,121	85.7
Males.....	7,579	7,168	7,179	7,152	7,095	7,223	7,167	7,939	8,164	7,919	8,016	7,920	8,006	86.9
Females.....	974	918	748	852	858	919	943	1,048	1,087	1,063	1,060	1,077	1,115	67.1
IRONTON.....	1,971	2,083	2,078	1,942	1,866	1,843	1,834	1,837	1,894	2,004	2,217	1,988	2,076	82.4
Males.....	1,587	1,659	1,633	1,533	1,490	1,451	1,481	1,465	1,517	1,635	1,847	1,638	1,695	78.6
Females.....	384	424	445	409	376	392	353	372	377	369	370	350	381	78.7
KENMORE.....	135	130	130	131	134	135	137	139	138	138	136	136	136	93.5
Males.....	128	126	126	126	127	129	129	130	129	130	128	128	128	96.9
Females.....	7	4	4	5	7	6	8	9	9	8	8	8	8	44.4
LAKEWOOD.....	1,821	1,982	1,708	1,684	1,610	1,629	1,616	1,689	1,741	1,897	1,967	2,104	2,225	72.4
Males.....	1,547	1,620	1,437	1,424	1,373	1,386	1,387	1,436	1,490	1,611	1,683	1,804	1,913	71.8
Females.....	274	362	271	260	237	243	229	253	251	286	284	300	312	63.3
LANCASTER.....	2,024	2,024	1,995	2,023	2,025	2,076	1,952	1,993	2,007	2,007	2,031	2,072	2,083	93.7
Males.....	1,572	1,584	1,561	1,589	1,603	1,648	1,611	1,548	1,550	1,553	1,553	1,583	1,589	91.7
Females.....	452	429	434	434	422	428	441	445	457	454	478	489	494	55.4
LIMA.....	4,901	5,619	5,527	5,331	4,632	4,413	4,403	4,624	4,930	4,080	4,521	5,179	5,553	72.6
Males.....	3,681	4,326	4,235	4,099	3,446	3,256	3,235	3,494	3,832	2,872	3,144	3,633	4,000	66.4
Females.....	1,270	1,293	1,292	1,232	1,186	1,157	1,168	1,130	1,098	1,208	1,377	1,546	1,553	70.7
LORAIN.....	11,677	11,466	11,810	12,323	11,829	11,121	11,524	11,003	11,585	11,715	11,821	11,915	12,012	89.3
Males.....	11,574	11,283	11,076	12,235	11,743	11,037	11,446	10,902	11,488	11,621	11,722	11,813	11,922	89.1
Females.....	103	183	134	88	86	84	78	101	97	94	99	102	90	42.6
MANSFIELD.....	4,711	4,678	4,484	4,498	4,454	4,521	4,490	4,630	4,847	4,843	4,898	5,150	5,238	82.5
Males.....	3,817	3,780	3,592	3,624	3,630	3,676	3,676	3,807	3,971	3,938	3,926	4,121	4,214	83.6
Females.....	894	898	892	874	824	845	814	823	876	905	972	1,029	1,025	77.4
MARIETTA.....	1,285	1,025	985	972	1,048	1,154	1,236	1,316	1,381	1,473	1,603	1,617	1,670	55.4
Males.....	1,155	948	867	897	1,044	1,095	1,170	1,216	1,314	1,437	1,437	1,439	1,478	58.1
Females.....	130	77	88	75	81	110	141	146	165	159	166	178	194	35.1
MARION.....	4,125	4,202	4,147	4,071	4,040	4,065	3,990	4,069	4,185	4,070	4,194	4,257	4,231	93.7
Males.....	3,641	3,777	3,695	3,607	3,579	3,603	3,529	3,573	3,671	3,584	3,672	3,710	3,692	93.4
Females.....	484	425	452	464	470	462	461	496	484	486	522	547	539	77.7
MARTINS FERRY.....	1,517	2,106	2,293	1,539	763	1,266	1,891	2,206	2,249	1,486	389	597	1,449	14.8
Males.....	1,460	2,039	2,210	1,485	722	1,201	1,830	2,126	2,160	1,422	321	581	1,415	14.5
Females.....	57	67	83	73	41	65	61	80	89	57	18	16	34	18.0
MASSILLON.....	2,153	2,082	2,039	2,048	2,151	2,250	2,271	2,207	2,154	2,151	2,178	2,130	2,175	89.8
Males.....	1,946	1,881	1,851	1,854	1,953	2,052	2,072	1,995	1,947	1,932	1,957	1,907	1,951	89.3
Females.....	207	201	188	194	198	198	199	212	207	219	221	223	224	83.9
MIDDLETOWN.....	6,442	6,538	6,576	6,506	6,288	6,164	6,186	6,318	6,453	6,430	6,473	6,674	6,698	92.0
Males.....	5,351	5,578	5,472	5,388	5,228	5,123	5,180	5,259	5,334	5,340	5,350	5,441	5,501	91.9
Females.....	1,091	960	1,104	1,118	1,060	1,041	1,006	1,059	1,099	1,090	1,123	1,233	1,197	78.0
NEWARK.....	4,570	4,443	4,247	4,295	4,499	4,588	4,689	4,689	4,661	4,695	4,795	4,815	4,963	83.6
Males.....	3,959	3,738	3,646	3,701	3,871	3,953	4,066	4,066	4,074	4,123	4,196	4,184	4,366	82.2
Females.....	611	705	601	594	628	635	623	620	587	572	599	631	597	79.4
NEW PHILADELPHIA.....	1,247	1,283	1,190	1,107	1,028	1,080	1,122	1,382	1,342	1,397	1,326	1,357	1,357	73.6
Males.....	1,112	1,163	1,053	999	893	930	990	1,243	1,243	1,244	1,192	1,229	1,229	70.6
Females.....	135	120	137	138	135	150	132	136	139	138	134	128	128	80.0
NILES.....	2,945	3,770	3,270	3,035	3,323	2,836	3,158	3,129	2,931	2,986	1,026	2,596	3,280	27.2
Males.....	2,817	3,640	3,135	2,900	3,202	2,701	3,027	2,993	2,807	2,873	914	2,462	3,150	25.1
Females.....	128	130	135	135	121	135	131	136	124	113	112	134	130	82.4
NORWOOD.....	8,283	8,259	7,832	7,751	7,615	7,845	8,022	8,298	8,418	8,428	8,729	8,977	9,222	82.6
Males.....	6,803	6,636	6,327	6,224	6,124	6,374	6,525	6,822	6,991	7,003	7,282	7,471	7,727	80.2
Females.....	1,480	1,623	1,505	1,467	1,491	1,471	1,497	1,476	1,427	1,425	1,447	1,506	1,495	87.6
PIQUA.....	3,293	2,980	3,147	3,147	3,102	3,138	3,201	2,907	3,399	3,455	3,598	3,633	3,809	76.3
Males.....	2,275	1,861	2,137	2,130	2,166	2,167	2,222	2,011	2,372	2,423	2,529	2,546	2,646	73.7
Females.....	1,018	1,119	1,010	1,017	936	971	979	896	1,027	1,032	1,069	1,087	1,163	77.0
PORTSMOUTH.....	5,914	5,744	5,613	5,408	5,594	5,365	5,624	5,727	6,038	6,178	6,321	6,496	6,880	78.2
Males.....	4,403	4,248	4,126	3,954	4,177	3,907	4,129	4,217	4,478	4,641	4,797	4,926	5,238	74.6
Females.....	1,511	1,496	1,487	1,454	1,417	1,458	1,495	1,510	1,560	1,537	1,524	1,570	1,642	87.3
SALEM.....	2,237	2,134	2,077	2,040	2,207	2,145	2,200	2,277	2,223	2,282	2,318	2,366	2,565	79.5
Males.....	2,138	2,047	1,987	1,954	2,116	2,050	2,102	2,182	2,134	2,182	2,201	2,253	2,448	79.8
Females.....	99	87	90	86	91	95	98	95	99	100	117	113	117	73.5
SANDUSKY.....	3,447	3,427	3,464	3,398	3,278	3,323	3,241	3,352	3,396	3,506	3,540	3,658	3,781	85.7
Males.....	2,815	2,829	2,816	2,774	2,676	2,767	2,670	2,782	2,824	2,806	2,817	2,920	3,109	85.9
Females.....	632	598	648	624	602	656	571	570	572	700	723	738	672	76.7
SPRINGFIELD.....	12,264	11,638	11,668	11,738	11,519	11,801	12,093	12,393	12,544	12,629	12,858	13,044	13,153	87.8
Males.....	10,426	10,016	10,060	10,120	9,936	10,184	10,237	10,569	10,566	10,592	10,803	10,963	11,126	89.3
Females.....	1,838	1,622	1,608	1,617	1,583	1,617	1,856	1,824	1,978	2,037	2,055	2,081	2,027	77.3
STEUERENVILLE.....	3,855	4,673	4,564	4,543	3,608	3,653	3,823	4,538	4,737	4,803	1,862	1,399	4,657	26.3
Males.....	3,643	4,489	4,348	4,328	3,409	3,452	3,620	4,335	4,503	4,597	1,049	1,156	4,400	22.8
Females.....	212	184	216	215	199	201	203	203	234	206	213	213	257	71.6

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
TIFFIN.....	2,213	2,151	2,095	2,133	2,109	2,084	2,107	2,189	2,258	2,290	2,294	2,420	2,430	85.8
Males.....	1,948	1,863	1,810	1,852	1,849	1,836	1,855	1,947	1,996	2,016	2,043	2,140	2,163	83.7
Females.....	265	288	285	281	260	248	252	242	262	270	251	274	267	84.0
TOLEDO.....	42,090	42,597	43,348	44,479	44,211	43,205	43,740	42,499	43,352	45,608	46,408	48,141	48,895	64.8
Males.....	35,750	35,985	36,910	38,102	37,969	35,838	36,585	33,731	36,199	36,651	38,767	39,367	40,895	63.2
Females.....	6,340	6,611	6,438	6,377	6,242	5,367	6,155	5,761	6,300	6,701	6,541	7,041	7,248	71.1
WARREN.....	2,433	2,440	2,350	2,230	2,205	2,177	2,229	2,384	2,467	2,584	2,641	2,687	2,802	77.7
Males.....	1,811	1,815	1,690	1,559	1,593	1,624	1,621	1,800	1,850	1,940	2,035	2,060	2,138	72.8
Females.....	622	625	660	674	612	553	608	584	607	644	606	627	664	82.0
YOUNGSTOWN.....	19,414	22,063	20,404	19,766	19,477	19,312	20,156	21,145	21,698	22,303	10,916	15,232	20,466	48.9
Males.....	18,547	21,032	19,456	18,896	18,060	18,483	19,323	20,341	20,882	21,441	10,055	14,368	19,577	48.9
Females.....	867	1,001	948	870	817	829	833	804	816	862	861	864	889	80.3
ZANESVILLE.....	3,014	3,112	3,117	3,014	2,847	2,917	2,952	2,982	2,997	3,032	3,053	3,034	3,111	91.3
Males.....	2,342	2,431	2,437	2,355	2,278	2,261	2,266	2,302	2,325	2,340	2,363	2,348	2,408	92.4
Females.....	672	681	680	659	569	656	686	680	672	692	690	686	703	80.9

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	730,733	48,750	48,036	198,838	156,028	51,695	136,582	59,145	31,659
	1914	510,435	(²)	(²)	69,975	78,201	116,627	126,649	89,552	29,431
	1909	446,934	(²)	(²)	31,977	29,296	88,915	130,852	131,853	34,041
Agricultural implements.....	1919	4,931	4	(²)	4	1,864	634	2,006	416	3
	1914	5,464	(²)	(²)	10	593	811	3,519	531	.....
Automobile bodies and parts.....	1919	16,670	2,385	457	5,914	3,477	1,241	2,570	596	.....
	1914	4,128	(²)	(²)	437	538	265	2,557	331	.....
Automobiles.....	1919	29,212	692	704	12,344	10,534	231	4,707	.....	.....
	1914	14,624	(²)	(²)	89	9,600	2,409	2,406	170	.....
Automobile repairing.....	1919	2,430	58	4	282	134	778	603	532	39
	1914	215	(²)	(²)	25	49	47	29	64	1
Boots and shoes, not including rubber boots and shoes.....	1919	14,092	15	.....	17	12,309	257	1,470	24	.....
	1914	14,461	(²)	(²)	810	103	6,089	7,201	258	.....
Boxes, paper and other, not elsewhere specified.....	1919	2,952	196	83	39	2,083	264	220	67	.....
	1914	2,456	(²)	(²)	329	149	1,594	219	105	.....
Brass, bronze, and copper products.....	1919	4,264	578	104	741	2,159	206	444	32	.....
	1914	2,277	(²)	(²)	484	422	543	651	75	102
Bread and other bakery products.....	1919	9,091	223	864	4,549	448	1,472	525	899	111
	1914	7,665	(²)	(²)	758	328	3,787	493	1,969	380
Brick and tile, terra-cotta, and fire-clay products.....	1919	12,060	76	76	1,624	1,587	2,552	2,052	3,900	193
	1914	16,238	(²)	(²)	604	814	2,840	2,802	9,046	132
Cars and general shop construction and repairs by steam-railroad companies.....	1919	35,245	243	916	21,533	189	585	11,662	117	.....
	1914	21,639	(²)	(²)	8,512	3,164	5,025	730	857	3,351
Cars, steam-railroad, not including operations of railroad companies.....	1919	2,177	132	773	.....	213	.....	1,059	.....	.....
	1914	2,885	.....	.....	.....	929	98	1,858	.....	.....
Chemicals.....	1919	3,670	116	46	77	371	20	2,739	283	18
	1914	2,017	(²)	(²)	380	.....	.....	859	266	512
Clothing, men's.....	1919	9,939	6,154	1,599	1,303	751	122	9	1	.....
	1914	8,691	(²)	(²)	3,058	4,095	1,358	142	38	.....
Clothing, women's.....	1919	8,258	6,521	506	660	563	8	3	27	.....
	1914	9,775	(²)	(²)	903	7,385	1,457	.....	.....	.....
Coke, not including gas-house coke.....	1919	3,407	.....	.....	.....	.....	.....	1,094	.....	2,313
	1914	489	.....	.....	.....	.....	.....	.....	205	284
Confectionery and ice cream.....	1919	5,451	122	284	1,044	1,713	728	845	488	227
	1914	3,965	(²)	(²)	292	357	2,091	587	322	316
Copper, tin, and sheet-iron work.....	1919	2,690	543	45	315	948	113	248	437	1
	1914	2,335	(²)	(²)	783	310	396	518	328	.....
Electrical machinery, apparatus, and supplies.....	1919	26,672	736	362	6,336	10,998	722	5,468	2,050	.....
	1914	12,695	(²)	(²)	657	8,850	4,098	3,795	295	.....
Engines, steam, gas, and water.....	1919	6,218	633	308	1,207	327	110	3,582	51	.....
	1914	2,962	(²)	(²)	100	179	59	2,400	224	.....
Flour-mill and gristmill products.....	1919	2,122	23	7	429	27	171	68	1,289	108
	1914	2,363	(²)	(²)	115	18	216	105	1,683	226
Foundry and machine-shop products.....	1919	87,803	2,847	2,797	25,681	22,910	9,206	20,096	2,956	310
	1914	51,553	(²)	(²)	4,377	7,786	10,749	21,324	7,308	.....

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Includes "chewing gum" in 1919.⁴ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
Furniture.....	1919	8,346	253							
	1914	7,750	(²)	(²)						
Glass.....	1919	10,935	1,197	2,723	3,780	1,471	916	783	65	
	1914	10,997	(²)	(²)	784	4,515	2,916	198	2,276	308
Gloves and mittens, cloth, not including gloves made in textile mills.....	1919	2,162	20	176	52	1,914				
Hardware.....	1919	4,576								
	1914	4,803	(²)	2,499	141	515	569	694	153	
				(²)	106	170	127	2,399	660	1,341
Iron and steel, blast furnaces.....	1919	9,793			87			988	1,762	6,956
	1914	5,786							918	4,868
Iron and steel, steel works and rolling mills.....	1919	73,025	8,343		8,058	1,204	567	16,690	24,170	13,993
	1914	46,397	(²)	(²)	3,303	2,013	2,961	8,094	20,551	9,475
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	1919	4,778			7	1,019	153	3,436	31	132
	1914	2,365	(²)	(²)	341	7	60	1,957		
Iron and steel, forgings, not made in steel works or rolling mills.....	1919	5,931	471	664	1,901	1,063	29	1,738	65	
	1914	2,308	(²)	(²)	449	234	244	1,174	41	166
Iron and steel, wrought pipe.....	1919	4,434	24	239		1,217	31	1,581	1,342	
	1914	2,285					176	1,063	1,026	
Knit goods.....	1919	4,407	7	184	374	3,333	266	203	20	
	1914	3,411	(²)	(²)	64	205	2,935	107	100	
Liquors, malt.....	1919	3,327	33		3,063	59	66		106	
	1914	5,340	(²)	(²)	4,287	59	619	143	232	
Lumber and timber products.....	1919	3,135	132	31	181	183	570	829	1,209	
	1914	4,798	(²)	(²)	318	175	688	1,141	2,459	17
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1919	4,495	101	50	242	872	1,168	1,569	492	1
	1914	5,516	(²)	(²)	502	473	2,096	1,507	948	
Motorcycles, bicycles, and parts.....	1919	2,480			160	130	220	1,970		
	1914	752				78	199	467	6	2
Paints.....	1919	2,197	29	10	328	1,048	86	629	67	
	1914	1,697	(²)	(²)	55	184	209	860	389	
Paper and wood pulp.....	1919	6,899			1,873		437	1,518	783	2,018
	1914	5,430	270				829	344	820	3,437
Petroleum, refining.....	1919	2,431			604	1,029	186	279	121	212
	1914	1,519				828	406		123	162
Pottery.....	1919	11,339	310		2,895	4,352	2,733	1,045	4	
	1914	11,096	(²)	(²)	1,591	2,090	5,099	955	1,361	
Printing and publishing, book and job.....	1919	8,505	298	643	6,423	967	124	48	2	
	1914	7,978	(²)	(²)	5,420	1,006	1,240	242	70	
Printing and publishing, newspapers and periodicals.....	1919	7,627	139	73	6,567	287	357	81	75	48
	1914	7,274	(²)	(²)	5,535	408	829	423	79	
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	1919	63,637	2,207	22,489	33,308	2,396	265	2,874	98	
	1914	21,705	(²)	(²)	3,057	5,848	99	12,297	64	340
Screws, machine.....	1919	4,226			155	792	70	753		
	1914	1,464	(²)	2,453	1,001			157	306	
Shipbuilding, steel.....	1919	11,192	2,340		8,690	97	65			
	1914	2,623					232	663	1,728	
Slaughtering and meat packing.....	1919	5,386	915	137	1,469	547	1,174	385	693	16
	1914	3,480	(²)	(²)	110	6	635	459	2,269	1
Stamped and enameled ware, not elsewhere specified.....	1919	3,834		147	139	1,362	219	1,657	280	
	1914	2,853	(²)	(²)	65	245	393	1,660	490	
Steam fittings and steam and hot-water heating apparatus.....	1919	2,723	91	1	2,175	179	238	39		
	1914	2,414	(²)	(²)	71	219	1,199	673	252	
Stoves and hot-air furnaces.....	1919	6,069	802	60	1,658	1,127	1,838	354	230	
	1914	5,041	(²)	(²)	464	871	812	2,032	842	
Stoves, gas and oil.....	1919	4,329			2,625	1,304	29	367		
	1914	3,534	(²)	(²)	2,360	135	81	368	590	
Structural ironwork, not made in steel works or rolling mills.....	1919	5,231	183	21	279	1,442	508	2,553	245	
	1914	6,657	(²)	(²)	13	948	1,584	3,027	1,085	
Tinware, not elsewhere specified.....	1919	2,608	242		861	1,356	107	42		
	1914	2,260	(²)	(²)	252	463	1,384	60	6	95
Tobacco, cigars and cigarettes.....	1919	10,995	1,512	1,013	1,216	6,568	402	271	12	1
	1914	12,025	(²)	(²)	4,397	1,592	5,488	464	80	4
Tools, not elsewhere specified.....	1919	6,961	102	749	1,307	1,988		2,562	253	
	1914	2,227	(²)	(²)	21	1,568	35	520	83	
All other industries.....	1919	133,456	5,420	3,665	23,698	40,059	18,269	25,093	12,293	4,959
	1914	117,753	(²)	(²)	10,775	11,696	38,217	28,386	23,408	5,271

¹ Includes 48 and under for 1914.² Corresponding figures not available.³ Not reported separately in 1914.

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
Total for cities ²	1919 1914	577,271 355,608	42,142 (³)	43,058 (³)	171,125 57,842	134,876 68,747	38,564 92,067	97,460 98,650	29,941 47,354	20,105 20,948
AKRON.....	1919 1914	65,054 24,680	160 (³)	21,052 (³)	36,736 4,188	3,285 5,936	1,700 953	1,760 11,873	257 580	104 1,150
ALLIANCE.....	1919 1914	5,117 2,333	460 (³)	..... (³)	989 306	1,465 11	387 1,136	1,751 107	38 711	27 62
ASHTABULA.....	1919 1914	4,172 1,868	74 (³)	190 (³)	2,699 265	426 25	509 852	229	35 615	10 111
BARBERTON.....	1919 1914	4,762 3,118	31 (³)	579 (³)	725 6	1,047 19	124 1,201	2,241 1,245	9 642	6 5
BELLAIRE.....	1919 1914	2,277 2,603	121 (³)	666 (³)	132 118	..... 19	190 1,099	426 469	155 36	587 882
BUCYRUS ⁴	1919	1,861	1	.....	925	349	52	485	39	10
CAMBRIDGE.....	1919 1914	1,782 1,455	552 (³)	20 (³)	277 180	440 491	28 615	5 136	460 27	..... 6
CANTON.....	1919 1914	20,336 12,255	3,878 (³)	208 (³)	1,383 1,400	2,019 811	1,123 1,555	9,911 7,579	1,674 566	146 344
CHILLICOTHE.....	1919 1914	1,638 1,557	8 (³)	..... (³)	432 27	38 59	34 401	819 637	278 198	29 235
CINCINNATI.....	1919 1914	69,680 59,861	8,045 (³)	2,556 (³)	26,854 11,975	21,343 13,526	4,013 16,330	5,322 12,713	1,343 4,410	204 907
CLEVELAND.....	1919 1914	157,730 103,317	15,288 (³)	9,488 (³)	36,548 17,103	46,756 20,680	10,547 24,581	24,945 19,409	10,764 16,556	3,394 4,988
COLUMBUS.....	1919 1914	26,751 17,236	778 (³)	737 (³)	9,225 5,611	5,454 1,614	1,482 3,965	7,729 4,702	1,075 1,255	271 89
COSHOCOTON.....	1919 1914	1,959 1,614	2 (³)	..... (³)	731 57	1,015 240	162 1,206	37 49	12 21	..... 41
CUYAHOGA FALLS ⁴	1919	784	1	112	163	226	30	230	20	2
DAYTON.....	1919 1914	31,131 24,061	2,283 (³)	1,165 (³)	3,340 2,335	9,863 1,451	6,962 8,492	6,453 10,041	954 1,605	111 137
EAST CLEVELAND.....	1919 1914	88 129	15 (³)	..... (³)	8 2	32	3 14	30 104	..... 1	..... 8
EAST LIVERPOOL.....	1919 1914	4,311 4,830	6 (³)	15 (³)	1,509 1,590	1,689 614	1,058 2,359	..... 66	17 146	17 55
ELYRIA.....	1919 1914	4,590 2,735	9 (³)	192 (³)	1,056 25	1,747 968	440 167	563 762	553 429	..... 364
FINDLAY.....	1919 1914	1,715 1,737	11 (³)	..... (³)	110 104	503 124	292 925	645 115	126 326	28 143
FREMONT.....	1919 1914	2,999 2,063	9 (³)	10 (³)	76 193	1,306 118	140 241	1,238 1,190	133 318	87 3
HAMILTON.....	1919 1914	8,553 6,043	605 (³)	596 (³)	4,661 797	667 99	225 506	1,760 2,580	39 926	..... 1,135
IRONTON.....	1919 1914	1,971 1,420	100 (³)	..... (³)	330 236	606 81	50 319	309 183	278 412	298 189
KENMORE ⁴	1919	135	.....	5	1	.....	100	26	.....	3
LAKEWOOD.....	1919 1914	1,821 1,774	10 (³)	2 (³)	1,659 35	127 1,238	6 13	7 77	10 404	7
LANCASTER.....	1919 1914	2,024 1,583	109 (³)	..... (³)	582 40	1,000 3	167 1,190	130 224	9 59	27 67
LIMA.....	1919 1914	4,901 4,876	48 (³)	7 (³)	628 98	2,934 719	199 1,882	843 1,906	233 259	9 12
LORAIN.....	1919 1914	11,677 6,436	7 (³)	14 (³)	4,274 287	263 20	311 43	50 16	193 1,657	6,565 4,413
MANSFIELD.....	1919 1914	4,711 3,398	327 (³)	264 (³)	138 300	1,832 469	29 1,456	2,076 1,006	45 160	..... 7
MARIETTA.....	1919 1914	1,285 1,401	6 (³)	12 (³)	589 58	184 22	174 523	274 178	46 608	..... 12
MARION.....	1919 1914	4,125 2,577	..... (³)	..... (³)	79 1,383	640 154	77 862	3,019 26	309 132	1 20
MARTINS FERRY ⁴	1919	1,517	847	.....	75	7	378	108	18	84
MASSILLON.....	1919 1914	2,153 1,768	458 (³)	2 (³)	48 57	924 354	129 744	305 509	132 98	155 6

¹ Includes 48 and under for 1914.² Excludes Cleveland Heights and East Youngstown to avoid disclosure of individual operations.³ Corresponding figures not available.⁴ Not shown separately in 1914.

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TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48.1	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
MIDDLETOWN.....	1919	6,442	5		3,380	1,698	46	512	128	673
	1914	4,003	(²)	(²)	44	29	1,068	417	2,041	384
NEWARK.....	1919	4,570	47	489	685	487	1,359	1,331	165	7
	1914	4,583	(²)	(²)	72	892	1,638	1,778	187	16
NEW PHILADELPHIA ³	1919	1,247	617	9	196	307	39	12	65	2
NILES ³	1919	2,945	416		645	208	141	1,274	6	255
NORWOOD.....	1919	8,283	146	898	3,808	2,630	272	521	4	4
	1914	5,808	(²)	(²)	1,069	1,338	2,707	656	33	5
PIQUA.....	1919	3,293	25	184	44	1,055	538	826	303	318
	1914	2,777	(²)	(²)	31	357	1,219	239	764	167
PORTSMOUTH.....	1919	5,914	4		113	2,481	29	1,454	1,824	9
	1914	3,597	(²)	(²)	94		288	2,899	343	23
SALEM ³	1919	2,237	624	892	208	67	88	9	349	
SANDUSKY.....	1919	3,447	223	68	551	475	544	1,171	273	142
	1914	2,727	(²)	(²)	415	66	785	710	400	351
SPRINGFIELD.....	1919	12,264	174	11	1,360	2,416	395	7,670	214	24
	1914	7,868	(²)	(²)	1,010	1,227	471	4,601	508	51
STEBENVILLE.....	1919	3,855	475		144	505	106	2,000	143	422
	1914	4,506	(²)	(²)	729	533	33	150	2,663	398
TIFFIN.....	1919	2,213	16	489	109	170	926	302	166	35
	1914	2,177	(²)	(²)	31	498	331	883	404	30
TOLEDO.....	1919	42,090	3,436	1,582	20,903	11,294	2,131	1,464	575	705
	1914	27,076	(²)	(²)	2,258	13,645	6,399	2,675	1,300	799
WARREN.....	1919	2,433	16	2	204	1,733	133	291	26	28
	1914	2,862	(²)	(²)	1,665	40	444	627	68	18
YOUNGSTOWN.....	1919	19,414	1,605	277	1,121	754	566	3,893	5,892	5,306
	1914	15,861	(²)	(²)	1,384	94	2,384	3,930	4,784	3,284
ZANESVILLE.....	1919	3,014	64	265	672	409	130	944	524	6
	1914	3,035	(²)	(²)	264	143	670	1,213	702	43

¹ Includes 48 and under for 1914.² Corresponding figures not available.³ Not shown separately in 1914.

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																	
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.		
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	
All industries.....	16,125	730,733	2,028	7,092	16,393	3,096	34,943	1,615	53,388	935	66,641	799	125,932	312	110,104	168	118,061	80	205,271	
Agricultural implements.....	46	4,931	3	14	36	5	70	4	152	4	325	9	1,493	5	1,593	2	1,262	—	—	
Automobile bodies and parts.....	237	16,670	20	72	175	59	676	34	1,117	23	1,644	12	1,867	7	2,565	8	5,540	2	3,086	
Automobiles.....	44	29,212	—	1	5	3	43	6	195	3	204	13	1,923	8	2,673	5	3,405	5	20,764	
Automobile repairing.....	540	2,430	25	425	995	76	734	10	298	3	182	1	221	—	—	—	—	—	—	
Boots and shoes, not including rubber boots and shoes.....	60	14,092	—	4	10	6	72	3	79	8	681	23	3,819	8	2,860	7	5,012	1	1,559	
Boxes, paper and other, not elsewhere specified.....	58	2,952	—	6	16	15	224	15	552	13	905	9	1,255	4	—	—	—	—	—	
Brass, bronze, and copper products.....	92	4,264	4	24	68	30	344	17	526	6	387	6	925	4	1,471	1	543	—	—	
Bread and other bakery products.....	1,621	9,091	284	1,062	2,277	202	2,055	43	1,334	15	1,085	13	1,790	2	550	—	—	—	—	
Brick and tile, terra-cotta, and fire-clay products.....	341	12,000	5	112	306	65	779	81	2,983	56	3,891	18	2,756	4	1,345	—	—	—	—	
Cars and general shop construction and repairs by steam-railroad companies.....	117	35,245	—	5	22	6	79	13	423	20	1,468	29	5,214	27	9,789	11	7,436	6	10,814	
Cars, steam-railroad, not including operations of railroad companies.....	8	2,177	—	—	—	—	—	1	27	2	144	3	383	—	—	2	1,623	—	—	
Chemicals.....	37	3,670	—	5	19	12	138	10	277	5	345	1	214	1	275	2	1,317	1	1,085	
Clothing, men's.....	246	9,939	11	62	184	81	1,012	45	1,520	25	1,832	16	2,362	3	1,052	3	1,977	—	—	
Clothing, women's.....	175	8,258	4	25	68	62	745	43	1,520	23	1,642	13	1,943	3	1,136	2	1,204	—	—	
Coke, not including gas-house coke.....	13	3,407	—	—	—	—	—	—	—	3	214	4	745	5	1,944	1	504	—	—	
Confectionery and ice cream.....	350	5,451	65	191	390	61	643	33	1,073	15	1,147	14	1,869	1	329	—	—	—	—	
Copper, tin, and sheet-iron work.....	262	2,650	26	155	349	56	675	16	479	4	253	4	498	—	396	—	—	—	—	
Electrical machinery, apparatus, and supplies.....	189	26,672	5	48	144	40	496	38	1,311	11	798	25	4,142	11	3,762	5	3,508	6	12,511	
Engines, steam, gas, and water.....	44	6,218	—	9	27	6	59	7	215	8	553	5	742	5	1,560	3	1,886	1	1,196	
Flour-mill and gristmill products.....	577	2,122	113	385	827	61	533	13	388	4	261	1	113	—	—	—	—	—	—	
Foundry and machine-shop products.....	1,000	72,227	57	247	697	228	2,604	179	5,967	118	8,384	99	15,942	42	14,197	25	17,712	5	6,724	
Furniture.....	162	8,346	11	31	96	38	501	35	1,186	30	2,150	13	2,013	2	539	1	731	1	1,130	
Glass.....	44	10,935	—	—	—	1	17	1	43	11	796	14	2,154	11	4,015	6	3,910	—	—	
Gloves and mittens, cloth, not including gloves made in textile mills.....	35	2,162	—	6	18	10	122	8	282	5	319	4	638	2	783	—	—	—	—	
Hardware.....	50	4,576	4	15	28	9	86	9	310	4	246	7	1,141	1	303	—	—	1	2,462	
Iron and steel, blast furnaces.....	42	9,793	—	—	—	1	19	3	102	10	714	16	2,708	6	2,126	6	4,124	—	—	
Iron and steel, steel works and rolling mills.....	86	73,025	—	1	1	2	30	4	167	3	196	14	2,480	17	6,125	27	20,075	18	43,951	
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	23	4,778	—	2	9	4	36	4	160	2	148	6	1,036	3	1,112	1	975	1	1,302	
Iron and steel forgings, not made in steel works or rolling mills.....	38	5,931	1	3	6	2	26	7	250	5	336	13	1,752	5	1,967	2	1,594	—	—	
Iron and steel, wrought pipe.....	8	4,434	—	—	—	—	—	3	100	—	—	1	239	—	—	2	1,581	2	2,514	
Knit goods.....	34	4,407	1	3	9	7	104	2	98	7	494	8	1,368	6	2,334	—	—	—	—	
Liquors, malt.....	73	3,327	—	7	27	20	241	25	815	14	1,030	7	1,214	—	—	—	—	—	—	
Lumber and timber products.....	514	3,135	13	379	770	98	1,088	18	576	3	211	3	490	—	—	—	—	—	—	
Lumber, planing-mill products, not including planing mills connected with sawmills.....	378	4,495	23	200	475	99	1,158	39	1,202	10	573	6	734	1	353	—	—	—	—	
Motorcycles, bicycles, and parts.....	9	2,480	1	—	—	—	—	—	—	3	221	3	509	1	374	—	—	1	1,376	
Paints.....	61	2,197	—	26	71	17	172	9	285	2	150	5	849	2	660	—	—	—	—	
Paper and wood pulp.....	49	6,899	—	—	—	3	46	14	429	12	898	14	2,085	4	1,455	1	621	1	1,365	
Petroleum, refining.....	11	2,431	—	—	—	2	13	2	93	—	—	4	698	—	—	1	598	1	1,029	
Pottery.....	95	11,339	1	7	10	7	84	19	637	22	1,572	29	5,082	8	2,605	2	1,349	—	—	
Printing and publishing, book and job.....	871	8,505	176	424	1,002	175	1,986	67	2,131	17	1,236	11	1,714	1	436	—	—	—	—	
Printing and publishing, newspapers and periodicals.....	794	7,627	253	356	899	118	1,286	37	1,153	16	1,192	9	1,301	4	1,220	1	576	—	—	
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	96	63,637	—	13	38	22	249	20	737	6	469	13	2,011	12	4,427	3	1,802	7	53,904	
Screws, machine.....	19	4,226	—	4	9	5	76	1	37	2	123	3	415	3	1,112	—	—	1	2,454	
Shipbuilding, steel, new vessels and repair work.....	9	11,192	—	—	—	1	9	—	—	3	242	1	157	—	—	—	—	4	10,784	
Slaughtering and meat packing.....	141	5,336	14	54	147	31	368	21	635	12	883	6	758	—	—	3	2,545	—	—	
Stamped and enameled ware, not elsewhere specified.....	49	3,834	—	9	27	9	104	9	294	9	574	9	1,366	4	1,469	—	—	—	—	
Steam fittings and steam and hot-water heating apparatus.....	29	2,723	3	7	17	7	71	4	125	3	208	3	517	—	—	1	569	1	1,216	
Stoves and hot-air furnaces.....	67	6,069	1	11	27	13	150	11	340	14	1,026	13	1,924	2	748	1	575	1	1,279	
Stoves, gas and oil.....	34	4,329	—	15	45	4	33	6	203	2	124	2	406	4	1,246	—	—	1	2,272	
Structural ironwork, not made in steel works or rolling mills.....	93	5,231	1	20	52	31	326	17	521	9	662	12	1,762	1	269	2	1,639	—	—	
Tinware, not elsewhere specified.....	14	2,608	—	2	5	2	30	2	83	1	96	2	355	4	1,514	1	525	—	—	
Tobacco, cigars and cigarettes.....	676	10,995	255	271	529	62	773	34	1,169	22	1,650	28	4,616	2	629	1	537	1	1,092	
Tools, not elsewhere specified.....	149	6,961	8	27	63	51	632	38	1,163	12	863	10	1,672	1	472	1	972	1	1,124	
All other industries.....	5,235	149,032	639	2,347	5,398	1,171	13,126	535	17,616	295	20,894	192	29,552	68	24,314	28	19,854	10	18,278	
Total for cities ¹	10,537	577,271	1,263	4,104	10,207	2,273	25,699	1,193	39,156	661	47,841	599	94,413	242	84,152	134	96,693	68	179,610	
AKRON.....	304	65,054	14	130	351	58	691	43	1,430	23	1,631	19	3,058	7	2,808	4	3,102	6	51,983	
ALLIANCE.....	74	5,117	13	34	75	9	95	8	267	1	89	3	563	3	1,068	2	1,568	1	1,392	
ASHTABULA.....	62	4,172	3	36	79	7	79	2	91	4	285	4	689	5	1,365	—	—	—	—	
BARBERTON.....	32	4,762	6	6	10	5	42	3	70	3	201	2	317	2	512	5	3,590	—	—	
BELLAIRE.....	45	2,277	5	18	38	10	104	4	123	—	—	5	836	3	1,176	—	—	—	—	

¹ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																	
	Establishments.	Wage earners (average number).	No wage earners.		1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.	
			Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
BUCYRUS.....	43	1,861	6	16	25	12	130	2	60	1	54	3	391	3	1,201					
CAMBRIDGE.....	32	1,782		19	57	7	93			2	150	1	234	2	699	1	549			
CANTON.....	287	20,336	26	105	231	70	751	40	1,304	15	1,072	12	1,869	13	4,405	2	1,131	4	9,573	
CHILLICOTHE.....	35	1,638	1	18	53	8	79	3	97	1	72	1	318	1	394	1	625			
CINCINNATI.....	2,239	69,680	280	837	2,120	518	5,907	270	9,075	163	11,774	113	17,247	39	13,952	12	8,389	1	1,216	
CLEVELAND.....	2,946	157,730	401	1,123	2,746	626	7,179	323	10,569	171	12,161	163	25,890	67	23,260	48	35,805	24	40,120	
COLUMBUS.....	690	26,751	86	264	692	163	1,871	83	2,678	41	2,908	35	5,062	9	3,163	7	4,446	2	5,931	
COSHOCOTON.....	45	1,959	5	17	51	7	79	7	245	3	206	4	676	2	702					
CUYAHOGA FALLS.....	30	784		16	39	6	71	4	129			4	545							
DAYTON.....	571	31,131	51	222	562	118	1,297	83	2,654	46	3,423	34	5,341	8	2,459	4	2,974	5	12,421	
EAST CLEVELAND.....	17	88	2	12	35	2	25	1	28											
EAST LIVERPOOL.....	67	4,311	2	26	62	15	193	5	181	6	449	9	1,368	2	709	2	1,349			
ELYRIA.....	75	4,590	6	38	79	10	95	1	22	10	669	7	1,108	3	926	2	1,691			
FINDLAY.....	75	1,715	9	35	83	16	150	8	235	1	66	6	1,181							
FREMONT.....	53	2,999	2	20	55	16	194	5	122	5	374	1	122	2	782	2	1,350			
HAMILTON.....	130	8,553	19	49	116	27	290	13	468	6	424	7	1,081	4	1,207	2	1,212	3	3,755	
IRONTON.....	52	1,971	1	16	38	15	176	9	323	5	415	6	1,019							
KENMORE.....	7	135		5	15	1	20			1	100									
LAKEWOOD.....	33	1,821	8	15	35	7	65	1	28	1	83							1	1,610	
LANCASTER.....	43	2,024	3	15	30	13	122	1	27	4	314	6	1,114	1	417					
LIMA.....	108	4,901	8	43	110	29	310	15	519	5	309	3	390	2	736	2	1,434	1	1,093	
LORAIN.....	55	11,677	9	15	34	18	195	4	111	1	82	2	361	3	1,050	1	739	2	9,105	
MANSFIELD.....	132	4,711	18	63	126	33	379	8	264	8	560	8	1,268	2	852	2	1,262			
MARIETTA.....	59	1,285	5	29	73	16	181	2	60	2	154	4	553	1	264					
MARION.....	70	4,125	9	27	73	15	152	7	265	3	223	5	813	2	834	1	673	1	1,092	
MARTINS FERRY.....	40	1,517	10	16	31	5	55	3	90	2	155	3	526			1	660			
MASSILLON.....	80	2,153	9	43	99	11	139	7	242	5	319	2	239	3	1,115					
MIDDLETOWN.....	56	6,442	5	19	48	11	139	6	206	6	400	6	904	1	373			2	4,372	
NEWARK.....	79	4,570	8	30	79	18	188	10	349	8	533	1	109	1	489	1	536	2	2,287	
NEW PHILADELPHIA.....	43	1,247	4	26	56	8	66	2	61			1	150	1	297	1	617			
NILES.....	40	2,945	2	18	40	4	44	5	162	3	242	4	558	3	956	1	943			
NORWOOD.....	70	8,283	5	30	88	6	76	5	152	2	172	11	1,719	6	1,927	4	3,019	1	1,130	
PIQUA.....	66	3,293	6	26	59	14	157	5	156	3	226	7	1,152	5	1,543					
PORTSMOUTH.....	60	5,614	9	24	73	9	83	8	287	3	228	2	262	1	277	2	1,540	2	3,154	
SALEM.....	36	2,237	2	14	38	8	88	4	140	3	198	1	227	3	922	1	624			
SANDUSKY.....	115	3,447	20	34	87	24	311	18	565	13	942	3	611	3	931					
SPRINGFIELD.....	206	12,264	27	70	201	42	445	25	794	14	1,068	19	3,073	4	1,304	4	2,451	1	2,928	
STUBENVILLE.....	57	3,855	3	26	65	17	172	3	94	1	71	4	677	2	716			1	2,060	
TIFFIN.....	75	2,213	10	35	85	16	169	4	126	5	343	3	467	1	484	1	539			
TOLEDO.....	671	42,090	80	239	624	159	1,860	84	2,876	40	2,787	42	6,647	15	5,555	10	7,195	2	14,546	
WARREN.....	96	2,433	18	44	97	16	165	6	199	3	185	6	832	3	955					
YOUNGSTOWN.....	239	19,414	38	110	252	33	348	24	783	10	689	9	1,661	2	733	8	6,080	5	8,258	
ZANESVILLE.....	97	3,014	9	43	92	15	179	13	419	8	535	7	1,155	2	634					

TABLE 11.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	16,125	15,658	15,138	730,733	510,435	446,934	\$5,100,308,728	\$1,782,808,279	\$1,437,935,817	\$2,188,360,857	\$762,026,264	\$613,733,870
Less than \$5,000.....	3,192	5,105	5,095	2,102	6,151	7,021	8,120,780	12,447,953	12,198,229	5,074,894	7,753,381	7,811,667
\$5,000 to \$20,000.....	4,452	4,614	4,474	12,089	20,996	23,571	49,105,812	47,806,840	46,028,999	27,477,990	27,043,887	26,309,694
\$20,000 to \$100,000.....	4,270	3,464	3,405	44,277	61,756	64,853	201,110,443	159,828,466	156,080,099	100,752,506	79,804,644	76,806,063
\$100,000 to \$500,000.....	2,674	1,823	1,919	123,388	229,226	208,656	607,923,301	411,257,188	557,384,719	298,904,714	308,732,635	258,737,951
\$500,000 to \$1,000,000.....	673	352		85,097			475,436,292	244,522,194		227,190,031		
\$1,000,000 and over.....	864	300	245	463,780	192,306	142,833	3,758,612,100	906,945,638	686,243,771	1,528,960,722	338,689,717	244,068,505
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	19.8	32.6	33.7	0.3	1.2	1.6	0.2	0.7	0.8	0.2	1.0	1.3
\$5,000 to \$20,000.....	27.6	29.5	29.6	1.7	4.1	5.3	1.0	2.7	3.2	1.3	3.5	4.3
\$20,000 to \$100,000.....	26.5	22.1	22.5	6.1	12.1	14.5	3.9	9.0	10.9	4.6	10.5	12.5
\$100,000 to \$500,000.....	16.6	11.6		16.9			11.9	23.1	38.8	13.7	40.5	42.2
\$500,000 to \$1,000,000.....	4.2	2.2		11.6			9.3	13.7		10.4		
\$1,000,000 and over.....	5.4	1.9	1.6	63.5	37.7	32.0	73.7	50.9	46.3	69.9	44.4	39.8

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.	
			1919	1914			1919	1914			1919	1914			1919	1914
AGRICULTURAL IMPLEMENTS.....	46	59	100.0	100.0	4,931	5,464	100.0	100.0	\$26,556,031	\$17,484,615	100.0	100.0	\$13,589,296	\$9,674,830	100.0	100.0
Less than \$5,000.....	7	10	15.2	16.9	10	8	0.2	0.1	23,575	17,421	0.1	0.1	11,916	11,353	0.1	0.1
\$5,000 to \$20,000.....	9	15	19.6	25.4	24	75	0.5	1.4	101,019	129,534	0.4	0.7	47,421	70,840	0.3	0.8
\$20,000 to \$100,000.....	5	11	10.9	18.6	57	287	1.2	5.3	269,725	638,360	1.0	3.7	127,792	344,419	0.9	3.6
\$100,000 to \$500,000.....	8	10	17.4	16.9	424	1,024	8.6	55.3	2,022,773	3,611,494	7.6	20.7	1,102,297	1,472,398	8.1	48.8
\$500,000 to \$1,000,000.....	8	9	17.4	15.3	1,271	.....	25.8	.....	5,776,757	5,560,310	21.8	31.8	2,748,885	.....	20.2	.....
\$1,000,000 and over.....	9	4	19.0	6.8	3,145	2,070	63.8	37.9	18,362,152	7,527,496	69.1	43.1	9,550,985	4,518,820	70.3	46.7
AUTOMOBILE BODIES AND PARTS.....	237	63	100.0	100.0	16,670	4,128	100.0	100.0	92,390,646	9,556,097	100.0	100.0	39,848,637	5,096,922	100.0	100.0
Less than \$5,000.....	28	9	11.8	14.3	12	13	0.1	0.3	64,818	31,469	0.1	0.3	37,753	23,279	0.1	0.5
\$5,000 to \$20,000.....	61	18	25.7	28.6	173	110	1.0	2.7	635,926	201,776	0.7	2.1	357,558	124,754	1.0	2.4
\$20,000 to \$100,000.....	65	19	27.4	30.2	855	339	5.1	8.2	2,987,840	956,733	3.2	10.0	1,788,220	457,769	4.5	9.6
\$100,000 to \$500,000.....	54	14	22.8	22.2	2,705	1,301	16.6	31.5	11,937,310	1,430,621	12.9	43.2	6,327,256	1,811,835	15.9	37.5
\$500,000 to \$1,000,000.....	8	.....	3.4	.....	1,215	.....	7.3	.....	5,382,785	.....	5.8	.....	3,053,925	.....	7.7	.....
\$1,000,000 and over.....	21	3	8.9	4.8	11,650	2,365	69.9	57.3	71,381,967	4,235,498	77.3	44.3	28,253,985	2,549,285	70.9	50.6
AUTOMOBILES.....	44	39	100.0	100.0	29,212	14,624	100.0	100.0	287,045,832	76,154,488	100.0	100.0	88,606,871	25,283,166	100.0	100.0
Less than \$100,000.....	3	10	6.8	25.6	27	82	0.1	0.6	153,212	321,609	0.1	0.4	47,699	129,428	0.1	0.5
\$100,000 to \$500,000.....	10	10	22.7	25.6	462	1,502	1.6	10.3	2,994,485	1,800,635	0.9	2.4	868,042	1,235,370	1.0	9.3
\$500,000 to \$1,000,000.....	3	7	6.8	17.9	275	.....	0.9	.....	2,443,057	5,014,859	0.9	6.6	910,785	.....	1.0	.....
\$1,000,000 and over.....	28	12	63.6	30.8	28,448	13,040	97.4	89.2	281,855,078	69,017,385	98.2	90.6	86,780,345	22,796,368	97.9	90.2
BOOTS AND SHOES, NOT INCLUDING RUBBER BOOTS AND SHOES.....	60	62	100.0	100.0	14,092	14,461	100.0	100.0	71,354,550	32,773,922	100.0	100.0	30,552,366	13,526,326	100.0	100.0
Less than \$20,000.....	6	6	10.0	9.7	28	43	0.2	0.3	61,166	31,126	0.1	0.1	38,190	19,723	0.1	0.1
\$20,000 to \$100,000.....	6	11	10.0	17.7	167	304	1.2	2.1	268,943	452,826	0.4	1.4	150,815	216,611	0.5	1.6
\$100,000 to \$500,000.....	9	28	15.0	45.2	666	1,648	4.7	44.4	3,085,992	9,627,797	4.3	29.4	1,037,318	1,629,662	3.5	46.6
\$500,000 to \$1,000,000.....	13	7	21.7	11.3	1,833	.....	13.0	.....	9,221,779	4,725,193	12.9	14.4	3,874,285	.....	12.7	.....
\$1,000,000 and over.....	26	10	43.3	16.1	11,398	7,696	80.9	53.2	58,717,070	17,936,980	82.3	54.7	25,421,760	6,994,330	83.2	51.7
BRASS, BRONZE, AND COPPER PRODUCTS.....	92	84	100.0	100.0	4,264	2,277	100.0	100.0	27,801,760	7,843,092	100.0	100.0	11,624,227	3,653,547	100.0	100.0
Less than \$5,000.....	5	13	5.4	15.5	1	13	(*)	0.6	14,274	33,455	0.1	0.4	8,586	7,089	0.1	0.2
\$5,000 to \$20,000.....	15	23	16.3	27.4	38	100	0.9	4.4	161,315	252,175	0.6	3.2	98,369	136,408	0.8	3.7
\$20,000 to \$100,000.....	30	51	32.6	36.0	265	423	6.2	18.6	1,623,983	1,457,952	5.5	18.6	635,482	591,493	5.5	16.2
\$100,000 to \$500,000.....	28	17	30.4	20.2	899	1,741	21.1	76.5	6,246,828	6,099,510	22.5	77.8	2,534,843	2,918,557	21.8	79.9
\$500,000 to \$1,000,000.....	8	.....	8.7	.....	841	.....	19.7	.....	5,625,350	.....	20.2	.....	1,845,513	.....	15.9	.....
\$1,000,000 and over.....	6	.....	6.5	.....	2,220	.....	52.1	.....	14,230,010	.....	51.2	.....	6,501,434	.....	55.9	.....
BREAD AND OTHER BAKERY PRODUCTS.....	1,621	1,634	100.0	100.0	9,091	7,065	100.0	100.0	78,819,001	30,560,881	100.0	100.0	28,863,456	13,265,708	100.0	100.0
Less than \$5,000.....	209	608	12.9	37.2	64	444	0.7	5.8	587,877	1,800,781	0.7	5.9	232,790	813,222	0.8	6.1
\$5,000 to \$20,000.....	765	781	47.2	47.8	1,015	1,933	11.2	25.2	8,559,363	7,499,783	10.8	24.5	3,135,022	3,357,491	10.9	25.3
\$20,000 to \$100,000.....	523	192	32.3	11.8	2,514	1,806	27.7	23.6	21,035,602	6,997,065	26.7	22.9	7,069,242	2,777,910	24.5	20.9
\$100,000 to \$500,000.....	92	46	5.7	2.8	2,075	1,452	22.8	45.4	18,183,897	9,463,665	23.1	31.0	6,260,000	1,637,055	21.7	47.6
\$500,000 to \$1,000,000.....	21	7	1.3	0.4	1,666	.....	18.3	.....	15,452,567	4,799,637	19.6	15.7	6,160,345	.....	21.3	.....
\$1,000,000 and over.....	11	.....	0.7	.....	1,757	.....	19.3	.....	15,009,165	.....	19.0	.....	6,006,057	.....	20.8	.....
BRICK AND TILE, TERRAZZO, AND FIRE-CLAY PRODUCTS.....	341	450	100.0	100.0	12,060	16,238	100.0	100.0	32,172,576	23,375,689	100.0	100.0	22,211,905	16,167,536	100.0	100.0
Less than \$5,000.....	41	145	12.0	32.2	61	335	0.5	2.1	116,206	381,164	0.4	1.6	84,339	289,012	0.4	1.8
\$5,000 to \$20,000.....	95	117	27.9	26.0	407	1,043	3.4	6.4	888,237	1,153,669	2.8	4.9	628,248	878,623	2.8	5.4
\$20,000 to \$100,000.....	97	120	28.4	28.7	2,571	4,889	21.3	30.1	5,137,021	6,397,273	16.0	27.4	3,430,454	4,498,757	15.4	27.8
\$100,000 to \$500,000.....	100	64	29.3	14.2	7,093	1,971	58.8	61.4	20,161,659	12,222,107	62.7	52.3	14,016,304	10,501,144	63.1	65.0
\$500,000 and over.....	8	4	2.3	0.9	1,928	.....	16.0	.....	5,570,033	3,221,476	18.2	13.8	4,052,560	.....	18.2	.....
BUTTER.....	141	143	100.0	100.0	1,362	1,099	100.0	100.0	41,061,993	14,938,608	100.0	100.0	6,334,790	2,519,943	100.0	100.0
Less than \$5,000.....	5	9	3.5	6.3	2	5	0.1	0.5	13,162	30,811	(*)	0.2	1,626	5,833	(*)	0.2
\$5,000 to \$20,000.....	12	31	8.5	21.7	8	43	0.6	3.9	156,662	425,126	0.4	2.8	26,079	90,942	0.4	3.6
\$20,000 to \$100,000.....	54	69	38.3	48.3	162	247	11.9	22.5	3,090,291	3,189,553	7.5	21.4	429,848	465,447	6.8	18.5
\$100,000 to \$500,000.....	47	29	33.3	20.3	465	804	34.1	73.2	10,774,530	6,724,838	26.2	45.0	1,307,184	1,957,721	20.6	77.7
\$500,000 to \$1,000,000.....	14	45	9.9	3.5	337	.....	24.7	.....	11,194,837	4,558,280	27.3	30.5	1,725,404	.....	27.2	.....
\$1,000,000 and over.....	9	.....	6.4	.....	388	.....	28.5	.....	15,832,221	.....	38.6	.....	2,846,649	.....	44.9	.....
CARS AND GENERAL SHOP CONSTRUCTION AND REPAIRS BY STEAM-RAILROAD COMPANIES.....	117	88	100.0	100.0	35,245	21,639	100.0	100.0	96,483,946	33,286,205	100.0	100.0	56,893,898	17,232,484	100.0	100.0
Less than \$20,000.....	7	.....	6.0	.....	46	.....	0.1	.....	103,797	.....	0.1	.....	66,401	.....	0.1	.....
\$20,000 to \$100,000.....	14	29	12.0	33.0	360	1,193	1.0	5.5	819,169	1,559,199	0.8	4.7	613,404	954,916	1.1	5.7
\$100,000 to \$500,000.....	47	38	40.2	43.2	5,731	13,798	16.3	63.8	13,474,148	9,981,098	14.0	30.0	9,617,031	10,769,600	16.9	62.5
\$500,000 to \$1,000,000.....	18	16	15.4	18.2	5,362	.....	15.2	.....	13,165,050	10,166,151	13.6	30.5	8,297,646	.....	14.6	.....
\$1,000,000 and over.....	31	5	26.5	5.7	23,746	6,048	67.4	30.7	68,918,788	11,579,757	71.4	34.8	38,290,416	5,477,968	67.3	31.8
CHEMICALS.....	37	29	100.0	100.0	3,670	2,017	100.0	100.0	32,719,466	11,388,140	100.0	100.0	17,423,937	4,062,147	100.0	100.0
Less than \$100,000.....	7	14	18.9	48.3	46	74	1.3	3.7	304,301	365,500	0.9	3.2	205,696	268,340	1.2	4.4
\$100,000 to \$500,000.....	19	110	51.4	34.5	446	1,275	12.2	13.6	4,715,279	12,585,756	14.4	22.7	2,558,083	1,899,744	14.7	19.3
\$500,000 to \$1,000,000.....	5	.....	13.5	.....	425	.....	11.6	.....	3,295,555	.....	10.1	.....	2,153,236	.....	12.4	.....
\$1,000,000 and over.....	6	5	16.2	17.2	2,753	1,668	75.0	82.7	24,404,331	8,436,884	74.6	74.1	12,506,022	3,556,063	71.8	76.3

* Includes the group "\$500,000 to \$1,000,000."

* Less than one-tenth of 1 per cent.

* Includes the groups "\$500,000 to \$1,000,000," and "\$1,000,000 and over."

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

* Includes the group "\$5,000 to \$20,000."

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914—Con.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.	
			1919	1914			1919	1914			1919	1914			1919	1914
CLOTHING, MEN'S.....	246	224	100.0	100.0	9,939	8,691	100.0	100.0	\$58,169,320	\$24,063,468	100.0	100.0	\$28,098,699	\$12,671,215	100.0	100.0
Less than \$5,000.....	35	71	14.2	31.7	61	358	0.6	4.1	104,501	164,831	0.2	0.7	93,632	151,718	0.3	1.3
\$5,000 to \$20,000.....	56	56	22.8	25.0	512	953	5.2	11.0	636,996	553,200	1.1	2.3	571,646	467,672	2.0	3.9
\$20,000 to \$100,000.....	68	48	27.6	21.4	1,044	1,566	10.5	18.0	3,094,640	2,565,695	5.3	10.7	1,799,142	1,414,881	6.4	11.7
\$100,000 to \$500,000.....	55	39	22.4	17.4	2,340	5,814	23.5	66.9	12,582,345	9,440,715	21.6	39.2	5,600,853	10,036,944	19.9	83.1
\$500,000 to \$1,000,000.....	18	210	7.3	4.5	1,853	.....	18.6	.....	13,075,534	11,339,027	22.5	47.1	6,436,250	.....	22.9	.....
\$1,000,000 and over.....	14	.....	5.7	.....	4,129	.....	41.5	.....	28,675,304	.....	49.3	.....	13,597,176	.....	48.4	.....
CLOTHING, WOMEN'S.....	175	170	100.0	100.0	8,258	9,775	100.0	100.0	48,703,704	22,881,753	100.0	100.0	22,626,684	10,791,914	100.0	100.0
Less than \$5,000.....	11	38	6.3	22.4	11	121	0.1	1.2	28,756	87,497	0.1	0.4	23,658	76,978	0.1	0.7
\$5,000 to \$20,000.....	29	29	16.6	17.1	182	211	2.2	2.2	339,567	310,333	0.7	1.4	253,291	193,533	1.1	1.8
\$20,000 to \$100,000.....	54	56	30.9	32.9	966	1,413	11.7	14.5	3,252,778	3,063,293	6.7	13.4	1,698,086	1,412,576	7.5	13.1
\$100,000 to \$500,000.....	55	37	31.4	21.8	2,248	5,658	27.2	57.9	13,534,158	7,921,178	27.8	34.6	5,348,642	5,528,331	23.6	51.2
\$500,000 to \$1,000,000.....	16	6	9.1	3.5	1,652	.....	20.0	.....	10,571,574	4,076,796	21.7	17.8	4,974,859	.....	22.0	.....
\$1,000,000 and over.....	10	4	5.7	2.4	3,199	2,372	38.7	24.3	20,976,871	7,422,656	43.1	32.4	10,328,148	3,550,496	45.6	33.2
COFFEE AND SPICE, ROASTING AND GRINDING.....	43	35	100.0	100.0	1,088	822	100.0	100.0	29,271,332	13,312,493	100.0	100.0	6,394,431	3,128,109	100.0	100.0
\$5,000 to \$20,000.....	5	47	11.6	20.0	3	14	0.3	1.7	59,701	458,351	0.2	0.4	19,564	18,735	0.3	0.6
\$20,000 to \$100,000.....	8	10	18.6	28.6	40	52	3.7	6.3	608,099	559,877	2.1	4.2	135,574	162,226	2.1	5.2
\$100,000 to \$500,000.....	16	9	37.2	25.7	140	431	12.9	52.4	3,746,908	2,248,075	12.8	16.9	886,007	1,006,610	13.9	35.1
\$500,000 to \$1,000,000.....	4	5	9.3	14.3	123	.....	11.3	.....	3,001,968	2,947,467	10.3	22.1	546,989	.....	8.6	.....
\$1,000,000 and over.....	10	4	23.3	11.4	782	325	71.9	39.5	21,854,656	7,498,723	74.7	56.3	4,806,297	1,550,538	75.2	59.2
CONFECTIONERY AND ICE CREAM.....	380	292	100.0	100.0	5,451	3,965	100.0	100.0	39,185,084	14,341,668	100.0	100.0	17,363,305	5,979,028	100.0	100.0
Less than \$5,000.....	82	95	21.6	32.5	38	99	0.7	2.5	198,836	261,409	0.5	1.8	94,225	131,888	0.5	2.2
\$5,000 to \$20,000.....	120	93	31.6	31.8	188	272	3.4	6.9	1,244,510	948,376	3.2	6.6	557,352	429,149	3.2	7.2
\$20,000 to \$100,000.....	97	74	25.5	25.3	624	1,030	11.4	26.0	4,546,851	3,589,453	11.6	25.0	1,809,585	1,507,797	10.4	25.2
\$100,000 to \$500,000.....	58	24	15.3	8.2	1,960	2,564	36.0	64.7	12,966,924	5,589,586	32.8	39.0	5,476,170	3,910,194	31.5	65.4
\$500,000 to \$1,000,000.....	15	6	3.9	2.1	1,486	.....	27.3	.....	9,432,230	3,952,844	24.1	27.6	4,100,487	.....	23.6	.....
\$1,000,000 and over.....	8	.....	2.1	.....	1,155	.....	21.2	.....	10,895,733	.....	27.8	.....	5,325,486	.....	30.7	.....
ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES.....	189	119	100.0	100.0	26,672	12,695	100.0	100.0	156,924,143	36,120,978	100.0	100.0	84,626,936	18,638,730	100.0	100.0
Less than \$5,000.....	13	22	6.9	18.5	20	35	0.1	0.3	36,224	60,755	(*)	0.2	18,807	29,286	(*)	0.2
\$5,000 to \$20,000.....	30	22	15.9	18.5	86	101	0.3	0.8	327,750	231,162	0.2	0.6	152,976	139,649	0.2	0.7
\$20,000 to \$100,000.....	49	32	28.9	26.9	641	572	2.4	4.5	2,543,258	1,604,114	1.6	4.4	1,359,159	865,200	1.6	4.6
\$100,000 to \$500,000.....	57	27	30.2	22.7	3,160	3,995	11.8	31.5	13,617,482	6,007,870	8.7	16.6	7,882,116	5,578,597	9.3	29.9
\$500,000 to \$1,000,000.....	13	6	6.9	5.0	2,213	.....	8.3	.....	9,369,538	3,685,727	6.0	10.2	5,085,811	.....	6.0	.....
\$1,000,000 and over.....	27	10	14.3	8.4	20,552	7,992	77.1	63.0	131,026,891	24,531,350	83.5	67.9	70,128,067	12,025,998	82.9	64.5
ENGINES, STEAM, GAS, AND WATER.....	44	47	100.0	100.0	6,218	2,962	100.0	100.0	42,850,677	6,861,351	100.0	100.0	22,506,896	4,024,147	100.0	100.0
Less than \$20,000.....	7	11	15.9	23.4	15	47	0.2	1.6	61,995	105,372	0.1	1.5	38,993	57,261	0.2	1.4
\$20,000 to \$100,000.....	11	19	25.0	40.4	195	474	3.1	16.0	605,948	1,080,294	1.4	15.7	350,122	618,085	1.6	15.4
\$100,000 to \$500,000.....	11	17	25.0	36.2	567	1,241	9.1	82.4	2,489,161	1,675,685	5.8	82.7	1,297,990	1,348,801	5.8	83.2
\$500,000 to \$1,000,000.....	6	.....	13.6	.....	819	.....	13.2	.....	4,320,338	.....	10.1	.....	2,513,847	.....	11.2	.....
\$1,000,000 and over.....	9	.....	20.5	.....	4,622	.....	74.3	.....	35,373,235	.....	82.5	.....	18,305,944	.....	81.3	.....
FLOUR-MILL AND GRISTMILL PRODUCTS.....	577	649	100.0	100.0	2,122	2,363	100.0	100.0	89,396,619	45,171,200	100.0	100.0	12,294,538	6,213,814	100.0	100.0
Less than \$5,000.....	34	61	5.9	9.4	8	32	0.4	1.4	96,029	178,668	0.1	0.4	18,414	39,578	0.1	0.6
\$5,000 to \$20,000.....	121	239	21.0	36.8	67	290	3.2	12.3	1,528,246	2,920,130	1.7	6.5	269,105	532,554	2.2	8.6
\$20,000 to \$100,000.....	289	279	50.1	43.0	557	870	26.2	36.8	14,233,331	12,458,066	15.9	27.6	2,274,711	2,125,091	18.5	34.2
\$100,000 to \$500,000.....	103	56	17.9	8.6	584	659	27.5	27.9	18,810,440	11,136,893	21.0	24.7	2,777,662	1,900,130	22.6	30.6
\$500,000 to \$1,000,000.....	9	5	1.6	0.8	127	.....	6.0	.....	6,464,333	3,385,544	7.2	7.5	761,908	.....	6.2	.....
\$1,000,000 and over.....	21	9	3.6	1.4	779	512	36.7	21.7	48,264,240	15,091,899	54.0	33.4	6,192,738	1,616,661	50.4	26.0
FOUNDRY AND MACHINE-SHOP PRODUCTS.....	1,162	992	100.0	100.0	87,803	51,553	100.0	100.0	425,497,682	122,816,681	100.0	100.0	250,811,011	72,472,448	100.0	100.0
Less than \$5,000.....	129	170	11.1	17.1	108	221	0.1	0.4	327,962	438,118	0.1	0.4	224,453	305,814	0.1	0.4
\$5,000 to \$20,000.....	212	255	18.2	25.7	912	1,354	1.0	2.6	3,443,942	2,832,314	0.8	2.3	2,169,798	1,905,927	0.9	2.6
\$20,000 to \$100,000.....	309	301	26.6	30.3	4,439	6,977	5.1	13.5	15,882,036	14,420,159	3.7	11.7	10,047,255	8,591,057	4.0	11.9
\$100,000 to \$500,000.....	306	208	26.3	21.0	17,248	33,626	19.6	65.2	71,861,387	45,819,951	16.9	37.3	43,017,282	45,151,249	17.2	62.3
\$500,000 to \$1,000,000.....	96	44	8.3	4.4	14,093	.....	16.1	.....	68,445,520	33,017,377	16.1	26.9	40,028,552	.....	16.0	.....
\$1,000,000 and over.....	110	14	9.5	1.4	51,003	9,375	58.1	18.2	265,536,835	26,288,762	62.4	21.4	155,328,691	16,518,871	61.9	22.8
FURNITURE.....	162	209	100.0	100.0	8,346	7,750	100.0	100.0	35,224,313	16,411,298	100.0	100.0	20,644,770	9,120,723	100.0	100.0
Less than \$5,000.....	17	37	10.5	17.7	10	39	0.1	0.5	32,565	87,011	0.1	0.5	20,128	59,142	0.1	0.6
\$5,000 to \$20,000.....	25	50	15.4	23.9	103	308	1.3	4.0	296,685	550,283</						

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914—Con.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
			Per cent distribution.				Per cent distribution.				Per cent distribution.				Per cent distribution.	
	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914
IRON AND STEEL, BLAST FURNACES.....	42	33	100.0	100.0	9,793	5,786	100.0	100.0	\$179,233,435	\$72,960,368	100.0	100.0	\$41,547,328	\$12,230,844	100.0	100.0
Less than \$500,000.....	6	8	14.3	24.2	251	1,112	2.6	19.2	2,071,580	1,875,855	1.2	2.6	516,418	1,030,302	1.2	8.6
\$500,000 to \$1,000,000.....	4	8	9.5	24.2	270	.....	2.8	.....	2,451,245	6,187,196	1.4	8.5	573,948	.....	1.4	.....
\$1,000,000 and over.....	32	17	76.2	51.5	9,272	4,674	94.7	80.8	174,710,610	64,900,317	97.5	88.9	40,456,962	11,180,542	97.4	91.4
IRON AND STEEL, STEEL WORKS AND ROLLING MILLS.....	86	70	100.0	100.0	73,025	40,397	100.0	100.0	626,370,025	205,023,391	100.0	100.0	245,310,352	65,346,900	100.0	100.0
Less than \$100,000.....	3	5	3.5	7.1	31	131	(?)	0.3	155,073	179,847	(?)	0.1	85,988	100,028	(?)	0.2
\$100,000 to \$500,000.....	7	15	8.1	21.4	474	14,736	0.6	10.2	1,946,017	6,912,871	0.3	3.4	929,217	1,561,719	0.4	8.6
\$500,000 to \$1,000,000.....	7	8	8.1	11.4	1,035	.....	1.4	.....	4,920,388	6,255,711	0.8	3.1	2,712,649	.....	1.1	.....
\$1,000,000 and over.....	69	42	80.2	60.0	71,485	41,530	97.9	89.5	610,347,947	191,674,962	98.9	93.5	241,582,498	59,629,713	98.5	91.2
LEATHER, TANNED, CURRIED, AND FINISHED.....	24	28	100.0	100.0	1,565	1,605	100.0	100.0	25,008,070	11,627,916	100.0	100.0	6,190,279	3,121,663	100.0	100.0
\$5,000 to \$20,000.....	.....	5	.....	17.9	.....	13	.....	0.8	.....	48,558	.....	0.4	.....	8,599	.....	0.3
\$20,000 to \$100,000.....	4	4	25.0	14.3	40	25	2.6	1.6	202,317	135,820	0.8	1.2	73,715	74,788	1.2	2.4
\$100,000 to \$500,000.....	10	13	41.7	46.4	221	1,567	14.1	97.6	3,016,681	3,224,167	12.1	27.7	762,323	1,038,270	12.3	97.3
\$500,000 to \$1,000,000.....	3	6	12.5	21.4	222	.....	14.2	.....	2,356,136	8,221,371	9.4	70.7	1,022,635	.....	16.5	.....
\$1,000,000 and over.....	5	.....	20.8	.....	1,082	.....	69.1	.....	19,432,936	.....	77.7	.....	4,331,006	.....	70.0	.....
LIQUORS, MALT.....	73	101	100.0	100.0	3,327	5,340	100.0	100.0	25,161,227	31,990,274	100.0	100.0	18,065,655	22,799,792	100.0	100.0
Less than \$5,000.....	.....	3	.....	3.0	.....	2	(?)	.....	.....	5,017	(?)	.....	.....	3,299	(?)	.....
\$5,000 to \$20,000.....	4	4	5.5	4.0	12	17	0.4	0.3	445,241	49,665	0.2	0.2	26,688	35,023	0.1	0.2
\$20,000 to \$100,000.....	22	26	30.1	25.7	268	344	8.1	6.4	1,318,590	1,390,076	5.2	4.3	852,389	895,955	4.7	3.9
\$100,000 to \$500,000.....	32	51	43.8	50.5	1,200	1,132	36.1	58.7	8,458,862	11,583,333	33.7	36.2	6,000,028	13,189,816	33.2	57.9
\$500,000 to \$1,000,000.....	10	10	13.7	9.9	999	.....	30.0	.....	7,180,538	6,722,424	28.5	21.0	5,178,411	.....	28.7	.....
\$1,000,000 and over.....	5	7	6.8	6.9	848	1,845	25.5	34.6	8,127,996	12,229,129	32.3	33.2	6,007,544	8,675,699	33.3	38.1
LUMBER, PLANING-MILL PRODUCTS, NOT INCLUDING PLANING MILLS CONNECTED WITH SAWMILLS.....	378	400	100.0	100.0	4,495	5,516	100.0	100.0	32,428,847	18,892,060	100.0	100.0	12,076,704	7,490,163	100.0	100.0
Less than \$5,000.....	62	86	16.4	21.5	48	102	1.1	1.8	158,381	215,778	0.5	1.1	84,942	103,396	0.7	1.4
\$5,000 to \$20,000.....	107	130	28.3	32.5	257	526	5.7	9.5	1,157,665	1,423,433	3.6	7.5	571,589	690,951	4.7	9.2
\$20,000 to \$100,000.....	131	125	34.7	31.2	1,149	1,801	25.6	32.7	6,242,802	5,628,447	19.3	29.8	2,643,289	2,229,538	21.9	29.8
\$100,000 to \$500,000.....	66	59	17.5	14.8	1,794	1,087	39.9	56.0	13,744,438	11,624,402	42.4	61.5	5,098,420	4,466,278	42.2	59.6
\$500,000 to \$1,000,000.....	8	.....	2.1	.....	595	.....	13.2	.....	5,680,119	.....	17.5	.....	1,861,944	.....	15.4	.....
\$1,000,000 and over.....	4	.....	1.1	.....	652	.....	14.5	.....	5,445,442	.....	16.8	.....	1,816,570	.....	15.0	.....
PAINTS.....	61	65	100.0	100.0	2,197	1,697	100.0	100.0	36,848,364	14,824,073	100.0	100.0	13,250,596	5,915,465	100.0	100.0
Less than \$5,000.....	.....	9	.....	13.8	.....	5	.....	0.3	.....	23,741	.....	0.2	.....	10,024	.....	0.2
\$5,000 to \$20,000.....	7	16	11.5	24.6	10	28	0.5	1.6	87,331	189,830	0.2	1.3	37,878	82,045	0.3	1.4
\$20,000 to \$100,000.....	19	17	31.1	26.2	72	137	3.3	8.1	994,744	981,051	2.7	6.0	371,622	410,887	2.8	6.9
\$100,000 to \$500,000.....	19	16	31.1	24.6	255	1,527	11.6	90.0	4,461,565	4,086,748	12.1	27.6	1,789,911	1,412,509	13.5	91.5
\$500,000 to \$1,000,000.....	8	7	13.1	10.8	266	.....	12.1	.....	5,467,159	9,545,673	14.8	64.4	1,769,528	.....	13.4	.....
\$1,000,000 and over.....	8	.....	13.1	.....	1,594	.....	72.6	.....	25,837,565	.....	70.1	.....	9,281,657	.....	70.0	.....
POTTERY.....	95	99	100.0	100.0	11,339	11,096	100.0	100.0	28,675,361	15,291,685	100.0	100.0	19,662,920	10,323,883	100.0	100.0
Less than \$5,000.....	3	12	3.2	12.1	3	28	(?)	0.3	8,284	42,336	(?)	0.3	6,163	30,625	(?)	0.3
\$5,000 to \$20,000.....	6	17	6.3	17.2	15	164	0.1	1.5	57,327	281,072	0.2	1.8	40,294	233,773	0.2	2.3
\$20,000 to \$100,000.....	19	21	20.0	21.2	623	985	5.5	8.9	1,063,560	1,093,520	3.7	7.2	717,064	704,292	3.6	6.8
\$100,000 to \$500,000.....	50	45	52.6	45.5	5,552	9,919	49.0	89.4	13,075,194	10,857,570	45.6	71.0	8,954,913	9,355,193	45.5	90.6
\$500,000 and over.....	17	4	17.9	4.0	5,146	.....	45.4	.....	14,470,996	3,017,187	50.5	19.7	9,944,438	.....	50.6	.....
PRINTING AND PUBLISHING, BOOK AND JOB.....	871	772	100.0	100.0	8,505	7,978	100.0	100.0	39,201,684	19,915,250	100.0	100.0	24,019,764	13,004,041	100.0	100.0
Less than \$5,000.....	257	328	29.5	42.5	132	320	1.6	4.0	652,892	797,989	1.7	4.0	437,442	570,834	1.8	4.4
\$5,000 to \$20,000.....	312	261	35.8	33.8	867	1,184	10.2	14.8	3,371,085	2,556,193	8.6	12.8	2,195,950	1,831,582	9.1	14.1
\$20,000 to \$100,000.....	218	145	25.0	18.8	2,427	2,642	28.5	33.1	10,285,545	6,227,691	26.2	31.3	6,550,899	4,210,884	27.3	32.4
\$100,000 to \$500,000.....	68	35	7.8	4.5	2,757	1,832	32.4	48.0	12,836,826	7,303,019	33.0	36.7	8,109,850	6,384,741	33.8	49.1
\$500,000 and over.....	16	3	1.8	0.4	2,322	.....	27.3	.....	11,955,336	3,030,358	30.5	15.2	6,728,623	.....	28.0	.....
PRINTING AND PUBLISHING, NEWS-PAPERS AND PERIODICALS.....	794	901	100.0	100.0	7,627	7,274	100.0	100.0	58,567,435	28,023,290	100.0	100.0	40,125,410	20,250,724	100.0	100.0
Less than \$5,000.....	282	450	35.5	53.3	222	658	2.9	9.0	787,922	1,244,041	1.3	4.4	628,226	1,018,504	1.6	5.0
\$5,000 to \$20,000.....	294	245	37.0	27.2	730	1,062	9.6	14.6	2,834,544	2,329,110	4.8	8.3	2,232,047	1,899,411	5.6	9.4
\$20,000 to \$100,000.....	154	136	19.4	15.1	1,587	1,822	20.8	25.0	6,785,644	5,382,925	11.6	19.2	5,197,844	4,245,301	13.0	21.0
\$100,000 to \$500,000.....	42	29	5.3	3.2	1,452	2,160	19.0	29.7	9,270,247	6,127,845	15.8	21.9	6,904,932	1,640,854	17.2	33.8
\$500,000 to \$1,000,000.....	10	5	1.3	0.6	919	.....	12.0	.....	6,480,157	3,572,352	11.1	12.7	4,543,208	.....	11.3	.....
\$1,000,000 and over.....	12	6	1.5	0.7	2,717	1,572	35.6	21.6	32,402,921	9,367,017	55.3	33.4	20,618,553	6,241,154	51.4	30.8
RUBBER TIRES, TUBES, AND RUBBER GOODS, NOT ELSEWHERE SPECIFIED.....	96	54	100.0	100.0	63,637	21,705	100.0	100.0	551,118,488	109,658,605	100.0	100.0	251,755,957	50,921,129	100.0	100.0
Less than \$20,000.....	11	10	11.5	18.5	53	27	0.1	0.1	123,399	54,746	(?)	(?)	69,823	32,061	(?)	0.1
\$20,000 to \$100,000.....	23	16	24.0	20.6	302	242	0.5	1.1	1,112,904	668,260	0.2	0.6	350,337	314,080	0.1	0.6
\$100,000 to \$500,000.....	22	10	22.9	18.5	787	1,656	1.2	7.6	3,735,493	2,604,061	0.7	2.4	1,682,205	1,215,167	0.7	6.3
\$500,000 to \$1,000,000.....	6	7	6.3	13.0	540	.....	0.8	.....	4,506,505	4,346,805	0.9	4.0	2,088,817	.....	0.8	.....
\$1,000,000 and over.....	34	11	35.4	20.4	61,955	19,780	97.4	91.1	541,290,187	101,954,733	98.2	93.0	247,554,770	47,361,821	98.3	98.0

1 Includes the group "\$500,000 to \$1,000,000."

2 Less than one-tenth of 1 per cent.

3 Includes the group "Less than \$5,000."

4 Includes the groups "\$500,000 to \$1,000,000," and "\$1,000,000 and over."

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

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914—Con.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.				
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		
			1919	1914			1919	1914			1919	1914			1919	1914	
SLAUGHTERING AND MEAT PACKING.....	141	152	100.0	100.0	5,336	3,480	100.0	100.0	\$170,337,892	\$64,960,396	100.0	100.0	\$19,739,453	\$6,663,426	100.0	100.0	
Less than \$20,000.....	11	22	7.8	14.5	3	13	0.1	0.4	127,497	254,033	0.1	0.4	22,818	42,037	0.1	0.6	
\$20,000 to \$100,000.....	34	53	24.1	34.9	112	161	2.1	4.6	2,101,333	2,689,301	1.2	4.1	393,657	368,069	2.0	5.5	
\$100,000 to \$500,000.....	40	47	32.6	30.9	345	1,009	6.5	26.1	11,253,554	10,488,551	6.6	16.1	1,347,717	1,283,804	6.8	34.3	
\$500,000 to \$1,000,000.....	20	12	14.2	7.9	442	83	8.3	.....	13,833,200	8,843,634	8.1	13.6	1,050,466	.....	8.4	.....
\$1,000,000 and over.....	30	18	21.3	11.8	4,434	2,397	83.1	68.9	143,022,308	42,684,877	84.0	65.7	16,324,763	3,960,436	82.7	59.6	
STOVES AND HOT-AIR FURNACES.....	67	79	100.0	100.0	6,069	5,041	100.0	100.0	25,000,280	9,990,696	100.0	100.0	14,212,357	6,487,997	100.0	100.0	
Less than \$5,000.....	5	6.3	11	0.2	15,138	0.2	4,240	0.1
\$5,000 to \$20,000.....	17	10	10.4	12.7	28	50	0.1	1.0	2,533,842	116,449	0.2	1.2	41,773	70,512	0.3	1.1	
\$20,000 to \$100,000.....	18	35	26.9	44.3	191	735	3.1	14.6	1,000,047	1,864,121	4.2	18.7	539,535	1,122,134	3.8	17.3	
\$100,000 to \$500,000.....	29	29	43.3	36.7	1,836	2,245	30.3	84.2	7,698,426	7,994,958	30.8	80.0	4,225,385	5,291,111	30.4	51.6	
\$500,000 to \$1,000,000.....	6	.....	9.0	.....	880	.....	14.5	.....	3,739,442	.....	15.0	.....	2,267,634	.....	16.0	.....
\$1,000,000 and over.....	7	.....	10.4	.....	3,154	.....	52.0	.....	12,457,503	.....	49.8	.....	7,038,080	.....	49.5	.....
STRUCTURAL IRON- WORK, NOT MADE IN STEEL WORKS OR ROLLING MILLS.....	93	93	100.0	100.0	5,231	6,657	100.0	100.0	41,792,720	22,615,795	100.0	100.0	17,021,788	10,011,491	100.0	100.0	
Less than \$5,000.....	13	14.0	14	0.2	35,226	0.2	18,379	0.2
\$5,000 to \$20,000.....	19	13	20.4	14.0	248	62	0.9	0.9	2,189,844	144,511	0.5	0.6	110,266	77,444	0.6	0.8	
\$20,000 to \$100,000.....	32	31	34.4	33.3	334	507	6.4	7.6	1,716,275	1,511,083	4.1	6.7	889,026	780,750	5.2	7.8	
\$100,000 to \$500,000.....	25	23	26.9	24.7	1,130	1,234	21.6	48.6	7,008,661	5,780,385	16.8	25.6	3,149,842	1,451,015	18.5	44.5	
\$500,000 to \$1,000,000.....	10	8	10.8	8.6	1,075	.....	20.6	.....	7,371,448	4,974,830	17.6	22.0	3,359,291	.....	19.7	.....
\$1,000,000 and over.....	7	5	7.5	5.4	2,644	2,840	50.5	42.7	25,506,492	10,169,760	61.0	45.0	9,513,360	4,683,903	55.9	46.8	
TOBACCO, CIGARS AND CIGARETTES.....	676	937	100.0	100.0	10,995	12,025	100.0	100.0	28,854,444	17,238,751	100.0	100.0	15,738,813	10,110,233	100.0	100.0	
Less than \$5,000.....	381	667	56.4	71.2	149	571	1.4	4.7	804,337	1,297,990	2.8	7.5	460,610	831,815	2.9	8.2	
\$5,000 to \$20,000.....	157	171	23.2	18.2	520	1,077	4.7	9.0	1,452,277	1,515,298	5.0	8.8	829,596	988,585	5.3	9.8	
\$20,000 to \$100,000.....	76	57	11.2	6.1	1,464	1,954	13.3	16.2	3,508,211	2,637,469	12.2	15.3	1,970,458	1,633,777	12.5	16.2	
\$100,000 to \$500,000.....	49	42	7.2	4.5	4,800	8,423	43.7	70.0	11,765,788	11,787,994	40.8	68.4	6,254,374	6,656,056	39.7	65.8	
\$500,000 and over.....	13	.....	1.9	.....	4,062	.....	36.9	.....	11,323,831	.....	39.2	.....	6,223,775	.....	39.5	.....
TOOLS, NOT ELSE- WHERE SPECIFIED.....	149	62	100.0	100.0	6,961	2,227	100.0	100.0	32,527,373	5,187,996	100.0	100.0	21,791,568	3,664,340	100.0	100.0	
Less than \$5,000.....	13	19	8.7	30.6	3	28	(*)	1.2	28,057	44,276	0.1	0.9	18,570	29,955	0.1	0.8	
\$5,000 to \$20,000.....	24	25	16.1	40.3	88	124	1.3	5.6	278,935	265,740	0.9	5.1	207,889	268,676	1.0	5.7	
\$20,000 to \$100,000.....	73	8	49.0	12.9	1,243	165	17.9	7.4	3,967,023	413,963	12.2	8.0	3,023,665	218,966	13.9	6.0	
\$100,000 to \$500,000.....	27	10	18.1	16.1	1,567	1,912	22.5	85.9	5,149,747	4,464,017	15.8	86.0	3,780,878	2,206,843	17.3	87.5	
\$500,000 to \$1,000,000.....	7	.....	4.7	.....	1,032	.....	14.8	.....	4,747,260	.....	14.6	.....	2,621,181	.....	11.6	.....
\$1,000,000 and over.....	5	.....	3.4	.....	3,028	.....	43.5	.....	18,356,351	.....	56.4	.....	12,239,385	.....	56.2	.....

¹ Includes the group "\$500,000 to \$1,000,000."² Includes the group "Less than \$5,000."³ Includes the groups "\$500,000 to \$1,000,000," and "\$1,000,000 and over."⁴ Less than one-tenth of 1 per cent.⁵ Includes the group "\$1,000,000 and over."

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
AKRON.....	304	65,054	100.0	\$558,962,067	100.0	\$244,590,473	100.0	COSHOCTON.....	45	1,959	100.0	\$7,084,762	100.0	\$3,812,093	100.0
Less than \$5,000.....	35	29	(1)	89,849	(1)	41,749	(1)	Less than \$5,000.....	8	6	0.3	14,653	0.2	7,484	0.2
\$5,000 to \$20,000.....	71	189	0.3	793,022	0.1	451,021	0.2	\$5,000 to \$20,000.....	10	30	1.5	105,820	1.4	49,541	1.3
\$20,000 to \$100,000.....	87	814	1.3	3,899,455	0.7	2,049,972	0.8	\$20,000 to \$100,000.....	11	152	7.8	592,070	7.7	281,375	7.4
\$100,000 to \$500,000.....	66	2,775	4.3	15,281,057	2.7	7,903,361	3.2	\$100,000 to \$500,000.....	10	440	22.5	2,180,180	28.4	837,217	22.0
\$500,000 to \$1,000,000.....	19	2,162	3.3	13,444,855	2.4	7,237,911	3.0	\$500,000 and over.....	6	1,331	67.9	4,792,039	62.4	2,637,476	68.2
\$1,000,000 and over.....	26	59,085	90.8	525,453,069	94.0	226,870,459	92.8								
ALLIANCE.....	74	5,117	100.0	32,871,087	100.0	18,081,650	100.0	CUYAHOGA FALLS.....	30	784	100.0	5,829,347	100.0	2,780,310	100.0
Less than \$5,000.....	10	1	(1)	21,196	0.1	13,810	0.1	Less than \$20,000.....	10	18	2.3	78,495	1.3	47,228	1.7
\$5,000 to \$20,000.....	25	43	0.8	307,020	0.9	155,234	0.9	\$20,000 to \$100,000.....	12	107	13.6	547,711	9.4	290,687	10.4
\$20,000 to \$100,000.....	17	154	3.0	760,543	2.3	389,290	2.2	\$100,000 to \$500,000.....	5	218	27.8	1,274,849	21.9	520,141	18.6
\$100,000 to \$500,000.....	12	827	16.2	3,341,910	10.2	1,665,850	9.2	\$500,000 and over.....	3	441	56.2	3,928,292	67.4	1,931,254	68.2
\$1,000,000 and over.....	7	4,092	80.0	28,440,418	86.5	15,857,466	87.7								
ASHTABULA.....	62	4,172	100.0	23,098,509	100.0	12,129,641	100.0	DAYTON.....	571	31,131	100.0	174,990,607	100.0	96,530,139	100.0
Less than \$5,000.....	11	10	0.2	29,079	0.1	18,781	0.2	Less than \$5,000.....	92	67	0.2	227,030	0.1	141,196	0.1
\$5,000 to \$20,000.....	19	41	1.0	153,201	0.8	94,306	0.8	\$5,000 to \$20,000.....	127	2,046	6.6	11,392,080	6.5	3,841,161	4.0
\$20,000 to \$100,000.....	15	158	3.8	507,904	2.2	272,974	2.2	\$20,000 to \$100,000.....	172	1,957	6.3	8,901,780	5.1	4,857,350	5.0
\$100,000 to \$500,000.....	8	514	12.3	1,731,021	7.5	940,263	7.8	\$100,000 to \$500,000.....	127	6,552	21.0	27,438,740	15.7	14,322,204	14.8
\$500,000 and over.....	9	3,449	82.7	20,647,304	89.4	10,803,317	89.1	\$500,000 to \$1,000,000.....	27	3,423	11.0	18,839,907	10.8	10,125,589	10.5
								\$1,000,000 and over.....	26	17,086	54.9	108,191,070	61.8	63,242,639	65.5
BARBERTON.....	32	4,762	100.0	27,713,226	100.0	13,017,487	100.0	EAST CLEVELAND.....	17	88	100.0	420,505	100.0	229,558	100.0
Less than \$5,000.....	5	1	(1)	13,115	(1)	8,400	0.1	\$5,000 to \$20,000.....	10	23	26.1	98,384	23.4	56,130	24.5
\$5,000 to \$20,000.....	5	5	0.1	53,591	0.2	22,213	0.2	\$20,000 to \$100,000.....	7	65	73.9	322,121	76.6	173,428	75.5
\$20,000 to \$100,000.....	7	62	1.3	355,827	1.3	217,992	1.7								
\$100,000 to \$500,000.....	9	843	17.7	3,199,501	11.5	2,063,521	15.9	EAST LIVERPOOL.....	67	4,311	100.0	12,501,181	100.0	7,610,101	100.0
\$1,000,000 and over.....	6	3,851	80.9	24,091,192	86.9	10,705,361	82.2	Less than \$5,000.....	6	6	0.1	16,487	0.1	10,426	0.1
BELLAIRE.....	45	2,277	100.0	14,502,401	100.0	4,573,889	100.0	\$5,000 to \$20,000.....	16	37	0.9	181,556	1.5	96,001	1.3
Less than \$5,000.....	7	6	0.3	18,984	0.1	10,536	0.2	\$20,000 to \$100,000.....	18	273	6.3	1,057,622	8.5	527,373	6.9
\$5,000 to \$20,000.....	14	44	1.9	142,717	1.0	55,829	1.9	\$100,000 to \$500,000.....	21	1,725	40.0	5,130,872	41.0	3,012,141	38.6
\$20,000 to \$100,000.....	11	134	5.9	556,616	3.8	287,481	6.3	\$500,000 and over.....	6	2,270	52.7	6,114,644	48.9	3,964,160	52.1
\$100,000 to \$500,000.....	9	681	29.9	2,275,258	15.7	1,206,720	26.4								
\$1,000,000 and over.....	4	1,412	62.0	11,508,826	79.4	2,983,323	65.2	ELYRIA.....	75	4,590	100.0	25,191,454	100.0	14,963,840	100.0
BUCYRUS.....	43	1,861	100.0	8,435,746	100.0	4,034,817	100.0	Less than \$5,000.....	14	8	0.2	35,385	0.1	24,099	0.2
Less than \$5,000.....	7	3	0.2	14,820	0.2	7,128	0.2	\$5,000 to \$20,000.....	15	30	0.7	170,355	0.7	98,584	0.7
\$5,000 to \$20,000.....	14	26	1.4	124,980	1.5	68,988	1.7	\$20,000 to \$100,000.....	21	122	2.7	302,028	3.2	404,397	2.7
\$20,000 to \$100,000.....	7	55	3.0	343,173	4.1	152,554	3.8	\$100,000 to \$500,000.....	13	800	17.4	3,414,937	13.6	1,409,128	9.4
\$100,000 to \$500,000.....	10	298	16.0	2,095,060	24.8	940,706	23.3	\$500,000 to \$1,000,000.....	5	895	19.5	4,000,274	15.9	2,296,997	15.4
\$500,000 and over.....	5	1,479	79.5	5,857,113	69.4	2,865,441	71.0	\$1,000,000 and over.....	7	2,735	59.6	16,768,475	66.6	10,730,385	71.7
CAMBRIDGE.....	32	1,782	100.0	11,226,809	100.0	5,373,642	100.0	FINDLAY.....	75	1,715	100.0	7,924,282	100.0	3,096,621	100.0
Less than \$5,000.....	4	7	0.4	15,332	0.1	8,295	0.2	Less than \$5,000.....	15	7	0.4	37,531	0.5	21,846	0.7
\$5,000 to \$20,000.....	10	29	1.6	127,923	1.1	45,016	0.8	\$5,000 to \$20,000.....	25	78	4.5	306,897	3.9	150,388	4.9
\$20,000 to \$100,000.....	11	65	3.6	543,650	4.8	189,209	3.5	\$20,000 to \$100,000.....	20	174	10.1	841,870	10.6	366,934	11.8
\$100,000 and over.....	7	1,651	92.6	10,539,898	93.9	5,131,122	95.5	\$100,000 to \$500,000.....	12	863	50.3	3,124,954	39.4	1,222,692	42.7
								\$1,000,000 and over.....	3	593	34.6	3,613,630	45.6	1,234,761	39.9
CANTON.....	287	20,336	100.0	124,292,924	100.0	59,215,399	100.0	FREMONT.....	53	2,999	100.0	12,915,095	100.0	7,477,431	100.0
Less than \$5,000.....	48	20	0.1	117,067	0.1	66,052	0.1	Less than \$5,000.....	7	6	0.2	16,602	0.1	10,110	0.1
\$5,000 to \$20,000.....	62	189	0.9	692,589	0.6	392,563	0.7	\$5,000 to \$20,000.....	12	33	1.1	138,430	1.1	86,166	1.2
\$20,000 to \$100,000.....	83	906	4.5	3,827,217	3.1	2,199,494	3.7	\$20,000 to \$100,000.....	19	239	8.0	986,575	7.6	548,516	7.3
\$100,000 to \$500,000.....	57	2,214	10.9	13,846,840	11.1	6,754,362	11.4	\$100,000 to \$500,000.....	9	438	14.6	2,029,330	15.7	1,058,605	14.2
\$500,000 to \$1,000,000.....	15	2,019	9.9	10,010,824	8.1	6,000,414	10.1	\$500,000 to \$1,000,000.....	3	462	15.4	2,186,428	16.9	954,530	12.8
\$1,000,000 and over.....	22	14,988	73.7	95,798,387	77.1	43,802,514	74.0	\$1,000,000 and over.....	3	1,821	60.7	7,557,730	58.5	4,819,504	64.5
CHILlicothe.....	35	1,638	100.0	7,667,182	100.0	3,326,963	100.0								
Less than \$20,000.....	12	30	1.8	132,394	1.7	65,085	2.0	HAMILTON.....	130	8,553	100.0	47,024,031	100.0	24,386,589	100.0
\$20,000 to \$100,000.....	17	203	12.4	814,163	10.6	333,712	11.5	Less than \$5,000.....	28	12	0.1	53,463	0.1	29,028	0.1
\$100,000 to \$500,000.....	3	363	22.2	1,436,305	18.4	559,227	16.8	\$5,000 to \$20,000.....	34	104	1.2	351,569	0.7	194,543	0.8
\$1,000,000 and over.....	3	1,042	63.6	5,234,320	68.3	2,318,939	69.7	\$20,000 to \$100,000.....	28	262	3.1	1,314,403	2.8	575,276	2.4
								\$100,000 to \$500,000.....	31	2,027	23.7	8,564,204	18.2	4,363,592	17.9
CINCINNATI.....	2,239	69,680	100.0	500,040,996	100.0	203,760,553	100.0	\$1,000,000 and over.....	9	6,148	71.9	36,740,392	78.1	19,224,150	78.8
Less than \$5,000.....	389	266	0.4	964,724	0.2	654,872	0.3								
\$5,000 to \$20,000.....	573	1,778	2.6	6,253,300	1.3	3,799,809	1.9	IRONTON.....	52	1,971	100.0	1			

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE:
1919—Continued.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
LIMA.....	108	4,901	100.0	\$23,638,764	100.0	\$10,895,473	100.0	PIQUA.....	66	3,293	100.0	\$19,921,345	100.0	\$8,966,318	100.0
Less than \$5,000.....	15	14	0.3	38,556	0.2	22,070	0.2	Less than \$5,000.....	12	7	0.2	22,547	0.1	11,603	0.1
\$5,000 to \$20,000.....	34	122	2.5	412,909	1.7	229,742	2.1	\$5,000 to \$20,000.....	12	29	0.9	128,001	0.6	70,967	0.8
\$20,000 to \$100,000.....	35	500	10.2	1,891,400	8.0	980,063	9.0	\$20,000 to \$100,000.....	17	153	4.6	801,140	4.0	351,593	3.9
\$100,000 to \$500,000.....	17	877	17.9	4,200,057	17.8	1,881,364	17.3	\$100,000 to \$500,000.....	13	551	16.7	3,185,655	16.0	1,609,351	17.9
\$1,000,000 and over.....	7	3,388	69.1	17,095,842	72.3	7,782,234	71.4	\$500,000 to \$1,000,000.....	4	571	17.3	3,036,093	15.2	1,770,929	19.8
								\$1,000,000 and over.....	8	1,982	60.2	12,747,909	64.0	5,151,965	57.5
LORAIN.....	55	11,677	100.0	116,908,616	100.0	50,913,851	100.0	PORTSMOUTH.....	60	5,914	100.0	36,645,736	100.0	16,467,980	100.0
Less than \$5,000.....	6	22	0.2	14,966	(?)	5,330	(?)	Less than \$5,000.....	8	10	0.2	22,621	0.1	12,628	0.4
\$5,000 to \$20,000.....	12	22	0.2	140,448	0.1	71,330	0.1	\$5,000 to \$20,000.....	16	45	0.8	205,586	0.6	107,125	0.7
\$20,000 to \$100,000.....	21	194	1.7	993,308	0.8	448,096	0.9	\$20,000 to \$100,000.....	19	203	3.4	975,483	2.7	423,622	2.7
\$100,000 to \$500,000.....	8	206	1.8	1,734,744	1.5	860,745	1.7	\$100,000 to \$500,000.....	12	716	12.1	3,171,312	8.6	1,537,897	9.6
\$1,000,000 and over.....	8	11,255	96.4	114,025,150	97.5	49,528,350	97.3	\$1,000,000 and over.....	5	4,950	83.7	32,270,734	88.1	14,380,708	87.3
MANSFIELD.....	132	4,711	100.0	31,877,551	100.0	14,518,413	100.0	SALEM.....	36	2,237	100.0	11,069,550	100.0	6,848,949	100.0
Less than \$5,000.....	26	21	0.4	62,323	0.2	38,248	0.3	Less than \$5,000.....	4	3	0.1	7,930	0.1	4,582	0.1
\$5,000 to \$20,000.....	37	95	2.0	408,179	1.3	236,052	1.6	\$5,000 to \$20,000.....	9	24	1.1	119,006	1.1	72,809	1.1
\$20,000 to \$100,000.....	34	296	6.3	1,623,029	5.1	651,646	4.5	\$20,000 to \$100,000.....	11	121	5.4	598,451	5.4	365,790	5.3
\$100,000 to \$500,000.....	23	1,079	22.9	5,670,152	17.8	2,648,127	18.2	\$100,000 to \$500,000.....	12	2,089	93.4	10,344,103	93.4	6,406,268	93.5
\$500,000 to \$1,000,000.....	5	643	13.6	2,752,788	8.6	1,499,933	10.3								
\$1,000,000 and over.....	7	2,577	54.7	21,361,080	67.0	9,444,407	65.1	SANDUSKY.....	115	3,447	100.0	19,248,571	100.0	8,588,926	100.0
MARIETTA.....	59	1,285	100.0	5,917,469	100.0	3,065,611	100.0	Less than \$5,000.....	22	10	0.3	65,782	0.3	43,276	0.5
Less than \$5,000.....	12	16	1.2	37,316	0.6	22,212	0.7	\$5,000 to \$20,000.....	27	75	2.2	303,041	1.6	178,054	2.1
\$5,000 to \$20,000.....	13	26	2.0	114,973	1.9	60,403	2.0	\$20,000 to \$100,000.....	32	453	13.1	1,701,580	8.8	540,852	6.3
\$20,000 to \$100,000.....	25	237	18.4	1,096,915	18.5	505,140	16.5	\$100,000 to \$500,000.....	23	1,005	29.2	4,772,455	24.8	2,394,552	27.5
\$100,000 and over.....	9	1,006	78.3	4,688,265	78.9	2,477,856	80.8	\$500,000 and over.....	11	1,904	55.2	12,406,713	64.5	5,461,560	63.6
MARION.....	70	4,125	100.0	20,712,973	100.0	10,339,043	100.0	SPRINGFIELD.....	206	12,264	100.0	67,759,001	100.0	33,868,702	100.0
Less than \$5,000.....	12	7	0.2	26,831	0.1	18,185	0.2	Less than \$5,000.....	31	19	0.2	78,063	0.1	49,457	0.1
\$5,000 to \$20,000.....	13	29	0.7	140,609	0.7	76,856	0.7	\$5,000 to \$20,000.....	56	169	1.4	610,922	0.9	390,989	1.2
\$20,000 to \$100,000.....	26	338	8.2	1,235,629	6.0	593,754	5.5	\$20,000 to \$100,000.....	64	622	5.1	2,738,494	4.1	1,617,480	4.8
\$100,000 to \$500,000.....	11	625	15.2	2,454,333	11.8	1,186,091	11.5	\$100,000 to \$500,000.....	36	2,017	16.4	8,758,240	12.9	4,590,803	14.4
\$500,000 and over.....	8	3,123	75.7	16,855,671	81.4	8,489,157	82.1	\$500,000 to \$1,000,000.....	15	1,993	16.3	10,498,403	15.5	5,642,623	16.8
MARTINS FERRY.....	40	1,517	100.0	15,402,280	100.0	5,130,213	100.0	\$1,000,000 and over.....	14	7,444	60.7	45,054,879	66.5	21,277,359	62.8
Less than \$5,000.....	16	8	0.5	32,183	0.2	19,101	0.4	STEBENVILLE.....	57	3,855	100.0	30,903,344	100.0	14,527,594	100.0
\$5,000 to \$20,000.....	10	23	1.5	113,826	0.7	51,063	1.0	Less than \$5,000.....	3	3	0.1	7,500	(?)	4,684	(?)
\$20,000 to \$100,000.....	4	59	3.9	239,738	1.6	127,191	2.5	\$5,000 to \$20,000.....	19	45	1.2	222,309	0.7	96,300	0.7
\$100,000 to \$500,000.....	6	264	17.4	1,241,476	8.1	597,016	11.6	\$20,000 to \$100,000.....	20	146	3.8	780,812	2.6	386,993	2.7
\$500,000 and over.....	4	1,163	76.7	13,775,057	89.4	4,335,842	84.5	\$100,000 and over.....	15	3,661	95.0	29,832,723	96.7	14,040,617	96.6
MASSILLON.....	80	2,153	100.0	13,984,871	100.0	6,911,044	100.0	TIFFIN.....	75	2,213	100.0	10,516,369	100.0	5,765,895	100.0
Less than \$5,000.....	18	12	0.6	49,295	0.4	31,421	0.5	Less than \$5,000.....	17	10	0.5	46,254	0.4	26,977	0.5
\$5,000 to \$20,000.....	22	42	2.0	227,641	1.6	138,125	2.0	\$5,000 to \$20,000.....	20	65	2.9	216,338	2.1	129,937	2.3
\$20,000 to \$100,000.....	17	100	4.6	607,730	4.3	293,510	4.2	\$20,000 to \$100,000.....	23	192	8.7	1,183,842	11.3	492,834	8.5
\$100,000 to \$500,000.....	19	860	39.9	5,137,635	36.7	2,704,554	39.1	\$100,000 to \$500,000.....	10	504	22.8	2,769,971	26.3	1,163,557	20.5
\$500,000 to \$1,000,000.....	4	1,139	52.9	7,962,570	56.9	3,743,434	54.2	\$500,000 and over.....	5	1,442	65.2	6,299,964	59.9	3,952,599	68.2
\$1,000,000 and over.....	4	1,139	52.9	7,962,570	56.9	3,743,434	54.2	TOLEDO.....	671	42,090	100.0	293,520,900	100.0	120,233,281	100.0
MIDDLETOWN.....	56	6,442	100.0	62,838,289	100.0	27,151,077	100.0	Less than \$5,000.....	97	43	0.1	245,628	0.1	154,005	0.1
Less than \$5,000.....	8	2	(?)	9,583	(?)	4,552	(?)	\$5,000 to \$20,000.....	161	393	0.9	1,811,563	0.6	1,084,002	0.9
\$5,000 to \$20,000.....	9	30	0.5	109,068	0.2	51,438	0.2	\$20,000 to \$100,000.....	199	2,024	4.8	9,680,965	3.3	5,148,494	4.3
\$20,000 to \$100,000.....	15	149	2.3	868,160	1.4	453,349	1.7	\$100,000 to \$500,000.....	131	6,373	15.1	29,890,138	10.1	14,802,923	12.3
\$100,000 to \$500,000.....	10	270	4.2	1,895,606	3.0	730,535	2.7	\$500,000 to \$1,000,000.....	30	3,162	7.5	20,846,734	7.1	8,812,183	7.3
\$500,000 to \$1,000,000.....	4	316	4.9	2,750,233	4.4	1,070,486	3.9	\$1,000,000 and over.....	53	30,095	71.5	231,355,844	78.8	90,231,674	75.0
\$1,000,000 and over.....	10	5,075	88.1	57,199,659	91.0	24,840,667	91.5	WARREN.....	96	2,433	100.0	19,747,395	100.0	7,816,812	100.0
NEW PHILADELPHIA.....	43	1,247	100.0	8,445,658	100.0	3,593,985	100.0	Less than \$5,000.....	22	5	0.2	40,710	0.2	24,191	0.3
Less than \$5,000.....	13	15	1.2	41,181	0.5	25,565	0.7	\$5,000 to \$20,000.....	27	47	1.9	287,330	1.5	143,500	1.8
\$5,000 to \$20,000.....	15	44	3.5	155,462	1.8	94,558	2.6	\$20,000 to \$100,000.....	25	189	7.8	1,167,675	5.9	616,991	7.9
\$20,000 to \$100,000.....	10	63	5.1	385,855	4.6	237,112	6.6	\$100,000 to \$500,000.....	13	494	20.3	2,494,778	12.6	1,256,894	16.1
\$100,000 and over.....	5	1,125	90.2	7,862,160	93.1	3,236,750	90.1	\$500,000 to \$1,000,000.....	4	498	20.5	2,012,390	14.7	1,417,825	18.1
NEWARK.....	79	4,570	100.0	16,563,149	100.0	8,291,523	100.0	\$1,000,000 and over.....	5	1,200	49.3	12,844,514	65.0	4,357,411	55.7
Less than \$5,000.....	12	10	0.2	30,500	0.2	18,998	0.2	YOUNGSTOWN.....	239	19,414	100.0	241,458,370	100.0	78,359,633	100.0
\$5,000 to \$20,000.....	20	58	1.3	223,582	1.3	123,50									

MANUFACTURES—OHIO.

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.						
		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.				
						Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Individ- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		
All industries.....	1919	6,490	6,766	2,899	730,733	28,421	678,849	23,463	3.9	92.9	3.2	\$5,100,308,728	\$157,660,289	\$4,790,633,085	\$152,015,354	3.1	93.9	3.0		
	1914	6,959	5,775	2,924	510,435	32,628	449,244	28,503	6.4	88.0	5.6	1,782,808,279	89,037,502	1,601,798,776	91,974,001	5.0	89.8	5.2		
	1909	6,978	5,123	3,037	440,934	34,345	378,473	34,116	7.7	84.4	7.6	1,437,933,517	88,075,465	1,249,778,444	100,081,908	6.1	86.9	7.0		
Automobile bodies and parts.	1919	71	126	40	10,670	399	15,881	390	2.4	95.3	2.3	92,390,646	2,777,329	87,405,711	2,207,606	3.0	94.6	2.4		
	1914	15	41	7	4,128	142	3,943	43	3.4	95.5	1.0	8,556,097	637,985	8,801,079	117,033	6.7	92.1	1.2		
Brass, bronze, and cop- per products.	1919	25	54	13	4,264	211	3,944	109	4.9	92.5	2.5	27,801,760	1,353,585	25,927,394	520,481	4.9	93.3	1.9		
	1914	28	42	14	2,277	197	1,922	158	8.7	84.4	6.9	7,843,092	532,955	6,894,127	416,010	6.8	87.9	5.3		
Bread and other bakery products.	1919	1,230	150	241	9,091	3,198	5,010	883	35.2	55.1	9.7	78,819,001	26,949,498	43,871,455	7,998,048	34.2	55.7	10.1		
	1914	1,318	81	235	7,665	3,246	3,566	853	42.3	46.5	11.1	30,560,581	12,755,385	14,279,550	3,525,946	41.7	46.7	11.5		
Brick and tile, terra- cotta, and fire-clay products.	1919	64	215	62	12,060	492	10,961	607	4.1	90.9	5.0	32,172,576	672,210	30,149,117	1,351,249	2.1	93.7	4.2		
	1914	124	223	103	16,238	776	14,527	935	4.8	89.5	5.8	23,375,689	1,029,397	20,998,577	1,347,715	4.4	89.8	5.8		
Butter.....	1919	29	80	32	1,362	154	1,104	104	11.3	81.1	7.6	41,061,993	2,334,594	36,366,409	2,360,990	5.7	88.6	5.7		
	1914	33	71	39	1,099	104	874	121	9.5	79.5	11.0	14,938,608	1,065,531	12,544,402	1,418,675	87.1	3.4	9.5		
Cars and general shop construction and re- pairs by steam-rail- road companies.	1919	.....	117	.....	35,245	.....	35,245	.....	100.0	.....	.....	96,483,946	.....	96,483,946	.....	.....	100.0	.....	
	1914	.....	88	.....	21,639	.....	21,639	.....	100.0	.....	.....	33,286,205	.....	33,286,205	.....	.....	100.0	.....	
Cars, steam-railroad, not including operations of railroad companies.	1919	.....	8	.....	2,177	.....	2,177	.....	100.0	.....	.....	28,145,542	.....	28,145,542	.....	.....	100.0	.....	
	1914	.....	5	.....	2,885	.....	2,885	.....	100.0	.....	.....	11,795,726	.....	11,795,726	.....	.....	100.0	.....	
Clothing, men's.....	1919	114	71	61	9,939	1,524	6,649	1,766	15.3	66.9	17.8	58,169,320	4,501,512	41,392,307	12,275,501	7.7	71.2	21.1		
	1914	121	45	58	8,091	1,274	3,769	3,048	21.0	43.4	35.1	24,063,468	2,804,335	11,236,960	10,022,173	11.7	46.7	41.6		
Clothing, women's.....	1919	53	88	34	8,258	1,015	6,485	758	12.3	78.5	9.2	48,703,704	4,507,299	38,869,637	5,326,768	9.3	79.8	10.9		
	1914	67	66	37	9,775	662	7,293	1,790	7.1	74.6	18.3	22,881,733	1,336,251	16,853,882	4,691,620	5.8	73.7	20.5		
Coke, not including gas- house coke.	1919	.....	13	.....	3,407	.....	3,407	.....	100.0	.....	.....	46,514,213	.....	46,514,213	.....	.....	100.0	.....	
	1914	.....	5	.....	489	.....	489	.....	100.0	.....	.....	2,156,814	.....	2,156,814	.....	.....	100.0	.....	
Confectionery and ice cream. ¹	1919	148	118	114	5,451	351	4,495	605	6.4	82.5	11.1	39,185,084	2,657,140	32,117,440	4,410,504	6.8	82.0	11.3		
	1914	134	90	68	3,965	418	3,036	511	10.5	76.6	12.9	14,341,668	1,252,838	11,625,147	1,463,683	8.7	81.1	10.2		
Electrical machinery, ap- paratus, and supplies.	1919	26	151	12	20,672	179	26,329	164	0.7	98.7	0.6	156,924,143	828,705	155,381,835	713,603	0.5	99.0	0.5		
	1914	20	87	12	12,095	88	12,482	125	0.7	98.3	1.0	36,120,978	257,038	35,520,772	343,168	0.7	98.3	1.0		
Flour-mill and gristmill products.	1919	220	143	214	2,122	378	1,338	406	17.8	63.1	19.1	80,396,619	10,294,759	66,560,505	12,541,355	11.5	74.5	14.0		
	1914	263	137	249	2,363	478	1,294	591	20.2	54.8	25.0	45,171,200	6,438,927	28,824,681	9,907,592	14.3	63.8	21.9		
Food preparations, not elsewhere specified.	1919	40	29	19	1,857	51	1,751	55	2.7	94.3	3.0	46,340,447	350,151	45,616,734	373,562	0.8	98.4	0.8		
	1914	30	34	12	1,523	82	1,396	45	5.4	91.7	3.0	27,346,187	313,748	26,915,712	116,727	1.1	98.4	0.4		
Foundry and machine- shop products. ²	1919	269	741	152	87,803	1,965	83,004	2,834	2.2	94.5	3.2	425,497,682	7,601,512	403,960,053	13,936,117	1.8	94.9	3.3		
	1914	224	619	140	51,553	1,355	48,244	1,954	2.6	93.6	3.8	122,816,681	3,109,976	114,936,866	4,769,839	2.5	93.6	3.9		
Furniture.....	1919	33	104	25	8,346	404	7,630	312	4.8	91.4	3.7	35,224,313	1,440,422	32,363,275	1,420,616	4.1	91.9	4.0		
	1914	61	110	38	7,750	777	6,434	539	10.0	83.0	7.0	16,411,298	1,358,558	13,960,248	1,092,492	8.3	85.1	6.7		
Iron and steel, blast furnaces.	1919	.....	42	.....	9,793	.....	9,793	.....	100.0	.....	.....	179,233,435	.....	179,233,435	.....	.....	100.0	.....	
	1914	.....	33	.....	5,786	.....	5,786	.....	100.0	.....	.....	72,969,368	.....	72,969,368	.....	.....	100.0	.....	
Leather, tanned, curried, and finished.	1919	2	17	5	1,565	.....	1,488	* 77	.....	95.1	4.9	25,008,070	.....	24,052,918	* 955,152	.....	96.2	3.8
	1914	4	19	5	1,605	.....	1,504	* 101	.....	93.7	6.3	11,627,916	.....	10,840,933	* 786,983	.....	93.2	6.8
Liquors, malt.....	1919	4	67	2	3,327	* 45	3,282	.....	1.4	98.6	.....	25,161,227	* 182,141	24,979,086	.....	0.7	99.3	.....	
	1914	7	83	11	5,340	49	5,200	91	0.9	97.4	1.7	31,990,274	219,265	31,429,717	341,292	0.7	98.2	1.1		
Lumber, planing-mill products, not includ- ing planing mills con- nected with sawmills.	1919	102	199	77	4,495	609	3,443	443	13.5	76.6	9.9	32,428,847	3,988,051	25,796,234	2,644,562	12.3	79.5	8.2		
	1914	126	188	86	5,516	620	4,190	706	11.2	76.0	12.8	18,892,060	2,034,656	13,511,644	3,045,760	10.8	73.1	16.1		
Paints.....	1919	7	51	3	2,197	.....	2,163	* 34	.....	98.5	1.5	36,848,364	.....	36,271,410	* 576,954	.....	98.4	1.6
	1914	14	48	3	1,097	.....	1,654	* 43	.....	97.5	2.5	14,824,073	.....	14,491,592	* 332,481	.....	97.8	2.2
Petroleum, refining.....	1919	.....	11	.....	2,431	.....	2,431	.....	100.0	.....	.....	43,282,801	.....	43,282,801	.....	.....	100.0	.....	
	1914	.....	7	.....	1,519	.....	1,519	.....	100.0	.....	.....	11,169,189	.....	11,169,189	.....	.....	100.0	.....	
Pottery.....	1919	8	79	8	11,339	* 683	10,656	.....	6.0	94.0	.....	28,675,361	* 1,496,916	27,188,445	.....	5.2	94.8	.....	
	1914	11	76	12	11,096	455	10,646	175	4.1	94.3	1.6	15,291,685	539,581	14,530,252	221,852	3.5	95.0	1.5		
Printing and publishing, book and job.	1919	462	252	157	8,505	1,306	6,213	986	15.4	73.1	11.6	39,201,684	5,237,135	29,743,181	4,221,368	13.4	75.9	10.8		
	1914	429	214	129	7,978	1,392	5,666	920	17.4	71.0	11.5	19,915,250	3,095,466	14,775,210	2,046,574	15.5	74.2	10.3		
Printing and publishing, newspapers and peri- odicals.	1919	330	280	184	7,627	850	6,282	495	11.1	82.4	6.5	58,567,435	4,823,328	50,358,137	3,385,970	8.2	86.0	5.8		
	1914	420	299	182	7,274	1,240	5,393	641	17.0	74.1	8.8	28,623,290	3,853,296	21,733,989	2,436,005	13.8	77.6	8.7		
Rubber tires, tubes, and rubber goods, not else- where specified.	1919	5	86	5	63,637	.....	63,537	* 100	.....	99.8	0.2	551,118,488	.....						

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.						
		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.				
						Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Indi- vid- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.		
Total for cities ¹	1919 1914	3,960 4,000	4,891 3,972	1,686 1,542	577,271 385,608	20,644 22,948	539,102 341,293	17,525 21,367	3.6 6.0	93.4 88.5	3.0 5.5	\$4,059,713,323 1,372,110,101	\$117,252,283 61,653,709	\$3,830,203,897 1,244,169,806	\$112,257,143 66,286,586	2.9 4.5	94.3 90.7	2.8 4.8		
AKRON.....	1919 1914	101 115	162 144	41 46	65,054 24,680	394 424	64,443 24,141	217 115	0.6 1.7	99.1 97.8	0.3 0.5	558,962,067 122,291,600	2,292,393 1,249,626	554,969,010 120,416,724	1,760,664 625,250	0.4 1.0	99.3 98.5	0.3 0.5		
ALLIANCE.....	1919 1914	34 24	23 19	17 9	5,117 2,333	71 53	4,877 2,220	169 60	1.4 2.3	95.3 95.2	3.3 2.5	32,871,087 7,174,766	642,330 189,478	31,162,991 6,714,898	1,065,766 270,390	2.0 2.6	94.8 93.6	3.2 3.8		
ASHTABULA.....	1919 1914	32 25	25 26	5 6	4,172 1,868	191 133	3,977 1,693	4 42	4.5 7.1	95.3 90.6	0.1 2.2	23,098,509 5,020,991	826,847 481,578	22,296,028 4,440,431	35,634 98,982	3.6 9.6	96.3 88.4	0.2 2.0		
BARBERTON.....	1919 1914	14 17	16 10	2 7	4,762 3,118	44 50	4,718 3,050	..... 18	0.9 1.6	99.1 97.8	..... 0.6	27,713,226 8,843,422	382,495 188,073	27,330,731 8,539,623	115,726	1.4 2.1	98.6 96.6	..... 1.3
BELLAIRE.....	1919 1914	16 21	19 13	10 6	2,277 2,603	25 303	2,197 2,281	55 19	1.1 11.6	96.5 87.6	2.4 0.7	14,502,401 12,170,206	142,719 401,225	13,967,311 11,608,030	392,371 160,951	1.0 3.3	96.3 95.4	2.7 1.3		
BUCYRUS.....	1919	20	16	7	1,861	48	1,769	44	2.6	95.1	2.4	8,435,746	397,176	7,555,168	483,492	4.7	89.6	5.7		
CAMBRIDGE.....	1919 1914	10 12	17 18	5 9	1,782 1,455	51 36	1,714 1,394	17 25	2.9 2.5	96.2 95.8	1.0 1.7	11,226,909 3,923,786	302,952 107,104	10,855,458 3,669,907	68,399 146,775	2.7 2.7	96.7 93.5	0.6 3.7		
CANTON.....	1919 1914	103 107	148 140	36 29	20,336 12,255	468 510	19,694 11,545	174 200	2.3 4.2	96.8 94.2	0.9 1.6	124,292,924 43,713,446	2,680,690 1,141,757	120,623,011 42,005,773	989,223 565,916	2.2 2.6	97.0 96.1	0.8 1.3		
CHILlicothe.....	1919 1914	10 21	14 18	11 7	1,638 1,557	47 90	1,519 1,315	72 152	2.9 5.7	92.7 81.5	4.4 9.8	7,667,182 4,083,486	273,356 409,470	6,975,560 3,399,200	418,266 274,816	3.6 10.0	91.0 82.2	5.5 6.7		
CINCINNATI.....	1919 1914	912 935	882 786	445 414	69,680 59,861	5,723 6,902	57,155 45,679	6,802 7,280	8.2 11.5	92.0 76.3	9.8 12.2	500,040,996 210,860,386	32,376,332 20,172,013	422,405,952 168,157,011	45,258,712 22,531,362	6.5 9.6	84.5 79.7	9.1 10.7		
CLEVELAND.....	1919 1914	1,091 1,005	1,461 1,032	394 308	157,730 103,317	5,196 6,421	148,764 91,218	3,770 5,678	3.3 6.2	94.3 88.3	2.4 5.5	1,091,577,490 352,418,052	29,576,933 14,847,376	1,032,638,042 318,827,846	29,362,515 18,742,830	2.7 4.2	94.6 90.5	2.7 5.3		
COLUMBUS.....	1919 1914	272 266	321 268	97 109	26,751 17,236	1,439 1,232	24,234 15,108	1,078 896	5.4 7.1	90.6 87.7	4.0 5.2	184,021,849 57,608,084	8,137,656 3,781,953	170,676,035 50,521,906	5,208,158 3,304,226	4.4 6.6	92.7 87.7	2.8 5.7		
COSHOCOTON.....	1919 1914	10 21	27 24	8 2	1,959 1,614	12 54	1,852 1,529	95 31	0.6 3.3	94.5 94.7	4.8 1.9	7,684,762 3,476,686	51,743 191,570	6,987,344 3,229,540	645,675 55,576	0.7 5.5	90.9 92.9	8.4 1.6		
CUYAHOGA FALLS.....	1919	11	11	8	784	64	689	31	8.2	87.9	4.0	5,829,347	406,182	5,260,659	162,506	7.0	90.2	2.8		
DAYTON.....	1919 1914	186 214	294 219	91 90	31,131 24,061	967 1,219	28,900 21,542	1,264 1,300	3.1 5.1	92.8 89.5	4.1 5.4	174,990,607 71,071,374	4,562,728 3,440,523	164,346,727 64,948,376	6,081,152 2,682,475	2.6 4.8	93.9 91.4	3.5 3.8		
EAST CLEVELAND.....	1919 1914	7 3	7 2	3 2	88 129	38	40	10	43.2	45.5 100.0	11.4	420,505 295,786	162,082	211,403	47,020	38.5	50.3	11.2		
EAST LIVERPOOL.....	1919 1914	20 30	36 36	11 14	4,311 4,830	99 109	4,090 4,555	122 166	2.3 2.3	94.9 94.3	2.8 3.4	12,501,181 7,092,903	1,110,738 336,296	10,929,511 6,456,349	460,932 300,258	8.9 4.7	87.4 91.0	3.7 4.2		
ELYRIA.....	1919 1914	22 23	44 34	9 6	4,590 2,735	114 140	4,456 2,586	20 9	2.5 5.1	97.1 94.6	0.4 0.3	25,191,454 8,791,734	820,787 556,191	24,248,261 8,168,421	122,406 67,122	3.3 6.7	96.3 92.9	0.5 0.8		
FINDLAY.....	1919 1914	27 25	30 37	18 16	1,715 1,737	58 74	1,553 1,557	104 106	3.4 4.3	90.6 89.6	6.1 6.1	7,924,282 4,662,778	437,792 235,748	7,037,685 4,066,636	448,805 360,394	5.5 5.1	88.8 87.2	5.7 7.7		
FREMONT.....	1919 1914	14 16	32 36	7 13	2,999 2,063	50 36	2,883 1,978	66 49	1.7 1.7	96.1 95.9	2.2 2.4	12,915,095 4,779,982	162,807 144,794	12,399,358 4,520,378	352,930 108,810	1.3 3.0	96.0 94.7	2.7 2.3		
HAMILTON.....	1919 1914	52 59	54 53	24 17	8,553 6,043	143 303	8,020 5,424	390 316	1.7 5.0	93.8 89.8	4.6 5.2	47,024,031 16,877,260	716,438 958,393	44,850,681 15,131,042	1,456,912 787,825	1.5 5.7	95.4 89.6	3.1 4.7		
IRONTON.....	1919 1914	9 14	31 31	12 14	1,971 1,420	79 94	1,635 1,143	257 183	4.0 6.6	83.0 80.5	13.0 12.9	14,071,850 4,666,185	251,935 143,954	12,895,963 4,307,442	923,952 214,789	1.8 3.1	91.6 92.3	6.6 4.6		
KENMORE.....	1919	3	2	2	135	.....	135	.....	100.0	.....	.....	844,303	.....	844,303	.....	100.0	.....	.....
LAKEWOOD.....	1919 1914	20 14	11 7	2 1	1,821 1,774	56 2434	1,765 1,340	..... .....	3.1 24.5	96.9 75.5	.....	7,002,803 3,606,498	341,776 594,784	7,261,027 3,011,714	..... .....	4.5 16.5	95.5 83.5	.....	
LANCASTER.....	1919 1914	15 23	22 19	6 11	2,024 1,583	135 87	1,848 1,436	41 60	6.7 5.5	91.3 90.7	2.0 3.8	11,478,883 4,602,615	486,156 251,656	10,629,009 8,894,289	363,718 456,676	4.2 5.5	92.6 84.0	3.2 9.9		
LIMA.....	1919 1914	36 41	48 42	24 14	4,901 4,876	154 120	4,432 4,619	315 137	3.1 2.5	90.4 94.7	6.4 2.8	23,638,764 11,598,580	742,348 506,718	21,817,237 10,826,368	1,079,179 265,494	3.1 4.4	92.3 93.3	4.6 2.3		
LORAIN.....	1919 1914	14 28	29 32	12 6	11,677 6,436	40 40	11,594 6,336	43 60	0.3 0.6	99.3 98.4	0.4 0.9	116,908,616 29,110,037	264,619 144,226	116,270,233 28,905,193	373,764 60,618	0.2 0.5	99.5 99.3	0.3 0.2		
MANSFIELD.....	1919 1914	58 46	48 37	26 20	4,711 3,398	244 208	4,323 2,862	144 328	5.2 6.1	91.8 84.2	3.1 9.7	31,877,551 10,281,968	1,495,843 455,534	29,393,908 8,537,109	987,800 999,325	4.7 4.4	92.2 86.1	3.1 9.4		
MARIETTA.....	1919 1914	23 24	23 33	13 14	1,285 1,401	117 90	1,124 1,153	44 158	9.1 6.4	87.5 82.3	3.4 11.3	5,917,469 4,128,615	469,596 204,425	5,243,924 3,645,653	203,949 278,540	7.9 5.0	88.6 88.3	3.4 6.7		
MARION.....	1919 1914	28 27	35 27	7 12	4,125 2,577	107 74	3,924 2,479	94 24	2.6 2.9	95.1 96.2	2.3 0.9	20,712,973 6,384,864	641,808 212,432	19,701,159 6,082,327	370,006 90,105	3.1 3.3	95.1 95.3	1.8 1.4		
MARTINS FERRY.....	1919	24	13	3	1,517	64	1,445	8	4.2	95.3	0.5	15,402,280	382,437	14,986,777	33,066	2.5	97.3	0.2		
MASSILLON.....	1919 1914	27 37	33 30	20 3	2,153 1,768	39 177	2,023 1,580	91 11	1.8 10.0	94.0 89.4	4.2 0.6	13,984,871 5,293,124	273,772 374,673	13,245,530 4,882,357	465,269 36,094	2.0 7.1	94.7 92.2	3.3 0.7		

¹ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.² Includes the group, "All others."³ Includes the groups, "Individuals" and "All others."

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914—Continued.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.						
		Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.				
						Indi- vid- uals.	Cor- pora- tions.	All oth- ers.	Indi- vid- uals.	Cor- pora- tions.	All oth- ers.		Individ- uals.	Corpora- tions.	All others.	Indi- vid- uals.	Corpora- tions.	All oth- ers.		
MIDDLETOWN.....	1919	18	30	8	6,442	78	6,347	17	1.2	98.5	0.3	\$62,838,289	\$410,056	\$62,186,586	\$232,647	0.7	99.0	0.4		
	1914	24	29	10	4,003	87	3,883	33	2.2	97.0	0.8	21,787,151	213,240	21,497,753	76,158	1.0	98.7	0.3		
NEWARK.....	1919	30	34	15	4,570	250	4,261	59	5.5	93.2	1.3	16,563,149	1,266,076	13,982,829	1,314,244	7.6	84.4	7.9		
	1914	34	25	20	4,583	220	3,858	505	4.8	84.2	11.0	9,276,762	465,729	7,857,081	953,952	5.0	84.7	10.3		
NEW PHILADELPHIA.....	1919	25	14	4	1,247	95	1,145	7	7.6	91.8	0.6	8,445,658	448,767	7,927,927	68,964	5.3	93.9	0.8		
NILES.....	1919	7	26	7	2,945	27	2,899	19	0.9	98.4	0.6	18,358,773	130,455	18,111,348	116,970	0.7	98.7	0.6		
NORWOOD.....	1919	23	40	7	8,283	71	8,188	24	0.9	98.9	0.3	47,947,183	341,081	47,445,759	160,343	0.7	99.0	0.3		
	1914	23	30	5	5,808	75	5,691	42	1.3	98.0	0.7	16,724,360	180,651	16,456,088	87,621	1.1	98.4	0.6		
PIQUA.....	1919	28	33	5	3,293	259	3,016	18	7.9	91.6	0.5	19,921,345	1,643,497	18,125,110	152,738	8.2	91.0	0.8		
	1914	34	30	14	2,777	122	2,544	111	4.4	91.6	4.0	7,988,279	501,810	7,229,095	257,374	6.3	90.5	3.2		
PORTSMOUTH.....	1919	25	27	8	5,914	110	5,771	33	1.9	97.6	0.6	36,645,736	1,118,288	35,292,188	235,260	3.1	96.3	0.6		
	1914	31	33	12	3,597	77	3,468	52	2.1	96.4	1.4	7,682,145	411,158	7,119,608	151,379	5.4	92.7	2.0		
SALEM.....	1919	11	22	3	2,237	37	2,190	10	1.7	97.9	0.4	11,069,550	268,665	10,766,585	34,300	2.4	97.3	0.3		
SANDUSKY.....	1919	44	57	14	3,447	207	3,063	177	6.0	88.9	5.1	19,248,571	1,236,751	17,179,147	832,673	6.4	89.2	4.3		
	1914	41	53	13	2,727	157	2,415	155	5.8	88.6	5.7	8,284,865	504,681	7,273,361	506,823	6.1	87.8	6.1		
SPRINGFIELD.....	1919	75	96	35	12,264	722	11,161	381	5.9	91.0	3.1	67,759,001	4,143,163	61,105,295	2,510,543	6.1	90.2	3.7		
	1914	111	91	51	7,868	439	7,003	426	5.6	89.0	5.4	27,721,789	1,399,218	24,688,487	1,634,084	5.0	89.1	5.9		
STEBENVILLE.....	1919	22	22	12	3,855	87	3,725	43	2.3	96.6	1.1	30,903,344	505,746	30,091,041	306,557	1.6	97.4	1.0		
	1914	23	22	15	4,506	78	4,375	53	1.7	97.1	1.2	16,958,987	220,660	16,510,323	228,001	1.3	97.4	1.3		
TIPTON.....	1919	29	22	24	2,213	286	1,860	67	12.9	84.0	3.0	10,516,369	1,162,006	8,643,414	710,949	11.0	82.2	6.8		
	1914	33	22	21	2,177	317	1,757	103	14.6	80.7	4.7	4,995,880	932,100	3,821,406	242,374	18.7	76.5	4.8		
TOLEDO.....	1919	244	336	91	42,090	1,180	40,054	856	2.8	95.2	2.0	293,520,900	8,537,745	281,196,519	3,786,638	2.9	95.8	1.3		
	1914	290	303	120	27,076	1,041	24,632	1,403	3.8	91.0	5.2	115,049,426	3,246,273	107,234,068	4,569,085	2.8	93.2	4.0		
WARREN.....	1919	31	47	18	2,433	70	2,286	77	2.9	94.0	3.2	19,747,395	451,148	18,794,812	501,435	2.3	95.2	2.5		
	1914	33	39	10	2,862	86	2,697	79	3.0	94.2	2.8	10,399,737	208,895	9,964,379	226,463	2.0	95.8	2.2		
YOUNGSTOWN.....	1919	91	107	41	19,414	345	19,001	68	1.8	97.9	0.4	241,458,370	2,482,657	238,339,112	636,601	1.0	98.7	0.3		
	1914	86	82	33	15,861	278	15,439	144	1.8	97.3	0.9	92,111,272	771,844	90,776,424	563,004	0.8	98.6	0.6		
ZANESVILLE.....	1919	35	44	18	3,014	543	2,343	128	18.0	77.7	4.2	13,437,777	1,283,716	11,119,929	1,034,132	9.6	82.8	7.7		
	1914	44	40	13	3,035	558	1,639	838	18.4	54.0	27.6	8,300,231	875,880	4,205,411	3,218,940	10.6	50.7	38.8		

TABLE 15.—MANUFACTURES, BY POPULATION GROUPS, IN CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	Cen- sus year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER.								THE STATE OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 OR OVER. ¹	
			Total.		10,000 to 25,000.		25,000 to 100,000.		100,000 and over.		Number or amount.	Per cent of aggregate.
			Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.	Number or amount.	Per cent of aggregate.		
Number of places.....	1919		48		27		14		7			
	1914		41		25		11		5			
	1909		36		22		9		5			
Population ²	1920	5,759,394	3,137,372	54.5	429,915	7.5	535,822	9.3	2,171,635	37.7	2,622,022	45.5
	1915	5,026,898	2,447,437	48.7	393,602	7.8	499,742	9.9	1,554,093	30.9	2,579,461	51.3
	1910	4,767,121	2,130,013	44.7	345,803	7.2	393,371	8.3	1,390,839	29.2	2,637,108	55.3
Number of establishments.....	1919	16,125	10,537	65.3	1,450	9.0	1,427	8.8	7,660	47.5	5,588	34.7
	1914	15,658	9,514	60.8	1,516	9.7	1,639	10.5	6,359	40.6	6,144	39.2
	1909	15,138	8,763	57.9	1,366	9.0	1,207	8.0	6,190	40.9	6,375	42.1
Average number of wage earners.....	1919	730,733	577,271	79.0	77,159	10.6	88,262	12.1	411,850	56.4	153,462	21.0
	1914	510,435	383,603	75.5	60,317	11.8	93,740	18.4	241,551	45.4	124,827	24.5
	1909	446,934	323,131	72.3	53,624	12.0	67,742	15.2	201,765	45.1	123,803	27.7
Value of products.....	1919	\$5,100,308,728	\$4,059,713,323	79.6	\$457,606,475	9.0	\$557,534,569	10.9	\$3,044,572,279	59.7	\$1,040,595,405	20.4
	1914	1,782,808,279	1,372,110,101	76.9	179,460,670	10.1	383,642,109	21.6	807,007,322	45.3	410,698,178	23.0
	1909	1,437,935,817	1,074,492,138	74.7	156,321,801	10.9	283,054,022	19.7	635,116,315	44.2	363,443,679	25.3
Value added by manufacture.....	1919	2,188,360,857	1,776,674,525	81.2	222,538,121	10.2	261,231,649	11.9	1,292,904,755	59.1	411,686,332	18.8
	1914	762,026,264	601,671,322	78.9	81,001,383	11.0	157,346,303	20.6	360,332,636	47.3	160,354,942	21.0
	1909	613,733,570	468,164,822	76.3	68,823,229	11.2	107,359,766	17.5	291,979,827	47.6	145,569,048	23.7

¹ Includes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.² Population of 1920, as of Jan. 1, 1920; 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of Apr. 15, 1910.

TABLE 16.—PRINCIPAL INDUSTRIES IN CITIES OF 50,000 INHABITANTS OR MORE, WITH PER CENT OF TOTAL FOR STATE: 1919.

CITY AND INDUSTRY.	VALUE OF PRODUCTS.				CITY AND INDUSTRY.	VALUE OF PRODUCTS.			
	Amount, 1919.	Per cent of total for the state.	Increase over 1914. ¹			Amount, 1919.	Per cent of total for the state.	Increase over 1914. ¹	
			Amount.	Per cent.				Amount.	Per cent.
AKRON.					CLEVELAND.				
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	\$462,092,527	83.8	\$369,545,031	399.3	Foundry and machine-shop products *...	\$120,423,404	28.3	\$85,463,841	244.5
Foundry and machine-shop products.....	14,624,783	-4.2	11,764,144	411.2	Automobiles.....	110,254,504	38.4	87,510,776	384.8
Bread and other bakery products.....	4,212,196	5.3	3,493,319	485.9	Iron and steel, steel works and rolling mills.....	84,424,721	13.5	51,035,892	152.9
Printing and publishing, book and job.....	3,289,029	8.4	(2)	(2)	Slaughtering and meat packing.....	71,061,098	41.7	47,850,775	206.2
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,684,177	8.3	(2)	(2)	Electrical machinery, apparatus, and supplies.....	52,324,151	33.3	40,966,613	360.7
Stoves and hot-air furnaces.....	1,814,480	7.3	926,974	104.4	Automobile bodies and parts.....	44,312,932	48.0	39,940,065	913.4
Liquors, malt.....	1,775,773	7.1	423,728	31.3	Clothing, women's.....	35,307,741	72.5	19,064,449	117.4
Printing and publishing, newspapers and periodicals.....	1,701,194	2.9	(2)	(2)	Stoves, gas and oil.....	19,489,305	82.7	12,282,587	170.4
Brick and tile, terra-cotta, and fire-clay products.....	1,589,606	4.9	595,176	59.9	Clothing, men's.....	19,433,496	33.4	10,916,618	128.2
Automobile bodies and parts.....	(2)	(2)	(2)	(2)	Bread and other bakery products.....	19,413,046	24.6	12,505,438	181.0
Automobiles.....	(2)	(2)	(2)	(2)	Tools, not elsewhere specified.....	17,602,520	54.1	(2)	(2)
Butter.....	(2)	(2)	(2)	(2)	Paints.....	17,436,225	47.3	9,900,527	131.4
Confectionery and ice cream.....	(2)	(2)	(2)	(2)	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	17,204,129	73.6	13,722,192	387.4
Flour-mill and gristmill products.....	(2)	(2)	(2)	(2)	Printing and publishing, newspapers and periodicals.....	15,570,029	26.6	9,271,749	147.2
Food preparations, not elsewhere specified.....	(2)	(2)	(2)	(2)	Printing and publishing, book and job.....	13,382,254	34.1	7,529,906	128.7
Oilcloth and linoleum.....	(2)	(2)	(2)	(2)	Iron and steel forgings, not made in steel works or rolling mills.....	13,373,139	33.8	11,619,109	662.4
Structural ironwork, not made in steel works or rolling mills.....	(2)	(2)	(2)	(2)	Structural ironwork, not made in steel works or rolling mills.....	11,721,132	28.0	5,685,463	94.2
Tools, not elsewhere specified.....	(2)	(2)	(2)	(2)	Cars and general shop construction and repairs by steam-railroad companies.....	11,571,425	12.0	6,613,557	133.4
CANTON.					Confectionery and ice cream.....	11,375,042	29.0	(2)	(2)
Iron and steel, steel works and rolling mills.....	63,373,984	10.1	46,486,715	275.3	Knit goods.....	10,003,277	53.3	5,952,125	146.9
Foundry and machine-shop products *...	8,592,801	2.5	2,832,688	49.2	Varnishes.....	9,050,542	66.4	6,493,291	253.9
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,643,835	8.2	2,531,854	2,261.0	Chemicals.....	7,593,467	23.2	4,463,497	142.6
Structural ironwork, not made in steel works or rolling mills.....	2,594,878	6.2	1,556,074	149.8	Wirework, including wire rope and cable, not elsewhere specified.....	7,071,352	81.2	4,585,391	184.5
Bread and other bakery products.....	1,560,551	2.0	1,139,835	270.9	Brass and bronze products.....	6,622,233	23.8	4,131,114	165.8
Agricultural implements.....	1,454,673	5.5	(2)	(2)	Coffee, roasting and grinding.....	6,171,429	21.1	(2)	(2)
Printing and publishing.....	1,142,874	1.2	367,159	47.3	Oil, not elsewhere specified.....	5,906,753	65.7	4,332,937	275.3
Automobiles.....	(2)	(2)	(2)	(2)	Liquors, malt.....	5,774,228	22.9	-753,940	-11.5
Brass and bronze products.....	(2)	(2)	(2)	(2)	Plumbers' supplies, not elsewhere speci- fied.....	5,393,331	66.7	3,172,878	142.9
Brick and tile, building brick, fancy, ornamental, vitrified, glazed, and ena- meled.....	(2)	(2)	(2)	(2)	Aluminum manufactures.....	(2)	(2)	(2)	(2)
Electrical machinery, apparatus, and supplies.....	(2)	(2)	(2)	(2)	Bags, other than paper, not including bags made in textile mills.....	(2)	(2)	(2)	(2)
Electroplating.....	(2)	(2)	(2)	(2)	Coke, not including gas-house coke.....	(2)	(2)	(2)	(2)
Furniture.....	(2)	(2)	(2)	(2)	Hardware.....	(2)	(2)	(2)	(2)
Iron and steel forgings, not made in steel works or rolling mills.....	(2)	(2)	(2)	(2)	Iron and steel, blast furnaces.....	(2)	(2)	(2)	(2)
Safes and vaults, safes.....	(2)	(2)	(2)	(2)	Iron and steel, wrought pipe.....	(2)	(2)	(2)	(2)
Slaughtering and meat packing, wholesale.....	(2)	(2)	(2)	(2)	Petroleum, refining.....	(2)	(2)	(2)	(2)
Springs, steel.....	(2)	(2)	(2)	(2)	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	(2)	(2)	(2)	(2)
Stamped and enameled ware, not else- where specified, enameled ware.....	(2)	(2)	(2)	(2)	Screws, machine.....	(2)	(2)	(2)	(2)
CINCINNATI.					Shipbuilding, steel.....	(2)	(2)	(2)	(2)
Slaughtering and meat packing.....	62,428,358	36.6	39,183,473	168.6	Wire.....	(2)	(2)	(2)	(2)
Foundry and machine-shop products *...	50,717,768	12.3	35,398,296	231.1	Worsted goods.....	(2)	(2)	(2)	(2)
Clothing, men's.....	32,254,217	55.4	18,921,107	141.9	COLUMBUS.				
Boots and shoes.....	31,223,081	43.8	16,698,003	115.0	Foundry and machine-shop products.....	18,632,901	5.4	12,912,994	225.8
Bread and other bakery products.....	14,140,223	17.9	7,754,547	121.4	Cars and general shop construction and repairs by steam-railroad companies.....	15,213,729	15.8	9,812,235	181.7
Printing and publishing, book and job.....	10,678,735	27.2	4,884,401	84.3	Boots and shoes.....	10,198,135	14.3	4,975,787	95.2
Printing and publishing, newspapers and periodicals.....	10,567,143	18.0	4,542,249	75.4	Slaughtering and meat packing.....	6,510,428	3.8	(2)	(2)
Paints.....	10,333,139	28.0	6,531,577	171.8	Bread and other bakery products.....	5,203,881	6.6	3,084,955	145.6
Leather, tanned, curried, and finished.....	10,093,997	40.4	4,068,272	86.0	Printing and publishing, newspapers and periodicals.....	4,094,919	7.0	1,973,107	93.0
Confectionery and ice cream.....	9,428,209	24.1	(2)	(2)	Automobile bodies and parts.....	3,668,580	4.0	(2)	(2)
Butter.....	8,824,102	21.5	(2)	(2)	Fertilizers.....	2,882,917	20.2	(2)	(2)
Liquors, malt.....	7,789,700	31.0	-2,563,107	-24.8	Confectionery and ice cream.....	2,575,127	6.6	1,685,520	189.5
Coffee and spice, roasting and grinding.....	6,611,920	22.6	4,325,872	189.2	Printing and publishing, book and job.....	2,185,610	5.6	1,148,878	110.8
Furniture.....	5,890,337	16.7	(2)	(2)	Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	1,691,612	5.2	858,298	103.0
Tobacco, cigars.....	5,882,781	20.4	(2)	(2)	Stoves, ranges, and hot-air furnaces, in- cluding gas and oil stoves.....	1,133,658	-2.3	281,685	33.1
Stoves and hot-air furnaces.....	5,251,557	21.0	(2)	(2)	Automobiles.....	(2)	(2)	(2)	(2)
Automobile bodies and parts.....	5,207,453	5.6	(2)	(2)	Butter.....	(2)	(2)	(2)	(2)
Clothing, women's.....	5,135,218	10.5	2,568,649	100.1	Cars, steam-railroad, not including opera- tions of railroad companies.....	(2)	(2)	(2)	(2)
Copper, tin, and sheet-iron work.....	4,805,466	30.4	2,025,385	72.9	Dental goods.....	(2)	(2)	(2)	(2)
Shirts.....	4,248,535	57.5	2,477,107	139.8	Flour-mill and gristmill products.....	(2)	(2)	(2)	(2)
Cars and general shop construction and repairs by steam-railroad companies.....	4,026,932	4.2	3,050,276	314.9	Furniture.....	(2)	(2)	(2)	(2)
Brass, bronze, and copper products.....	3,641,519	13.1	2,454,817	206.9	Glass.....	(2)	(2)	(2)	(2)
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	3,122,558	9.6	1,650,262	112.1	Iron and steel, blast furnaces.....	(2)	(2)	(2)	(2)
Automobiles.....	(2)	(2)	(2)	(2)	Iron and steel, steel works and rolling mills.....	(2)	(2)	(2)	(2)
Bags, paper, exclusive of those made in paper mills.....	(2)	(2)	(2)	(2)	Iron and steel, bolts, nuts, washers, and rivets.....	(2)	(2)	(2)	(2)
Baking powders and yeast.....	(2)	(2)	(2)	(2)	Iron and steel, forgings.....	(2)	(2)	(2)	(2)
Glass.....	(2)	(2)	(2)	(2)	Liquors, malt.....	(2)	(2)	(2)	(2)
Ink, printing.....	(2)	(2)	(2)	(2)	Oilcloth, enameled.....	(2)	(2)	(2)	(2)
Lamps.....	(2)	(2)	(2)	(2)	Oleomargarine.....	(2)	(2)	(2)	(2)
Oil and cake, cottonseed.....	(2)	(2)	(2)	(2)	Paints.....	(2)	(2)	(2)	(2)
Oleomargarine.....	(2)	(2)	(2)	(2)	Regalia, and society badges and emblems.....	(2)	(2)	(2)	(2)
Pickles, preserves, and sauces.....	(2)	(2)	(2)	(2)	Tobacco, cigars.....	(2)	(2)	(2)	(2)
Soap.....	(2)	(2)	(2)	(2)	Wool pulling.....	(2)	(2)	(2)	(2)
Steam fittings and steam and hot-water heating apparatus.....	(2)	(2)	(2)	(2)	DAYTON.				
Waste.....	(2)	(2)	(2)	(2)	Foundry and machine-shop products *...	16,085,156	3.8	10,499,522	188.0
					Slaughtering and meat packing.....	8,414,683	4.9	3,584,036	74.2
					Bread and other bakery products.....	4,522,347	5.7	2,509,570	124.7

¹ A minus sign (—) denotes decrease.² Figures can not be shown without disclosing individual operations.³ Includes "iron and steel, welding."⁴ Includes "iron and steel, tempering and welding" and "machine tools."⁵ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."

TABLE 16.—PRINCIPAL INDUSTRIES IN CITIES OF 50,000 INHABITANTS OR MORE, WITH PER CENT OF TOTAL FOR STATE: 1919—Continued.

CITY AND INDUSTRY.	VALUE OF PRODUCTS.				CITY AND INDUSTRY.	VALUE OF PRODUCTS.			
	Amount, 1919.	Per cent of total for the state.	Increase over 1914.			Amount, 1919.	Per cent of total for the state.	Increase over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
DAYTON—Continued.					TOLEDO—Continued.				
Tools, not elsewhere specified.....	\$3,785,457	11.6	\$3,709,655	4,893.9	Bread and other bakery products.....	\$5,774,946	7.3	\$3,467,735	150.3
Tobacco, cigars and cigarettes.....	3,057,848	10.6	1,002,417	45.8	Butter.....	4,324,608	10.5	(1)	(1)
Printing and publishing, newspapers and periodicals.....	2,630,616	4.5	1,523,089	137.5	Clothing, women's.....	4,163,468	8.5	1,729,898	71.1
Stationery goods, not elsewhere specified.	2,564,132	55.2	(1)	(1)	Printing and publishing, newspapers and periodicals.....	3,514,811	6.0	1,680,506	91.6
Pumps, steam and other power.....	2,064,211	60.7	(1)	(1)	Gloves and mittens, cloth, not including those made in textile mills.....	2,840,984	37.5	(1)	(1)
Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,036,429	6.3	(1)	(1)	Confectionery and ice cream.....	2,776,615	7.1	(1)	(1)
Clothing, men's.....	1,787,391	3.1	(1)	(1)	Cars and general shop construction and repairs by steam-railroad companies...	2,609,557	2.7	1,407,628	117.1
Furniture.....	1,488,981	4.2	604,158	80.5	Printing and publishing, book and job...	2,279,574	5.8	1,316,787	136.3
Confectionery and ice cream.....	1,473,323	3.8	(1)	(1)	Lumber, planing-mill products, not in- cluding planing mills connected with sawmills.....	2,238,609	6.9	757,973	51.2
Brass, bronze, and copper products.....	1,271,610	4.6	939,140	282.5	Automobiles.....				
Boxes, paper and other, not elsewhere specified.....	1,256,869	12.5	393,372	45.6	Awning, tents, and sails.....				
Printing and publishing, book and job...	1,012,880	2.6	540,038	114.2	Bags, paper, exclusive of those made in paper mills.....				
Automobile bodies and parts.....					Brass, bronze, and copper products.....				
Cash registers and calculating machines..					Carriages and sleds, children's.....				
Chemicals.....					Coffee and spice, roasting and grinding				
Coffee, roasting and grinding.....					Coke, not including gas-house coke.....				
Electrical machinery, apparatus, and supplies.....					Fancy articles, not elsewhere specified..				
Envelopes.....					Glass.....				
Iron and steel, steel works and rolling mills.....	(1)	(1)	(1)	(1)	Iron and steel, blast furnaces.....				
Liquors, malt.....					Iron and steel, wrought pipe.....				
Motorcycles, bicycles, and parts.....					Liquors, malt.....				
Ordnance and accessories.....					Oil, linseed.....				
Paints.....					Pens, fountain and stylographic.....	(1)	(1)	(1)	(1)
Paper and wood pulp.....					Petroleum, refining.....				
Patent medicines and compounds.....					Pickles and sauces.....				
Rubber tires, tubes, and rubber goods, not elsewhere specified.....					Rubber tires, tubes, and rubber goods, not elsewhere specified.....				
Scales and balances.....					Scales and balances.....				
Soap.....					Shipbuilding, steel.....				
SPRINGFIELD.					Slaughtering and meat packing.....				
Agricultural implements.....	7,205,732	27.1	1,444,241	25.1	Springs, steel, automobile.....				
Foundry and machine-shop products ² ...	7,166,220	2.1	3,372,172	88.9	Stoves and hot-air furnaces.....				
Engines, steam, gas, and water.....	4,180,910	9.8	2,886,848	218.2	Structural ironwork, not made in steel works or rolling mills.....				
Musical instruments, piano materials.....	2,036,594	65.9	1,279,044	168.8	Tinware, not elsewhere specified.....				
Automobiles.....					Tobacco, chewing and smoking, and snuff				
Coffins, burial cases, and undertakers' goods.....					Toys and games.....				
Electrical machinery, apparatus, and supplies.....					Wood preserving.....				
Flour-mill and gristmill products.....	(1)	(1)	(1)	(1)	YOUNGSTOWN.				
Iron and steel, steel works and rolling mills.....					Foundry and machine-shop products....	9,604,195	2.8	6,526,250	212.0
Printing and publishing, newspapers and periodicals.....					Bread and other bakery products.....	2,712,504	3.4	2,082,618	337.6
Signs and advertising novelties.....					Printing and publishing.....	2,082,236	2.1	1,290,459	163.0
Slaughtering and meat packing.....					Coke, not including gas-house coke.....				
TOLEDO.					Electrical machinery, apparatus, and supplies.....				
Foundry and machine-shop products ² ...	27,468,943	6.5	20,924,341	319.7	Furniture.....				
Electrical machinery, apparatus, and supplies.....	19,245,500	12.3	16,015,618	495.9	Iron and steel, blast furnaces.....				
Flour-mill and gristmill products.....	13,432,512	15.0	7,617,124	131.0	Iron and steel, steel works and rolling mills.....	(1)	(1)	(1)	(1)
Automobile bodies and parts.....	5,922,578	6.4	(1)	(1)	Iron and steel, wrought pipe.....				

¹ Figures can not be shown without disclosing individual operations.² Includes "iron and steel, tempering and welding" and "machine tools."³ Includes "iron and steel, tempering and welding"; "machine tools"; and "steel barrels, drums, and tanks, portable."⁴ Not reported for 1914.

TABLE 17.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	93,713	44,188	25,970	2,897,497	1,993,080	1,583,155	100.0	100.0	100.0
Owned.....	10,814	12,738	13,012	1,939,666	1,712,136	1,483,628	66.9	85.9	93.7
Steam.....	7,722	8,346	9,246	1,782,512	1,541,212	1,363,720	61.5	77.3	86.1
Engines.....	7,150	(²)	(²)	1,407,558	(²)	(²)	48.6		
Turbines.....	572	(²)	(²)	374,954	(²)	(²)	12.9		
Internal-combustion engines.....	2,797	4,050	3,354	147,039	156,481	103,801	5.1	7.9	5.6
Water.....	295	333	412	10,115	14,443	16,107	0.3	0.7	1.0
Water wheels and turbines.....	227	284	373	9,461	13,930	15,777	0.3	0.7	1.0
Water motors.....	68	49	39	654	513	330	(³)	(³)	(³)
Rented.....	82,899	31,450	12,958	957,831	280,944	99,527	33.1	14.1	6.3
Electric.....	82,899	31,450	12,958	945,341	273,814	93,592	32.6	13.7	5.9
Other.....				12,490	7,130	5,935	0.4	0.4	0.4
Electric.....	129,118	66,137	34,237	1,764,724	823,000	417,844	100.0	100.0	100.0
Rented.....	82,899	31,450	12,958	945,341	273,814	93,592	53.7	33.3	22.4
Generated by establishments reporting.....	46,219	34,687	21,279	819,383	549,186	324,252	46.4	66.7	77.6

¹ Figures for horsepower include for 1909 the amount reported under the head of "Other" owned power.² Not reported separately.³ Less than one-tenth of 1 per cent.

TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All industries..... 1919.	108,606	25,483,869	8,640,711	1,837,653	188,552	45,614,790
Per cent of increase ² 1914.	43,198 151.4	13,927,612 83.0	6,267,733 37.9	678,239 198.7	(1)	50,092,157 -10.1
Agricultural implements.....	27	42,777	11,523	10,525	281	174,734
Automobile bodies and parts.....	579	67,219	5,230	33,113	5,631	225,321
Automobiles.....		200,434	213	93,998	26,529	189,379
Automobile repairing.....	135	10,485	57	88	296	60,590
Boots and shoes, not including rubber boots and shoes.....	8	77,346		6	22	58,620
Boxes, paper and other, not elsewhere specified.....	145	8,582		3	2	17,725
Brass, bronze, and copper products.....	2,154	52,911	16,634	42,113	3,808	192,692
Bread and other bakery products.....	4,841	36,499	17,346	149	3,626	1,528,667
Brick and tile, terra-cotta, and fire-clay products.....	2,453	1,493,487	947	7,742	2,064	896,219
Cars and general shop construction and repairs by steam-railroad companies.....	10,153	715,394	5,095	61,945	1,090	33,449
Cars, steam-railroad, not including operations of railroad companies.....		22,444	582	8,369	2	98,448
Cash registers and calculating machines.....	70	42,297	2,050	2,853	1,009	19,799
Chemicals.....	596	714,592	96,108	226	8,424	73,086
Clothing, men's.....	104	6,059	3	60	53	58,532
Clothing, women's.....	470	11,197			1	90,374
Coke, not including gas-house coke.....		7,995,889	53			37,951
Confectionery and ice cream.....	517	34,862	392	64	1,396	226,468
Copper, tin, and sheet-iron work.....	199	4,712	582	262	167	62,346
Cutlery and edge tools.....	402	5,232	12	56,474	385	14,864
Electrical machinery, apparatus, and supplies.....	2,355	104,243	12,880	31,553	1,860	611,664
Engines, steam, gas, and water.....	339	34,407	6,778	3,498	2,725	282,852
Flour-mill and gristmill products.....	100	105,017	135	2,315	2,554	212,076
Foundry and machine-shop products.....	5,312	764,873	222,524	269,231	21,650	7,146,061
Furniture.....	27	64,753	6		134	108,831
Gas, illuminating and heating.....	1,610	43,067	2,692	12,754	96	18,680
Glass.....	905	339,738	85	16,994	325	5,800,995
Gloves and mittens, cloth, not including gloves made in textile mills.....	300	2,214	9			2,146
Hardware.....		59,341	2,032	8,363	30	1,123,413
Ice, manufactured.....	256	251,359		2	1,645	422,734
Iron and steel, blast furnaces.....		650,212	7,743,804	1,266	6,056	72,842
Iron and steel, steel works and rolling mills.....	1,175	5,096,601	284,874	565,975	9,854	15,294,674
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	2,040	42,840	716	36,534	399	206,835
Iron and steel, forgings, not made in steel works or rolling mills.....	48	250,571	22,987	244,301	368	552,495
Iron and steel, wrought pipe.....	2,002	138,220	12,013	16,804	164	100,739
Knit goods.....	2	11,777	9	105		4,626
Liquors, malt.....	135	262,081		200	823	229,396
Lumber and timber products.....	100	9,665			182	3,518
Lumber, planing-mill products, not including planing mills connected with saw-mills.....	268	197,873	124	225	841	75,123
Machine tools.....	269	61,004	2,955	23,059	734	75,223
Marble and stone work, except slate.....	35	22,163	68	124	598	43,514
Mineral and soda waters.....	112	10,431	74	9	1,325	17,700
Motorcycles, bicycles, and parts.....		10,532	3,000	4,534	198	76,982
Paints.....		22,441	3,312			50,160
Paper and wood pulp.....	275	706,985		5,126		
Patent medicines and compounds.....	217	5,184	21	331	11	20,378
Petroleum, refining.....	39,198	418,777	1,969	52,248	31	137,170
Plumbers' supplies, not elsewhere specified.....	632	5,234	2,006	3,775	249	52,863
Pottery.....	810	225,784		24	221	3,882,784
Printing and publishing, book and job.....	224	9,645	157	6	172	136,495
Printing and publishing, newspapers and periodicals.....	98	18,430	47	15	469	217,270
Rubber tires, tubes, and rubber goods, not elsewhere specified.....	3,730	1,156,810		58,759	23,920	236,332
Safes and vaults.....	948	6,641	398	6,300	164	16,348
Screws, machine.....	15	19,880	8	9,299	106	59,854
Shipbuilding, steel, new vessels and repair work.....	759	68,271	4,338	839	33,073	442,676
Slaughtering and meat packing.....		148,512	204	1,054	2,397	71,438
Springs, steel, automobile.....		13,385		39,945	300	685,080
Stamped and enameled ware, not elsewhere specified.....	4	89,525	1,583	3,020	1	117,555
Steam fittings and steam and hot-water heating apparatus.....		15,664	5,822	14,104		15,834
Stoves and hot-air furnaces.....	110	26,760	20,939	3	4,182	50,557
Stoves, gas and oil.....	36	27,540	650	4,710	618	77,668
Structural ironwork, not made in steel works or rolling mills.....	205	42,091	1,793	9,312	456	58,799
Tinware, not elsewhere specified.....	8	13,669	131	35	7	46,780
Tobacco, cigars and cigarettes.....	306	4,719		1	24	45,401
Tools, not elsewhere specified.....	449	19,808	969	18,663	143	154,243
Wirework, including wire rope and cable, not elsewhere specified.....	3	13,998	1,190	1,307	388	34,885
All other industries.....	20,336	2,345,236	120,522	52,571	14,260	2,008,903
Total for cities ²	96,564	15,742,736	5,818,163	1,493,769	129,015	30,628,258
AKRON.....	3,724	1,150,213	12,413	81,208	27,883	329,410
ALLIANCE.....	7,039	168,716	3,091	12,167	443	15,461
ASHTABULA.....	806	44,142	1,305	6,685	470	377,861
BARBERTON.....		430,856	40,126	17,025	523	84,385
BELLAIRE.....	3	77,059	130,554	121		457,157
BUCYRUS.....	435	72,967	881	4,789	112	34,916
CAMBRIDGE.....		93,914	44		12	99,242
CANTON.....	1,793	657,932	15,802	208,314	1,452	2,561,947
CHILLICOTHE.....		76,068	25	1,264		44,544
CINCINNATI.....	1,602	545,582	21,248	15,109	11,526	1,406,554

¹ Included in figures for fuel oils.² A minus sign (-) denotes decrease.³ Excludes Cleveland Heights and East Youngstown, to avoid disclosure of individual operations.

TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919—Continued.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
CLEVELAND.....	20,604	3,536,718	1,467,347	581,889	43,588	7,040,842
COLUMBUS.....	286	340,702	189,629	62,054	6,525	1,531,402
COSHOCOTON.....		29,047	3,375		157	117,498
CUYAHOGA FALLS.....		10,090	2,290	1,567	2	8,328
DAYTON.....	430	354,049	22,904	20,042	3,099	375,238
EAST CLEVELAND.....	10	420	3			4,667
EAST LIVERPOOL.....	562	34,691	600		44	2,140,231
ELYRIA.....	515	68,475	2,022	5,458	5,348	235,790
FINDLAY.....	73	26,250	400		384	99,238
FREMONT.....	95	32,622	709	38,784	476	91,667
HAMILTON.....	7	174,637	15,857	7,501	270	76,468
IRONTON.....	5	464,848	265,197			268,400
KENMORE.....		404				68
LAKELWOOD.....	60	35,362	5,179	5,278	288	19,625
LANCASTER.....		22,314	692	161	83	219,455
LIMA.....	330	73,140	4,035	15,237	1,714	25,919
LOREAN.....	171	1,989,654	848,575	118,146	6,208	205,895
MANSFIELD.....	1,613	22,315	3,301	14,909	1,524	266,940
MARIETTA.....		6,017	360		19	201,845
MARION.....	1,121	63,370	4,283	37,110	509	360,865
MARTINS FERRY.....		84,651	60,765		1	12,381
MASSILLON.....		87,985	2,007	2,395	388	20,329
MIDDLETOWN.....	228	389,583	3,000	61,243	1,846	1,015,611
NEWARK.....	110	155,380	5,700	6,508	4,829	1,998,305
NEW PHILADELPHIA.....		74,472	536		4	9,524
NILES.....	6	134,302	36,641	8,582	95	47,858
NORWOOD.....	487	75,109	1,683	6,434	994	70,452
PIQUA.....	25	31,281	2,313	72	6	14,239
PORTSMOUTH.....	4	686,995	29,942			135,665
SALEM.....	503	25,579	2,943	1	314	130,470
SANDUSKY.....	3,101	141,242	3,710	5,715	1,474	3,302,614
SPRINGFIELD.....	7	92,121	12,599	11,210	255	1,712,043
STEUERENVILLE.....	510	195,609	231,661		60	681,995
TIFFIN.....	1,414	30,283	2,369	6,521	4	294,514
TOLEDO.....	46,653	1,072,169	266,740	98,945	4,896	1,626,020
WARREN.....	160	31,592	1,135	1,152	561	197,546
YOUNGSTOWN.....	72	1,741,342	2,082,024	29,324	513	212,138
ZANESVILLE.....		90,187	10,739	405	107	410,645

SPECIAL STATISTICS.

For a number of important industries the Census Bureau collects, by means of special schedules, certain details which do not appear on the general schedule. Data for 20 of these industries in Ohio are here presented.

Iron and steel, blast furnaces (Table 19).—This table presents the statistics for the pig-iron industry of the state for 1919, 1914, and 1909. The state ranks second in the industry (Pennsylvania first) and produced 23.2 per cent of the tonnage of the country in 1919, 22.7 per cent in 1914, and 21.2 per cent in 1909. All but one-half of 1 per cent was coke iron in 1919, as compared with 1.1 per cent in 1914 and 1.3 per cent in 1909. The small production made with fuel other than coke in 1919 was made with mixed bituminous coal and coke.

The production in 1919 was an increase of 34 per cent over that of 1914 and 29.9 per cent over 1909, with increases in values of 146.3 per cent and 115.2 per cent, respectively. Iron for steel making—the basic and Bessemer grades—constituted 83.5 per cent of the production in 1919, 84.4 per cent in 1914, and 78.8 per cent in 1909, not including the ferroalloys; while foundry iron constituted 9.2 per cent in 1919, 10.4 per cent in 1914, and 13.2 per cent in 1909. Of the pig-iron output, 57.1 per cent was handled molten in 1919 and 29.4 per cent was machine cast; 53 per cent molten and 31 per cent machine cast in 1914; and 50 per cent molten and 17.3 per cent machine cast in 1909.

TABLE 19.—IRON AND STEEL, BLAST FURNACES: 1919, 1914, AND 1909.

[Ton of 2,240 pounds, except as otherwise stated.]

	1919	1914	1909
MATERIALS.			
Total cost.....	\$137,686,107	\$60,738,524	\$68,424,722
Iron ore:			
Tons.....	12,449,590	9,624,750	9,884,358
Cost.....	\$71,456,065	\$36,348,602	\$41,530,645
Average per ton.....	\$5.75	\$3.80	\$4.25
Scrap, mill cinder, scale, slag, flue dust, etc.:			
Tons.....	759,719	353,518	368,931
Cost.....	\$3,971,192	\$806,739	\$1,041,384
Average per ton.....	\$5.25	\$2.30	\$2.80
Fluxing material:			
Tons.....	3,484,609	2,752,381	2,693,423
Cost.....	\$6,054,043	\$2,796,342	\$2,597,107
Average per ton.....	\$1.75	\$1.00	\$0.95
Fuel for smelting:			
Coke—			
Tons (2,000 lbs.).....	7,715,245	5,816,260	6,050,491
Cost.....	\$46,600,139	\$18,750,140	\$20,433,686
Average per ton.....	\$6.00	\$3.20	\$3.40
Other (bituminous coal, 1919; coal and charcoal, 1914 and 1909).....	\$70,133	\$102,538	\$159,444
All other materials, cost.....	\$9,534,535	\$1,934,163	\$2,362,456
PRODUCTS.			
Total value.....	\$179,233,435	\$72,969,368	\$83,699,238
Pig iron:			
Tons.....	7,073,337	5,279,045	5,446,971
Value.....	\$176,592,690	\$71,686,701	\$82,048,712
Average unit value, ton.....	\$24.95	\$13.60	\$15.05
For consumption in works of company producing—			
Tons.....	5,327,132	3,877,188	3,564,358
Per cent of total.....	75.3	73.4	65.4
Assigned value.....	\$129,343,702	\$52,469,007	\$53,108,589
For sale—			
Tons.....	1,746,205	1,401,857	1,882,613
Per cent of total.....	24.7	26.6	34.6
Value.....	\$50,248,988	\$19,217,694	\$28,940,123
<i>Classified according to smelting fuel.</i>			
Coke:			
Tons.....	7,037,592	5,219,564	5,376,398
Value.....	\$175,207,027	\$70,759,573	\$80,813,570
Other fuel:			
Tons.....	35,745	59,481	70,573
Value.....	\$1,385,663	\$927,128	\$1,236,142
<i>Classified by grades.</i>			
Bessemer..... tons.....	3,356,796	2,880,759	3,456,131
Basic..... tons.....	2,550,134	1,516,905	798,173
Foundry..... tons.....	649,619	541,354	714,322
Malleable..... tons.....	364,614	194,606	364,067
Forge or mill..... tons.....	122,632	75,095	60,805
All other, including direct castings..... tons.....	29,542	4,548	6,121
Ferroalloys..... tons.....	(1)	65,778	47,352
<i>Classified by method of delivery or casting.</i>			
Molten to steel works, etc..... tons.....	4,036,452	2,797,254	2,723,700
Machine cast..... tons.....	2,078,216	1,635,242	945,036
Sand cast..... tons.....	677,157	636,639	1,625,073
Chill cast and direct castings..... tons.....	281,512	209,910	153,162
All other products, value.....	\$2,640,745	\$1,282,667	\$1,650,526

¹ Not included in the blast-furnace industry in 1919: See "Ferroalloys"—Production of blast furnace ferroalloys 36,038 tons of ferrosilicon, value \$1,454,831.

Iron and steel, steel works and rolling mills.—Table 20 presents the state statistics for steel furnaces and hot-rolling mills. The plants produced 24.7 per cent of the rolled, forged, and other classified products of the country in 1919 and in 1914 and 22.1 per cent in 1909. There was an increase of 42.1 per cent in tonnage in 1919, as compared with 1914, and 51.8 per cent with respect to 1909. The total value of the rolled, forged, or other classified products increased 217.5 per cent during the five-year period 1914-1919, and 222.2 per cent from 1909 to 1919. The figures show an average unit value of approximately \$62 per ton in 1919, \$28 in 1914, and \$29 in 1909.

The steel production in 1919, 8,175,960 tons, was approximately 68 per cent of the capacity of the furnaces operating on double turn for 300 working days, as compared with 65.6 per cent in 1914, and 72.3 per cent in 1909.

TABLE 20.—IRON AND STEEL, STEEL WORKS AND ROLLING MILLS: 1919, 1914, AND 1909.

[Ton of 2,240 pounds.]

	1919	1914	1909
MATERIALS.¹			
Total cost.....	\$351,059,673	\$139,576,491	\$139,243,155
Pig iron:			
Tons.....	5,784,072	4,341,857	4,172,114
Cost.....	\$137,971,046	\$59,180,555	\$62,747,551
Ferroalloys—spiegeleisen, ferromanganese, etc.:			
Tons.....	100,927	46,166	37,035
Cost.....	\$18,417,595	\$2,928,818	\$1,694,127
Scrap (not produced in establishment reporting):			
Tons.....	1,365,875	855,163	530,408
Cost.....	\$25,982,418	\$9,452,349	\$8,093,044
Steel, crude and semifinished (not produced in establishment reporting):			
Tons.....	2,812,098	1,902,828	1,858,171
Cost.....	\$115,948,407	\$38,370,551	\$40,356,367
Rolled forms for further manufacture (not produced in establishment reporting):			
Tons.....	9,630	102,981	154,683
Cost.....	\$550,355	\$2,732,071	\$4,438,205
Iron ore:			
Tons.....	157,933	147,464	75,857
Cost.....	\$1,394,362	\$455,440	\$384,303
All other materials, including fuel and rent of power, cost.....	\$80,795,460	\$26,556,707	\$21,527,258
PRODUCTS.			
Total value.....	\$626,370,025	\$205,023,391	\$197,780,043
Rolled, forged, and other classified iron and steel products:			
Tons.....	8,956,138	6,303,890	5,868,660
Value.....	\$554,496,299	\$174,638,132	\$172,105,247
Finished rolled products and forgings—			
Plates and sheets—			
Tons.....	1,676,048	988,997	755,010
Value.....	\$143,189,210	\$38,692,399	\$33,800,604
Black plates or sheets for tinning—			
Tons.....	190,094	176,835	111,158
Value.....	\$16,713,092	\$7,424,689	\$5,868,639
Skelp—			
Tons.....	1,281,747	955,697	799,761
Value.....	\$74,905,772	\$24,478,568	\$22,195,365
Bars for reinforced concrete—			
Tons.....	45,037	77,309	70,978
Value.....	\$2,766,625	\$2,233,658	\$2,063,084
Merchant bars—			
Tons.....	1,065,738		
Value.....	\$89,538,326	1,250,614	1,424,049
All other—			
Tons.....	725,450	\$40,319,111	\$42,888,567
Value.....	\$46,294,339		
Semifinished rolled products (sold or transferred to other works of same company):			
Blooms, billets, and slabs—			
Tons.....	2,493,271	1,708,562	1,975,730
Value.....	\$102,727,692	\$33,187,270	\$42,301,568
Sheet and tin-plate bars—			
Tons.....	1,258,180	1,033,972	1,695,857
Value.....	\$53,028,077	\$20,877,350	\$16,027,395
Unrolled steel (sold or transferred to other works of same company):			
Ingots—			
Tons.....	92,540	8,369	32,223
Value.....	\$3,049,795	\$146,679	\$613,540
Direct castings—			
Tons.....	127,715	103,335	93,926
Value.....	\$22,343,371	\$7,078,409	\$6,343,186
All other products, including scrap and value added to steel or iron rolling mill products by further manufacture, value.....	\$71,873,726	\$30,355,259	\$25,674,796
Steel production.			
Total..... tons.....	8,175,960	5,449,981	4,765,337
Ingots..... tons.....	5,048,245	5,346,646	4,611,411
Castings..... tons.....	127,715	103,335	93,926
Classified according to process:			
Open hearth..... tons.....	5,078,637	2,589,535	1,377,218
Basic..... tons.....	5,028,689	2,554,956	1,306,694
Acid..... tons.....	49,948	34,579	70,522
Bessemer..... tons.....	3,039,293	2,860,129	3,327,351
Crucible and electric..... tons.....	58,030	317	770

¹ Includes material purchased and the quantity and assigned value of that transferred to the establishment reporting from other works of the same company.

² Includes 15,875 tons of muck and scrap bar.

Rubber tires, tubes, and rubber goods (Table 21).—This table presents the quantities and values of the various classes of rubber goods for 1919 and 1914. It shows a remarkable growth in the industry during the five-year period 1914–1919, particularly in the production of automobile tires; pneumatic tires and tubes alone show an increase of 330.7 per cent in the number manufactured. In addition to the statistics contained in the table one establishment in Ohio was engaged exclusively in the manufacture of rubber belting and hose, for which statistics could not be included without the possibility of disclosing individual operations.

TABLE 21.—RUBBER TIRES, TUBES, AND RUBBER GOODS: 1919 AND 1914.

	1919	1914
Number of establishments.....	96	54
Products, total value.....	\$551,118,458	\$109,658,605
Tires:		
Pneumatic—		
Automobile—		
Casings—		
Number.....	19,726,962	
Value.....	\$362,932,865	8,850,625
Inner tubes—		
Number.....	18,391,065	\$71,776,078
Value.....	\$41,430,711	
Motorcycle and bicycle—		
Casings—		
Number.....	1,758,832	
Value.....	\$5,743,923	643,419
Inner tubes—		
Number.....	301,394	\$1,570,244
Value.....	\$417,370	
Solid—		
Truck—		
Number.....	1,072,627	
Value.....	\$36,599,616	(¹)
All other—		
Number.....	1,606,137	\$11,897,710
Value.....	\$3,581,131	
Boots and shoes:		
Heels—		
Pairs.....	89,269,519	(¹)
Value.....	\$10,285,011	(¹)
Rubberized fabrics:		
Automobile and carriage—		
Yards.....	6,877,538	(²)
Value.....	\$783,254	(²)
All other—		
Yards.....	20,661,588	(²)
Value.....	\$4,346,991	(²)
Belting, value.....	\$5,730,341	\$2,154,696
Hose, value.....	\$7,554,285	\$4,194,576
Packing, value.....	\$2,794,756	\$851,807
Druggists' and stationers' sundries, value.....	\$5,661,572	\$2,513,949
Hard rubber goods, value.....	\$12,851,621	(³)
All other manufactures of rubber, value.....	\$47,136,950	\$13,541,459
All other products, value.....	\$3,288,091	\$1,158,096

¹ Figures not available.² Not reported separately.

Automobiles, including bodies and parts (Table 22).—The following table shows the number and value of the different classes of automobiles manufactured during 1919, 1914, and 1909. The total number of automobiles of all kinds manufactured increased 143,005, or 211.9 per cent, while the total value of all products, including bodies and parts, increased \$293,725,893, or 342.7 per cent, during the five-year period 1914–1919. Of the automobiles manufactured in 1919, 93.9 per cent were pleasure vehicles, 79.6 per cent of which were touring cars. Trucks, which represent 78.9 per cent of the business vehicles manu-

factured in the state during 1919, show an increase in number of 2,533, or 33.3 per cent.

TABLE 22.—AUTOMOBILES, INCLUDING BODIES AND PARTS: 1919, 1914, AND 1909.

PRODUCT.	1919		1914		1909	
	Num-ber.	Value.	Num-ber.	Value.	Num-ber.	Value.
Total value ¹		\$379,436,478		\$85,710,585		\$38,838,734
Automobiles, total.....	210,488	198,916,292	67,483	69,465,370	14,299	23,550,112
Pleasure vehicles.....	197,647	170,025,986	58,548	53,835,446	13,493	22,630,602
Touring cars.....	157,354	123,097,625	49,421	44,800,434	6,479	14,307,361
Closed cars.....	22,349	30,913,944	2,010	4,251,172	1,072	2,526,891
Runabouts.....	12,137	8,673,108	7,117	4,783,840	2,900	2,948,588
Roadsters.....	5,807	7,341,309	(²)	(²)	83,042	2,848,023
Business vehicles.....	12,841	28,890,306	8,935	15,629,924	806	919,250
Trucks.....	10,131	22,958,704	7,598	13,611,631	202	386,845
All other ³	2,710	5,931,602	1,337	2,018,293	604	532,805
Chassis.....	30,902	45,670,445	(⁴)	(⁴)	(⁴)	(⁴)
Trailers.....	4,327	2,741,960	(⁵)	(⁵)	(⁵)	(⁵)
All other products, in- cluding bodies and parts and repairs.....		132,107,781		16,245,215		15,288,642

¹ In addition, 531 automobiles, valued at \$944,283 in 1919, and 102 automobiles valued at \$159,850 in 1914, were manufactured by establishments engaged primarily in other industries.

² Included with "Runabouts" in 1914.

³ Reported as "All other" in 1909.

⁴ Includes delivery wagons, to avoid disclosure of individual operations.

⁵ Not reported separately in 1914 and 1909.

Slaughtering and meat packing (Table 23).—This table presents, for the census years 1919, 1914, and 1909, data as to the kind, number, and cost of animals slaughtered; the cost of all other materials, which includes that for poultry, horses, goats and kids, dressed meat purchased for curing, cottonseed oil for making lard compounds and substitutes, curing materials, seasoning, refrigeration, containers, whole milk and butter for making oleomargarine, fuel, rent of power, mill supplies, and freight; and the quantity and value of the principal products that can be shown without disclosing the operations of individual establishments. The value of minor specified products are grouped under "All other products" and include canned beef and pork, canned sausage, lard compounds and substitutes, oleo oil, oleomargarine, hoofs, horns, and horntips, strips and waste, skins (other than cattle, calf, and sheep), hog and cattle hair, and stock food. The value of goat meat, dressed poultry, and horse meat is included in "Edible offal and all other fresh meat."

The actual growth of the industry is measured by the increase of 31.9 per cent in the number of animals slaughtered in 1919 over 1914. This increase was in all classes, except sheep and lambs, the largest being 630,696, or 33 per cent, in the number of hogs. The abnormal increase in the total cost of animals in this period—\$83,636,764, or 159.2 per cent—was due to the high prices prevailing as a result of the World War. The production of fresh meat was 109,966,632 pounds more in 1919 than in 1914, and that of cured meat was 56,450,247 pounds more. The total meat production, including sausage, in 1919, was 575,933,554 pounds, and including canned meat and sausage, 580,484,484 pounds.

TABLE 23.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$150,598,439	\$58,296,970	\$43,639,913
Animals slaughtered, cost.....	\$136,165,871	\$52,529,107	\$38,633,858
Beefes—			
Number.....	410,680	269,719	265,191
Cost.....	\$35,531,201	\$16,375,682	\$11,613,314
Calves—			
Number.....	249,487	141,353	150,223
Cost.....	\$5,579,538	\$1,931,710	\$1,599,585
Sheep and lambs—			
Number.....	258,291	300,337	229,985
Cost.....	\$2,103,814	\$1,418,726	\$872,989
Hogs—			
Number.....	2,542,304	1,911,608	1,725,285
Cost.....	\$92,951,318	\$32,802,989	\$24,547,970
All other materials, cost.....	\$14,432,568	\$5,767,863	\$5,006,055
PRODUCTS.			
Total value.....	\$170,337,892	\$64,960,396	\$49,795,368
Fresh meat, value.....	\$75,899,849	\$29,255,155	\$19,753,089
Beef—			
Pounds.....	104,018,954	118,627,111	119,597,666
Value.....	\$27,876,643	\$13,009,363	\$10,047,217
Veal—			
Pounds.....	20,548,843	11,157,758	12,921,896
Value.....	\$4,768,452	\$1,569,471	\$1,498,687
Mutton and lamb—			
Pounds.....	8,583,313	9,245,870	7,738,777
Value.....	\$1,877,852	\$1,169,054	\$763,364
Pork—			
Pounds.....	157,378,994	101,775,391	60,320,259
Value.....	\$39,853,273	\$12,689,369	\$6,950,354
Edible offal and all other fresh meat—			
Pounds.....	11,674,845	11,432,187	6,728,033
Value.....	\$1,523,629	\$337,898	\$493,467
Cured meat:			
Beef, pickled and other cured—			
Pounds.....	1,278,410	1,695,084	4,450,976
Value.....	\$287,209	\$245,076	\$328,334
Pork, pickled and other cured—			
Pounds.....	178,055,163	121,188,242	121,988,353
Value.....	\$52,916,363	\$16,632,373	\$16,202,666
Sausage:			
Pounds.....	34,395,032	31,047,288	24,240,181
Value.....	\$7,424,495	\$3,692,691	\$2,337,781
Meat puddings, scrapple, etc.:			
Pounds.....	3,309,651	3,592,848	(¹)
Value.....	\$573,665	\$328,865	(¹)
Lard:			
Pounds.....	64,513,888	67,135,365	58,518,712
Value.....	\$18,053,472	\$7,147,098	\$6,566,768
Tallow, oleo stock, and stearin:			
Pounds.....	9,482,201	24,845,291	11,088,893
Value.....	\$1,338,112	\$1,683,720	\$640,001
Grease and soap stock:			
Pounds.....	5,959,317	4,821,543	(¹)
Value.....	\$722,089	\$244,193	(¹)
Casings:			
Pounds.....	1,364,408	855,544	(¹)
Value.....	\$336,971	\$90,136	(¹)
Fertilizers and fertilizer materials:			
Tons (2,000 lbs.).....	10,654	6,602	9,103
Value.....	\$509,736	\$170,422	\$166,354
Hides and pelts:			
Cattle			
Number.....	410,680	269,719	
Pounds.....	21,707,928	16,146,170	
Value.....	\$6,643,486	\$2,391,107	410,573
Calf—			
Number.....	238,194	140,608	16,900,033
Pounds.....	3,031,426	1,680,454	\$1,970,069
Value.....	\$1,552,668	\$290,575	
Sheep—			
Number.....	256,740	300,259	232,775
Value.....	\$573,312	\$292,851	\$194,720
All other products, value.....	\$3,506,465	\$2,496,134	\$1,635,606

¹ Not reported separately.

Electrical machinery, apparatus, and supplies (Table 24).—This table presents statistics of the various kinds of electrical machinery, apparatus, and supplies manufactured in Ohio for 1919. Certain classes of products, among which were incandescent lamps and carbons, were reported to a greater value than some of those for which statistics are presented in the table, but can not be shown separately without the

possibility of disclosing the operations of individual establishments.

Ohio ranked second in the industry in the value of products, reporting 15.8 per cent of the electrical products of the United States. It led all states in the production of generating apparatus and batteries, furnishing 45 per cent and 32.2 per cent of the respective totals for the United States.

TABLE 24.—ELECTRICAL MACHINERY, APPARATUS, AND SUPPLIES: 1919.

PRODUCT.	Value of products.
Total value ¹	\$156,924,143
Generating apparatus and parts.....	37,741,663
Batteries.....	29,694,726
Household and industrial apparatus and devices.....	21,726,024
Motors.....	19,760,215
Magnetoignition apparatus.....	11,121,179
Transformers and feeder potential regulators.....	3,879,236
Switchboards, panel boards, and cut-out cabinets for light and power.....	772,553
Electric measuring instruments.....	640,477
Pole line hardware.....	432,639
Circuit fittings.....	397,926
Therapeutic apparatus and X-ray tubes.....	378,624
Telephone apparatus.....	373,150
Telegraph apparatus.....	353,194
Rectifying apparatus.....	312,238
All other electrical machinery, apparatus, and supplies.....	22,970,139
All other products.....	4,697,487
Amount received for custom work and repairing.....	1,672,543

¹ In addition, electrical machinery, apparatus, and supplies to the value of \$1,082,661 were reported by establishments engaged primarily in other industries.

Printing and publishing (Tables 25 and 26).—Table 25 gives the number and aggregate circulation per issue for all classes of newspaper and periodical publications reported for the census years 1919, 1914, and 1909.

Of the 165 dailies reported, 128, with a circulation of 1,933,072, were published in the afternoon, an increase of 29.8 per cent over the afternoon circulation in 1914. The circulation of Sunday newspapers during the same period increased 31 per cent.

TABLE 25.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	1,030	1,173	1,181	16,101,202	15,707,597	10,753,143
Daily.....	165	181	184	2,497,955	2,484,548	1,542,855
Sunday.....	29	28	25	1,087,733	830,219	645,869
Semiweekly.....	41	47	54	76,071	171,215	122,106
Triweekly.....	8	6	6	18,640	13,925	9,700
Weekly.....	513	641	699	3,282,812	3,110,883	2,913,730
Semi-monthly.....	10	18	14	314,298	669,734	516,064
Monthly.....	179	183	152	6,082,211	5,501,906	2,685,470
Quarterly.....	44	57	37	2,697,832	2,874,657	2,288,134
All other classes ¹	11	12	10	43,650	50,510	29,215

¹ Includes, in 1919, 11 bimonthly publications; in 1914, 11 bimonthly publications and 1 semiannual; in 1909, 8 bimonthly publications and 2 "All other."

Table 26 shows the number and circulation of foreign-language publications, in comparison with publications in English, by period of issue. The marked decreases shown in both number and circulation are due chiefly to the discontinuance of a number of German papers. The increase shown in the circulation of

foreign-language dailies is due to the reported circulation of a newspaper printed in Rumanian. Of the 84 publications, with a circulation of 573,441, printed in foreign languages in 1919, 46 were German, 8 Polish, 6 Italian, 5 Hungarian, 5 Slovenian, 4 Rumanian, 3 Bohemian, 1 Greek, 1 Lithuanian, 1 Serbo-Croatian, 1 English and German, 1 English and Italian, 1 English and Slovenian, and 1 Yiddish.

TABLE 26.—FOREIGN-LANGUAGE PUBLICATIONS COMPARED WITH ENGLISH, BY PERIOD OF ISSUE: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	Cen- sus year.	TOTAL.		IN ENGLISH.		IN FOREIGN LANGUAGES.	
		Num- ber.	Aggregate circulation per issue.	Num- ber.	Aggregate circulation per issue.	Num- ber.	Aggregate circulation per issue.
Total.....	1919	1,030	16,101,202	946	15,527,761	84	573,441
	1914	1,173	15,707,597	1,055	14,879,708	118	827,889
	1909	1,181	10,753,143	1,052	9,919,063	129	834,080
Daily.....	1919	165	2,497,955	153	2,308,227	12	189,728
	1914	181	2,481,548	169	2,353,583	12	130,965
	1909	184	1,542,855	173	1,453,190	11	89,665
Sunday.....	1919	29	1,087,733	26	1,031,994	3	55,739
	1914	28	830,219	23	742,519	5	87,700
	1909	25	645,869	18	588,729	7	57,140
Semiweekly and triweekly.	1919	49	94,711	42	76,811	7	17,900
	1914	53	185,140	45	164,144	8	20,996
	1909	60	131,806	52	111,438	8	20,368
Weekly.....	1919	543	3,282,812	500	3,114,338	43	168,474
	1914	641	3,110,883	579	2,783,531	62	327,352
	1909	699	2,913,730	630	2,543,916	69	369,814
Monthly.....	1919	179	6,082,211	169	6,042,584	10	39,627
	1914	183	5,501,906	167	5,391,458	16	110,448
	1909	152	2,685,470	133	2,550,482	19	134,988
Quarterly ¹	1919	65	3,055,780	56	2,953,807	9	101,973
	1914	87	3,594,901	72	3,444,473	15	150,428
	1909	61	2,833,413	46	2,671,308	15	162,105

¹ Includes, in 1919, 10 semimonthly and 11 bimonthly publications, 1 of each in a foreign language; in 1914, 18 semimonthly and 11 bimonthly publications and 1 semiannual, of which, 3 semimonthly and 2 bimonthly publications were in foreign languages; in 1909, 14 semimonthly and 8 bimonthly publications and 2 "All other," of which, 5 semimonthlies, 1 bimonthly, and 1 "All other" were in foreign languages.

Flour-mill and gristmill products (Table 27).—This table shows the chief products of the industry in Ohio at the censuses of 1919, 1914, and 1909.

TABLE 27.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$89,386,619	\$45,171,200	\$48,063,353
Wheat flour:			
Barrels.....	5,773,328	5,707,781	5,723,536
Value.....	\$63,201,713	\$27,852,222	\$30,508,109
Rye flour:			
Barrels.....	22,044	43,674	33,215
Value.....	\$189,374	\$220,344	\$146,786
Buckwheat flour:			
Pounds.....	3,853,140	5,848,216	7,436,813
Value.....	\$220,015	\$171,359	\$180,267
Corn meal and corn flour:			
Barrels.....	370,810	524,941	865,250
Value.....	\$2,714,357	\$1,696,817	\$2,528,843
Hominy and grits:			
Pounds.....	268,000	\$3,822,280	\$0,855,875
Value.....	\$9,380	\$1,380,905	\$1,247,605
Bran and middlings:			
Tons.....	228,892	255,720	(¹)
Value.....	\$10,535,906	\$5,880,947	(¹)
Feed and offal:			
Tons.....	192,610	249,551	502,301
Value.....	\$12,003,914	\$7,536,048	\$12,406,370
All other cereal products, value.....	\$132,727	\$58,671	\$931,283
All other products, value.....	\$329,233	\$337,887	\$144,090

¹ Included in "Feed and offal."

Of the total value of products for the industry in the state, wheat flour formed 70.7 per cent in 1919 and 61.6 per cent in 1914. Bran and middlings and feed and offal combined formed 25.3 per cent and 29.7 per cent, respectively, for the two years. Illustrative of the high prices of commodities in 1919 as compared with 1914, the value of wheat flour increased 126.9 per cent while the quantity increased only 1.1 per cent during the five-year period.

Boots and shoes (Tables 28 and 29).—Table 28 gives the number of pairs and value of the various kinds of boots and shoes manufactured in the state in 1919, 1914, and 1909. The total number of pairs of boots and shoes reported in 1919 shows a small increase as compared with 1914 and a slight decrease as compared with 1909. Women's shoes constituted 69.2 per cent of the total output for the state and outnumbered by far all other kinds. Ohio ranked fifth in the industry in value of products among the states in 1919 and 1914.

TABLE 28.—BOOTS AND SHOES, BY CLASSES: 1919, 1914, AND 1909.

KIND.	1919	1914	1909
Aggregate value.....	\$71,354,850	\$32,773,922	\$30,529,468
Boots and shoes:			
Total number of pairs.....	17,571,593	17,161,199	17,693,316
Total value.....	\$70,349,255	\$31,572,556	(¹)
Men's—			
Number of pairs.....	898,507	1,419,925	1,702,194
Value.....	\$3,689,495	\$3,375,001	(¹)
Boys' and youths'—			
Number of pairs.....	1,804,699	1,734,957	1,872,330
Value.....	\$4,695,926	\$2,724,537	(¹)
Women's—			
Number of pairs.....	12,157,284	10,966,825	11,154,083
Value.....	\$56,783,280	\$21,978,519	(¹)
Misses' and children's—			
Number of pairs.....	2,711,103	3,039,492	3,464,709
Value.....	\$5,180,554	\$3,494,499	(¹)
All other footwear:			
Number of pairs.....	298,555	812,242	1,215,569
Value.....	\$630,245	\$1,052,362	(¹)
All other products, including amount received for work done for others, value.....	\$375,350	\$149,004	(¹)

¹ Figures not available.

TABLE 29.—BOOTS AND SHOES—NUMBER OF PAIRS, BY METHOD OF MANUFACTURE: 1919 AND 1914.

KIND.	Cen- sus year.	NUMBER OF PAIRS, BY METHOD OF MANUFACTURE.			
		Total.	Welted.	McKay.	Turned and wood or metal fastened.
Boots and shoes.....	1919	17,571,593	5,255,955	10,871,298	1,444,340
	1914	17,161,199	6,027,083	9,914,687	1,219,429
Men's, boys', and youths'.	1919	2,703,206	636,758	1,266,448	.....
	1914	3,154,882	1,217,226	1,796,438	141,218
Women's.....	1919	12,157,284	4,530,980	6,181,964	1,444,340
	1914	10,966,825	4,603,637	5,332,200	1,030,988
Misses' and children's.....	1919	2,711,103	88,217	2,622,886	.....
	1914	3,039,492	206,220	2,786,049	47,223
All other footwear.....	1919	298,555	.....	112,419	* 186,136
	1914	812,242	.....	470,055	* 342,187

¹ Includes "Turned" and "Wood or metal fastened" to avoid disclosure of individual operation.

² Includes "Welted."

TABLE 32.—BRICK, TILE, POTTERY, AND OTHER CLAY PRODUCTS: 1919, 1914, AND 1909—Continued.

	1919	1914	1909
Drain tile:			
Net tons.....	246,158	(1)	(1)
Value.....	\$2,042,432	\$1,589,565	\$2,032,528
Sewer pipe:			
Net tons.....	481,219	(1)	(1)
Value.....	\$6,198,589	\$4,691,719	\$3,009,798
Tile:			
Building, hollow—			
Net tons.....	664,744	(1)	(1)
Value.....	\$1,755,610	\$2,280,544	\$804,637
Ceramic mosaic—			
Square feet.....	2,258,018		
Value.....	\$565,220		
Faience—			
Square feet.....	729,717		
Value.....	\$461,048		
Flooring—			
Square feet.....	2,298,344	(1)	(1)
Value.....	\$770,627	\$2,331,079	\$1,912,343
Roofing—			
Squares.....	48,334		
Value.....	\$645,435		
Wall—			
Square feet.....	2,450,396		
Value.....	\$833,013		
Pottery:			
Red earthenware.....	\$293,249		
Red and brown, white-lined cooking ware.....	\$632,844	\$300,453	\$145,137
Stoneware and yellow and Rockingham ware.....	\$2,050,864	\$1,592,102	\$1,806,798
White ware, semiporcelain, and semivitreous porcelain.....	\$18,664,031	\$10,227,806	\$8,884,189
China, bone china, delft, and bone china ware.....	\$817,195		
Sanitary ware, including bathtubs, laundry tubs, etc.....	\$1,301,024	\$619,931	\$310,254
Porcelain electrical supplies.....	\$3,717,207	\$1,472,359	\$1,146,694
All other products.....	\$2,184,432	\$3,319,251	\$1,811,429

¹ Figures not available.

The large increase in 1919, as compared with 1914, was an increase in values and not in quantity production, the number of brick manufactured in 1919 showing a decided decrease, as compared with 1914.

The average number of wage earners in 1919—23,399—was 14.4 per cent less than the average number in 1914. This decrease, however, was confined to the "brick, tile, terra-cotta, and fire-clay" branch of the industry, the "pottery" branch showing an increase of 2.2 per cent.

Paper and wood pulp (Table 33).—This table shows the quantity and cost of materials used, the quantity and value of products, and detailed information regarding equipment for 1919, 1914, and 1909.

Ohio ranked seventh among the states in 1919 in the value of paper and wood pulp produced. Boards were the principal product of the industry in the state, forming 26.5 per cent of the total value of paper and wood pulp products in 1919. Book paper represented 23.8 per cent and fine paper 22 per cent of all products of this industry at the last census. Building, roofing, and sheathing paper, tissue paper, blotting paper, and other grades, amounting to \$4,948,781, and other products, principally paper bags and boxes, to the amount of \$4,835,851, have been included in the item "All other products," in order to avoid disclosing the operations of individual establishments.

TABLE 33.—PAPER AND WOOD PULP: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$35,710,348	\$16,169,274	\$10,898,285
Pulp wood:			
Cords.....	26,967	29,352	(1)
Cost.....	\$247,157	\$187,090	\$443,206
Wood pulp, purchased, total:			
Tons.....	2 151,467	2 139,451	80,201
Cost.....	\$13,904,166	\$9,392,759	\$3,743,972
Ground—			
Tons.....	10,683	9,383	4,778
Cost.....	\$312,755	\$106,447	\$110,372
Soda fiber—			
Tons.....	25,827	33,855	27,326
Cost.....	\$2,244,624	\$1,499,053	\$1,303,292
Sulphite fiber—			
Tons.....	99,384	86,559	47,167
Cost.....	\$9,885,543	\$4,335,536	\$2,292,178
Sulphate fiber—			
Tons.....	13,729	9,017	3 930
Cost.....	\$1,175,094	\$340,218	\$38,130
Screenings, mechanical and chemical, cost.....	\$86,150	\$21,505	(1)
Rags, including cotton and flax waste and sweepings:			
Tons.....	20,544	37,303	33,744
Cost.....	\$1,979,338	\$978,771	\$833,509
Paper stock, including high-grade shavings, and old and waste paper:			
Tons.....	180,863	200,996	93,239
Cost.....	\$4,439,189	\$2,307,643	\$1,286,432
Manila stock, including jute bagging, rope, waste, thread, etc.:			
Tons.....	18,802	39,230	25,949
Cost.....	\$1,257,347	\$850,851	\$550,430
Straw:			
Tons.....	79,448	97,007	70,322
Cost.....	\$1,051,585	\$473,599	\$335,951
China clay:			
Tons.....	17,782	(1)	(1)
Cost.....	\$238,616	(1)	(1)
Bleaching powder:			
Tons.....	5,342	(1)	(1)
Cost.....	\$213,750	(1)	(1)
Fuel and rent of power, cost.....	\$2,947,471	\$1,280,584	\$1,049,097
All other materials, cost.....	\$9,431,729	\$3,637,977	\$2,289,858
PRODUCTS.			
Total value.....	\$55,098,196	\$23,284,192	\$16,965,260
Book, cover, plate, and coated paper:			
Tons.....	81,191	89,006	75,607
Value.....	\$13,136,652	\$7,712,459	\$6,752,103
Fine paper:			
Tons.....	55,006	24,155	19,579
Value.....	\$12,096,730	\$2,597,349	\$2,306,016
Wrapping paper:			
Tons.....	32,922	34,837	42,548
Value.....	\$5,488,802	\$1,954,766	\$2,389,232
Boards:			
Tons.....	211,335	171,726	106,016
Value.....	\$14,591,350	\$5,537,694	\$3,159,290
Straw—			
Tons.....	48,618	39,496	37,710
Value.....	\$3,347,752	\$1,075,535	\$853,100
All other—			
Tons.....	162,717	132,230	68,306
Value.....	\$11,243,628	\$4,492,159	\$2,306,190
All other products, value.....	\$9,784,632	\$5,481,924	\$2,358,619
Wood pulp produced (including that used in mills where manufactured), tons.....	13,490	14,399	25,935
EQUIPMENT.			
Paper machines:			
Total number.....	109	99	118
Capacity, yearly, tons.....	557,850	478,244	414,650
Fourdrinier—			
Number.....	43	44	63
Capacity per 24 hours, tons.....	774	659	575
Cylinder—			
Number.....	66	55	55
Capacity per 24 hours, tons.....	1,114	965	717
Pulp equipment:			
Grinders, number.....	4	4	5
Digesters, total number.....	8	7	11
Soda fiber, number.....	4	4	3
Sulphite fiber, number.....	3	3	8
Sulphate fiber, number.....	1		
Capacity, yearly, tons of pulp, total.....	10,678	20,032	54,400
Ground, tons.....	6,532	6,532	7,800
Soda, tons.....	5,528	4,500	3,000
Sulphite, tons.....	4,150	9,000	43,600
Sulphate, tons.....	1,000		

¹ Not reported.

² Includes 1,844 tons of mechanical and chemical screenings in 1919 and 637 tons in 1914.

³ Reported as "Other chemical fiber."

⁴ Not reported separately.

Paint and varnish (Table 34).—This table presents the statistics of products for the paint and varnish industries, 1919, 1914, and 1909. They represent 94 establishments in 1919, 61 primarily engaged in the manufacture of paints and 33 in the manufacture of varnishes, as compared with 95 (65 paint and 30 varnish) in 1914 and 87 in 1909.

TABLE 34.—PAINT AND VARNISH, 1919, 1914 AND 1909.

PRODUCT.	1919	1914	1909
Total value.....	\$50,477,810	\$19,326,576	\$13,617,189
Paint industry.....	\$36,848,364	\$14,824,073	\$13,617,189
Varnish industry.....	\$13,629,446	\$4,502,503	
Pigments.....	\$1,324,268	\$717,352	\$949,613
Paints.....	\$31,331,603	\$11,401,735	\$7,674,867
In paste form, ground in oil—			
White lead—			
Pounds.....	35,408,775	28,941,498	24,057,529
Value.....	\$4,140,545	\$1,905,492	\$1,532,797
All other—			
Pounds.....	18,074,246	13,219,598	12,237,952
Value.....	\$3,254,743	\$1,085,100	\$907,156
In oil, ready mixed for use—			
Gallons.....	11,785,606	8,187,973	6,769,267
Value.....	\$23,936,315	\$8,411,143	\$5,334,914
Varnishes and japs.....	\$11,637,510	\$5,255,127	\$3,721,889
Oleoresinous varnishes—			
Gallons.....	4,815,175	3,288,124	3,790,073
Value.....	\$7,038,545	\$2,887,622	\$2,413,323
Spirit varnishes, not turpentine—			
Gallons.....	95,890	96,309	77,786
Value.....	\$209,003	\$83,236	\$106,848
Damar and similar turpentine and benzine varnishes—			
Gallons.....	1,045,715	150,659	309,080
Value.....	\$1,857,080	\$171,309	\$259,204
Drying japs and driers—			
Gallons.....	842,920	1,227,184	
Value.....	\$708,887	\$556,181	1,715,173
Baking japs and lacquers—			
Gallons.....	970,759	644,062	\$672,443
Value.....	\$1,046,705	\$340,961	
All other varnishes and japs, value	\$777,280	\$1,215,818	\$270,071
Fillers:			
Liquid—			
Gallons.....	270,850	281,063	292,867
Value.....	\$321,816	\$163,538	\$155,860
Dry or in paste—			
Pounds.....	2,709,141	2,970,795	\$623,364
Value.....	\$243,726	\$175,981	\$159,570
Putty—			
Pounds.....	4,066,210	1,875,714	
Value.....	\$194,089	\$40,393	
Water paints and kalsomine, dry or in paste—			
Pounds.....	2,648,260	1,500,616	\$955,381
Value.....	\$156,465	\$45,569	
All other products, value.....	\$5,268,333	\$1,526,881	

¹ In addition, products within the scope of these industries to the value of \$1,065,385 in 1919 and \$145,005 in 1914 were reported as subsidiary products by establishments engaged primarily in the manufacture of other products.

Chemicals (Table 35).—This table gives the statistics for the chemical industries for 1919, 1914, and 1909. The production shown for 1919 comprises all products reported by 57 establishments primarily engaged in the manufacture of chemicals—including those of coal-tar origin, and sulphuric, nitric, and mixed acids—amounting to \$44,181,018 and chemicals of the value of \$5,904,572 manufactured by establishments included under other industry classifications. In 1914 there were 33 establishments in the industries constituting the group, and in 1909, 37 establishments. The increase of 300 per cent in the value of all products for the period 1914–1919, as compared with 50 per cent for the 1909–1914 period, cannot be accepted as a measure of growth for the industry owing to the abnormal prices prevailing in 1919.

TABLE 35.—CHEMICALS: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$50,085,590	\$12,490,369	\$8,361,985
The classified industries:			
Chemicals.....	32,719,466	11,388,140	7,742,045
Coal-tar products.....	9,494,586		
Sulphuric, nitric, and mixed acids.....	1,966,966		
Subsidiary chemical products from other industries.....	5,904,572	1,102,229	619,940
Acids.....	7,547,185	2,435,302	1,664,157
Sodas, sodium, and compounds.....	15,074,794	4,530,911	2,285,769
Compressed and liquefied gases.....	3,330,742	591,248	245,541
Glycerin.....	4,364,434	1,246,795	1,140,639
Other chemicals.....	17,433,841	2,810,810	2,532,633
All other products.....	2,334,594	875,303	493,256

Engines, steam, gas, and water (Table 36).—This table shows the number, by groups of indicated horsepower capacity, and the value of engines of the various types manufactured in 1919 and 1914. A notable development in this industry is indicated, not only by the general increase in the number and total rated horsepower capacity of engines reported, but by the obvious trend toward the construction of larger units of power.

TABLE 36.—ENGINES, STEAM, GAS, AND WATER: 1919 AND 1914.

PRODUCT.	NUMBER BY INDICATED HORSEPOWER CAPACITY.						Indicated horsepower capacity.	Value.
	Under 10.	10 but under 50.	50 but under 100.	100 but under 500.	500 but under 1,000.	1,000 and over.		
Total:								
1919.....	6,499	41,159	693	574	34	118	1,651,014	\$44,750,880
1914.....	27,466	5,231	1,160	829	48	33	468,430	9,471,281
The engine industry:								
1919.....	3,702	40,576	693	509	34	118	1,533,600	42,850,677
1914.....	24,980	4,233	589	289	35	21	334,504	6,861,351
Subsidiary products from other industries:								
1919.....	2,797	583	—	65	—	—	117,414	1,900,203
1914.....	2,486	998	571	40	13	12	133,926	2,609,930
Steam engines:								
1919.....	151	716	37	188	34	118	403,188	12,759,736
1914.....	102	135	31	100	29	15	84,902	1,199,169
Internal-combustion engines:								
1919.....	5,445	7,045	196	1,300	—	—	332,604	7,528,724
1914.....	10,038	4,533	200	111	11	7	202,284	3,224,263
Automobile:								
1919.....	—	4,648	—	—	—	—	92,727	1,155,004
1914.....	—	2,016	—	—	—	—	67,605	209,122
Marine:								
1919.....	450	40	10	4	—	—	5,880	209,219
1914.....	2,934	580	32	14	—	—	26,177	534,747
Stationary:								
1919.....	2,268	2,357	186	184	—	—	113,461	4,768,979
1914.....	7,104	1,937	108	97	11	7	108,502	2,480,394
Portable and other:								
1919.....	2,727	—	—	112	—	—	120,556	1,395,522
1914.....	—	—	—	—	—	—	—	—
Traction engines (not locomotive):								
1919.....	663	22,967	—	—	—	—	748,071	15,351,101
1914.....	—	4,542	712	7	—	—	63,081	2,114,953
Water wheels, motors, and turbines:								
1919.....	240	10,431	460	86	—	—	167,151	713,834
1914.....	17,326	21	217	111	8	11	118,163	832,029
Parts of engines:								
1919.....	—	—	—	—	—	—	—	2,466,025
1914.....	—	—	—	—	—	—	—	619,535
Other foundry and machine-shop products:								
1919.....	—	—	—	—	—	—	—	2,768,899
1914.....	—	—	—	—	—	—	—	793,144
All other products:								
1919.....	—	—	—	—	—	—	—	3,162,561
1914.....	—	—	—	—	—	—	—	688,188

¹ Includes group "500 but under 1,000."

Includes group "Under 10."

Petroleum, refining (Table 37).—This table presents the statistics for the various products of the petroleum-refining industry for 1919, 1914, and 1909. The figures show an increase for the period 1914 to 1919 of 46.5 per cent in quantity and 288 per cent in value of products. The average value of these oils, as a whole, was \$7 per barrel in 1919 as compared with \$2.65 in 1914, and \$2.30 in 1909. Gasoline and the naphthas constituted 46.4 per cent of the quantity of gas and oil produced; the fuel oils, 24.9 per cent; illuminating oils 18.2 per cent; and lubricating oils 10.6 per cent.

TABLE 37.—PETROLEUM, REFINING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$31,958,077	\$9,924,445	\$8,144,583
Crude petroleum:			
Barrels (42 gallons).....	7,364,934	5,026,251	4,833,675
Cost.....	\$23,525,792	\$7,901,948	\$4,987,558
Distillates purchased and rerun:			
Barrels.....	215,299	(1)	(1)
Cost.....	\$1,850,950	(1)	(1)
Casing-head gasoline purchased:			
Barrels.....	66,055	(1)	(1)
Cost.....	\$621,149	(1)	(1)
Chemicals and filtering material, cost.....	\$386,854	(1)	(1)
Containers and materials therefor, cost.....	\$928,764	\$416,286	\$652,487
All other materials, cost.....	\$4,614,568	\$1,546,211	\$2,504,538
PRODUCTS.			
Total value.....	\$43,282,801	\$11,169,189	\$10,753,738
Naphthas and lighter products:			
Gasoline—			
Gallons.....	112,624,051	41,076,200	
Value.....	\$21,212,560	\$3,568,534	26,991,400
Naphtha, benzine, etc.—			
Gallons.....	12,918,803	3,307,200	\$2,224,253
Value.....	\$2,537,857	\$167,483	
Illuminating oils:			
Gallons.....	49,228,787	50,652,900	60,209,300
Value.....	\$4,793,592	\$2,072,015	\$2,618,762
Fuel oils:			
Distillates—			
Gallons.....	17,114,604		
Value.....	\$981,324		
Gas oils.....			
Gallons.....	20,984,326	64,900,800	62,897,500
Value.....	\$1,293,445	\$1,844,644	\$1,302,720
Residual fuel oils—			
Gallons.....	29,220,972		
Value.....	\$1,737,366		
Lubricating oils:			
Gallons.....	28,745,834	21,042,150	27,176,300
Value.....	\$5,503,207	\$1,900,185	\$2,062,387
Greases:			
Gallons.....	3,532,166	816,550	903,800
Value.....	\$1,404,675	\$185,951	\$207,225
Paraffin wax:			
Gallons.....	5,136,396	2,819,750	2,726,800
Value.....	\$1,385,244	\$410,929	\$470,760
Other refinery products, value.....	\$1,006,102	\$322,272	
All other products, value.....	\$1,427,429	\$696,876	\$1,867,601
EQUIPMENT (CAPACITY, GALLONS).			
Stills:			
Steam—			
Number.....	37	23	38
Capacity.....	1,366,760	921,242	1,116,738
Fire—			
Number.....	168	151	160
Capacity.....	5,135,245	4,450,446	3,330,264
Pressure—			
Number.....	73	(1)	(1)
Capacity.....	905,664	(1)	(1)
Storage tanks for:			
Crude petroleum—			
Number.....	47	20	61
Capacity.....	18,757,000	14,126,000	21,521,000
Refined petroleum—			
Number.....	561	321	
Capacity.....	45,393,000	26,905,000	
Fuel oil—			
Number.....	93	80	614
Capacity.....	32,446,000	26,771,000	78,612,000
Other—			
Number.....	569	531	
Capacity.....	57,538,000	49,754,000	

¹ Figures not available.

The corresponding distribution percentages for 1914 and 1909 indicate the steadily increasing proportion of gasoline and naphthas produced, exceeding that of fuel oil for the first time at the census of 1919.

Glass (Table 38).—This table shows the value of the various classes of glass products, and the kind and quantity of the principal varieties of pressed and blown glass and bottles and jars for 1919, 1914, and 1909. Of the establishments engaged in the manufacturing of glass in Ohio in 1919, 16 produced building glass, 20 pressed and blown glass, and 11 bottles and jars. Pressed and blown glass was the most important product of the glass industry in this state, forming 47.5 per cent of the total value of products in 1919.

Ohio ranks first among the states in the production of electric bulbs, shades, globes, and other gas and electrical goods, and beer, soda, and mineral water bottles; second in the production of tableware, jelly glasses, tumblers, and goblets, lamps, chimneys, blown tumblers, stem ware, and bar goods, and liquor bottles and flasks; and third in the manufacture of window glass and fruit jars.

TABLE 38.—GLASS: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$35,240,877	\$19,191,342	\$14,358,274
Building glass.....	7,204,826	3,805,669	2,744,513
Pressed and blown glass.....	16,740,016	6,490,498	6,160,707
Bottles and jars.....	8,579,661	7,422,402	4,717,658
All other products.....	2,716,374	1,472,773	735,396
<i>Kind and quantity of pressed and blown glass and bottles and jars.</i>			
Pressed and blown glass:			
Tableware, 100 pieces.....	676,427	525,573	248,815
Jellies, tumblers, and goblets, dozens.....	3,997,554	3,050,566	4,133,100
Lamps, dozens.....	226,302	182,449	50,147
Chimneys, dozens.....	1,401,609	1,102,386	1,215,815
Lantern globes, dozens.....	979,107	318,886	213,586
Shades, globes, and other gas and electrical goods (excluding electric bulbs) dozens.....	6,081,251	625,019	641,896
Blown tumblers, stem ware, and bar goods, dozens.....	2,820,669	1,739,548	2,255,805
Cut ware, dozens.....	240,176	15,333	6,000
Bottles and jars:			
Beer, soda, and mineral, dozens.....	1,116,857	1,220,253	585,924
Liquors and flasks, dozens.....	257,503	545,541	222,764
Fruit jars, gross.....	240,707	73,645	21,626
Packers' and preservers', gross.....	294,542	299,673	138,269

Agricultural implements (Table 39).—This table gives the value of the principal classes of agricultural implements manufactured in the state for 1919, 1914, and 1909.

TABLE 39.—AGRICULTURAL IMPLEMENTS: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$26,556,031	\$17,484,615	\$14,440,461
Plows and cultivators.....	6,701,388	4,627,191	3,062,194
Harvesting implements.....	2,223,127	2,573,726	2,675,727
Seed separators.....	1,193,874	1,364,209	858,106
Planters and seeders and all other agricultural implements, including parts.....	12,606,934	6,158,170	7,536,850
All other products.....	2,676,472	2,379,464	
Amount received for repair work.....	1,149,236	383,855	307,554

The figures do not indicate any particular growth in this industry during the five-year period, although the total value of products increased 51.9 per cent. Plows and cultivators were the products of chief value.

forming 25.2 per cent of the total value of products in 1919. Ohio ranked fourth among the states in the manufacture of agricultural implements in 1919 and third in 1914.

Leather, tanned, curried, and finished (Table 40).—This table shows the quantity and cost of materials used and the quantity and value of the principal products for 1919, 1914, and 1909.

There was an increase of 29 per cent in the number, and 100.7 per cent in the cost of cattle hides treated in 1919, as compared with 1914. The value of products during the same period more than doubled. Upholstery leather for furniture, automobiles, and carriages was the product of chief value at each census. Sole and upper leather are shown in combination to avoid the possibility of disclosing the operations of individual establishments. Upper leather includes case, bag, and strap, rough, bookbinder's, belting, welting, saddlery, and finished splits.

Although the value has increased, due to the prevalence of higher prices at each succeeding census, the statistics indicate a steadily diminishing output of harness leather.

TABLE 40.—LEATHER, TANNED, CURRIED, AND FINISHED: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$18,817,791	\$8,506,253	\$7,719,604
Cattle hides:			
Number.....	594,193	460,521	514,226
Cost.....	\$11,096,508	\$5,530,059	\$5,179,537
All other raw stock, cost.....	\$4,283,842	\$1,668,206	\$1,157,205
Fuel and rent of power, cost.....	\$193,028	\$105,086	\$89,269
All other materials, cost.....	\$3,244,413	\$1,202,902	\$1,293,593
PRODUCTS.			
Total value.....	\$25,008,070	\$11,627,916	\$10,127,836
Sole and upper leather, value.....	\$9,771,961	\$3,789,369	\$1,903,510
Upholstery leather (automobile, furniture, and carriage), value.....	\$7,820,184	\$3,404,590	\$3,734,827
Harness leather:			
Sides.....	219,455	335,127	363,981
Value.....	\$3,157,361	\$2,802,957	\$2,540,892
All other leather, value.....	\$3,849,187	\$1,135,467	\$1,682,630
All other products, value.....	\$284,237	\$486,763	\$265,277
Work on materials for others, value.....	\$125,140	\$8,770	\$700

¹ Does not include upper leather made from skins.

Laundries (Table 41).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 41, however, summarizes the statistics for such laundries in the state of Ohio for 1919 and 1914.

TABLE 41.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	277	296	-6.4
Persons engaged.....	8,316	8,434	-1.4
Proprietors and firm members.....	273	309	-11.7
Salaried employees.....	1,003	800	19.6
Wage earners (average number).....	7,040	7,265	-3.1
Primary horsepower.....	12,107	10,909	11.0
Capital.....	\$8,204,599	\$5,096,162	62.0
Salaries and wages.....	6,122,025	3,999,649	53.2
Salaries.....	1,418,377	839,435	69.0
Wages.....	4,703,648	3,157,194	49.0
Paid for contract work.....	64,089	2,555	2,498.4
Rent and taxes.....	315,093	180,002	75.0
Cost of materials.....	2,874,537	1,361,546	111.1
Amount received for work done.....	12,528,344	7,822,491	60.2

¹ A minus sign (-) denotes decrease.

Dyeing and cleaning (Table 42).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this table. Statistics for such establishments are not included in the general tables nor in the totals for manufacturing industries for censuses since 1900. This presentation is the first of its kind that has been made since the census statistics were confined to manufacturing industries as distinguished from the hand trades, household industries, etc.

TABLE 42.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	173
Persons engaged.....	2,113
Proprietors and firm members.....	165
Salaried employees.....	254
Wage earners (average number).....	1,594
Primary horsepower.....	2,714
Capital.....	\$2,630,374
Salaries and wages.....	2,011,590
Salaries.....	453,306
Wages.....	1,528,284
Paid for contract work.....	10,518
Rent and taxes.....	150,742
Cost of materials.....	893,349
Amount received for work done.....	4,657,055

Custom sawmills and custom gristmills (Tables 43 and 44).—Statistics for custom sawmills and custom gristmills are not included in the general tables nor in the totals for manufacturing industries. Data for these custom mills were not collected at the census of 1914.

Tables 43 and 44, however, summarize the statistics for such mills for 1919 and 1909. The value of products for custom sawmills represents the amount charged for work performed, and that for custom gristmills the selling value of the grain milled.

TABLE 43.—CUSTOM SAWMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	262	262	.....
Persons engaged.....	478	732	-34.7
Proprietors and firm members.....	337	340	-0.9
Salaried employees.....	141	391	-63.9
Wage earners (average number).....	5,898	5,398	9.3
Primary horsepower.....	\$325,159	\$336,846	-3.5
Capital.....	.....	150	.....
Salaries.....	107,626	107,849	-0.2
Wages.....	3,292	(?)	.....
Rent and taxes.....	31,668	3,980	695.7
Cost of materials.....	290,022	286,189	1.3
Amount received for work done.....	.....	.....	.....

¹ A minus sign (-) denotes decrease; percentages are omitted where base is less than 100.

² Figures not available.

TABLE 44.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	171	152	12.5
Persons engaged.....	350	301	16.3
Proprietors and firm members.....	190	199	-4.5
Salaried employees.....	47	7	.....
Wage earners (average number).....	113	95	.....
Primary horsepower.....	5,737	5,125	11.9
Capital.....	\$1,601,188	\$503,988	217.7
Salaries and wages.....	153,065	32,860	365.8
Salaries.....	33,887	2,842	1,092.4
Wages.....	119,178	30,018	297.0
Rent and taxes.....	18,579	(?)	.....
Cost of materials ²	2,464,123	981,496	151.1
Value of products ³	2,989,096	1,189,853	151.2

¹ A minus sign (-) denotes decrease; percentages are omitted where base is less than 100.

² Figures not available.

³ Includes estimate of all grain ground.

GENERAL TABLES.

Table 45 gives, for 1919, 1914, and 1909, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products for selected industries in the state and in the cities of Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Springfield, Toledo, and Youngstown, and for each of the cities in the state having from 10,000 to 50,000 inhabitants, for which comparative figures are available, similar data for all industries combined.

Table 46 presents, for 1919, for the state as a whole and for Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Springfield, Toledo, and Youngstown, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments, and the statistics for all industries combined for each of the cities in the state having from 10,000 to 50,000 inhabitants.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.								Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1919	16,125	730,733	2,897,497	\$944,652	\$2,911,948	\$5,100,309	Butter, cheese, and condensed milk.	1919	267	2,132	10,401	\$2,290	\$59,415	\$60,013
	1914	15,658	510,436	1,993,080	317,924	1,020,782	1,782,808		1914	286	1,480	6,677	1,049	15,968	19,326
	1909	15,138	446,934	1,583,155	245,450	824,202	1,437,936		1909	325	1,067	3,386	557	7,665	9,690
Agricultural implements	1919	46	4,931	10,470	5,675	12,967	26,556	Canning and preserving ²	1919	124	2,951	7,105	2,065	11,515	17,290
	1914	59	5,464	11,677	3,828	7,810	17,485		1914	135	2,507	7,079	946	5,897	8,951
	1909	55	5,997	9,867	3,155	6,319	14,440		1909	107	2,009	4,244	532	3,102	4,660
Aluminum manufactures.	1919	20	1,840	4,721	2,747	6,673	11,132	Carriages and wagons and materials.	1919	152	2,213	5,361	2,255	5,654	10,946
	1914	8	216	592	122	245	515		1914	341	5,997	13,381	3,839	8,561	16,192
	1909	8	216	592	122	245	515		1909	407	8,815	14,771	4,647	11,414	21,949
Artificial stone products	1919	339	721	1,932	830	1,405	2,993	Cars and general shop construction and repairs by electric-railroad companies.	1919	60	1,903	2,545	2,270	2,116	4,725
	1914	403	954	2,949	535	763	1,945		1914	48	1,879	3,687	1,228	1,077	2,346
	1909	299	802	1,325	404	499	1,378		1909	49	1,818	3,635	722	801	1,691
Automobiles, including bodies and parts.	1919	281	45,882	79,039	63,410	250,981	379,436	Cars and general shop construction and repairs by steam-railroad companies.	1919	117	35,245	50,650	50,664	39,590	96,454
	1914	102	18,752	30,249	13,411	55,330	85,711		1914	88	21,639	31,389	9,471	16,054	33,286
	1909	75	12,130	14,433	7,746	18,522	38,839		1909	71	20,728	19,422	12,726	14,266	28,690
Awnings, tents, and sails	1919	41	851	1,732	754	3,736	6,937	Cars, steam-railroad, not including operations of railroad companies.	1919	8	2,177	12,685	3,336	21,315	28,146
	1914	38	615	348	299	1,270	2,131		1914	5	2,885	6,420	2,434	8,558	11,796
	1909	30	392	260	163	853	1,387		1909	6	2,282	4,410	1,304	4,195	6,451
Bags, paper, exclusive of those made in paper mills.	1919	11	694	785	654	9,139	12,610	Cement.....	1919	6	655	13,514	975	1,514	3,339
	1914	9	646	853	305	1,831	2,893		1914	7	849	6,975	521	890	2,112
	1909	8	557	508	240	1,638	2,393		1909	9	887	12,685	544	638	1,465
Belting, leather.....	1919	10	102	166	107	1,138	1,550	Chemicals.....	1919	37	3,670	35,049	5,474	15,296	32,719
	1914	10	78	216	56	543	730		1914	29	2,017	18,751	1,460	6,726	11,388
	1909	8	107	405	80	795	1,080		1909	33	1,132	11,715	749	4,748	7,742
Blackening and cleansing and polishing preparations.	1919	67	171	258	161	1,093	2,469	Clothing, men's, including shirts.	1919	278	11,839	3,038	10,079	33,830	65,559
	1914	54	104	237	53	339	798		1914	257	10,758	2,948	4,903	13,756	27,622
	1909	49	103	297	50	297	672		1909	342	9,950	1,794	4,050	12,920	24,869
Boots and shoes, including cut stock. ¹	1919	67	14,360	9,463	12,743	41,913	72,970	Clothing, women's.....	1919	175	8,258	2,008	8,642	26,077	48,704
	1914	73	14,674	9,945	7,132	19,883	33,642		1914	170	9,775	1,719	5,137	12,090	22,882
	1909	72	16,026	8,925	6,646	18,872	31,551		1909	153	8,843	1,505	4,272	10,291	19,493
Boxes, paper and other, not elsewhere specified.	1919	58	2,952	2,893	2,035	4,805	10,030	Coffee and spice, roasting and grinding.	1919	43	1,088	3,105	934	22,877	29,271
	1914	49	2,456	1,941	1,557	4,190	7,843		1914	35	822	2,062	385	10,184	13,312
	1909	46	2,530	1,825	830	1,931	3,635		1909	39	762	2,186	352	8,277	11,224
Brass, bronze, and copper products.	1919	92	4,264	10,915	5,894	16,178	27,802	Coffins, burial cases, and undertakers' goods.	1919	20	1,148	1,983	1,182	2,840	6,475
	1914	84	2,277	4,393	1,557	4,190	7,843		1914	19	1,252	2,268	702	1,294	2,966
	1909	82	2,232	4,214	1,372	3,533	6,572		1909	24	1,245	2,289	525	1,324	3,061
Bread and other bakery products.	1919	1,621	9,091	12,582	9,906	49,956	78,819	Coke, not including gas-house coke.	1919	13	3,407	43,119	6,559	33,172	46,514
	1914	1,634	7,665	8,978	4,783	17,295	30,561		1914	5	489	2,325	352	1,607	2,157
	1909	1,467	5,972	5,398	3,371	13,666	23,007		1909	4	246	1,250	120	640	851
Brick, tile, pottery, and other clay products. ²	1919	436	23,399	73,894	24,490	18,973	60,848	Confectionery and ice cream. ⁴	1919	380	5,451	14,385	4,571	21,822	39,185
	1914	549	27,334	76,432	16,487	12,176	38,667		1914	292	3,965	8,332	1,764	8,363	14,342
	1909	703	23,985	64,520	12,155	8,665	30,531	Cooperage and wooden goods, not elsewhere specified.	1919	74	1,032	3,060	1,054	4,081	6,185
Brooms, from broom corn.	1919	79	341	352	313	935	1,706		1914	95	1,516	4,037	818	2,547	3,946
	1914	77	345	377	155	454	840		1909	113	1,663	3,453	803	2,216	3,516
	1909	82	393	328	172	692	1,079								
Brushes.....	1919	19	816	1,124	954	1,676	3,904								
	1914	16	677	848	298	732	1,544								
	1909	22	425	675	158	625	1,219								

¹ Includes "boot and shoe findings" in 1914 and 1909.² Excludes "sand-lime brick" in 1919 and 1914.³ Includes "canning and preserving, fruits and vegetables," and "pickles, preserves and sauces" for all years; but excludes "canning and preserving, fish," for 1919 and 1914, to avoid disclosure of individual operations.⁴ Includes "chewing gum" in 1914.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.								Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Copper, tin, and sheet-iron products. ¹	1919	325	9,092	11,246	\$9,338	\$26,550	\$18,256	House-furnishing goods, not elsewhere specified.	1919	29	340	793	\$245	\$1,427	\$2,165
	1914	288	7,448	8,483	4,500	14,450	25,059		1914	26	320	895	162	996	1,430
	1909	221	6,598	6,352	3,163	11,622	19,086		1909	22	364	1,069	143	924	1,560
Cordials and flavoring sirups.	1919	8	106	89	100	1,403	2,090	Ice, manufactured.....	1919	141	1,952	34,930	2,618	2,898	10,208
	1914	8	110	96	46	536	890		1914	132	1,277	27,978	904	876	3,134
	1909	8	110	96	46	536	890		1909	97	892	19,058	559	564	2,270
Cutlery and tools, not elsewhere specified.	1919	168	8,624	16,236	11,430	11,696	36,782	Ink, printing.....	1919	8	397	2,184	515	3,574	5,515
	1914	81	3,199	8,079	1,898	1,961	6,612		1914	7	254	1,913	190	1,354	2,764
	1909	70	2,820	6,567	1,518	1,650	5,036		1909	8	183	1,437	131	809	1,907
Dairymen's, poultrymen's, and apiarists' supplies.	1919	14	445	690	430	2,056	3,471	Instruments, professional and scientific.	1919	20	601	415	534	338	1,424
	1914	18	442	1,002	233	722	1,277		1914	28	457	436	254	247	868
	1909	18	479	916	262	527	1,149		1909	20	457	436	254	247	868
Dyeing and finishing textiles, exclusive of that done in textile mills.	1919	6	339	3,551	384	744	1,514	Iron and steel, blast furnaces.	1919	42	9,793	359,224	20,224	137,686	179,233
	1914	5	382	4,100	191	444	706		1914	33	5,786	232,179	5,171	60,739	72,969
	1909	5	382	4,100	191	444	706		1909	40	7,295	215,739	5,090	68,425	88,699
Electrical machinery, apparatus, and supplies.	1919	189	26,672	42,753	30,652	72,297	156,924	Iron and steel, steel works and rolling mills.	1919	86	73,025	865,036	137,281	381,060	626,370
	1914	119	12,695	17,771	7,409	17,482	36,121		1914	70	40,397	642,958	38,004	139,676	265,023
	1909	115	8,073	11,959	3,847	7,226	18,777		1909	75	38,586	515,813	28,014	139,243	197,780
Explosives.....	1919	12	304	4,093	417	1,474	2,790	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	1919	23	4,778	11,053	6,020	10,349	23,451
	1914	11	311	5,046	188	972	1,439		1914	15	2,365	6,167	1,323	2,002	4,651
	1909	11	358	2,692	204	1,104	1,719		1909	17	2,797	4,782	1,336	3,421	6,267
Fertilizers.....	1919	23	1,197	7,179	1,501	8,071	14,042	Iron and steel, forgings, not made in steel works or rolling mills.	1919	38	5,931	21,030	7,623	18,686	39,563
	1914	24	1,005	4,739	590	4,627	7,246		1914	29	2,308	7,440	1,570	3,937	6,752
	1909	27	841	3,059	368	2,535	4,435		1909	30	2,002	4,912	1,117	2,221	4,044
Flags, banners, regalia, society badges, and emblems.	1919	21	1,017	552	813	1,937	4,420	Iron and steel, wrought pipe.	1919	8	4,434	10,289	7,210	23,730	37,968
	1914	17	1,074	487	531	1,203	2,605		1914	5	2,285	8,193	1,535	6,152	9,868
	1909	13	1,262	568	523	1,509	3,026		1909	5	1,081	3,770	640	2,507	3,418
Flavoring extracts.....	1919	44	325	419	347	4,800	6,596	Jewelry.....	1919	52	658	297	619	1,769	3,380
	1914	34	100	183	47	417	908		1914	57	477	348	337	403	1,265
	1909	35	356	116	252	619	1,255		1909	35	356	116	252	619	1,255
Flour-mill and gristmill products.	1919	577	2,122	47,830	2,439	77,102	80,397	Knit goods.....	1919	34	4,407	2,688	3,033	11,079	18,779
	1914	649	2,363	53,524	1,506	38,957	45,171		1914	38	3,411	2,740	1,502	5,033	8,654
	1909	678	2,585	52,250	1,415	41,353	48,093		1909	39	3,149	1,613	1,072	3,851	6,433
Food preparations, not elsewhere specified.	1919	98	1,857	10,256	2,107	37,414	46,340	Labels and tags.....	1919	9	228	244	216	550	1,156
	1914	76	1,523	5,709	827	20,035	27,346		1914	7	92	63	44	122	250
	1909	61	1,020	3,254	455	8,271	10,837		1909	7	92	63	44	122	250
Foundry and machine-shop products. ²	1919	2,001	114,299	266,208	148,032	249,275	572,079	Leather goods ⁴	1919	141	1,241	946	1,067	4,451	7,771
	1914	1,379	73,103	159,172	48,318	77,503	178,855		1914	187	1,743	1,437	966	3,473	5,728
	1909	1,218	64,617	112,538	38,015	64,560	145,837		1909	86	1,890	1,399	879	2,859	4,599
Foundry supplies.....	1919	28	213	2,008	234	1,963	3,259	Leather, tanned, curried, and finished.	1919	24	1,565	5,063	2,172	18,818	25,008
	1914	15	120	1,016	57	241	549		1914	28	1,605	4,450	1,054	8,506	11,638
	1909	15	120	1,016	57	241	549		1909	36	1,884	4,244	1,083	7,720	10,128
Fur goods.....	1919	36	207	236	253	579	1,201	Lime.....	1919	30	1,191	9,175	1,262	1,701	4,021
	1914	25	136	41	100	149	423		1914	38	1,416	7,374	777	706	2,334
	1909	18	167	12	74	206	411		1909	39	1,273	3,872	553	598	1,620
Furnishing goods, men's. ³	1919	19	553	212	390	2,171	3,599	Liquors, malt.....	1919	73	3,327	35,924	4,453	7,096	25,161
	1914	51	2,667	867	723	2,700	4,236		1914	101	5,340	38,048	4,416	9,190	31,930
	1909	63	2,568	917	668	3,054	4,623		1909	105	4,356	31,690	3,267	6,563	25,332
Furniture and refrigerators.	1919	167	8,481	17,287	8,062	14,899	35,823	Looking-glass and picture frames.	1919	18	519	663	462	852	2,050
	1914	213	7,831	16,317	4,469	7,429	16,259		1914	14	410	835	258	331	913
	1909	228	8,232	15,951	4,142	7,242	16,259		1909	14	410	835	258	331	913
Gas and electric fixtures and lamps and reflectors.	1919	49	1,934	4,013	2,266	5,912	10,552	Lubricating greases.....	1919	8	70	232	82	915	2,030
	1914	52	1,832	2,868	1,021	2,600	4,899		1914	8	73	134	46	356	703
	1909	56	1,437	2,356	748	1,777	3,503		1909	8	73	134	46	356	703
Glass.....	1919	44	10,935	37,831	12,112	12,652	35,241	Lumber and timber products. ⁵	1919	1,005	9,685	50,296	10,225	31,250	54,144
	1914	39	10,997	34,871	7,053	7,046	19,191		1914	1,188	11,921	61,162	7,104	18,017	31,853
	1909	45	10,159	16,198	5,977	4,688	14,358		1909	1,390	13,456	69,255	6,701	19,972	34,597
Glass, cutting, staining, and ornamenting.	1919	37	532	405	472	1,400	2,566	Marble and stone work, except slate.	1919	191	1,504	8,179	1,912	2,518	7,202
	1914	40	481	360	295	428	979		1914	213	2,523	10,353	1,636	2,049	5,264
	1909	40	481	360	295	428	979		1909	198	2,012	7,070	1,161	1,450	3,847
Grease and tallow, not including lubricating greases.	1919	54	711	4,424	860	3,793	5,639	Mattresses and spring beds, not elsewhere specified.	1919	40	553	1,054	565	2,595	4,199
	1914	34	400	2,010	270	671	1,216		1914	43	934	2,228	500	1,998	3,427
	1909	23	300	1,264	171	591	1,017		1909	38	961	2,069	435	1,682	3,307
Grindstones.....	1919	17	529	2,950	477	200	1,090	Millinery and lace goods, not elsewhere specified.	1919	41	1,033	464	782	1,893	3,632
	1914	10	546	1,866	255	61	483		1914	30	911	409	433	1,005	1,913
	1909	9	1,277	5,228	597	385	1,498		1909	31	1,357	603	478	1,459	2,744
Hats and caps, other than felt, straw, and wool.	1919	31	492	92	471	1,667	2,916	Mineral and soda waters	1919	217	867	2,199	989	3,255	6,769
	1914	28	431	58	224	574	1,040		1914	202	575	1,059	342	860	2,004
	1909	25	406	83	174	422	804		1909	174	457	1,050	237	452	1,395

¹ Includes "stamped and enameled ware, not elsewhere specified," and "tinware, not elsewhere specified."² Includes "automobile repairing," "bells," "engines, steam, gas, and water," "gas machines and gas and water meters," hardware," "hardware, saddlery," "iron and steel, cast-iron pipe," "iron and steel, tempering and welding," "machine tools," "plumbers' supplies, not elsewhere specified," "pumps, steam and other power," "steam fittings and steam and hot-water heating apparatus," "steel barrels, drums, and tanks, portable," and "structural ironwork, not made in steel works or rolling mills."³ Includes "suspenders, garters, and elastic woven goods," but excludes "collars and cuffs," to avoid disclosure of individual operations.⁴ Includes "saddlery and harness" and "trunks and valises," but excludes "pocketbooks," to avoid disclosure of individual operations.⁵ Includes "boxes, wooden packing, except cigar boxes," "lumber, planing-mill products, not including planing mills connected with sawmills," and "window and door screens and weather strips."

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
Minerals and earths, ground or otherwise treated.	1919 1914 1909	44 19 4	1,960 433 64	24,006 3,967 1,340	\$2,348 227 34	\$2,219 352 223	\$6,861 780 331	Salt.....	1919 1914 1909	5 8 8	535 813 648	8,259 4,937 4,034	\$675 411 361	\$1,380 1,204 1,090	\$2,668 2,197 1,807
Mirrors, framed and un- framed, not elsewhere specified.	1919 1914 1909	10 11 8	243 115 94	312 246 198	148 76 56	712 163 182	1,099 361 291	Screws, machine.....	1919 1914 1909	19 7 6	4,226 1,464 324	10,594 2,885 915	5,043 942 204	5,309 1,368 178	16,599 3,275 598
Models and patterns, not including paper patterns.	1919 1914 1909	138 98 74	1,192 519 441	6,731 1,036 673	1,915 393 294	1,704 183 159	5,460 896 670	Shipbuilding, including boat building.	1919 1914 1909	28 29 39	11,412 2,879 3,200	14,219 9,661 8,125	19,668 1,939 1,705	23,902 1,909 2,462	57,483 4,717 5,676
Motorcycles, bicycles, and parts.	1919 1914 1909	9 9 6	2,480 752 942	4,289 1,951 1,895	3,339 518 686	5,130 1,634 1,066	10,874 2,931 2,308	Show cases.....	1919 1914 1909	13 11 14	273 302 349	804 711 569	278 178 173	557 280 307	1,177 619 668
Musical instruments, pianos and organs, and materials.	1919 1914 1909	22 27 30	1,820 1,745 1,841	2,747 2,201 2,254	1,840 1,022 1,092	3,154 1,673 1,922	6,797 3,545 3,926	Signs and advertising novelties.	1919 1914 1909	70 50 28	1,907 1,372 1,096	2,161 1,800 1,125	1,605 734 505	3,167 1,744 941	7,904 3,551 2,598
Oil, linseed.....	1919 1914 1909	3 3 4	270 150 213	1,516 1,603 1,347	275 116 83	7,761 3,642 3,081	9,369 3,958 3,627	Slaughtering and meat packing. ⁴	1919 1914 1909	171 169 158	5,605 3,619 3,066	21,205 13,037 9,873	7,116 1,488 1,857	154,796 59,681 44,347	175,692 66,674 50,804
Oil, not elsewhere speci- fied.	1919 1914 1909	21 20 21	302 138 157	597 495 330	366 105 102	6,546 1,888 1,252	8,986 2,676 2,037	Smelting and refining, not from the ore.	1919 1914 1909	7 8 6	88 89 57	130 697 280	109 86 41	1,682 311 174	2,288 578 379
Optical goods.....	1919 1914 1909	31 20 17	365 175 67	176 102 43	371 103 42	806 216 109	1,885 617 274	Sporting and athletic goods.	1919 1914	11 9	762 531	590 411	662 254	1,198 432	2,854 986
Paint and varnish.....	1919 1914 1909	94 95 87	2,929 2,107 1,535	10,450 8,721 5,572	3,186 1,295 904	32,307 11,339 8,570	50,478 19,327 13,617	Stationery goods, not elsewhere specified.	1919 1914 1909	12 15 14	766 708 982	754 1,118 2,130	769 394 383	2,162 906 996	4,646 2,174 2,434
Paper and wood pulp...	1919 1914 1909	49 48 47	6,899 5,430 4,673	64,420 50,013 51,402	8,094 3,378 2,419	35,710 16,109 10,898	55,098 23,284 16,965	Stereotyping and elec- trotyping.	1919 1914 1909	17 16 14	488 306 207	1,350 952 323	544 238 143	822 223 171	1,975 747 475
Paper goods, not else- where specified. ¹	1919 1914 1909	29 29 28	2,776 2,269 2,040	4,919 3,702 1,909	2,507 1,179 882	11,888 4,197 3,434	21,261 8,148 6,307	Stoves and hot-air fur- naces, including gas and oil stoves.	1919 1914 1909	101 105 102	10,398 8,575 7,274	13,065 10,648 9,478	12,951 5,751 4,217	21,628 8,415 6,300	48,587 19,982 15,358
Patent medicines and compounds and drug- gists' preparations. ²	1919 1914 1909	267 252 261	1,695 2,102 905	1,670 1,949 1,568	1,207 479 385	7,415 3,018 1,888	18,922 7,734 5,859	Sugar, beet.....	1919 1914	5 3	630 282	7,180 3,520	1,127 209	5,108 877	7,249 2,051
Paving materials.....	1919 1914 1909	77 66 5	966 1,957 56	23,303 23,885 874	896 1,169 33	1,041 723 68	2,952 3,507 210	Surgical appliances and artificial limbs.	1919 1914 1909	34 32 23	291 162 112	142 59 58	228 93 82	605 150 82	1,139 528 284
Petroleum, refining.....	1919 1914 1909	11 7 10	2,431 1,519 1,659	7,383 4,920 4,324	3,246 1,025 1,028	31,958 9,924 8,145	43,283 11,169 10,754	Tobacco, cigars and cigarettes. ⁵	1919 1914 1909	676 937 1,146	10,995 12,025 12,631	696 581 1,401	7,182 4,799 4,505	13,116 7,129 12,075	28,854 17,239 28,907
Photo-engraving.....	1919 1914 1909	30 26 20	417 411 277	280 366 215	647 396 242	277 170 109	1,813 974 576	Toys and games.....	1919 1914 1909	59 36 19	1,525 1,103 387	2,246 941 253	1,225 520 175	1,918 799 379	4,716 1,909 763
Poultry, killing and dressing, not done in slaughtering and meat- packing establish- ments.	1919 1914	13 5	105 46	105 45	112 26	1,681 440	1,917 498	Umbrellas and canes...	1919 1914 1909	10 13 15	208 267 287	53 194 82	133 101 105	918 480 607	1,345 836 1,005
Printing and publish- ing. ³	1919 1914 1909	1,780 1,783 1,655	19,174 18,070 15,756	27,268 24,308 18,417	21,665 12,800 9,355	38,317 17,070 11,904	112,029 55,609 41,657	Wall plaster and com- position flooring.	1919 1914 1909	16 22 23	689 826 259	3,776 3,617 1,823	908 370 106	2,267 770 434	4,431 1,714 935
Pumps, not including power pumps.	1919 1914 1909	20 17 20	1,265 1,014 897	2,127 1,403 1,322	1,401 639 517	2,767 1,404 1,271	7,393 3,277 2,747	Washing machines and clothes wringers.	1919 1914	15 11	477 171	767 416	511 91	2,033 348	2,946 713
Roofing materials.....	1919 1914 1909	20 18 11	1,138 715 428	7,249 2,076 3,229	1,432 429 251	7,909 2,319 3,147	12,785 3,906 3,900	Wirework, including wire rope and cable, not elsewhere specified.	1919 1914 1909	47 43 60	1,822 810 1,455	3,631 1,281 2,511	2,110 456 823	4,335 2,167 1,806	8,710 3,435 3,620
Rubber tires, tubes, and rubber goods, not else- where specified.	1919 1914 1909	96 54 37	63,637 21,705 10,382	170,402 58,672 25,885	90,981 14,578 5,660	299,363 58,737 32,442	551,118 109,659 53,911	Wood preserving.....	1919 1914	6 5	444 163	1,330 446	504 119	2,313 585	3,496 937
Safes and vaults.....	1919 1914 1909	18 10 10	1,821 1,760 2,014	2,704 5,603 3,177	1,907 1,153 1,321	3,440 1,483 2,162	9,478 4,337 5,488	Wood, turned and carved.	1919 1914 1909	47 61 83	892 985 1,208	4,610 4,250 4,611	874 520 333	1,931 1,286 1,063	3,722 2,284 2,460
								All other industries.....	1919 1914 1909	787 750 996	49,746 38,949 38,583	110,100 82,515 70,108	55,098 22,801 19,66-	236,579 84,678 75,173	396,894 157,606 143,510

¹ Includes "envelopes."² Includes "perfumery and cosmetics."³ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."⁴ Includes "sausage."⁵ Includes "tobacco, chewing and smoking, and snuff" in 1909.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of materi- als.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of materi- als.	Value of prod- ucts.
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
AKRON.....	1919	304	65,054	174,812	\$94,779	\$314,372	\$558,982	CINCINNATI.....	1919	2,239	69,680	121,526	\$68,650	\$296,280	\$500,041
All industries.	1914	305	24,680	65,942	17,310	66,062	122,292	All industries.	1914	2,135	59,861	106,689	33,159	114,107	210,867
	1909	246	15,831	36,263	8,936	43,071	73,158		1909	2,183	60,182	88,522	31,097	101,407	192,516
Artificial stone products	1919	16	49	96	61	73	172	Boots and shoes, includ- ing cut stock and find- ings.	1919	32	6,777	3,948	6,314	17,928	32,094
	1914	15	19	37	13	16	44		1914	34	7,295	4,195	3,716	8,322	15,329
	1909	10	30	16	15	15	41		1909	32	7,989	4,631	3,518	8,584	14,999
Bread and other bakery products.	1919	50	434	483	529	2,731	4,212	Boxes, cigar.....	1919	5	127	152	50	154	344
	1914	41	183	280	126	443	719		1914	5	139	208	62	106	226
	1909	25	90	105	58	255	417		1909	8	222	405	82	177	347
Brick and tile, pottery, and other clay prod- ucts.	1919	13	872	3,367	982	805	2,402	Boxes, paper and other, not elsewhere speci- fied.	1919	19	808	761	526	1,243	2,645
	1914	15	1,048	2,966	612	515	1,488		1914	17	753	570	263	487	1,016
	1909	18	1,172	2,902	600	443	1,491		1909	15	669	218	185	292	679
Copper, tin, and sheet- iron work.	1919	14	145	68	189	394	780	Boxes, wooden packing, except cigar boxes.	1919	10	360	1,163	330	1,097	1,791
	1914	5	53	27	43	60	132		1914	8	244	973	133	375	647
Foundry and machine- shop products. ¹	1919	44	3,269	11,457	4,671	5,909	16,147	Brass, bronze, and cop- per products.	1919	13	816	1,039	856	1,477	3,642
	1914	34	1,552	4,352	1,133	1,699	3,947		1914	12	556	708	346	506	1,187
	1909	26	969	2,015	650	1,062	2,248		1909	14	563	424	329	385	996
Liquors, malt.....	1919	3	185	2,662	264	391	1,776	Bread and other bakery products.	1919	182	1,745	1,426	1,579	8,919	14,140
	1914	3	184	1,732	136	308	1,352		1914	177	1,669	1,524	925	3,690	6,386
	1909	3	81	1,522	57	170	645		1909	187	1,340	909	723	3,034	5,103
Lumber, planing-mill products, not includ- ing planing mills con- nected with sawmills. ²	1919	8	253	991	407	1,728	2,684	Carriages and wagons and materials.	1919	28	458	921	439	1,560	2,527
	1914	13	367	1,280	245	883	1,326		1914	75	1,761	2,788	1,203	3,126	5,565
	1909	10	319	989	191	437	792		1909	74	2,250	2,523	1,295	3,702	6,825
Printing and publish- ing. ³	1919	33	807	1,370	969	2,415	4,990	Cars and general shop construction and re- pairs by steam-rail- road companies.	1919	10	1,523	1,022	2,448	1,293	4,027
	1914	37	800	1,027	534	685	1,938		1914	6	747	1,023	564	341	971
	1909	27	734	934	452	597	2,353		1909	3	314	590	203	111	328
Rubber tires, tubes, and rubber goods, not elsewhere specified.	1919	22	53,806	134,609	78,577	257,333	462,093	Chemicals.....	1919	9	174	1,292	167	553	1,518
	1914	18	17,468	43,886	12,296	49,063	92,547		1914	11	81	493	51	362	618
	1909	14	9,015	20,225	5,065	29,630	49,329		1909	11	122	508	76	474	899
Stoves and hot-air fur- naces.	1919	3	400	1,105	610	625	1,814	Cleansing and polishing preparations.	1919	12	29	46	24	238	478
	1914	4	362	900	264	228	888		1914	7	20	36	8	73	205
	1909	5	334	610	228	245	754	Clothing, men's, in- cluding shirts.	1919	117	6,260	1,666	5,104	19,272	36,503
All other industries.....	1919	98	4,834	18,604	7,520	41,968	61,892		1914	115	5,477	1,628	2,668	7,421	15,105
	1914	120	2,644	9,455	1,908	12,162	17,911		1909	183	5,718	559	2,512	8,680	16,975
	1909	108	3,087	6,945	1,620	10,217	15,088	Clothing, women's.....	1919	34	908	160	960	2,968	5,135
CANTON	1919	287	20,336	52,933	29,122	65,078	124,293		1914	26	1,137	167	616	1,370	2,567
All industries.	1914	276	12,255	43,071	8,550	21,808	43,713		1909	26	1,325	176	619	1,514	2,913
	1909	204	9,964	27,016	5,719	14,644	28,583	Coffee and spice, roast- ing and grinding.	1919	12	351	654	280	4,927	6,612
Agricultural imple- ments.	1919	4	301	449	371	572	1,455		1914	7	227	657	107	1,782	2,286
	1914	4	271	326	194	543	1,105		1909	8	221	691	91	1,595	2,110
	1909	5	283	442	127	401	819	Copper, tin, and sheet- iron products. ⁵	1919	39	1,497	1,855	1,882	6,236	9,633
Bread and other bakery products.	1919	33	165	281	201	1,042	1,561		1914	48	1,139	1,495	712	3,548	5,570
	1914	25	131	116	66	203	421		1909	37	833	1,154	413	1,633	2,775
	1909	19	59	38	34	147	253	Electrical machinery, apparatus, and sup- plies.	1919	24	542	922	573	1,054	2,613
Confectionery and ice cream.	1919	13	120	289	96	371	711		1914	16	319	329	191	469	902
	1914	12	57	114	35	65	180		1909	13	313	397	200	333	836
Foundry and machine- shop products. ⁴	1919	61	2,683	6,118	3,122	7,211	15,442	Flavoring extracts.....	1919	14	135	224	137	1,901	2,644
	1914	47	2,153	3,420	1,400	2,634	8,042		1914	10	43	57	22	190	489
	1909	32	1,748	3,409	1,005	2,267	4,891	Flour-mill and gristmill products.	1919	6	38	690	47	1,010	1,206
Iron and steel, steel works and rolling mills.	1919	6	10,128	30,846	16,881	35,367	63,374		1914	7	43	725	35	1,036	1,153
	1914	6	3,799	28,428	3,245	10,209	16,887		1909	6	52	685	38	957	1,083
Lumber and timber products.	1919	12	169	531	231	1,845	2,644	Food preparations, not elsewhere specified.	1919	14	149	550	130	713	1,063
	1914	10	46	272	34	52	128		1914	12	60	187	32	218	313
	1909	3	46	180	29	95	135	Foundry and machine- shop products. ⁶	1919	278	14,118	25,574	15,642	22,291	63,385
Printing and publish- ing.	1919	19	199	276	282	331	1,143		1914	228	9,055	17,578	5,789	7,741	21,122
	1914	21	251	275	193	305	775		1909	200	8,534	12,590	4,985	7,044	18,380
	1909	17	161	185	88	78	293	Grease and tallow, not including lubricating greases.	1919	8	242	624	286	1,437	2,105
Signs and advertising novelties.	1919	7	85	3	33	26	92		1914	6	153	397	104	158	319
	1914	7	42	5	24	18	71	Hats and caps, other than felt, straw, and wool.	1919	12	247	29	181	729	1,271
Tobacco, cigars and cigarettes.	1919	9	14	1	9	13	29		1914	14	239	29	121	344	668
	1914	16	40	-----	16	27	65		1909	12	260	33	112	284	532
	1909	19	70	-----	27	42	106	Ice, manufactured.....	1919	16	206	5,355	267	323	1,364
All other industries.....	1919	123	6,472	14,139	7,916	18,300	37,842		1914	14	230	5,048	155	172	472
	1914	128	5,465	10,115	3,343	7,752	16,039		1909	8	129	3,229	81	124	355
	1909	109	7,597	22,702	4,409	11,614	22,086								

¹ Includes "automobile repairing" and "iron and steel, welding," in all years; "structural ironwork, not made in steel works or rolling mills," in 1919 and 1914; and "engines, steam, gas and water"; "hardware"; and "hardware, saddlery," in 1914.

² Includes "lumber and timber products" in 1914 and "window and door screens" in 1914 and 1909.

³ Includes "bookbinding and blank-book making" and "lithographing" in 1914 and 1909.

⁴ Includes "automobile repairing," "bells," "engines, steam, gas, and water"; "hardware, saddlery"; "pumps, steam and other power"; "iron and steel, welding"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills" in all years; and "hardware," and "plumbers' supplies, not elsewhere specified," in 1914 and 1909.

⁵ Includes "stamped and enameled ware, not elsewhere specified," and "tinware, not elsewhere specified."

⁶ Includes "automobile repairing"; "engines, steam, gas, and water"; "gas machines and gas and water meters"; "hardware"; "iron and steel, welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks, portable"; and "structural ironwork, not made in steel works or rolling mills," in all years; "pumps, steam and other power," in 1919; and "bells," in 1914 and 1909.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of materi- als.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of materi- als.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		

CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
CINCINNATI— Continued.								CLEVELAND— Continued.							
Jewelry.....	1919	24	324	133	\$324	\$1,395	\$2,264	Automobiles, including bodies and parts.	1919	85	18,873	32,250	\$28,047	\$97,219	\$154,567
	1914	24	288	213	193	226	729		1914	36	7,006	10,867	5,371	14,732	27,117
	1909	15	210	88	156	518	936		1909	32	6,408	9,135	4,023	10,417	21,404
Leather goods ¹	1919	11	101	135	90	501	824	Awnings, tents, and sails.	1919	9	329	318	329	1,128	1,961
	1914	13	416	233	193	928	1,548		1914	8	233	94	119	458	721
	1909	16	533	230	277	790	1,499	Blackening and cleansing and polishing prepara- tions.	1919	25	93	112	94	524	1,119
Leather, tanned, cur- ried, and finished.	1914	12	755	2,382	474	3,954	5,426		1914	18	46	97	26	162	375
	1909	13	997	2,269	570	3,677	5,059		1909	19	51	55	29	159	355
Liquors, malt.....	1919	17	1,002	11,973	1,310	2,448	7,790	Boxes, cigar.....	1919	4	51	54	23	51	108
	1914	20	1,727	13,114	1,549	2,944	10,353		1914	4	54	35	21	44	82
	1909	22	1,578	11,416	1,168	2,173	8,874		1909	5	69	27	19	43	97
Lumber, planing-mill products, not includ- ing planing mills con- nected with sawmills.	1919	22	412	2,609	415	2,052	3,123	Boxes, paper and other, not elsewhere speci- fied.	1919	9	866	785	673	1,449	3,135
	1914	23	375	1,564	292	818	1,472		1914	9	708	489	328	772	1,468
	1909	23	375	1,564	292	818	1,472		1909	6	739	647	266	627	1,141
Marble and stone work..	1919	25	136	789	165	273	668	Brass and bronze prod- ucts.	1919	22	947	831	1,297	4,452	6,622
	1914	27	327	1,171	214	268	750		1914	28	789	879	534	1,418	2,491
	1909	25	269	854	181	252	632		1909	28	801	872	518	1,362	2,568
Mattresses and spring beds, not elsewhere specified.	1919	11	154	232	134	608	1,009	Bread and other bakery products.	1919	288	2,184	2,513	2,607	11,812	19,413
	1914	10	84	200	50	181	306		1914	224	1,612	1,787	1,222	3,917	6,908
	1909	9	165	227	74	223	394		1909	198	1,229	14	804	2,722	4,731
Millinery and lace goods.	1919	15	398	89	196	487	889	Brooms, from broom corn.	1919	10	67	41	71	209	352
	1914	9	293	31	105	203	443		1914	7	34	21	23	64	102
	1909	11	428	59	120	204	547	Butter.....	1919	7	114	246	94	2,415	2,744
Mineral and soda waters.	1919	12	104	144	122	370	980		1914	6	32	145	22	926	1,064
	1914	12	116	92	68	79	246	Carriages and wagons, including repairs. ⁶	1919	18	186	425	271	354	891
Models and patterns, not including paper patterns.	1919	24	234	353	288	145	891		1914	30	289	347	219	271	696
	1914	19	140	235	92	48	239		1909	33	267	175	182	142	462
	1909	9	89	65	63	54	151	Cars and general shop construction and re- pairs by steam-rail- road companies.	1919	8	4,081	6,040	6,144	4,834	11,571
Optical goods.....	1919	13	104	53	105	147	419		1914	9	2,877	7,838	2,362	2,297	4,358
	1914	5	36	22	23	32	100		1909	6	1,372	1,640	843	1,077	2,056
Paint and varnish.....	1919	26	544	2,319	372	7,783	11,533	Chemicals.....	1919	9	1,021	5,305	1,495	3,593	7,593
	1914	25	417	2,229	294	2,784	4,517		1914	6	653	2,773	488	1,844	3,130
	1909	24	408	1,356	215	2,486	3,880		1909	5	469	1,840	307	978	1,886
Patent medicines and compounds and drug- gists' preparations. ²	1919	46	402	226	257	1,234	3,214	Clothing, men's ⁶	1919	78	3,174	748	3,452	9,632	19,433
	1914	37	228	308	116	705	1,365		1914	68	3,590	646	1,696	4,516	9,546
	1909	50	202	404	90	497	1,230		1909	93	2,745	346	1,096	3,293	5,353
Photo-engraving.....	1919	11	136	51	163	72	427	Clothing, women's.....	1919	103	5,626	1,291	6,337	17,964	35,308
	1914	8	191	169	150	78	358		1914	106	6,955	1,074	3,717	8,266	18,243
Printing and publish- ing. ³	1919	304	4,354	6,622	4,499	8,263	23,471		1909	96	5,418	771	2,903	6,496	12,789
	1914	307	4,074	6,056	2,883	4,105	13,387	Confectionery and ice cream. ⁷	1919	41	1,395	5,019	1,333	5,409	11,375
	1909	280	3,866	4,671	2,480	3,349	11,519		1914	31	1,206	2,410	517	2,837	4,965
Signs and advertising novelties.	1919	13	142	292	135	174	428	Cooperage ⁸	1919	5	287	1,086	338	1,611	2,159
	1914	7	150	210	84	145	294		1914	7	301	1,935	138	623	555
	1909	10	261	533	136	471	708	Copper, tin and sheet- iron products. ⁹	1919	122	1,418	1,403	1,820	2,779	6,164
Slaughtering and meat packing. ⁴	1919	42	1,621	6,838	1,839	54,441	62,428		1914	71	1,542	1,422	919	1,854	3,865
	1914	47	1,126	4,928	766	21,567	23,245		1909	37	1,364	1,231	640	1,628	2,966
	1909	55	1,116	3,710	669	16,974	19,320	Electrical machinery, apparatus, and sup- plies.	1919	78	8,113	14,196	10,026	25,102	52,324
Wirework, not else- where specified.	1919	8	79	101	68	199	433		1914	40	3,326	4,831	1,948	5,892	11,358
	1914	9	97	140	61	105	250		1909	40	1,578	1,980	760	1,780	4,036
All other industries.....	1919	708	21,238	35,917	19,630	111,220	171,784	Food preparations.....	1919	24	507	958	488	2,465	4,099
	1914	666	17,620	32,517	7,729	33,100	62,826		1914	12	282	521	111	563	1,021
	1909	817	19,467	33,451	9,572	31,197	62,310	Foundry and machine- shop products. ¹⁰	1919	421	33,324	64,594	45,029	64,028	157,024
CLEVELAND.....	1919	2,946	157,780	460,108	211,206	613,449	1,091,577		1914	267	22,301	39,107	15,186	20,869	50,951
All industries.	1914	2,345	103,317	277,066	67,351	198,493	352,418		1909	231	17,915	24,204	10,485	15,324	37,443
	1909	2,148	84,728	199,898	48,053	154,915	271,961	Fur goods.....	1919	24	145	30	185	461	940
Artificial stone products	1919	11	70	130	108	225	423		1914	14	76	14	63	107	290
	1914	15	118	177	68	102	241	Furniture.....	1919	25	677	1,125	942	1,385	3,208
	1909	18	121	158	76	92	233		1914	23	525	788	406	717	1,695
									1909	25	467	578	288	491	1,069

¹ Includes "trunks and valises" in all years and "saddlery and harness" in 1914 and 1909.² Includes "perfumery and cosmetics."³ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithography" in all years. Excludes "print-
ing and publishing, music," in 1919, to avoid disclosure of individual operations.⁴ Includes "sausage, not made in slaughtering and meat-packing establishments" in 1909.⁵ Includes "carriage and wagon materials" in 1914 and 1909.⁶ Includes "shirts" in 1914 and 1909.⁷ Includes "chewing gum" in 1914.⁸ Includes "wooden goods, not elsewhere specified," in 1914 and 1909.⁹ Includes "stamped and enameled ware, not elsewhere specified," in 1914 and 1909.¹⁰ Includes "automobile repairing"; "gas machines, and gas and water meters"; "hardware"; "iron and steel, cast-iron pipe"; "machine tools"; "plumbers' supplies,
not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks, portable"; "structural ironwork, not made in
steel works or rolling mills"; "iron and steel, tempering and welding" in all years; "engines, steam, gas, and water," in 1919 and 1914; "pumps, power, other than
steam," in 1914; and "bells" and "hardware, saddlery," in 1919.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.	INDUSTRY AND CITY.	Census year.	Number of establishments.	Wage earners (average number).	Primary horse-power.	Wages.	Cost of materials.	Value of products.
					Expressed in thousands.								Expressed in thousands.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
CLEVELAND—Continued.								CLEVELAND—Continued.							
Gas and electric fixtures. ¹	1919	18	345	412	\$407	\$825	\$1,763	Printing and publishing. ⁵	1919	337	4,935	4,069	\$6,763	\$10,808	\$33,336
	1914	19	323	347	222	529	974		1914	272	4,002	5,154	3,439	4,155	13,996
	1909	17	326	199	193	229	654		1909	245	3,104	3,328	2,009	2,780	9,635
Glass, cutting, staining, and ornamenting.	1919	11	67	52	69	253	471	Slaughtering and meat packing. ⁶	1919	40	2,605	7,964	3,586	68,078	75,728
	1914	8	55	26	39	46	125		1914	39	1,400	3,229	956	22,303	24,787
	1909								1909	35	1,076	2,570	599	15,399	17,192
Hats and caps, other than felt, straw, and wool.	1919	14	191	48	236	768	1,353	Stoves and hot-air furnaces, including gas and oil stoves.	1919	27	3,964	3,814	5,244	10,115	21,907
	1914	8	122	17	63	168	303		1914	27	2,911	2,981	1,871	4,261	8,621
	1909	9	97	11	43	102	199		1909	20	1,843	1,899	1,155	2,286	4,977
Iron and steel, steel works and rolling mills.	1919	16	9,719	125,302	15,847	60,142	84,425	Tobacco, cigars ⁷	1919	158	1,046	71	889	1,658	3,753
	1914	15	8,149	70,844	6,050	24,552	33,389		1914	233	1,549	42	775	1,093	2,666
	1909	14	7,538	60,575	5,150	28,039	38,463		1909	254	1,866	29	734	1,047	2,709
Iron and steel, bolts, nuts, washers, and rivets, not made in steel works or rolling mills.	1919	11	3,603	5,758	4,619	7,573	17,264	Tools, not elsewhere specified. ⁸	1919	47	3,387	6,495	4,619	6,001	17,608
	1914	7	1,675	4,393	969	2,009	3,542		1914	12	1,592	4,031	952	831	3,684
	1909								1909	15	1,444	3,246	759	665	2,395
Iron and steel forgings, not made in steel works or rolling mills.	1919	13	1,801	6,044	2,866	5,663	13,373	Wirework, not elsewhere specified.	1919	16	1,477	2,868	1,833	3,476	7,071
	1914	11	503	2,438	416	765	1,754		1914	13	501	979	307	1,585	2,486
	1909							All other industries.....	1919	475	32,916	135,966	44,145	144,742	245,713
Jewelry.....	1919	17	70	49	106	110	290		1914	329	19,237	86,594	11,520	47,826	74,638
	1914	21	105	71	79	74	232	COLUMBUS—All industries.	1919	690	26,751	66,292	30,979	112,719	184,022
	1909	15	102	34	66	62	208		1914	643	17,236	35,522	11,177	30,636	57,606
Knit goods.....	1919	16	2,453	1,003	1,771	5,527	10,003		1909	586	16,428	35,780	8,892	25,204	49,032
	1914	16	1,341	523	672	2,334	4,051	Awnings, tents, and sails.	1919	3	21	17	23	62	145
	1909	13	1,234	407	485	1,813	2,957		1914	3	27	16	21	55	111
Leather goods ²	1919	19	117	31	156	307	678	Boots and shoes.....	1919	9	1,872	1,264	1,700	6,152	10,198
	1914	30	145	94	97	186	352		1914	7	1,725	889	876	3,537	5,224
	1909	14	125	84	68	133	271		1909	8	2,479	845	1,076	3,224	5,486
Liquors, malt.....	1919	8	758	7,067	1,095	1,713	5,774	Bread and other bakery products.	1919	64	617	1,057	600	3,092	5,204
	1914	12	1,056	6,554	805	1,858	6,528		1914	75	545	1,106	351	1,153	2,119
	1909	11	744	3,395	594	1,484	5,124		1909	58	435	75	222	1,092	1,765
Lumber, and timber products. ³	1919	55	1,222	5,097	1,460	4,649	7,908	Brooms, from broom corn.	1919	6	10	22	10	38	67
	1914	50	1,501	5,280	1,016	3,053	4,916		1914	9	11	22	5	15	33
	1909	51	1,147	5,263	699	2,732	4,021	Cars and general shop construction and repairs by steam-railroad companies.	1919	5	4,856	7,826	5,873	8,353	15,214
Marble and stone work.	1919	26	194	997	280	405	1,086		1914	4	2,753	3,281	2,195	3,166	5,401
	1914	19	206	684	159	207	475	Confectionery and ice cream.	1919	19	513	1,837	483	1,368	2,575
	1909	18	315	789	192	197	468		1914	13	214	754	137	570	890
Mattresses and spring beds.	1919	6	124	262	148	502	854	Electroplating.....	1919	3	21	93	22	13	56
	1914	7	171	398	102	248	485		1914	4	34	111	19	7	43
	1909	6	150	178	71	208	365	Food preparations, not elsewhere specified.	1919	8	23	53	18	190	243
Millinery and lace goods.	1919	20	538	357	540	1,178	2,354		1914	6	19	23	6	27	49
	1914	12	496	350	278	630	1,150	Foundry and machine-shop products. ⁹	1919	91	4,327	7,989	5,897	9,786	21,586
	1909	6	472	143	190	726	1,206		1914	59	2,477	4,272	1,688	3,153	6,959
Mineral and soda waters	1919	29	152	208	199	528	1,096		1909	58	3,012	4,148	1,841	3,465	7,744
	1914	25	89	112	50	144	299	Lumber and timber products. ¹⁰	1919	20	334	1,993	387	1,329	2,243
Models and patterns, not including paper patterns.	1919	41	408	416	764	223	1,534		1914	21	358	1,910	246	613	1,088
	1914	24	166	252	135	59	279		1909	27	434	1,808	264	758	1,240
	1909	21	190	213	123	51	251	Marble and stone work.	1919	6	29	50	46	64	163
Optical goods.....	1919	7	74	46	96	226	542		1914	7	42	75	42	55	135
	1914	7	50	24	32	97	245		1909	6	70	445	47	75	169
Paint and varnish.....	1919	35	1,555	5,274	1,654	16,629	26,487	Models and patterns, not including paper patterns.	1919	9	44	57	51	22	124
	1914	33	1,062	3,544	645	5,766	10,093		1914	8	34	89	29	9	59
	1909	24	760	2,624	468	3,889	6,138		1909	8	34	58	23	11	70
Patent medicines and compounds. ⁴	1919	56	348	277	313	2,172	6,167	Patent medicines and compounds and druggists' preparations. ¹¹	1909	28	157	172	109	599	1,693
	1914	52	228	677	119	640	1,010		1914	23	137	184	59	311	1,068
	1909	50	125	66	62	316	1,010		1909	13	140	285	61	239	946
Photo-engraving.....	1919	7	113	61	208	76	511	Printing and publishing. ¹²	1919	110	1,140	1,333	1,176	2,407	6,983
	1914	5	67	31	79	23	196		1914	107	1,026	1,283	712	950	3,523
	1909	3	58	23	50	36	144		1909	91	901	879	592	689	2,660

¹ Includes "lamps and reflectors" in 1914 and 1909.² Comprises "saddlery and harness" and "trunks and valises."³ Comprises "boxes, wooden packing, except cigar boxes"; "lumber, planing-mill products, not including planing mills connected with sawmills"; and "window and door screens" in all years; and "lumber and timber products," in 1914 and 1909.⁴ Includes "perfumery and cosmetics" in all years, and "druggists' preparations" in 1914 and 1909, the latter was omitted in 1919 to avoid disclosure of individual operations.⁵ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."⁶ Includes "sausage."⁷ Includes "tobacco, chewing and smoking, and snuff," in 1914 and 1909.⁸ Includes "cutlery and edge tools" in 1914 and 1909, excluded in 1919 to avoid disclosure of individual operations.⁹ Includes "automobile repairing"; "gas machines and gas and water meters"; "hardware"; "iron and steel, cast-iron pipe"; "iron and steel, welding"; "plumbers' supplies, not elsewhere specified"; "pumps, steam and other power"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills."¹⁰ Includes "boxes, wooden packing, except cigar boxes," and "lumber, planing-mill products, not including planing mills connected with sawmills," for all years; and "window and door screens and weather strips," for 1919.¹¹ Includes "perfumery and cosmetics."¹² Includes "bookbinding and blank-book making" and "lithographing" for all years; and "engraving, steel and copper plate, including plate printing," for 1919.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
COLUMBUS—Continued.								DAYTON—Continued.							
Shirts.....	1919	5	29	10	\$21	\$61	\$117	Tobacco, cigars.....	1919	29	1,102	124	\$764	\$1,454	\$3,058
	1914	4	33	5	13	24	69		1914	44	1,582	115	533	905	2,055
									1909	56	1,428	52	487	831	1,893
Slaughtering and meat packing. ¹	1919	7	241	1,110	241	5,857	6,516	Tools, not elsewhere specified.	1919	36	1,200	993	1,896	715	3,785
	1914	7	204	606	121	2,984	3,211		1914	8	52	112	34	13	76
	1909	6	130	365	101	1,964	2,354		1909	4	40	59	21	7	62
Stoves and hot-air furnaces, including gas and oil stoves.	1919	12	268	380	330	610	1,134	Toys and games.....	1919	8	220	240	184	280	639
	1914	7	234	261	190	371	852		1914	5	242	162	116	245	476
	1909	10	294	377	173	310	722	All other industries.....	1919	189	19,684	32,206	26,276	51,115	120,262
All other industries.....	1919	285	12,249	41,029	13,992	72,716	109,751		1914	177	15,170	29,384	9,137	20,485	47,775
	1914	279	7,363	20,635	4,467	13,636	26,764		1909	205	13,255	20,391	8,158	17,660	41,155
	1909	301	8,499	26,495	4,492	13,377	25,926								
DAYTON.....								SPRINGFIELD.....							
All industries.	1919	571	31,131	52,749	39,680	78,460	174,991	All industries.	1919	206	12,264	20,191	13,372	33,890	67,759
	1914	523	24,061	42,109	14,076	32,954	71,071		1914	253	7,868	13,113	5,328	13,704	27,722
	1909	513	21,549	31,501	12,451	27,528	60,378	Agricultural imple-ments.	1919	6	1,575	3,081	1,633	3,391	7,206
Boxes, set-up paper boxes and cartons.	1919	5	439	364	274	518	1,257		1914	7	1,447	2,436	1,211	2,733	5,762
	1914	5	518	408	196	460	803	Artificial stone products	1919	4	15	29	14	18	40
	1909	5	540	376	196	486	932		1914	9	24	68	17	18	53
Brass, bronze, and cop- per products.	1919	9	216	318	274	734	1,272	Bread and other bakery products.	1919	14	102	208	118	552	818
	1914	8	95	115	69	207	332		1914	27	103	134	66	236	398
	1909	7	210	340	145	213	451	Copper, tin, and sheet-iron work.	1919	7	28	12	34	70	134
Bread and other bakery products.	1919	57	530	912	575	2,923	4,522		1914	6	38	40	25	33	76
	1914	64	491	651	290	1,213	2,013	Foundry and machine-shop products. ²	1919	44	2,674	4,952	3,275	5,506	12,977
	1909	65	350	401	187	949	1,531		1914	45	2,100	4,230	1,467	2,688	5,790
Carriages and wagons, including repairs.	1919	3	14	43	18	21	50	Models and patterns, not including paper patterns.	1919	6	19	22	30	5	58
	1914	12	67	206	52	62	145		1914	6	9	16	8	2	18
Clothing, men's. ³	1919	7	283	73	184	815	1,787	Musical instruments, piano materials.	1919	3	508	975	660	596	2,637
	1914	4	147	143	63	138	277		1914	3	540	478	293	246	758
	1909	4	196	125	71	209	354	Printing and publish- ing, book and job.	1919	16	176	195	172	208	607
Confectionery and ice cream.	1919	20	261	590	218	920	1,473		1914	18	140	110	88	92	280
	1914	16	197	351	91	302	528	Tobacco, cigars.....	1919	7	20	-----	10	29	43
Copper, tin, and sheet-iron work.	1919	6	38	-----	48	101	152		1914	14	51	10	23	28	72
	1914	11	72	51	43	81	178	All other industries.....	1919	99	7,147	10,717	7,426	22,614	43,845
	1909	11	63	50	44	88	178		1914	118	3,416	5,591	2,130	7,633	14,515
Foundry and machine-shop products. ⁴	1919	98	5,053	11,281	6,693	7,754	19,766	TOLEDO.....	1919	671	42,090	93,227	53,363	173,288	293,521
	1914	71	3,424	5,862	2,119	2,944	6,859	All industries.	1914	713	27,076	53,369	18,124	70,494	115,049
	1909	69	3,585	5,576	2,033	2,800	6,778		1909	760	18,878	43,946	9,911	34,064	61,230
Furniture.....	1919	7	432	754	398	562	1,489	Artificial stone prod-ucts.	1919	11	51	80	71	153	293
	1914	10	490	667	210	285	825		1914	12	29	69	17	37	82
	1909	10	423	795	200	287	744	Bread and other bakery products.	1919	79	661	943	757	3,550	5,775
Lumber and timber products. ⁴	1919	10	465	1,930	545	1,558	2,644		1914	76	579	541	370	1,253	2,307
	1914	12	576	1,799	416	1,151	1,899		1909	88	468	314	260	959	1,596
	1909	11	512	1,650	325	878	1,417	Brooms, from broom corn.	1919	5	14	12	18	48	80
Marble and stone work.	1919	6	52	93	43	243	266		1914	5	25	24	15	31	57
	1914	4	14	30	11	14	36	Cars and general shop construction and re- pairs by steam-rail- road companies.	1919	5	1,022	1,680	1,592	768	2,610
	1909	6	41	80	33	39	95		1914	6	814	1,254	596	534	1,202
Mineral and soda waters	1919	7	24	72	29	149	288	Clothing, women's.....	1919	8	673	103	720	2,335	4,163
	1914	6	22	56	18	35	79		1914	13	892	300	515	1,410	2,434
Models and patterns, not including paper patterns.	1919	12	65	95	105	31	223		1909	13	1,150	155	492	1,375	2,323
	1914	7	37	100	26	8	50	Confectionery and ice cream. ⁷	1919	12	306	599	246	1,748	2,777
	1909	5	31	44	20	5	35		1914	12	184	290	81	507	778
Printing and publishing ⁵	1919	50	763	1,309	809	1,088	3,643	Cooperage and wooden goods, not elsewhere specified.	1919	5	76	151	76	225	395
	1914	50	680	1,045	459	560	1,774		1914	8	85	75	28	104	189
	1909	45	630	1,078	386	440	1,552		1909	10	116	145	52	106	195
Slaughtering and meat packing.	1919	12	290	1,352	347	7,479	8,415								
	1914	9	275	609	193	3,846	4,831								
	1909	10	245	484	145	2,636	3,171								

1 Includes "sausage" in 1914 and 1909.

2 Includes "shirts" for 1914 and 1909.

3 Includes "automobile repairing"; "gas machines and gas and water meters"; "hardware"; "iron and steel, tempering and welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; "steel barrels, drums, and tanks, portable"; and "structural ironwork, not made in steel works or rolling mills" in all years; and "engines, steam, gas, and water" and "pumps, steam and other power," in 1919 and 1914.

4 Includes "boxes, wooden packing, except cigar boxes," and "lumber, planing-mill products, not including planing mills connected with sawmills."

5 Includes "bookbinding and blank-book making" and "lithographing" in 1914 and 1909.

6 Includes "automobile repairing"; "engines, steam, gas, and water"; "iron and steel, welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "steam fittings and steam and hot-water heating apparatus"; and "structural ironwork, not made in steel works or rolling mills."

7 Includes "chewing gum" in 1914.

TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES—Continued.															
TOLEDO— Continued.								TOLEDO— Continued.							
Copper, tin, and sheet- iron products. ¹	1919	20	753	994	\$796	\$2,349	\$4,298	Patent medicines and compounds and drug- gists' preparations. ²	1919	25	41	93	\$45	\$138	\$469
	1914	35	698	713	495	1,020	2,029		1914	31	51	102	29	125	453
	1909	37	547	265	282	649	1,303		1909	51	76	154	36	149	540
Electrical machinery, apparatus, and sup- plies.	1919	13	3,365	5,413	3,187	8,871	19,246	Printing and publish- ing. ³	1919	86	867	1,278	1,097	1,991	5,999
	1914	11	918	1,155	397	1,821	3,230		1914	88	889	1,095	670	858	2,991
	1909	7	416	248	108	289	932		1909	72	703	866	480	523	2,004
Flour-mill and grist- mill products.	1919	6	236	2,723	291	11,516	13,433	Tools, not elsewhere specified.	1919	9	231	213	304	103	596
	1914	6	234	3,345	187	5,277	5,815		1914	4	15	30	12	5	33
	1909	7	204	3,510	140	4,931	5,662	All other industries.	1909	253	26,447	61,605	33,883	124,331	197,304
Foundry and machine- shop products. ⁴	1919	71	6,390	13,972	9,118	11,915	30,235		1914	272	16,823	34,339	11,351	52,585	82,199
	1914	67	3,796	6,679	2,674	3,137	7,855		1909	327	9,472	26,738	4,801	19,341	34,808
	1909	75	3,191	6,931	1,905	3,161	7,024								
Furniture.....	1919	9	199	370	215	296	763	YOUNGSTOWN.. All industries.	1919	239	19,414	303,887	38,319	163,099	241,458
	1914	16	374	740	231	299	734		1914	201	15,861	196,663	12,349	69,077	92,111
	1909	23	550	884	303	545	1,123		1909	115	10,498	140,907	7,835	62,292	81,271
House-furnishing goods.	1919	5	29	7	29	116	292	Artificial stone prod- ucts.	1919	7	14	66	17	26	70
	1914	3	19	12	15	59	128		1914	9	48	95	23	20	55
Lumber and timber products. ⁵	1919	20	444	2,332	484	1,728	2,694	Bread and other bakery products.	1919	44	238	319	362	1,700	2,713
	1914	21	486	2,141	333	1,054	1,747		1914	43	130	115	83	316	620
	1909	28	585	2,480	286	1,111	1,793		1909	22	65	23	35	133	249
Marble and stone work, except slate.	1919	6	85	167	166	282	659	Confectionery and ice cream.	1919	11	68	579	110	418	834
	1914	8	63	227	57	197	331		1914	7	76	265	37	84	189
	1909	6	62	142	43	108	217	Foundry and machine- shop products. ⁷	1919	36	2,461	11,216	4,265	13,191	23,682
Mineral and soda waters	1919	8	48	125	66	186	338		1914	19	2,040	8,492	1,580	4,442	7,235
	1914	8	46	119	33	55	159		1909	15	1,153	2,674	800	2,702	4,866
Models and patterns, not including paper patterns.	1919	9	97	78	169	58	323	Printing and publish- ing.	1919	28	295	482	425	526	2,082
	1914	6	16	33	15	4	29		1914	21	243	303	181	178	792
	1909	7	16	29	9	5	24		1909	13	164	188	109	128	464
Paints ⁶	1919	6	55	259	60	571	869	All other industries.	1919	113	16,338	291,225	83,140	147,238	212,077
	1919	5	40	186	23	122	267		1914	102	13,324	187,395	10,445	64,037	83,220
	1909	5	34	150	20	158	252		1909	65	9,116	138,022	6,888	59,329	76,709

¹ Includes "stamped ware, not elsewhere specified." and "tinware, not elsewhere specified."² Includes "automobile repairing"; "iron and steel, welding"; "machine tools"; "plumbers' supplies, not elsewhere specified"; "steel barrels, drums, and tanks, portable"; and "structural ironwork, not made in steel works or rolling mills," in all years; "engines, steam, gas, and water," and "hardware" in 1919 and 1914; and "steam fittings and steam and hot-water heating apparatus" in 1919 and 1909.³ Comprises "boxes, wooden packing"; "lumber, planing-mill products, not including planing mills connected with sawmills"; and "window and door screens."⁴ Includes "varnishes" in 1919.⁵ Includes "perfumery and cosmetics."⁶ Includes "bookbinding and blank-book making"; "engraving, steel and copper plate, including plate printing"; and "lithographing."⁷ Includes "automobile repairing"; "hardware"; "iron and steel, welding"; and "structural ironwork, not made in steel works or rolling mills."

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TABLE 45.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mater- ials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments.	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mater- ials.	Value of prod- ucts.
					Expressed in thousands.								Expressed in thousands.		
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
ALLIANCE.....	1919	74	5,117	12,481	\$5,769	\$14,789	\$32,871	LORAIN.....	1919	55	11,677	148,253	\$22,955	\$65,995	\$116,909
	1914	52	2,333	4,678	1,617	3,656	7,175		1914	66	6,436	211,182	4,660	17,929	29,110
	1909	44	2,524	3,453	1,462	2,853	6,135		1909	57	6,697	208,992	4,788	21,222	38,987
ASHTABULA.....	1919	62	4,172	9,013	5,813	10,969	23,099	MANSFIELD.....	1919	132	4,711	9,123	5,570	17,359	31,878
	1914	57	1,868	7,327	1,345	2,825	5,021		1914	103	3,398	6,637	2,029	4,772	10,282
	1909	44	1,471	2,379	814	2,084	3,459		1909	121	3,204	5,077	1,472	4,356	8,173
BARBERTON.....	1919	32	4,762	29,000	6,261	14,696	27,713	MARIETTA.....	1919	59	1,285	3,716	1,213	2,852	5,917
	1914	34	3,118	7,211	1,734	4,106	8,844		1914	71	1,401	3,117	844	2,383	4,129
									1909	66	1,288	2,742	594	1,787	3,215
BELLAIRE.....	1919	45	2,277	15,387	2,729	9,929	14,502	MARION.....	1919	70	4,125	9,601	4,881	10,374	20,713
	1914	40	2,603	14,390	1,566	9,278	12,170		1914	66	2,577	5,575	1,512	2,562	6,385
	1909	36	2,597	17,790	1,412	7,159	10,092		1909	55	2,619	3,686	1,405	2,577	5,667
CAMBRIDGE.....	1919	32	1,782	5,160	3,038	5,853	11,227	MASSILLON.....	1919	80	2,153	9,931	2,715	7,074	13,985
	1914	39	1,455	5,742	1,112	2,340	3,924		1914	70	1,768	5,544	1,166	2,719	5,293
	1909	32	1,230	5,055	919	2,885	4,291		1909	56	1,934	4,730	1,127	2,290	4,788
CHILLICOTHE.....	1919	35	1,638	5,036	1,840	4,340	7,667	MIDDLETOWN.....	1919	56	6,442	56,386	8,729	35,687	62,838
	1914	46	1,557	4,765	852	2,571	4,083		1914	63	4,003	35,328	2,888	10,660	21,787
	1909	57	1,674	3,558	707	3,038	4,345		1909	41	2,576	9,304	1,389	7,950	16,517
COSHOCTON.....	1919	45	1,959	5,439	1,652	3,873	7,685	NEWARK.....	1919	79	4,570	10,314	4,532	8,272	16,563
	1914	47	1,614	3,501	805	1,814	3,477		1914	79	4,583	8,071	2,909	3,574	9,277
									1909	72	3,913	8,630	1,958	3,982	7,851
EAST CLEVELAND.....	1919	17	88	217	104	191	421	NORWOOD.....	1919	70	8,283	16,218	8,149	20,223	47,947
	1914	7	129	397	81	147	296		1914	58	5,808	9,865	3,614	7,217	16,724
									1909	49	3,907	6,381	2,081	4,021	9,664
EAST LIVERPOOL.....	1919	67	4,311	5,911	4,546	4,891	12,501	PIQUA.....	1919	66	3,293	7,212	3,037	10,955	19,921
	1914	80	4,830	6,051	2,935	2,842	7,093		1914	78	2,777	5,721	1,508	4,554	7,988
	1909	82	4,873	5,528	2,764	2,521	6,629		1909	82	2,683	5,062	1,292	3,852	6,981
ELYRIA.....	1919	75	4,590	14,481	6,029	10,228	25,191	PORTSMOUTH.....	1919	60	5,914	22,392	6,907	20,178	36,646
	1914	63	2,735	10,814	1,759	5,016	8,792		1914	76	3,597	5,099	1,751	4,079	7,682
	1909	58	2,673	9,058	1,573	4,495	8,065		1909	75	3,728	4,028	1,459	3,894	7,277
FINDLAY.....	1919	75	1,715	4,098	1,543	4,828	7,924	SANDUSKY.....	1919	115	3,447	15,949	3,666	10,660	19,249
	1914	78	1,737	3,661	778	2,791	4,663		1914	107	2,727	7,415	1,688	8,285	8,285
	1909	74	1,376	2,574	574	2,094	3,487		1909	91	2,118	4,856	1,006	2,835	5,947
FREMONT.....	1919	53	2,999	5,752	3,114	5,438	12,915	STEBENVILLE.....	1919	57	3,855	44,531	6,689	16,376	30,903
	1914	65	2,063	3,664	1,097	2,296	4,780		1914	60	4,506	36,731	3,430	11,432	16,959
									1909	55	4,267	37,748	3,203	14,443	21,137
HAMILTON.....	1919	130	8,553	27,596	10,094	22,637	47,024	TIFFIN.....	1919	75	2,213	3,748	2,439	4,750	10,516
	1914	129	6,043	16,767	3,665	9,015	16,877		1914	76	2,177	4,464	1,410	2,392	4,996
	1909	125	6,895	22,563	3,798	9,640	18,184		1909	75	1,632	3,257	828	1,252	3,254
IRONTON.....	1919	52	1,971	16,968	2,252	8,837	14,072	WARREN.....	1919	96	2,433	6,083	3,274	11,931	19,747
	1914	59	1,420	15,147	721	3,294	4,666		1914	82	2,802	5,747	1,933	6,355	10,400
	1909	63	1,520	16,548	888	4,994	7,118		1909	68	1,798	5,530	911	3,064	5,988
LAKEWOOD.....	1919	33	1,821	2,435	2,254	3,853	7,603	ZANESVILLE.....	1919	97	3,014	7,557	2,942	7,427	13,438
	1914	22	1,774	2,969	1,022	1,604	3,606		1914	97	3,035	7,064	1,685	5,246	8,300
									1909	108	2,932	7,783	1,582	5,056	8,020
LANCASTER.....	1919	43	2,024	3,189	2,033	6,732	11,479								
	1914	53	1,583	2,874	790	3,287	4,603								
	1909	42	1,532	2,453	677	3,051	4,074								
LIMA.....	1919	108	4,901	11,075	5,293	12,748	23,639								
	1914	97	4,876	7,518	3,178	6,369	11,599								
	1909	85	3,607	8,264	2,024	3,869	7,754								

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
						Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.	Female.	
									Maximum month.	Minimum month.						
THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.																
1	All industries.....	16,125	882,918	12,823	30,265	71,636	37,461	730,733	De 790,681	My 687,683	(2)	(2)	(2)	(2)	(2)	Dollars. 3,748,743,996
2	Agricultural implements.....	46	5,991	27	240	585	208	4,931	Mh 5,411	Jy 4,406	5,283	5,216	67	.....	.....	27,884,087
3	Aluminum manufactures.....	20	2,382	4	143	243	152	1,840	De 2,390	Je 1,405	2,269	2,080	189	.....	.....	7,601,815
4	Artificial flowers.....	6	33	6	3	.....	2	22	Je 24	Oc 19	21	5	16	.....	.....	33,769
5	Artificial limbs.....	17	66	18	8	2	4	34	Oc 39	Ap 32	35	33	2	.....	.....	86,294
6	Artificial stone products.....	339	1,205	384	65	10	25	721	Au 988	Ja 341	895	895	.....	.....	.....	2,523,168
7	Automobile bodies and parts.....	237	19,561	161	727	1,244	759	16,670	De 21,679	Fe 12,635	21,607	20,203	1,319	81	4	65,425,632
8	Automobiles.....	44	33,760	2	715	2,407	1,424	29,212	De 35,931	My 20,274	36,997	35,654	1,343	.....	.....	191,041,010
9	Automobile repairing.....	540	3,463	623	144	100	166	2,430	Oc 2,795	Ja 2,156	2,503	2,467	26	10	.....	5,811,464
10	Awnings, tents, and sails.....	41	1,040	29	46	69	45	851	Jy 1,069	Fe 642	865	373	489	.....	3	5,463,880
11	Bags, paper, exclusive of those made in paper mills.....	11	924	1	57	117	55	694	De 794	Mh 604	704	353	351	.....	.....	4,575,170
12	Baskets, and rattan and willow ware.....	29	383	40	15	4	5	319	Au 359	My 289	315	199	115	1	.....	232,216
13	Belting, leather.....	10	184	.....	26	42	14	102	De 118	Je 94	109	107	2	.....	.....	1,072,269
14	Blacking, stains, and dressings.....	13	81	16	13	7	5	40	Jy 59	Ja 31	45	25	20	.....	.....	244,078
15	Bookbinding and blank-book making.....	54	1,301	56	44	255	112	834	De 1,004	Fe 762	997	529	464	4	.....	3,242,432
16	Boot and shoe cut stock.....	7	310	3	22	11	6	268	No 298	Ja 243	289	196	93	.....	.....	613,262
17	Boots and shoes, not including rubber boots and shoes.....	60	15,753	13	428	620	600	14,092	De 14,963	Ap 13,473	14,923	8,718	6,088	92	25	40,178,881
18	Boxes, cigar.....	19	419	18	12	5	5	379	De 404	Au 354	405	155	250	.....	.....	394,767
19	Boxes, paper and other, not elsewhere specified.....	58	3,275	24	151	69	79	2,952	.....	.....	3,202	1,152	2,027	3	20	6,118,941
20	Shipping containers, corrugated and fiber.....	10	432	.....	38	8	17	369	De 428	My 287	433	267	165	1	.....	1,037,666
21	Set-up paper boxes.....	38	2,335	22	85	49	45	2,134	No 2,340	Je 2,009	2,281	624	1,636	1	20	3,816,796
22	Cartons.....	10	508	2	28	12	17	449	No 485	Je 406	458	261	226	1	.....	1,264,380
23	Boxes, wooden packing, except cigar boxes.....	98	2,148	99	99	49	27	1,874	De 1,999	Ap 1,746	2,008	1,883	122	3	.....	4,346,740
24	Brass, bronze, and copper products.....	92	5,019	57	230	318	150	4,264	.....	.....	4,983	4,773	203	7	.....	16,887,641
25	Brass and bronze products.....	81	4,778	46	209	301	143	4,079	No 4,800	Fe 3,538	4,748	4,560	181	7	.....	16,028,311
26	All other.....	11	241	11	21	17	7	185	No 236	Fe 143	235	213	22	.....	.....	859,310
27	Bread and other bakery products.....	1,621	13,353	1,803	392	1,358	709	9,091	.....	.....	9,890	7,278	2,631	53	18	57,719,262
28	Biscuit and crackers.....	12	2,140	.....	63	260	94	1,723	De 1,969	My 1,602	1,963	982	975	1	5	5,962,100
29	Bakery products, other than biscuit and crackers.....	1,609	11,213	1,803	329	1,098	615	7,368	De 7,897	Fe 6,785	7,917	6,296	1,556	52	13	51,767,162
30	Brick and tile, terra-cotta, and fire-clay products.....	341	13,548	239	615	404	230	12,060	.....	.....	13,230	12,672	497	61	.....	64,371,925
31	Building brick.....	96	4,250	36	234	134	78	3,768	Au 4,760	Fe 2,319	4,300	4,239	54	7	.....	24,737,600
32	Fire brick.....	36	2,214	6	97	60	35	2,016	No 2,080	Au 1,725	2,171	2,102	26	43	.....	9,102,274
33	Sewer pipe and drain tile.....	158	3,474	187	144	64	43	3,036	Au 3,428	De 2,406	3,076	3,054	18	6	.....	12,801,430
34	Terra-cotta products.....	46	3,321	10	120	139	72	2,980	Se 3,488	Ja 2,207	3,450	3,050	395	5	.....	16,343,695
35	All other.....	5	289	.....	20	7	2	260	Ja 295	Au 226	233	227	6	.....	.....	1,386,986
36	Brooms, from broom corn.....	79	489	85	19	32	12	341	Oc 358	Je 331	363	313	49	.....	.....	857,875
37	Brushes.....	19	1,115	12	55	144	88	816	De 1,018	My 688	1,020	809	211	.....	.....	3,315,972
38	Butter.....	141	2,029	77	167	134	289	1,362	Jy 1,531	Ja 1,148	1,361	1,169	196	5	.....	8,018,265
39	Buttons.....	6	125	3	5	1	2	114	Ja 139	My 65	145	127	18	.....	.....	182,125
40	Canning and preserving, fruits and vegetables.....	87	1,868	52	157	38	45	1,576	.....	.....	3,911	2,211	1,651	18	31	6,744,352
41	Canned vegetables.....	82	1,801	50	151	37	44	1,519	Se 4,541	De 347	3,740	2,083	1,608	18	31	6,486,158
42	All other.....	5	67	2	6	1	1	57	Jy 321	Ja 11	171	123	43	.....	.....	258,194
43	Card cutting and designing.....	4	246	1	9	21	12	203	No 252	My 168	233	74	159	.....	.....	321,981
44	Carpets, rag.....	25	144	28	5	4	2	105	Je 118	Ja 84	106	65	37	4	.....	76,337
45	Carriage and wagon materials.....	33	1,390	22	58	52	39	1,219	De 1,461	Ja 904	1,450	1,303	146	1	.....	3,632,774
46	Carriages and wagons, including repairs.....	119	1,317	125	84	62	52	994	.....	.....	940	918	22	.....	.....	3,818,584
47	Carriages and wagons.....	59	1,044	47	71	60	50	816	Ap 880	No 742	754	733	21	.....	.....	3,362,376
48	Repair work only.....	60	273	78	13	2	2	178	No 189	Ja 165	186	185	1	.....	.....	456,208
49	Cars and general shop construction and repairs by electric-railroad companies.....	60	2,009	1	60	19	26	1,903	Mh 1,965	Ja 1,767	1,899	1,894	5	.....	.....	4,942,956
50	Cars and general shop construction and repairs by steam-railroad companies.....	117	38,584	.....	1,177	1,742	420	35,245	De 37,236	Ap 32,688	37,234	36,973	261	.....	.....	42,581,602
51	Cars, steam-railroad, not including operations of railroad companies.....	8	2,576	.....	79	237	83	2,177	De 2,539	Je 1,847	2,539	2,536	2	1	.....	20,576,710
52	Cement.....	6	721	19	35	12	655	Au 756	Fe 502	646	644	2	.....	.....	.....	4,346,385
53	Cheese.....	96	112	52	1	.....	59	My 93	Ja 21	86	86	.....	.....	.....	.....	270,850
54	Chemicals.....	37	4,410	1	178	357	204	3,670	Oc 4,210	Ap 3,022	4,296	4,012	283	1	.....	26,764,288
55	Cleansing and polishing preparations.....	54	320	50	42	58	39	131	.....	.....	150	93	56	1	.....	807,002
56	Cleansing preparations.....	33	213	30	30	33	23	97	Fe 113	Jy 77	112	68	43	1	.....	452,060
57	Metal polish.....	5	23	3	5	5	2	8	(6)	(5)	8	6	2	.....	.....	38,280
58	All other polishing preparations.....	16	94	17	7	20	14	26	Se 32	Ja 20	30	19	11	.....	.....	316,662
59	Cloth, sponging and refinishing.....	6	76	5	3	1	3	64	Se 69	Ap 61	65	65	.....	.....	.....	83,310
60	Clothing, men's.....	246	12,062	262	380	920	561	9,839	.....	.....	11,697	3,588	7,971	8	30	30,152,858
61	Regular factories.....	148	10,703	142	373	920	558	8,710	.....	.....	10,242	3,240	6,958	7	28	29,967,857
62	Men's, youths', and boys'.....	92	8,454	93	295	758	447	6,861	De 8,104	Ap 6,043	8,057	2,901	5,188	6	12	24,732,326
63	All other.....	56	2,249	49	78	162	111	1,849	No 2,231	Ap 1,471	2,185	348	1,820	1	16	5,235,531
64	Contract work.....	98	1,359	120	7	3	.....	1,229	De 1,352	Ap 1,174	1,355	339	1,013	1	2	185,001
65	Clothing, men's, buttonholes.....	8	101	10	2	.....	3	86	De 98	Ja 78	98	19	79	.....	.....	27,456
66	Clothing, women's.....	175	10,045	133	432	717	505	8,258	.....	.....	8,223	2,593	5,573	8	49	21,789,994
67	Regular factories.....	144	9,541	104	410	716	503	7,808	.....	.....	7,659	2,517	5,120	5	17	21,628,739
68	Suits, skirts, and cloaks.....	70	6,093	60	241	513	382	4,897	Au 5,514	Ja 4,409	4,533	2,108	2,741	4	.....	15,060,910
69	Shirt waists and dresses, except house dresses.....	32	2,297	20	97	148	76	1,956	Au 2,147	Ja 1,767	1,782	315	1,467	.....	.....	4,003,340
70	Undergarments and petticoats.....	11	415	2	20	12	20	361	No 395	My 334	386	36	350	.....	.....	1,194,190
71	Wrappers and house dresses.....	11	245	9	15	22	10	189	Jy 228	My 161	212	9	185	1	17	428,564
72	All other.....	20	491	13	37	21	15	405	No 446	Ja 336	426	49	377	.....	.....	941,735
73	Contract work.....	311	504	29	22	1	2	450	De 558	Ap 372	564	76	453	3	32	161,255

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

3 No figures given for reason stated under "Explanation of terms."

COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.										POWER.							
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Electric horsepower generated in establishments reporting.		
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power.		Rent.	
Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.								
114,246,012	159,468,347	944,651,734	17,600,925	16,130,610	179,262,557	2,729,033,617	182,914,254	5,100,308,728	2,188,360,857	2,897,497	1,407,558	374,974	147,039	10,115	957,531	819,383	1
946,901	1,130,349	5,075,451	1,500	10,480	571,380	12,611,928	354,807	26,556,031	13,589,296	10,470	4,170	1,433	1,565	229	3,082	5,993	2
601,532	642,574	2,746,873	7,800	8,172	174,882	6,476,030	195,942	11,132,231	4,459,659	4,721			1,060		3,661	776	3
7,515	2,245	21,765		4,910	653	45,409	177	112,543	66,957	1					1		4
19,734	8,799	37,266	700	19,727	1,607	52,799	1,159	197,605	143,647	27					23		5
99,661	27,139	830,254	7,009	15,199	19,356	1,365,930	39,122	2,992,977	1,587,925	1,932	286		708		938	8	6
2,408,535	2,393,441	21,966,409	60,467	272,474	2,116,799	51,448,073	1,062,976	92,390,640	39,848,697	41,566	2,442	40	649		28,435	662	7
3,513,285	5,147,108	41,443,839	97,566	53,798	9,910,351	196,354,341	2,084,620	287,045,832	88,606,871	37,473	6,113	400	228		20,732	3,061	8
271,286	230,647	3,311,759	38,435	283,977	86,407	4,344,652	149,745	10,245,408	5,751,011	3,678	180		735		2,763	6	9
109,830	146,443	753,692	1,552	27,077	289,482	3,689,161	46,659	6,937,359	3,201,539	1,732	225		47		1,400	29	10
313,736	278,373	653,579	566	27,380	388,106	9,109,811	29,421	12,606,656	3,470,424	785	590				199	391	11
25,775	8,411	239,450	1,131	2,376	2,932	128,620	6,107	537,898	403,171	639	556				75		12
89,623	44,598	107,356		13,367	14,263	1,132,842	5,032	1,549,695	411,821	166				55	111		13
50,310	23,128	32,482	55	3,260	8,169	260,691	2,492	588,551	325,368	42					42		14
150,281	665,969	824,540	80,486	46,279	39,480	882,094	26,126	3,836,961	2,928,341	849					846		15
52,791	15,649	197,455		6,984	21,569	1,092,014	18,896	1,615,003	504,993	326	18		5		303		16
1,682,426	3,208,137	12,545,100	92,931	130,409	1,772,248	40,521,015	281,469	71,364,850	20,552,396	9,137	4,188	155	343		4,451	2,288	17
28,072	8,070	230,192	251	11,683	7,616	467,769	12,840	950,739	470,130	490	240		91		159	26	18
454,522	183,826	2,034,909	1,669	166,536	256,177	4,721,322	83,349	10,029,812	5,225,141	2,893	503		265		2,125	149	19
116,391	26,035	322,903	1,269	52,885	13,482	1,225,503	16,061	2,108,429	866,865	687	40		75		572		20
252,187	121,510	1,388,874		101,375	220,907	2,447,137	46,449	5,975,716	3,482,130	1,449	203		90		1,156	135	21
85,944	30,281	313,132	400	12,276	21,788	1,048,682	20,839	1,945,667	876,146	757	260		100		297		22
336,416	80,061	1,778,927	3,727	38,246	166,954	5,287,965	65,011	8,930,595	3,583,619	6,738	3,712	15	377		2,694	149	23
1,001,777	755,044	5,893,721	4,939	43,639	903,828	15,527,757	649,776	27,801,760	11,024,227	10,915	1,792	300	904		7,919	835	24
925,345	711,251	5,669,984	4,939	40,999	894,939	14,683,819	619,419	26,450,176	11,146,938	9,507	522	300	854		7,801	785	25
76,432	43,793	223,737		2,640	8,889	843,938	30,357	1,351,584	477,289	1,408	1,270		20		118	50	26
1,222,366	2,878,991	9,906,064	48,505	666,765	1,234,703	48,744,427	1,211,115	78,819,091	28,963,456	12,582	1,387	53	774	5	10,363	721	27
296,854	548,410	1,277,465		18,343	618,401	6,264,518	122,644	11,583,100	5,196,038	1,357	451				966	93	28
925,512	2,330,375	8,628,599	48,505	648,442	1,234,703	48,744,427	1,211,115	78,819,091	28,963,456	11,225	936	53	774	5	9,457	628	29
1,583,812	804,322	12,931,241	97,632	38,430	863,983	4,577,945	5,382,726	32,172,576	22,211,905	63,763	49,023	390	4,003		10,347	5,818	30
527,392	218,175	4,275,566	2,005	19,745	191,867	1,076,396	2,042,884	10,731,413	7,612,133	23,626	17,561		1,164		4,901	1,100	31
367,012	148,591	2,141,364	13,103	13,059	256,619	1,046,233	816,857	5,613,721	3,760,631	8,449	6,591	60			1,798	285	32
319,985	146,509	3,234,075	16,346	4,210	261,309	1,362,773	1,881,644	7,989,373	5,245,056	18,236	15,665	300	760		1,511	2,806	33
339,214	280,858	2,978,465	65,678	1,416	139,489	955,501	1,049,602	7,065,180	5,060,177	12,165	8,629	30	1,394		2,112	1,282	34
30,209	10,189	301,771	500		24,069	137,042	91,639	772,889	543,908	1,287	577				25	775	35
37,926	52,156	312,649		8,443	12,627	921,033	13,893	1,705,377	771,451	352	30				124	196	36
196,869	261,973	954,033	250	9,726	99,417	1,655,054	22,837	3,903,798	2,227,907	1,124	460		170		494	670	37
451,478	387,817	1,456,165	4,984	81,648	255,889	34,455,248	271,955	41,061,993	6,334,790	7,405	3,486	3	1,124		2,792	748	38
7,094	3,679	82,693		1,445	967	72,538	2,267	191,614	116,854	93	25				43		39
285,099	67,253	775,723	508	3,785	174,408	4,347,443	64,899	6,838,327	2,426,015	5,103	3,844	123	400		736	282	40
271,649	65,633	744,014	508	3,195	171,110	4,260,986	62,197	6,662,944	2,339,761	5,024	3,769	123	396		736	282	41
13,450	1,620	31,709		3,298	590	86,457	2,672	175,383	86,254	79	75						42
43,000	80,647	169,922		12,024	37,817	255,980	3,250	500,123	590,893	112					112		43
5,180	3,630	64,635	3,193	5,670	968	33,267	3,182	186,459	130,010	155					75	80	44
161,642	99,859	1,182,154		15,609	97,342	3,197,742	63,780	5,931,602	2,670,070	3,433	2,841		195		397	593	45
243,941	123,844	1,072,636	10,082	47,350	174,984	2,334,197	58,455	5,014,008	2,621,356	1,928	182		465		1,281	11	46
221,135	118,631	854,128	3,682	28,096	168,430	2,102,841	48,008	4,344,467	2,193,618	1,600	182				1,042	11	47
22,806	5,213	218,508	6,400	19,254	6,554	231,356	10,447	669,541	427,738	328					239		48
173,436	52,735	2,269,966	13,499	8,120	30,412	1,914,056	202,382	4,724,031	2,608,193	2,545	129		2		2,414	374	49
2,847,966	3,135,954	50,694,380		81,000	89,567	36,997,952	2,592,096	96,483,946	56,893,898	50,659	24,943	5,187	1,610		18,910	22,252	50
561,454	348,086	3,335,505	8,585	22,835	922,410	21,097,856	217,288	28,145,542	6,830,398	12,685	1,905		450		10,330	300	51
73,056	66,931	975,029	21,510		43,810	615,907	898,344	3,338,594	1,824,343	13,514	5,225	1,000	80		7,209	3,498	52
1,097		125,422	2,698		3,879	1,514,248	11,064	1,753,274	227,962	510	435	72	3		4,438	10,676	53
693,141	742,760	5,473,508	56,874	34,095	1,740,048	12,146,385	3,149,144	32,719,466	17,423,937	35,049	13,838	16,320	433	20	4,438	10,676	

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.							Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		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	Coal-tar products.....	15	944	2	62	23	23	834	Fe	924	Je ^a	711	919	912	7	Dollars.	
2	Coffee and spice, roasting and grinding.....	43	1,811	17	103	480	123	1,088	Se	1,191	Mh	986	1,092	532	552	8	
3	Coffins, burial cases, and undertakers' goods.....	20	1,377	15	71	100	43	1,148	Mh	1,221	Jy	1,100	1,125	925	200	4,382,665	
4	Coke, not including gas-house coke.....	13	3,847	109	268	63	3,407	Ja	4,287	Oc	2,256	3,154	2,713	2	439	48,242,369	
5	Condensed milk.....	30	806	3	41	24	27	711	Je	783	Ja	647	703	639	64	4,493,877	
6	Confectionery and ice cream.....	380	7,248	417	361	494	525	5,451	Oc	5,423	Jy	3,304	6,230	2,652	3,526	37	18,347,323
7	Confectionery.....	185	5,287	179	224	382	375	4,137	Oc	5,423	Jy	3,304	4,991	1,533	3,425	18	11,454,893
8	Ice cream.....	195	1,951	238	137	112	150	1,814	Jy	1,742	Ja	995	1,239	1,119	101	19	6,892,430
9	Cooperage.....	58	797	28	44	11	13	701	De	789	Mh	627	800	795	4	1	2,800,774
10	Copper, tin, and sheet-iron work.....	282	3,434	265	231	135	153	2,650	De	2,955	Mh	2,288	3,007	2,848	157	2	9,081,239
11	Cordials and flavoring sirups.....	8	178	4	15	37	16	106	Jy	139	Ja	89	102	71	81	1	901,517
12	Cutlery and edge tools.....	19	1,849	8	60	75	37	1,663	Je	1,713	Se	1,619	1,658	1,329	329	3	3,727,269
13	Dairymen's, poultrymen's, and ap- arists' supplies.....	14	617	9	38	74	51	445	De	480	My	418	455	419	66	1	2,339,302
14	Druggists' preparations.....	29	835	21	46	142	101	525	Mh	624	No	478	493	219	274	1	2,466,992
15	Dyeing and finishing textiles, exclu- sive of that done in textile mills.....	6	367	14	8	6	339	Se	373	Fe	300	377	316	61	1	2,108,425	
16	Electrical machinery, apparatus, and supplies.....	189	32,501	53	925	2,817	2,034	26,672	De	31,551	My	22,900	35,633	27,377	8,226	24	103,340,897
17	Electroplating.....	39	314	40	26	5	7	236	De	291	Fe	196	291	276	14	1	274,591
18	Emery and other abrasive wheels.....	5	245	2	15	6	11	201	De	226	Ja	193	226	224	2	1	420,618
19	Engines, steam, gas, and water.....	44	7,554	9	265	782	280	6,218	Au	6,667	My	5,673	6,341	6,301	40	1	37,221,036
20	Engraving and diesinking.....	13	56	16	6	1	2	31	De	40	Mh	23	40	34	6	1	76,292
21	Engraving, steel and copper plate, including plate printing.....	22	304	15	14	12	8	255	Jy	271	Fe	224	271	174	97	1	225,887
22	Engraving, wood.....	5	8	6	1	1	1	2	(1)	2	(4)	2	2	2	2	1	1,685
23	Envelopes.....	7	1,100	1	27	13	38	1,021	De	1,108	Ap ^a	999	1,118	413	705	1	2,340,390
24	Explosives.....	12	427	1	45	58	19	304	Ja	355	Je	251	317	316	1	1	4,349,334
25	Fertilizers.....	23	1,539	1	99	190	52	1,197	Se	2,185	De	870	1,312	1,302	10	1	11,649,854
26	Flags and banners.....	11	153	10	10	9	1	123	Je	144	Mh	111	120	42	77	1	272,371
27	Flavoring extracts.....	44	529	42	35	88	39	325	Je	410	Mh	285	322	222	98	2	2,819,208
28	Flour-mill and gristmill products.....	577	3,563	717	313	228	183	2,122	Se	2,281	Fe	1,937	2,335	2,318	13	2	32,284,802
29	Food preparations, not elsewhere specified.....	98	2,989	85	139	682	216	1,857	Au	2,133	Mh	1,580	1,930	1,474	443	8	19,405,119
30	Foundry and machine-shop products.....	1,000	84,753	561	3,538	5,666	2,761	72,227	.....	.....	.....	.....	79,985	78,008	1,846	128	297,222,356
31	Boiler shops.....	51	3,156	32	135	361	111	2,517	Ja	3,108	My	2,266	2,831	2,825	6	1	19,570,080
32	Foundries.....	152	21,325	86	760	659	340	19,480	De	23,525	My	17,134	23,420	22,647	465	108	45,307,999
33	Machine shops.....	703	43,914	423	1,975	3,571	1,749	36,196	Ja	39,574	Je	34,347	38,571	37,528	1,025	15	168,994,338
34	Machine shop and foundry com- bined.....	94	16,358	20	688	1,075	561	14,034	De	15,056	Je	13,229	15,163	14,808	350	5	63,800,271
35	Foundry supplies.....	28	353	7	54	43	36	213	No	271	Mh	181	263	259	4	1	1,632,556
36	Fur goods.....	36	287	38	18	6	18	207	No	278	Mh	159	263	87	178	1	663,500
37	Furnishing goods, men's.....	12	444	9	30	89	24	292	De	342	My	266	349	46	303	1	898,468
38	Furniture.....	162	9,723	92	404	511	370	8,346	De	5,609	Ja	4,157	9,401	8,642	704	55	25,886,058
39	Wood furniture, other than rat- tan and willow.....	116	5,601	72	225	237	134	4,933	De	5,609	Ja	4,157	5,469	5,091	354	24	13,939,241
40	Rattan and willow furniture.....	5	299	4	16	14	5	260	No	318	Ja	204	316	215	70	31	431,427
41	Metal furniture.....	11	1,699	91	161	155	1	1,292	De	1,583	Je	1,032	1,583	1,524	59	1	6,085,589
42	Store and office fixtures.....	30	2,124	16	72	99	76	1,861	De	2,032	Ja	1,769	2,033	1,812	221	1	5,413,801
43	Gas and electric fixtures.....	35	1,012	27	56	53	37	839	Oc	433	Jy	363	962	606	340	16	2,985,596
44	Gas fixtures.....	12	445	5	25	11	12	392	Oc	433	Jy	363	401	154	240	7	1,057,124
45	All other.....	23	567	22	31	42	25	447	No	563	Fe	360	561	452	100	9	1,898,772
46	Gas, illuminating and heating.....	15	221	81	12	16	162	Ja	175	De	152	154	153	1	1	6,500,838	
47	Gas machines and gas and water meters.....	14	335	3	42	49	30	211	Ja	237	My	178	202	200	2	1	1,393,006
48	Glass.....	44	11,761	297	305	224	10,935	De	12,085	Jy	9,077	13,346	11,876	1,916	44	10	27,690,089
49	Glass, cutting, staining, and orna- menting.....	37	664	26	49	26	31	532	De	655	Ja	430	656	402	251	3	988,143
50	Gloves and mittens, cloth, not in- cluding gloves made in textile mills.....	35	2,328	22	60	33	51	2,162	Ja	2,745	My	1,733	2,635	317	2,221	27	4,384,678
51	Grease and tallow, not including lu- bricating greases.....	54	896	44	68	53	20	711	.....	.....	.....	.....	713	706	7	1	4,147,277
52	Soap stock.....	24	410	19	28	12	5	346	Mh	365	No	318	349	345	4	1	1,500,507
53	All other.....	30	486	25	40	41	15	365	Au	402	Je	334	364	361	3	1	2,646,770
54	Grindstones.....	17	574	5	23	10	7	629	Ap	613	De	446	453	449	4	1	1,845,283
55	Hair work.....	11	48	12	2	2	2	32	Fe ^a	34	No ^a	29	34	6	28	1	20,536
56	Hand stamps.....	23	148	24	17	10	14	83	De ^a	93	Ja	69	94	84	6	4	197,241
57	Hardware.....	50	5,047	23	142	145	161	4,576	No	508	My	441	4,834	4,080	734	11	11,160,691
58	Locks.....	7	39	4	9	1	2	23	No	508	Se	441	33	33	2	1	97,540
59	Builders' hardware.....	10	551	4	16	33	28	470	Au	508	Se	441	507	418	89	1	1,906,848
60	All other.....	33	4,457	15	117	111	131	4,083	Au	4,427	Ja	3,699	4,294	3,640	643	11	9,156,308
61	Hats and caps, other than felt, straw, and wool.....	31	639	38	34	52	23	492	De	574	Ap	376	587	229	344	14	1,197,751
62	House-furnishing goods, not else- where specified.....	29	459	18	28	42	31	340	Jy	377	Ja	300	346	173	171	2	1,375,056
63	Ice, manufactured.....	141	2,544	85	215	87	205	1,932	Jy	2,959	Ja ^a	1,148	2,176	2,143	33	1	16,990,167
64	Ink, printing.....	8	532	19	67	49	297	No	462	Ap	345	457	428	29	1	2,793,717	
65	Instruments, professional and scien- tific.....	20	718	11	50	22	34	601	Jy	693	Ja	501	648	332	313	3	1,062,549
66	Iron and steel, blast furnaces.....	42	11,055	31	747	204	9,793	Ja	12,137	Oc	6,105	11,211	11,263	8	1	162,007,954	
67	Iron and steel, steel works and rolling mills.....	86	80,494	3	1,395	4,618	1,453	73,025	Ja	85,394	Oc	41,747	82,678	81,667	1,010	1	511,271,910
68	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	23	5,274	9	130	207	150	4,778	Ja	5,334	Oc	3,975	4,976	4,030	915	26	19,059,171

¹Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).^aChiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

MANUFACTURES—OHIO.

1189

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.			Rent- ²	
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

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TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.							Capital.	
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		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	Iron and steel, forgings, not made in steel works or rolling mills.	38	6,676	5	189	358	103	5,931	Ja	6,563	Se	5,701	6,017	5,992	24	1	Dollars. 23,945,063	
2	Iron and steel, tempering and welding	47	239	59	23	8	9	140	De	170	Ja	103	171	166	5	—	449,047	
3	Iron and steel, wrought pipe.	8	4,937	—	59	298	146	4,434	Au	4,970	Oc	3,415	4,546	4,495	51	—	39,309,921	
4	Jewelry.	52	868	67	29	50	64	658	De	829	Se	531	818	535	276	7	1,716,788	
5	Knit goods.	34	4,824	13	128	158	118	4,407	De	5,149	Fe	3,586	5,122	1,008	4,060	31	23	13,564,745
6	Labels and tags.	9	270	2	26	7	13	228	No	257	Ja	179	249	131	118	—	864,241	
7	Lamps and reflectors.	14	1,231	3	42	55	39	1,095	Au	1,307	Ja	777	1,303	1,206	97	—	3,906,616	
8	Leather goods, not elsewhere specified	13	1,877	11	15	14	11	136	De	159	Ja	113	151	80	70	—	470,039	
9	Leather, tanned, curried, and finished	24	1,738	17	80	44	32	1,565	Oc	1,791	Ja	1,363	1,733	1,702	31	—	26,995,409	
10	Lime.	30	1,865	13	68	59	34	1,191	Au	1,315	Fe	958	1,197	1,196	1	—	6,040,374	
11	Liquors, malt.	73	4,039	9	282	343	78	3,327	Jy	3,935	De	2,776	2,814	2,787	27	—	47,005,889	
12	Lithographing.	28	2,812	10	109	126	128	1,939	No	2,103	Ja	1,764	2,091	1,715	374	2	8,364,037	
13	Looking-glass and picture frames.	18	609	10	25	31	24	519	No	599	Ja	455	630	410	120	—	1,563,309	
14	Lubricating greases.	8	214	2	19	88	35	70	Oc	74	Mh	65	78	76	1	—	1,283,730	
15	Lumber and timber products.	514	4,039	653	149	54	48	3,135	De	3,543	Ja	2,850	4,129	4,109	14	6	6,697,061	
16	Lumber, planing-mill products, not including planing mills connected with sawmills.	378	5,862	238	472	390	217	4,495	De	5,021	Ja	3,736	5,497	5,439	56	2	21,702,964	
17	Machine tools.	102	16,112	29	663	1,038	527	13,855	De	15,305	My	12,911	15,333	15,064	260	9	56,626,865	
18	Marble and stone work, except slate.	191	1,987	196	117	122	48	1,504	—	—	—	—	1,553	1,550	1	2	7,512,180	
19	Monuments and tombstones.	143	739	161	60	60	21	437	Au	468	Ja	356	495	462	1	2	2,106,000	
20	Other marble and stone work, except slate.	48	1,248	35	57	62	27	1,067	Jy	1,185	Fe	861	1,038	1,088	—	—	5,406,100	
21	Mattresses and spring beds, not elsewhere specified.	40	712	22	64	39	34	553	Se	600	Ja	468	588	426	159	3	2,515,818	
22	Millinery and lace goods, not elsewhere specified.	41	1,245	52	69	40	45	1,033	—	—	—	—	1,102	268	813	3	18	1,598,158
23	Embroideries.	7	192	5	10	8	6	163	Oc	172	Fe	150	167	46	120	1	280,792	
24	Trimmed hats and hat frames.	20	908	27	50	34	30	767	Fe	877	Je	591	822	197	605	2	18	1,104,694
25	All other.	14	145	20	9	4	9	103	Jy	113	Ja	87	113	25	88	—	202,772	
26	Mineral and soda waters.	217	1,343	247	106	71	52	867	—	—	—	—	844	788	25	30	4,419,267	
27	Mineral and carbonated waters.	200	1,239	235	91	68	42	803	Jy	1,066	Ja	599	778	733	14	30	3,094,133	
28	All other.	17	104	12	15	9	10	84	Oc	123	Ja	31	66	55	11	—	725,124	
29	Minerals and earths, ground or otherwise treated.	44	2,193	6	107	69	51	1,960	Ja	2,223	My	1,795	1,968	1,968	—	—	8,884,083	
30	Mirrors, framed and unframed, not elsewhere specified.	10	288	7	15	12	11	243	De	285	My	218	301	240	61	—	438,850	
31	Models and patterns, not including paper patterns.	138	1,625	168	91	39	35	1,192	De	1,533	Fe	890	1,539	1,529	7	3	2,371,064	
32	Motorcycles, bicycles, and parts.	9	2,780	1	96	92	111	2,480	Ja	2,995	Je	2,224	2,747	2,492	255	—	8,447,379	
33	Mucilage, paste, and other adhesives, not elsewhere specified.	12	89	6	15	8	7	53	Je	65	Se	46	60	33	27	—	216,246	
34	Musical instruments, organs.	6	75	10	10	—	2	53	De	60	Mh	45	59	54	5	—	154,983	
35	Musical instruments, piano.	10	902	—	52	37	26	787	De	979	Ja	595	979	825	152	2	3,054,456	
36	Musical instruments, piano and organ materials.	6	1,048	1	22	31	14	980	De	1,113	Ja	768	1,117	931	136	—	2,813,705	
37	Oil, linseed.	3	357	—	17	43	27	270	Ja	295	Au	248	250	246	4	—	3,822,151	
38	Oil, not elsewhere specified.	21	592	5	54	156	75	302	Ap	325	Mh	280	306	287	9	—	2,784,096	
39	Optical goods.	31	519	12	30	40	63	365	De	377	Ja	346	378	300	72	6	978,436	
40	Paints.	61	3,569	16	228	788	340	2,197	No	2,379	Ja	1,930	2,349	2,098	251	—	23,152,529	
41	Paper and wood pulp.	49	7,603	1	289	210	184	6,999	No	7,464	Ap	6,306	7,447	6,468	972	4	74,498,111	
42	Paper goods, not elsewhere specified.	22	2,014	7	64	119	69	1,755	No	1,800	Ap	1,716	1,815	1,139	676	—	9,133,644	
43	Patent medicines and compounds.	202	1,705	128	171	309	208	889	—	—	—	—	1,036	612	520	2	2	6,534,040
44	Patent and proprietary medicines.	144	1,307	86	126	239	158	698	No	807	Je	650	824	372	448	2	2	4,904,519
45	Patent and proprietary compounds, not elsewhere specified.	58	398	42	45	70	50	191	De	236	Jy	162	212	140	72	—	1,620,521	
46	Paving materials.	77	1,212	60	99	70	17	966	Au	1,313	Fe	591	1,226	1,226	—	—	4,872,743	
47	Perfumery and cosmetics.	36	657	30	62	126	158	281	No	364	Ja	196	307	93	272	1	1,778,383	
48	Petroleum, refining.	11	4,890	—	76	2,044	345	2,431	Au	2,556	Ap	2,331	2,400	2,372	28	—	46,545,550	
49	Phonographs and graphophones.	20	1,656	5	46	55	126	1,424	De	1,585	Ja	908	1,589	1,640	243	2	4	3,492,734
50	Photographic materials.	12	238	3	19	15	16	185	Ja	224	Au	163	182	62	92	8	386,244	
51	Photo-engraving.	30	578	11	62	48	40	417	Se	453	Ja	343	455	428	14	12	687,598	
52	Pickles, preserves, and sauces.	37	1,565	25	50	67	39	1,375	—	—	—	—	1,416	557	852	—	7	6,599,462
53	Preserves.	14	815	11	32	36	17	719	Je	924	Ja	524	798	236	550	—	2,807,822	
54	Pickles and sauces.	23	750	14	27	31	22	656	Se	1,225	My	481	630	321	302	—	7	3,791,640
55	Plumbers' supplies, not elsewhere specified.	48	2,228	15	135	110	71	1,897	Da	2,244	Mh	1,567	2,240	2,094	143	3	5,785,918	
56	Pottery.	95	12,246	25	410	245	227	11,339	—	—	—	—	12,050	8,506	3,501	22	21	21,576,324
57	China ware.	59	10,461	7	331	201	190	9,732	No	10,426	Fe	9,041	10,410	7,240	3,152	11	7	18,055,257
58	All other.	36	1,785	18	79	44	37	1,607	Fe	1,687	Se	1,517	1,640	1,266	349	11	14	3,521,067
59	Poultry, killing and dressing, not done in slaughtering or meat-packing establishments.	13	142	13	9	7	8	105	Oc	159	Ap	76	153	107	46	—	405,443	
60	Printing and publishing, book and job.	871	11,213	709	695	597	707	8,505	—	—	—	—	9,364	6,466	2,829	62	7	25,482,824
61	Job printing.	808	10,335	668	624	483	572	7,988	De	8,767	Ja	7,376	8,762	6,062	2,633	60	7	22,933,957
62	Book publishing and printing.	9	447	5	19	23	31	369	No	422	Ja	333	423	241	181	1	—	1,494,859
63	Book publishing without printing.	30	237	17	30	87	99	4	Fe	10	De	3	13	12	1	—	641,345	
64	Linotype work and typesetting.	24	194	19	22	4	5	144	De	166	Ja	124	166	151	14	1	412,633	
65	Printing and publishing, music.	11	81	9	12	34	15	14	Jy	16	Ja	12	11	9	2	—	423,634	
66	Printing and publishing, newspapers and periodicals.	794	13,703	596	790	2,403	2,302	7,627	—	—	—	—	8,114	6,067	1,368	72	7	37,353,788
67	Printing and publishing.	91	6,085	36	235	1,676	693	3,445	No	3,595	Fe	3,272	3,582	3,288	270	24	—	17,642,121
68	Printing, publishing, and job printing.	507	7,057	465	421	612	1,352	4,177	De	4,494	Ja	3,961	4,526	3,374	1,097	45	7	18,931,414
69	Publishing without printing.	196	566	85	134	115	227	5	De	6	Je	3	6	5	1	—	780,253	

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

MANUFACTURES—OHIO.

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COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						Electric horsepower generated in establishments reporting.
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.						
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.	Rent- ²				
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹			

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
888,509	686,476	7,622,833	71,400	3,003,951	10,581,154	2,104,855	39,563,464	20,877,455	21,030	2,580	625	670	17,155	4,237	1			
69,402	16,267	222,852	5,044	17,940	34,532	172,996	36,287	755,415	546,132	491	9	9	482	50	2			
372,417	683,388	7,209,734		1,911,354	23,004,172	725,748	37,968,236	14,238,316	10,289	4,635	800		4,884	11,071	3			
95,267	175,452	618,936	18,625	40,529	24,615	1,754,196	15,236	3,349,547	1,580,115	297			297		4			
903,914	572,309	3,032,899	14,393	116,651	992,989	10,990,123	88,117	18,778,844	7,099,604	2,688	1,165	85	1,438	5,833	5			
73,834	34,100	216,443	1,724	9,946	10,829	640,314	10,142	1,156,023	605,567	244			244		6			
211,477	174,287	1,547,742	7,765	5,254	151,099	4,087,891	81,810	7,186,768	3,017,067	3,061	250	43	2,768	32	7			
40,578	18,246	104,387	1,000	8,469	8,111	607,059	4,359	992,124	380,706	156			148		8			
342,072	139,647	2,171,888		4,005	550,846	18,624,763	193,028	25,008,070	6,190,279	5,063	2,612	667	1,614	1,972	9			
182,774	125,265	1,261,937	4,008	178	146,550	954,878	746,122	4,021,106	2,320,106	9,175	2,015	907	5,578	1,199	10			
1,106,783	675,199	4,453,390	3,074	7,225	3,875,969	5,803,560	1,292,012	25,161,227	18,065,655	35,924	30,495	2,275	2,901	6,404	11			
46,937	405,324	2,007,817	45,482	46,770	147,460	3,491,174	52,583	9,150,614	5,606,857	2,720	995	285	1,440	1,539	12			
66,736	91,618	462,248		13,444	41,330	834,740	17,219	2,050,220	1,198,261	663	225		438		13			
80,274	273,499	81,549		1,904	36,580	904,870	10,442	2,029,529	1,114,217	232	100	19	113		14			
348,603	111,336	3,048,798	182,341	16,224	99,077	5,115,721	79,982	12,031,472	6,535,769	20,809	17,901	279	2,011	135	15			
1,093,057	650,105	5,213,136	58,985	135,003	435,391	19,990,630	361,513	32,428,847	12,076,704	28,302	10,268	200	3,389	1,501	16			
2,511,242	2,028,768	17,071,620	406,294	119,528	6,294,723	18,731,367	745,468	62,554,169	45,077,334	25,255	4,649	1,635	18,056	9,309	17			
322,089	240,516	1,912,274	42,141	40,519	90,903	2,362,889	154,864	7,201,876	4,684,123	8,179	3,137	1,517	3,525	2,499	18			
146,654	106,676	645,440	12,025	19,416	25,183	1,289,671	40,313	3,156,652	1,826,668	2,000	116	1,114	1,460		19			
175,435	133,840	1,266,834	30,116	21,103	65,720	1,073,218	114,551	4,045,224	2,857,455	5,489	3,021	403	2,065	2,499	20			
188,832	102,556	504,728		35,742	53,802	2,559,285	35,735	4,199,164	1,604,144	1,054	2	180	872	39	21			
190,766	103,517	792,048	260	54,633	90,823	1,874,004	19,214	3,632,168	1,738,950	464	85		379	70	22			
25,555	7,205	145,556		11,877	1,525	152,922	2,647	474,856	319,287	41			41		23			
151,825	80,547	580,111	260	33,869	88,406	1,560,186	14,145	2,797,140	1,222,809	389	85		304	70	24			
13,386	15,765	66,381		8,887	892	160,896	2,422	360,172	196,854	34			34		25			
223,266	124,166	989,351	4,992	51,835	271,135	3,176,005	78,678	6,769,394	3,514,711	2,199	656	133	1,902	37	26			
197,905	114,638	935,771	4,898	51,374	243,579	2,847,567	74,013	6,122,885	3,201,315	1,928	643	84	1,199	37	27			
25,361	9,528	53,580	99	461	27,556	328,438	4,665	646,499	313,396	271	13	133	103		28			
334,071	179,994	2,348,263		69,079	336,811	1,444,406	774,460	6,860,653	4,641,778	24,006	15,170	688	8,120	36	29			
60,587	51,151	148,250		6,713	11,008	697,198	14,393	1,099,215	387,624	312	70	36	206		30			
329,122	64,204	1,914,688	6,648	58,164	121,256	1,632,508	71,215	5,469,746	3,756,023	6,731	4,500	125	1,856	21	31			
273,305	238,406	3,339,074	1,036	7,643	513,059	4,965,313	164,483	10,874,030	5,744,234	4,289	1,210	69	3,019		32			
42,657	15,606	43,892		9,069	9,264	287,425	5,387	469,672	176,860	94	10	8	75		33			
14,810	2,012	67,275	2,380	2,464	1,396	91,593	1,505	233,193	140,066	69		29	49		34			
135,497	67,090	743,274		43,742	63,078	1,940,773	19,126	3,475,543	1,515,644	935	600	95	240	207	35			
102,014	61,551	1,029,368		27,075	123,115	1,068,286	32,754	3,088,393	1,743,353	1,743		349	1,403		36			
89,725	96,106	275,212		612	105,992	7,696,538	64,214	9,368,779	1,608,027	1,516	850		666	250	37			
254,792	304,364	366,147	1,800	20,112	105,945	6,455,592	90,678	8,985,985	2,439,715	597	206	25	366		38			
108,926	100,108	370,945		60,533	47,642	791,859	14,103	1,855,134	1,079,172	176			176		39			
1,091,126	1,432,871	2,916,325	24,052	60,091	1,200,986	23,360,149	237,619	36,843,364	13,250,596	8,187	1,524	500	6,167	1,242	40			
1,320,891	684,671	8,094,230	12,506	7,644	2,112,475	32,762,877	2,947,471	55,068,196	19,387,848	64,420	47,723	11,579	2,983	25,227	41			
433,920	227,058	1,627,664		25,859	2,180,085	7,894,645	115,623	15,368,229	7,357,961	3,813	1,920	47	1,846	1,289	42			
550,689	680,054	688,601	8,051	75,092	556,002	4,296,307	50,481	10,890,925	6,514,137	1,069	422	14	632	281	43			
401,241	486,802	503,849	7,685	54,747	483,302	3,099,535	23,791	7,941,142	4,817,816	699	250	14	434		44			
149,448	193,252	184,752	366	20,345	72,700	1,196,772	26,690	2,919,733	1,696,321	370	172		198	60	45			
222,309	103,950	896,304	1,338	14,740	76,472	770,843	269,906	2,951,533	1,910,784	23,303	16,827	422	6,054	271	46			
170,050	277,721	213,129		21,160	224,923	1,272,546	6,477	4,119,975	2,840,952	179	45		134		47			
359,868	2,441,744	3,245,959		330	3,819,640	29,997,014	1,961,063	43,282,801	11,324,724	7,383	4,173	1,170	1,883	192	48			
129,472	194,887	1,786,629	23,574	19,813	78,596	2,910,371	45,262	6,220,534	3,264,901	1,498	698		778	50	49			
52,383	62,329	151,245		11,308	17,007	254,812	7,966	677,958	415,180	116			91		50			
170,319	121,908	646,869	38,264	36,998	16,182	261,184	15,918	1,813,310	1,536,206	280			245	10	51			
201,898	192,814	1,288,981	712	31,854	159,507	6,999,845	102,556	10,451,455	3,349,094	2,002	1,547	71	384	1,377	52			
115,265	116,112	386,261	350	27,875	79,601	3,757,603	29,677	4,807,531	1,020,861	629	404		195		53			
86,633	76,702	902,720	382	3,979	79,906	3,242,242	72,979	5,643,924	2,328,708	1,373	1,143	41	189	1,377	54			
465,899	354,068	2,023,624	21,027	82,933	96,569	3,551,405	134,208	8,083,340	4,397,727	2,993	525	190	2,178	161	55			
1,222,746	820,230	11,558,318	78,193	25,640	888,527	6,731,173	2,281,268	28,675,361	19,662,920	10,131	6,695	125	2,687	717	56			
1,008,358	627,688	10,083,945	77,377	22,534	789,152	6,091,111	1,877,842	24,631,507	16,656,554	6,980	2,930	135	2,381	605	57			
214,388	192,542	1,474,473	816	3,106	97,375	637,062	403,426	4,043,554	3,003,366	3,151	2,765	80	306	112	58			
16,471	10,420	111,929		8,384	3,464	1,075,869	6,348	1,916,574	235,557	105	6		99		59			
2,128,365	1,360,392	9,097,772	1,007,485	657,841	571,483	14,862,138	319,782	39,201,684	24,019,764	9,628	770		8,045	382	60			
1,008,930	1,166,779	8,535,053	279,671	608,472	541,81													

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.						WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Capital.	
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		
						Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.		Female.
1	Printing materials.....	9	50	6	9	5	4	26	De ^a 28	Ja 21	28	28	7	45	Dollars. 153,731	
2	Pumps, not including power pumps.....	20	1,552	17	76	138	56	1,265	De 1,408	My 1,203	1,405	1,353	7	45	4,535,535	
3	Pumps, steam and other power.....	11	789	4	48	81	46	610	Mh 261	Au 233	774	763	11	1	2,281,133	
4	Steam pumps.....	5	282	3	17	12	8	242	De 543	Mh 199	543	532	11	1	722,401	
5	Other power pumps.....	6	507	1	31	69	38	368	No 151	Ja 113	543	532	11	1	1,558,732	
6	Refrigerators.....	5	182	1	19	18	9	135	Ja 942	Ja 791	144	144	571	2	602,316	
7	Regalia, and society badges and emblems.....	10	1,115	4	27	116	74	894			943	370			3,067,044	
8	Roofing materials.....	20	1,550	6	52	159	195	1,138	De 1,209	Ja 1,071	1,213	1,185	28	45	8,023,119	
9	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	96	89,774	15	1,246	17,808	7,068	63,637	Oc 74,720	Ja 53,904	75,300	68,550	6,705	45	398,126,426	
10	Saddlery and harness.....	106	1,052	112	44	77	20	799	De 897	My 675	906	831	74	1	4,100,027	
11	Safes and vaults.....	18	2,225	4	88	210	102	1,821	De 2,078	My 2,078	2,078	2,035	42	1	8,329,728	
12	Safes.....	10	1,923	2	70	172	81	1,598	De 1,855	Fe 1,411	1,855	1,823	32	1	7,303,072	
13	Vaults.....	8	302	2	18	38	21	223	Mh 237	Se 213	223	212	11	1	1,028,651	
14	Salt.....	5	591	26	16	14	535	Oc ^a 604	Ap 450	570	505	65	1	4,525,920		
15	Sausage, not made in slaughtering and meat-packing establishments.....	30	396	28	49	22	269			286	281	5		1,049,636		
16	Sausage.....	20	244	18	18	31	10	167	De ^a 182	Ap ^a 157	181	181			754,196	
17	Sausage casings.....	10	152	10	18	12	102	No 100	My 98	105	100	5	1	250,469		
18	Saws.....	9	184	7	8	13	12	144	No 151	Au 130	145	144	1	1	1,206,126	
19	Screws, machine.....	9	4,663	7	158	144	128	4,226	De 4,752	Ja 3,541	4,762	3,967	795	1	27,365,000	
20	Shipbuilding, steel, new vessels and repair work.....	9	11,566	02	205	107	11,192	Mh 12,081	De 9,279	10,407	10,388	19	1	51,177,363		
21	Shipbuilding, wooden, including boat building.....	19	269	20	2	7	220	Fe 335	No 90	250	248	2		645,264		
22	Shirts.....	32	2,185	36	76	85	88	1,900	No 1,978	Jy 1,816	1,972	199	1,773	1	4,940,229	
23	Show cases.....	13	331	6	26	19	7	273	De 338	Ja 203	338	326	11	1	997,042	
24	Signs and advertising novelties.....	70	2,573	52	108	337	169	1,907	De 1,978	Ja 1,816	2,260	1,347	912	1	6,110,483	
25	Electric and other signs.....	53	1,230	45	60	132	65	928	No 1,046	Ja 702	1,063	842	221	1	2,334,489	
26	Advertising novelties.....	17	1,343	7	48	205	104	979	De 1,197	Fe 706	1,197	505	691	1	3,776,994	
27	Slaughtering and meat packing.....	141	6,007	136	244	694	197	5,336	De 5,984	My 4,995	5,820	5,350	469	1	32,340,461	
28	Smelting and refining, not from the ore.....	7	128	23	4	13	88	De 100	Mh 68	100	100	100			1,344,476	
29	Sporting and athletic goods.....	11	869	9	28	26	44	762	Au 790	Ja 728	872	521	351	7	2,052,189	
30	Stamped and enameled ware, not elsewhere specified.....	49	4,285	6	183	120	142	3,834			4,164	3,225	932	7	13,962,664	
31	Stamped ware.....	35	1,408	6	96	58	51	1,197	De 1,485	Mh 995	1,463	1,238	224	1	4,816,229	
32	Enameled ware and bathtubs.....	14	2,877	87	62	91	2,637	Oc 2,880	Ja 2,392	2,701	1,987	708	6	1	9,616,425	
33	Stationery goods, not elsewhere specified.....	12	1,004	3	38	115	82	766	De 847	Ja 705	847	610	237		3,269,980	
34	Statuary and art goods.....	10	147	10	11	2	8	116	Oc 134	Ja 86	114	110	4		322,177	
35	Steam fittings and steam and hot-water heating apparatus.....	29	3,307	11	106	289	178	2,723			3,110	3,028	81	1	9,734,260	
36	Radiators and cast-iron heating boilers.....	8	517	6	12	21	14	464	De 506	Fe 394	505	500	5		1,307,021	
37	All other.....	21	2,790	5	94	268	164	2,259	De 2,556	My 2,074	2,605	2,528	76	1	8,426,639	
38	Steam packing.....	8	87	5	10	7	6	59	Ja 76	De 50	50	41	9		164,825	
39	Steel barrels, drums, and tanks, portable.....	13	1,810	5	72	100	52	1,581	De 2,018	My 1,214	2,018	2,015	3		11,151,669	
40	Stencils and brands.....	11	115	12	7	10	79	De 104	Ja 64	104	87	17			244,853	
41	Stereotyping and electrotying.....	17	570	10	24	31	17	488	De 537	Ja 422	523	520	3		708,796	
42	Stoves and hot-air furnaces.....	67	7,204	25	310	502	298	6,099			6,596	6,418	177	1	20,050,351	
43	Stoves and ranges, and fireless cookers.....	39	5,345	8	212	287	186	4,652	De 5,099	Jy 4,044	4,882	4,709	172	1	13,448,764	
44	Hot-air furnaces.....	28	1,859	17	98	215	112	1,417	De 1,725	Mh 1,069	1,714	1,709	5		6,601,587	
45	Stoves, gas and oil.....	34	5,003	13	114	336	211	4,329	No 5,509	Ap 3,624	5,513	4,884	624	5	18,494,786	
46	Structural ironwork, not made in steel works or rolling mills.....	93	6,676	37	329	773	306	5,231	De 5,971	Ap 4,553	5,957	5,940	16	1	29,326,633	
47	Sugar, beet.....	5	693	25	20	18	630	No 1,472	Fe 188	1,390	1,377	13			5,963,906	
48	Surgical appliances.....	17	368	15	12	66	28	257	Ap 266	Jy 236	251	161	89	1	525,329	
49	Suspenders, garters, and elastic woven goods.....	7	309	4	14	14	16	261	Oc 287	Mh 240	281	40	240	1	786,997	
50	Tinware, not elsewhere specified.....	14	3,119	4	48	330	129	2,608	Au 2,912	Ap 2,295	2,744	1,882	860	2	14,426,963	
51	Tobacco, cigars and cigarettes.....	676	12,171	697	249	164	66	10,995	De 12,316	Au 10,529	12,469	2,908	9,541	2	13,879,731	
52	Tools, not elsewhere specified.....	149	8,272	87	339	447	438	6,961			7,923	7,435	459	29	24,777,519	
53	Shovels, spades, scoops, and hoes.....	6	470	16	13	14	427	Mh 467	Ap 367	7,923	7,435	459	29	1	2,004,527	
54	Carpenters' and machinists' tools.....	97	5,968	61	231	322	298	5,066	De 5,867	Ap 4,525	5,848	5,465	355	28	17,256,436	
55	All other.....	46	1,834	26	92	112	126	1,478	No 1,635	Ap 1,338	1,620	1,536	83	1	5,516,566	
56	Toys and games.....	59	1,778	37	113	48	55	1,525	No 2,051	Ja 1,007	2,052	1,017	1,014	15	6	3,266,688
57	Trunks and valises.....	22	399	26	29	21	17	306	Au 343	Ja 246	324	265	59		1,067,533	
58	Typewriters and supplies.....	4	114	2	5	16	11	80	De 102	Ap 62	99	78	21		373,606	
59	Umbrellas and canes.....	10	266	10	9	20	19	208	Jy 230	Ja 182	209	62	147		667,534	
60	Varnishes.....	33	1,272	13	107	267	163	732	De 819	Ja 668	819	735	83	1	9,262,919	
61	Vinegar and cider.....	18	49	22	2	2	2	21			45	42	3		253,892	
62	Vinegar.....	4	27	6	2	2	2	15	Oc 36	Jy 10	24	24	3		224,945	
63	Cider.....	14	22	16	2	2	2	6	Se 22	De 4	21	18	3		28,747	
64	Wall plaster and composition flooring.....	16	884	4	43	100	48	689	Oc 891	Ja 410	837	835	2		2,904,782	
65	Washing machines ^a and clothes wringers.....	15	562	4	32	29	20	477	De 638	Ja 342	625	624	1		1,388,576	
66	Window and door screens and weather strips.....	15	237	11	17	14	14	181	Ap 214	Ja 140	211	183	28		404,038	
67	Wirework, including wire rope and cable, not elsewhere specified.....	47	2,184	25	88	196	53	1,822			2,005	1,703	301	1	9,726,218	
68	Woven wire fencing.....	7	113	1	12	3	11	86	Je 100	Oc 73	75	75	301	1	623,174	
69	All other.....	40	2,071	24	76	193	42	1,736	Ja 1,952	Ja 1,535	1,930	1,628	301	1	9,103,044	

^a Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).^b Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.										POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Electric horse-power generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.	Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Rent.

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	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COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent-^{2}
										Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
102,724	120,820	504,152	10,000	3,754	52,527	2,251,525	51,065	3,498,431	1,184,941	1,330	995				335	307	1
108,368	44,040	873,850	113	7,090	133,260	1,901,542	28,073	3,721,708	1,791,103	4,010	2,723		1,180		701	80	2
48,055	33,873	263,700		4,351	22,703	683,135	12,506	1,303,378	607,677	1,017	458		161		398	50	3
6,074,706	8,937,820	51,072,180	2,958,444	351,001	20,528,093	221,303,071	5,163,816	374,888,508	148,420,781	104,458	51,498	4,906	1,837	90	46,127	39,557	4

Japanning.....	3	Oil and cake, cottonseed.....	1	Scales and balances.....	5	Wall paper, not made in paper mills.	3
Jewelry and instrument cases.....	1	Oil, essential.....	1	Screws, wood.....	1	Waste.....	4
Lard, refined, not made in slaughtering and meat-packing establishments.....	1	Oilcloth and linoleum, floor.....	2	Sewing-machine cases.....	1	Watchcases.....	3
Leads.....	5	Oilcloth, enameled.....	1	Sewing machines and attachments.....	3	Watches, watch movements.....	1
Lead, bar, pipe, and sheet.....	3	Olcomargarine.....	5	Silk goods.....	1	Wheelbarrows.....	5
Liquors, distilled.....	1	Ordnance and accessories.....	3	Smelting, lead.....	1	Windmills.....	1
Liquors, vinous.....	5	Paper patterns.....	1	Soap.....	28	Window shades and fixtures.....	12
Locomotives, not made by railroad companies.....	2	Peanuts, grading, roasting, cleaning, and shelling.....	2	Soda-water apparatus.....	2	Wire.....	5
Malt.....	1	Pens, fountain and stylographic.....	5	Springs, steel, automobile.....	7	Wool pulling.....	2
Matches.....	3	Photographic apparatus.....	1	Sulphuric, nitric, and mixed acids.....	5	Wool scouring.....	1
Musical instruments and materials, not specified.....	11	Plated ware, hollow ware.....	1	Tin plate andterneplate.....	3	Wool shoddy.....	3
Needles, pins, and hooks and eyes.....	2	Pocketbooks.....	2	Tobacco, chewing and smoking, and snuff.....	34	Woolen goods.....	10
		Pulp, from fiber, other than wood.....	3	Type founding.....	3	Worsted goods.....	3
		Rules, ivory and wood.....	1	Upholstering materials, excelsior.....	1		
		Sand-lime brick.....	1	Vault lights and ventilators.....	1		

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

6,028,853	42,378,127	94,778,011	46,550	6,810,758	17,865,096	307,066,348	6,405,240	558,962,007	244,500,473	174,812	30,020	70,807	3,214	61,771	12,111	1
2,600	2,200	60,882		1,724	2,030	71,212	2,212	172,147	98,723	90			24	72		2
6,296	4,528	90,740		5,454	1,255	46,990	2,421	146,141	96,730	21				21		3
101,022	108,551	528,520	300	40,931	44,743	2,672,801	58,500	4,212,106	1,480,706	483	21		7	455		4
68,104	40,132	603,554		510	50,408	204,897		1,589,600	1,031,688	2,598	2,385		145	08	505	5
54,230	12,710	180,002	205	13,411	12,385	390,825	353,021	779,982	386,195	68				08		6
736,664	458,758	4,306,167		16,384	255,070	4,887,096	306,478	14,624,783	9,431,209	11,031	675		1,564	8,792	1,332	7
122,557	30,507	263,520		4,205	98,881	307,549	83,300	1,775,773	1,384,825	2,062	2,641	75	36	10	1,065	8
107,707	48,488	406,857		26,073	22,334	1,714,308	13,737	2,684,177	956,132	991	700		140	01	15	9
58,843	28,933	378,480			20,174	158,224	80,109	812,435	565,042	760	625		80	58	80	10
153,906	131,959	670,487	18,837	15,970	52,195	1,737,668	26,046	3,289,029	1,524,415	789	335		137	317	14	11
92,955	85,810	289,049	5,258	4,949	60,095	637,025	13,027	1,701,104	1,051,142	581		42		530		12
4,359,953	39,407,574	78,577,002	6,155	6,070,109	15,800,731	252,555,253	4,778,038	462,092,527	204,759,236	134,600	18,708	73,557	37	42,307	2,572	13
2,000	5,522	27,082	1,481	2,603	2,717	17,257	170	60,209	51,782							14
70,290	48,055	610,105		1,104	32,200	567,418	57,688	1,814,480	1,189,374	1,105	175			930		15
	4,200	4,200		1,030	1,546	9,808	120	20,102	10,177	6						16
997,238	1,880,325	7,781,523	14,224	100,241	1,385,832	41,987,930	617,349	63,178,280	20,573,007	10,004	3,765	6,133	1,033	8,073	6,408	17

Hand stamps.....	2	Mattresses and spring beds, not elsewhere specified.....	2	Pickles, preserves, and sauces.....	2	Tools, not elsewhere specified.....	1
Ice, manufactured.....	1	Mineral and carbonated waters.....	5	Saddlery and harness.....	2	Varnishes.....	1
Ink, printing.....	1	Models and patterns, not including paper patterns.....	3	Sausage, not made in slaughtering and meat-packing establishments.....	2	Wheelbarrows.....	1
Iron and steel, steel works and rolling mills.....	1	Oilcloth and linoleum, floor.....	1	Slaughtering and meat packing.....	1	Window and door screens.....	1
Iron and steel, welding.....	1	Optical goods.....	1	Sporting and athletic goods.....	1	Window shades and fixtures.....	1
Lamps.....	1	Paper and wood pulp.....	1	Steam packing.....	1	Wirework, not elsewhere specified.....	1
Marble and stone work, monuments and tombstones.....	1	Petroleum, refining.....	1	Structural ironwork, not made in steel works or rolling mills.....	3	Wood, turned and carved.....	1
		Photo-engraving.....	1	Surgical appliances.....	1		

2,727,590	2,780,850	20,122,434	104,540	103,176	2,762,671	60,207,252	4,810,273	124,292,924	50,215,399	52,933	18,550	8,592	992	24,799	19,223	1
65,065	40,078	371,044		480	44,209	549,800	22,168	1,454,073	882,630	449				449		2
2,500	848	28,004		1,020	502	37,833	1,428	100,487	61,226	35				35		3
39,450	15,871	242,355		20,156	8,792	327,038	8,188	816,786	481,660	109			25	144		4
15,712	48,848	200,044		10,359	8,024	1,013,939	28,455	1,560,551	518,157	281				281		5
42,720	16,650	95,842		8,074	37,461	358,156	12,718	711,261	340,387	289			100	189		6
201,250	67,363	1,520,070		7,214	278,570	3,136,894	171,032	8,567,045	5,259,119	2,879	1,035			1,840	1,074	7
773,998	1,280,876	16,861,100	37,557		1,109,985	32,134,191	3,233,085	63,373,984	28,006,708	30,840	10,400	7,667	30	12,749	15,383	8
		5,677		120	141	10,389	741	25,756	14,626	21				21		9
65,878	26,402	230,711		1,840	21,126	1,834,053	11,436	2,643,835	798,341	531	75		80	376		10

* Same number reported for one or more other months.

† Same number reported throughout the year.

MANUFACTURES—OHIO.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.		
								Maximum month.							Minimum month.

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

CANTON—Continued.															Dollars.
1	Marble and stone work, except slate.	4	16	4				12	(*)	12	(2)	12	12		27,700
2	Models and patterns, not including paper patterns.	3	33	6	1		2	24	Au	36	0c	8	25		43,414
3	Printing and publishing.	19	322	23	18	43	39	199	De	206	Ja	190	210	183	631,603
4	Signs and advertising novelties.	7	99	4	5	1	4	85	De	134	My	59	137	21	55,974
5	Structural ironwork, not made in steel works or rolling mills.	5	394		27	54	15	298	De	325	Jy	268	321	321	1,764,504
6	Tobacco, cigars and cigarettes.	9	25	10	1			14	Apr	15	De	13	15	12	7,798
7	All other industries.*	117	8,268	47	318	454	339	7,110					7,370	6,226	35,558,982

*All other industries embrace—

Aluminum ware.	2	Carriages and wagons, repair work only.	2	Cutlery and edge tools, pocketknives.	2	Foundry supplies.	1
Artificial stone products.	4	Cars and general shop construction and repairs by electric-railroad companies.	2	Druggists' preparations.	2	Fur goods.	2
Automobiles.	1		1	Electrical machinery, apparatus, and supplies.	5	Furniture.	6
Awnings, tents, and sails.	2		1	Electroplating.	2	Gas fixtures.	2
Bells.	1		1	Engines, steam, gas, and water.	1	Hardware, saddlery.	2
Brass and bronze products.	3		3	Fancy articles, metal novelties.	1	Ice, manufactured.	1
Brick, building.	1		1	Flour-mill and gristmill products.	2	Instruments, medical and surgical.	1
Brooms, from broom corn.	1		1	Food preparations, not elsewhere specified.	1	Iron and steel, doors and shutters.	1
Butter.	3		3			Iron and steel forgings, not made in steel works or rolling mills.	2
Carriage and wagon materials.	1		1				

CINCINNATI—All industries.		2,239	86,169	1,925	3,789	6,694	4,081	69,680	De	77,149	Ap	64,807	77,911	57,929	19,730	159	93	268,015,132
1	Artificial limbs.	6	28	3	4		2	19	De	20	Mh	18	19	17	2			43,465
2	Automobile bodies and parts.	38	1,228	34	62	88	69	975	No	1,353	Fe	607	1,342	1,283	55	3	1	3,338,846
3	Automobile repairing.	48	416	50	26	23	31	288	De	297	Mh	275	317	307	4	0		442,559
4	Bookbinding and blank-book making.	22	217	29	7	5	11	165	No	180	Ja	153	175	86	86	3		238,682
5	Boots and shoes, not including rubber boots and shoes.	22	7,382	5	207	301	300	6,560	De	6,927	Ap	6,218	6,889	4,223	2,613	35	18	16,480,667
6	Boxes, cigar.	5	140	8	3	1	1	127	No	131	Ja	122	130	56	74			115,423
7	Boxes, paper and other, not elsewhere specified.	19	906	8	45	20	25	808	De	863	My	768	870	313	536	2	19	1,614,769
8	Boxes, wooden packing, except cigar boxes.	10	394	13	13	5	3	360	Au	421	Ap	300	384	374	10			730,609
9	Brass, bronze, and copper products.	13	915	14	25	32	28	316	Mh	854	Oc	777	837	793	37	7		2,120,698
10	Bread and other bakery products.	182	2,345	193	60	191	156	1,745	De	1,935	Jy	1,631	1,959	1,374	580	4	1	5,506,979
11	Biscuit and crackers.	4	841		25	77	32	707	De	852	Jy	576	852	432	420			2,845,991
12	Bakery products, other than biscuit and crackers.	178	1,504	193	35	114	124	1,038	De	1,083	Fe	994	1,107	942	160	4	1	3,160,988
13	Brick.	4	99	4	7	1	1	86	Je	111	Fe	59	91	91				281,674
14	Brooms, from broom corn.	6	63		2	2	1	52	De	67	Fe	47	57	57				90,534
15	Butter.	9	251	2	27	22	49	151	Jy	183	De	128	146	103	43			921,148
16	Carriage and wagon materials.	9	272	7	10	5	8	242	Au	274	Ja	163	254	239	14	1		717,782
17	Carriages and wagons, including repairs.	19	281	20	16	19	10	216	My	231	Ja	182	200	187	13			592,757
18	Carriages and wagons.	8	209	5	10	17	10	167	My	185	No	147	147	135	12			569,790
19	Repair work only.	11	72	15	6	2		49	De	59	Ja	35	53	52	1			22,907
20	Cars and general shop construction and repairs by steam-railroad companies.	10	1,687		33	112	19	1,523	De	1,660	Ap	1,405	1,660	1,626	34			1,312,936
21	Chemicals.	9	311	1	27	63	46	174	Au	199	Ap	147	195	180	15			1,838,817
22	Cleaning and polishing preparations.	12	88	12	12	21	14	29	My	35	Ja	26	30	21	9			317,727
23	Clothing, men's.	108	6,511	136	172	612	283	5,308	De	6,195	Ap	3,618	6,196	2,067	4,115	3	11	14,097,373
24	Regular factories.	52	5,758	64	167	612	281	4,634	De	5,480	Ap	3,972	5,481	1,911	3,557	2	11	14,026,227
25	Men's, youths', and boys'.	42	4,946	57	149	553	251	3,936	De	4,675	Ap	3,378	4,676	1,704	2,902	2		11,495,147
26	All other.	10	812	7	18	59	30	698	De	805	Mh	573	805	147	655		8	2,531,080
27	Contract work.	50	753	72	5	2	2	674	No	718	My	646	715	156	558	1		71,146
28	Clothing, women's.	34	1,129	43	40	84	54	903	Au	999	My	791	948	305	625	1	17	2,169,934
29	Coffee and spice, roasting and grinding.	12	517	6	20	106	34	351	Se	407	Mh	296	357	165	192			2,508,010
30	Confectionery and ice cream.	58	1,782	68	68	103	145	1,398	Oc	1,615	Mh	1,273	1,567	567	990	5	5	3,508,709
31	Copperage.	6	133	6	10	2	2	113	De	120	Mh	108	121	120				680,005
32	Copper, tin, and sheet-iron work.	32	906	26	60	46	42	732	Ja	994	Jy	645	745	669	76			2,743,304
33	Electrical machinery, apparatus, and supplies.	24	682	13	47	46	24	542	De	616	Jy	494	615	583	32			2,951,351
34	Electroplating.	5	63	5	3	2	2	51	De	64	Fe	42	67	58	9			46,873
35	Engraving and die-sinking.	7	26	9		1	1	16	Ja	17	Au	15	16	16				16,944
36	Engraving, steel and copper plate, including plate printing.	9	130	9	1	1	1	118	Je	132	Fe	96	118	69	49			59,263
37	Flavoring extracts.	14	224	15	14	42	18	135	Se	142	Fe	120	140	95				1,245,132
38	Flour-mill and gristmill products.	6	74	14	7	6	9	38	De	46	My	32	46	46			2	403,749
39	Food preparations, not elsewhere specified.	14	208	8	23	17	11	149	Fe	169	Se	133	189	122	67			601,864
40	Foundry and machine-shop products.	133	6,982	93	358	575	241	5,715	De	6,743	My	4,933	6,673	6,526	145	2		18,252,464
41	Foundry supplies.	7	153	3	20	24	19	87	No	99	Mh	78	95	93	2			453,107
42	Fur goods.	3	25	1	2	1	2	19	Se	25	Ap	14	18	7	11			40,530
43	Furniture.	41	1,703	35	91	58	38	1,481	De	1,600	Ja	1,319	1,600	1,467	101	32		3,555,076
44	Grease and tallow, not including lubricating greases.	8	294	7	16	21	8	242	My	232	Au	260	261	261				948,336
45	Hardware.	10	567	5	26	53	23	460	De	523	Mh	385	519	424	95			1,470,108
1 Includes water wheels and turbines (representing of amount).																		

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								POWER.							
Salaries and wages.			For contract work.	Rent and taxes.		For materials.		Value of products.	Value added by manufacture.	Primary horsepower.					Elec- tric horse- power generated in estab- lish- ments report- ing.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent- ed.^{2}
			Steam en- gines (not tur- bines).					Steam tur- bines.	Inter- nal- com- bus- tion en- gines.		Water power. ¹				

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
1,789	1,682	18,192 51,010	1,264	1,420 1,920	100 206	39,524 13,140	848 1,023	82,650 93,339	42,278 79,171	31 51	15				16 51		1 2
54,794	85,990	282,355	700	14,314	22,644	323,827	6,985	1,142,874	812,062	276					276		3
8,350	2,919	32,776		3,824	369	25,576	295	91,853	65,982	3					3		4
118,874	113,392	453,451	47,314	1,000	52,821	1,466,928	31,521	2,594,878	1,096,429	1,179	125		60		994	130	5
1,000		9,496		1,391	3,366	13,254	218	29,491	16,019	1					1		6
1,245,301	1,073,925	8,718,741	107,714	30,444	1,174,289	18,982,636	1,280,127	41,003,461	20,740,698	15,892	6,900	925	603		7,374	2,636	7

Jewelry.....	1	Paints.....	1	Saddlery and harness.....	1	Sulphuric, nitric, and mixed acids..	1
Lamps.....	1	Patent medicines and compounds....	4	Safes.....	2	Surgical appliances.....	1
Leather goods, not elsewhere speci- fied.....	2	Photo-engraving.....	2	Shirts.....	2	Tools, not elsewhere specified.....	4
Liquors, malt.....	1	Pickles and preserves.....	1	Slaughtering and meat packing.....	1	Toys and games.....	2
Looking-glass and picture frames....	1	Pottery.....	1	Sporting and athletic goods.....	1	Trunks and valises.....	1
Mattresses and spring beds, not elsewhere specified.....	1	Pumps, steam.....	1	Springs, steel, automobile.....	1	Umbrellas and canes.....	1
Mineral and carbonated waters.....	3	Roofing materials, metal shingles and ceiling.....	3	Stamped and enameled ware, not elsewhere specified.....	2	Watchcases.....	1
Mucilage, paste, and other adhesives, not elsewhere specified.....	1	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	4	Steam fittings and steam and hot- water heating apparatus.....	1	Watches.....	1

13,892,351	13,927,410	68,650,321	3,474,692	2,429,536	18,130,198	201,711,406	4,569,037	500,040,996	203,760,553	121,520	58,742	2,498	6,137		54,149	30,345	1
12,275	3,445	17,494	200	14,124	1,091	25,504	577	96,671	70,590	15					11		2
213,072	116,484	1,132,913		44,172	72,142	3,123,516	32,498	5,207,453	2,051,439	1,641	500				1,133	55	3
46,240	47,953	360,144		40,695	16,452	721,394	18,996	1,519,247	778,857	260					276		4
15,908	15,241	124,218	3,373	16,902	2,127	107,200	3,147	642,536	472,189	134					134		5
747,757	1,440,730	6,131,487		93,840	606,984	16,836,937	129,598	31,223,081	14,259,546	3,807	2,148				1,659	1,461	6
10,000	1,820	80,150	251	2,916	3,618	148,128	5,694	3,443,809	189,987	152	125				27	25	7
103,221	43,402	525,745		53,432	70,065	1,222,775	20,343	2,645,239	1,402,121	761	135		136		491		8
48,120	9,056	329,949		8,120	23,125	1,085,713	11,025	1,790,614	693,876	1,163	935		10		218	139	9
178,914	90,826	855,667	2,941	8,052	331,809	1,419,551	57,329	3,641,519	2,164,639	1,039	297		135		607	304	10
230,503	431,317	1,578,863	1,566	99,597	341,147	8,750,595	168,828	14,140,223	5,220,800	1,426	580		195		651	454	11
114,967	144,991	460,352		2,310	242,106	2,888,402	48,304	4,888,107	1,951,401	173	150				23	93	12
115,530	286,326	1,115,611	1,566	97,287	99,041	5,862,193	120,524	9,252,116	3,269,399	1,253	430		195		628	361	13
21,005	2,259	80,173		518	9,695	38,348	32,709	253,019	181,962	815	215				100		14
	4,075	51,731		2,916	578	112,277	1,780	217,736	103,723	35					35		15
86,735	43,387	150,572		5,520	47,012	7,636,875	38,948	8,824,102	1,148,279	2,015	1,544		20		451	58	16
32,969	16,308	219,573		14,567	8,989	575,405	9,119	979,250	394,726	638	580		18		40	3	17
54,615	33,657	219,822		17,088	12,702	966,592	9,190	1,547,807	572,019	283	75				130	10	18
46,618	30,381	173,272		8,897	11,251	911,213	5,576	1,386,790	470,001	218	75		70		73	10	19
8,297	3,276	46,550		8,191	1,451	55,379	3,620	161,017	102,018	65			8		57		20
90,349	194,765	2,448,257		481		1,234,862	57,955	4,026,632	2,734,115	1,022	484				538	111	21
56,904	115,474	166,975		7,348	99,800	473,891	79,231	1,518,237	965,115	1,292	230		60		1,002		22
49,604	43,298	23,861		4,163	9,809	235,862	1,715	478,224	240,647	46					46		23
1,001,290	1,214,999	4,576,182	2,028,183	265,101	728,352	16,719,957	50,510	32,254,217	15,477,750	947	190				757	52	24
991,495	1,213,315	3,977,768	2,004,877	252,519	726,618	16,697,097	49,254	31,394,174	14,647,823	861	190				671	52	25
812,239	1,123,132	3,497,018	1,807,319	225,466	488,067	12,416,388	38,437	25,684,840	13,231,015	629	190				439	52	26
179,256	90,183	480,750	137,558	27,053	238,551	4,281,709	10,817	5,709,334	1,416,808	232							27
9,795	1,684	598,414	23,306	12,582	1,734	22,860	7,256	860,043	829,927	86					86		28
193,355	150,475	960,304	60,995	57,113	60,771	2,957,036	11,350	5,135,218	2,166,826	160					160		29
75,836	276,929	270,848		26,465	82,186	4,904,053	23,127	6,611,920	1,684,740	954	50		350		554	546	30
244,575	208,597	887,273	450	81,671	598,045	5,340,135	77,401	9,428,209	4,010,673	1,491	565		137		789	514	31
33,742	5,250	119,585		12,300	15,730	509,607	6,633	831,708	315,268	379	362				17	58	32
272,720	109,867	734,172	707	12,987	96,403	2,785,874	23,623	4,805,466	2,045,009	1,054					546	95	33
153,301	76,354	572,848	20,039	27,043	93,396	1,024,751	29,693	2,613,632	1,558,588	922	105		97		720	219	34
7,768	3,488	58,479	232	4,787	596	19,052	2,320	133,714	112,342	101					101		35
	320	20,143		2,302	185	5,147	449	44,844	39,243	14					14		36
3,275	3,116	97,110	3,102	5,552	298	44,666	987	215,825	170,172	27					27		37
65,980	73,941	136,774		16,209	27,143	1,884,223	16,512	2,644,384	743,649	224	110				114		38
17,469	14,189	47,335		4,119	4,871	995,533	14,966	1,207,788	197,289	690	200				430		39
62,321	34,785	130,018		10,701	12,186	689,202	23,825	1,062,547	379,820	550	205		35		250	29	40
1,324,468	915,083	6,120,097	67,982	144,486	825,524	9,739,133	360,293	25,560,986	15,461,560	9,638	1,797		925		6,916	1,180	41
47,748	37,514	78,020	34	5,048	20,074	431,351	24,627	821,896	365,828	910	347				563	118	42
4,000	1,251	16,743	277	2,760	144	14,225	207	46,767	32,335	7					7		43
306,321	107,505	1,960,937	6,611	53,547	83,811	2,658,504	78,076	5,890,337	3,153,757	3,336	1,725		873		1,238	754	44
37,236	17,330	286,433		3,636	9,494	1,312,778	124,481	2,104,759	667,500	624	619				5	179	45
93,791	140,174	414,864	3,448	12,363	83,841	806,483	23,893	1,901,011	1,070,635	860	693		25		142	623	46

² Same number reported throughout the year.⁴ Same number reported for one or more other months.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.						Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.					
						Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.	Female.				
																Number, 15th day of—			
1	CINCINNATI—Con.		12	306	16	9	22	14	247	No	271	Ap	163	268	65	189	14	Dollars.	
2	Hats and caps, other than felt, straw, and wool.		16	245	2	18	10	9	206	Jy	258	Ja	141	198	197	1		457,631	
3	Ice, manufactured.		10	39	13	2	2	2	22	Oct	25	Jy	18	25	20	5		2,105,802	
4	Iron and steel, welding.		24	432	43	14	22	29	324	Je	368	Oct	173	361	279	78	4	40,181	
5	Jewelry.		7	93	8	9	4	4	72	Oct	82	Fe	55	82	50	31	1	1,194,429	
6	Leather goods, not elsewhere specified		13	751	12	27	24	6	682	Oct	739	Fe	639	732	722	10		343,008	
7	Leather, tanned, curried, and finished		17	1,205	7	79	116	8	1,002	Jy	1,079	No	842	855	849	6		15,312,985	
8	Liquors, malt.		11	391	8	18	26	19	320	Oct	353	Ja	278	344	292	52		10,582,180	
9	Lithographing.		22	551	17	44	51	27	412	De	487	Ja	313	918	908	10		1,099,214	
10	Lumber, planing-mill products, not including planing mills connected with sawmills.		46	6,510	18	328	426	170	5,573	De	6,401	My	5,049	6,423	6,327	91	5	2,098,105	
11	Machine tools.		25	197	33	12	12	4	136	Au	149	Ja	114	148	148			21,183,382	
12	Marble and stone work.		16	89	22	5	4	1	57	Oct	61	Ja	50	60	60			584,059	
13	Monuments and tombstones.		9	108	11	7	8	3	79	An	89	Ja	64	88	88			108,804	
14	Other marble and stone work, except slate.		11	190	8	13	9	6	154	No	175	Ja	122	159	107	50	2	475,255	
15	Mattresses and spring beds, not elsewhere specified.		15	463	16	20	12	17	398	An	499	Mh	345	418	71	346	1	512,824	
16	Millinery and lace goods, not elsewhere specified.		12	136	13	8	7	4	104	An	124	Ja	83	102	100	2		472,393	
17	Mineral and carbonated waters.		24	306	31	18	15	8	234	No	287	Fe	192	270	267	2	1	499,098	
18	Models and patterns, not including paper patterns.		13	160	6	14	13	23	104	Oct	109	Ja	98	108	94	14		637,452	
19	Optical goods.		18	751	9	48	141	66	487	Se	555	Fe	405	515	504	11		259,503	
20	Paints.		31	238	20	14	19	64	121	De	146	Fe	100	142	57	85		8,470,623	
21	Patent medicines and compounds.		21	199	10	12	9	59	109	De	131	Fe	89	128	44	84		280,058	
22	Patent and proprietary medicines		10	39	10	2	10	5	12	De	15	Ja	10	14	13	1		229,690	
23	Patent and proprietary compounds, including compounds not elsewhere specified.		7	72	1	9	3	3	56	No	78	Ja	31	74	74			50,368	
24	Phonographs and graphophones.		11	187	6	21	16	8	136	Oct	156	Ja	108	151	154	6	10	130,859	
25	Photo-engraving.		4	24	5	2	2	2	15	(^c)	15	(^c)	15	15	15			130,723	
26	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.		172	3,314	150	164	173	190	2,637	No	2,937	Fe	2,383	2,918	1,933	973	11	83,882	
27	Printing and publishing, book and job.		90	2,238	56	225	506	337	1,114	De	1,171	Ja	1,062	1,183	1,047	136		7,253,227	
28	Printing and publishing, newspapers and periodicals.		9	1,450	4	173	399	147	727	De	755	Ja	697	767	726	41		6,381,277	
29	Printing and publishing, and job printing.		12	546	12	19	46	82	387	No	424	Ja	365	416	321	95		3,714,050	
30	Publishing without printing.		66	242	40	33	61	108										2,432,462	
31	Shirts.		9	1,102	4	42	64	40	952	Oct	969	Jy	925	956	98	858		224,765	
32	Signs and advertising novelties.		13	173	12	8	4	7	142	Jy	167	Ja	101	155	111	44		2,363,394	
33	Slaughtering and meat packing.		42	1,922	51	48	143	56	1,624	De	1,794	Jy	1,582	1,790	1,584	206		208,931	
34	Statuary and art goods.		6	81	6	5	1	4	65	Se	69	Ja	57	66	63	3		9,866,841	
35	Stoves and hot-air furnaces.		11	1,262	3	62	171	103	923	De	1,098	Ap	788	1,089	1,084	5		139,563	
36	Structural ironwork, not made in steel works or rolling mills.		15	375	11	32	24	14	294	Se	353	My	224	342	328	14		4,927,280	
37	Tobacco, cigars.		124	2,146	131	47	65	16	1,887	De	2,105	My	1,748	2,121	840	1,281		1,011,567	
38	Tools, not elsewhere specified.		15	145	14	13	3	7	108	Ja	152	Je	80	140	125	15		2,780,938	
39	Watchmakers' tools.		7	86	6	7	2	2	69	Ja	116	Je	47	96	88	8		288,251	
40	All other.		8	59	8	6	1	5	39	Se	48	Fe	32	44	37	7		130,720	
41	Toys and games.		5	79	7	1	1	1	70	De	317	Ja	19	318	8	310		148,531	
42	Trunks and valises.		4	36	3	2	1	1	29	No	34	Fe	25	32	22	10		31,191	
43	Varnishes.		10	118	5	19	27	10	57	An	96	Fe	49	62	59	3		77,913	
44	Wirework, not elsewhere specified		8	99	7	4	6	3	79	Jy	97	Ja	64	85	85			688,449	
45	All other industries *		394	20,698	267	833	1,851	1,059	16,688					18,500	14,272	4,205	21	149,596	
																	2	72,916,319	

- *All other industries embrace—
- Aluminum manufactures.
- Artificial flowers.
- Artificial stone products.
- Automobiles.
- Awnings, tents, and sails.
- Babbitt metal.
- Bags, other than paper, not including bags made in textile mills.
- Bags, paper, exclusive of those made in paper mills.
- Baking powders and yeast.
- Baskets, and rattan and willow ware.
- Belt and hose, other than leather and rubber.
- Belt and leather.
- Billiard tables and accessories.
- Blackening, stains, and dressings.
- Bluing.
- Boot and shoe cut stock.
- Boot and shoe findings.
- Brushes.

Canning and preserving, vegetables..
 Carpets, rag..
 Cars and general shop construction
 and repairs by electric-railroad
 companies..
 Cars, electric-railroad, not including
 variations of railroad companies..
 Cash registers and parts..
 Chewing gum..
 Clocks..
 Cloth, sponging and refinishing..
 Clothing, men's, buttonholes..
 Coal-tar products..
 Coffins, burial cases, and undertakers'
 goods..
 Condensed milk..
 Cordage and twine..
 Cordials and flavoring sirups..
 Corsets..
 Cotton goods..
 Cotton small wares..
 Cutlery and edge tools..

Dental goods.....
Druggists' preparations.....
Dyeing and finishing textiles, exclu-
sive of that done in textile mills.
Emery and other abrasive wheels.
Enameling.....
Engines, steam, gas, and water.
Engravers' materials.
Engraving, wood.
Envelopes.....
Fancy articles, not elsewhere specified.
Fertilizers.....
Fire extinguishers, chemical.
Flags and banners.....
Furnishing goods, men's, neckwear.
Galvanizing.....
Gas and electric fixtures.
Gas machines.....
Glass.....
Glass, cutting, staining, and orna-
menting.....
Gloves and mittens, leather.....

Glue, other than fish	2
Gold and silver, reducing and refining, not from the ore	2
Hair work	5
Hand stamps	4
Hats, fur-felt	1
Hats, straw	1
House-furnishing goods, not else- where specified	8
Ink, printing	6
Ink, writing	4
Instruments, professional and sci- entific	2
Iron and steel, steel works and rolling mills	1
Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills	1
Iron and steel, forgings, not made in steel works or rolling mills	4
Japanning	1
Jewelry and instrument cases	1

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

* Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants.)

MANUFACTURES—OHIO.

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COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent- ²
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars. 40,600	Dollars. 50,306	Dollars. 181,300	Dollars. 371	Dollars. 16,570	Dollars. 8,751	Dollars. 726,639	Dollars. 2,528	Dollars. 1,271,137	Dollars. 541,970						
47,508	18,022	267,070	.....	2,700	22,133	51,322	271,920	1,368,591	1,040,349	5,355	4,085	190	.....	1,080	432
4,180	1,048	24,452	4,804	4,009	766	42,332	1,701	108,157	59,124	20	.....	.....	.....	.....	.....
30,647	48,849	323,750	18,425	24,400	4,601	1,387,768	7,721	2,263,840	885,351	133	.....	.....	.....	133	.....
27,046	1,965	65,110	1,000	5,654	7,137	420,988	2,902	694,253	270,393	119	.....	.....	.....	119	.....
124,960	50,164	786,129	.....	4,005	151,877	7,071,545	73,559	10,953,997	2,948,893	2,187	1,170	667	170	180	1,023
356,589	222,389	1,309,935	.....	1,900	1,702,338	2,023,653	424,282	7,789,700	5,341,735	11,973	11,511	152	.....	310	2,216
85,270	71,266	354,824	11,615	12,582	18,835	579,183	12,556	1,307,199	775,400	636	120	25	.....	491	31
110,875	79,907	415,235	1,035	15,956	29,900	2,022,869	28,990	3,122,558	1,070,699	2,699	1,625	112	.....	962	633
1,155,929	752,142	6,540,150	279,700	57,474	2,744,578	6,895,268	268,663	25,047,625	17,853,694	10,226	2,015	245	.....	7,966	802
34,347	22,024	165,181	2,583	7,572	10,036	261,483	11,635	607,758	394,640	789	412	188	.....	209	200
11,792	4,583	81,531	2,279	2,378	2,335	89,353	2,942	305,935	213,640	208	.....	167	.....	41	.....
22,555	17,441	83,650	304	5,194	7,701	172,130	8,693	361,823	181,000	531	412	1	.....	168	200
46,679	23,768	134,253	.....	9,172	5,767	599,130	8,675	1,009,004	401,259	232	.....	50	.....	182	35
39,813	24,974	106,200	.....	18,567	5,121	483,385	3,858	888,648	401,405	89	.....	.....	.....	89	.....
26,180	13,182	121,926	.....	2,388	72,101	360,440	9,362	980,387	610,585	144	20	.....	.....	124	.....
43,314	11,139	287,943	.....	9,085	83,277	135,918	8,688	891,434	746,828	353	.....	125	50	178	.....
29,340	34,853	105,282	.....	16,744	7,154	142,989	3,834	419,184	272,361	53	.....	.....	.....	53	.....
218,782	283,296	307,887	24,000	34,040	408,811	6,987,095	88,147	10,333,130	3,257,897	2,148	1,040	150	.....	958	1,200
54,345	47,094	70,499	.....	12,220	8,953	371,298	1,716	779,294	400,280	38	.....	.....	.....	28	.....
49,847	25,143	59,551	.....	9,720	8,149	343,387	1,630	686,668	341,651	37	.....	.....	.....	37	.....
4,498	21,951	10,948	.....	2,500	804	27,911	86	92,626	64,629	1	.....	.....	.....	1	.....
11,892	3,688	50,214	3,680	5,845	6,948	108,937	1,485	252,484	142,062	132	.....	.....	.....	132	.....
41,745	30,611	162,613	1,512	9,428	2,369	67,569	4,726	427,367	355,072	51	.....	.....	.....	51	.....
3,360	1,725	22,405	.....	4,100	787	712,412	1,250	783,090	69,428	36	6	.....	.....	30	.....
464,055	314,215	2,350,266	220,047	185,351	138,547	4,303,569	88,172	10,678,735	6,286,994	2,905	310	124	.....	2,471	236
305,202	929,524	1,572,681	507,560	53,356	369,981	3,011,019	52,887	10,567,143	7,503,237	2,920	1,125	70	.....	1,725	625
172,677	660,600	1,186,595	8,347	32,713	343,588	2,357,220	32,793	7,378,103	4,988,090	1,774	75	60	.....	1,639	5
63,752	137,303	386,086	800	7,381	20,535	613,099	20,039	2,106,943	1,473,805	1,146	1,050	10	.....	86	620
68,773	131,621	.....	498,413	13,262	5,858	40,700	55	1,082,997	1,041,342	.....	.....	.....	.....	.....	30
229,722	120,099	527,633	31,348	43,250	160,002	2,470,182	16,131	4,248,835	1,753,522	719	570	.....	.....	149	195
20,370	17,410	135,205	3,747	9,461	3,602	167,933	5,708	427,974	254,333	292	110	.....	.....	182	.....
203,904	274,401	1,839,161	5,000	50,635	252,852	54,188,381	252,361	62,428,358	7,987,616	6,838	4,008	300	285	2,245	1,413
8,766	3,826	63,002	.....	4,966	1,448	40,346	2,571	137,418	94,501	73	.....	55	.....	18	28
227,608	288,593	1,203,352	300	30,165	125,472	2,567,744	49,818	5,251,557	2,633,995	900	570	.....	.....	330	605
89,016	38,155	307,078	13,247	19,808	28,533	915,131	20,962	1,626,329	690,236	776	400	60	.....	316	425
127,374	137,873	1,418,327	172	50,054	587,365	2,733,122	14,099	5,882,781	3,135,560	112	.....	.....	.....	112	.....
42,359	9,223	128,305	.....	14,683	4,406	67,086	3,340	368,166	297,740	167	.....	5	.....	162	15
30,204	4,555	93,267	.....	6,703	2,725	25,328	1,809	211,847	184,710	121	.....	.....	.....	121	.....
12,155	4,638	35,037	.....	7,980	1,681	41,758	1,531	156,319	113,030	46	.....	5	.....	41	15
1,560	936	15,632	.....	1,244	236	30,069	368	64,073	33,636	155	150	.....	.....	5	.....
5,227	1,184	25,297	.....	3,723	1,351	76,291	583	129,952	53,078	16	.....	.....	.....	16	.....
73,475	75,594	63,987	.....	3,303	15,961	701,826	5,518	1,199,624	492,280	171	95	.....	.....	69	.....
7,105	12,186	68,132	5,000	3,937	6,284	195,775	3,345	432,767	233,647	101	.....	25	.....	78	28
3,607,921	3,866,515	15,635,266	143,655	499,029	6,731,214	91,214,544	1,234,203	143,602,061	51,153,314	28,977	14,524	1,216	1,187	12,050	13,404

Knit goods.....	3	Paper goods, not elsewhere specified..	4	Safes.....	3	Surgical appliances.....	5
Labels and tags.....	2	Paper patterns.....	1	Sausage casings.....	4	Suspenders, garters and elastic woven	3
Lamps.....	5	Pens, fountain and stylographic.....	2	Saws.....	3	goods.....	3
Lasts.....	3	Perfumery and cosmetics.....	8	Scales and balances.....	1	Tinware, not elsewhere specified.....	4
Lead, bar, pipe, and sheet.....	1	Photographic apparatus.....	1	Screws, machine.....	2	Tobacco, chewing and smoking.....	9
Liquors, distilled, grain alcohol.....	1	Photographic materials.....	1	Show cases.....	2	Type foundry.....	1
Liquors, vinous.....	1	Pickles, preserves, and sauces.....	8	Smelting and refining, not from the	3	Umbrellas and canes.....	3
Looking-glass and picture frames.....	1	Plated ware, hollow ware.....	1	ore.....	3	Vinegar.....	1
Lubricating greases.....	4	Plumbers' supplies, not elsewhere	8	Soap.....	9	Wall plaster and composition flooring.....	1
Lumber and timber products.....	3	specified.....	8	Sporting and athletic goods.....	2	Washing machines and clothes	1
Mirrors, framed and unframed, not	4	Pottery.....	4	Springs, steel, automobile.....	1	wringers.....	1
elsewhere specified.....	4	Printing and publishing, music.....	5	Stamped ware.....	3	Waste.....	1
Mucilage, paste, and other adhesives,	2	Printing materials.....	4	Stationery goods, not elsewhere	2	Watchcases.....	1
not elsewhere specified.....	2	Pumps, not including power pumps..	2	specified.....	2	Window and door screens, and	2
Musical instruments and materials,	2	Pumps, steam.....	1	Steam fittings and steam and hot-	3	weather strips.....	2
not specified.....	2	Refrigerators.....	1	water heating apparatus.....	3	Window shades and fixtures.....	3
Musical instruments, organs.....	7	Regalia, and society badges and	5	Steam packing.....	2	Wood preserving.....	1
Musical instruments, pianos.....	7	emblems.....	5	Steel barrels, drums, and tanks, port-	1	Wood, turned and carved.....	3
Musical instruments, piano materials.	1	Roofing materials.....	3	able.....	1	Wooden goods, not elsewhere speci-	2
Oil and cake, cottonseed.....	1	Rubber tires, tubes, and rubber	2	Stencils and brands.....	5	fied.....	2
Oil, vegetable.....	2	goods, not elsewhere specified.....	2	Stereotyping and electrotyping.....	4	Wool scouring.....	1
Oleomargarine.....	2	Saddlery and harness.....	7	Stoves, gas and oil.....	2	Wool shoddy.....	1

¹ Same number reported for one or more other months.

² Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.		Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.							WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.	
			Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		
						Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.		Female.
1	CLEVELAND—All industries..	2,946	191,349	1,970	7,515	15,733	8,401	157,730	De 172,842	Ap 147,365	180,142	151,791	26,643	1,652	56	Dollars. 762,585,305
2	Artificial stone products.....	11	93	14	5	2	2	70	Au 96	Ja 35	87	87	.....	.....	.....	427,261
3	Automobile bodies and parts.....	75	8,509	28	392	676	319	7,094	De 9,475	Fe 4,655	9,524	9,196	328	.....	.....	32,242,794
4	Automobiles.....	10	13,316	.....	275	686	576	11,779	De 13,189	Fe 10,429	13,190	13,017	173	.....	.....	73,394,511
5	Automobile repairing.....	71	575	63	26	22	25	439	No 448	Fe 422	450	446	4	.....	.....	807,065
6	Awnings, tents, and sails.....	9	359	1	18	27	14	329	Jy 420	Ja 242	303	173	130	.....	.....	1,713,437
7	Blacking, stains, and dressings.....	8	61	9	12	5	4	32	Jy 46	Ja 24	36	18	18	.....	.....	203,694
8	Bookbinding and blank-book making	17	333	10	14	2	11	290	De 325	Ja 251	321	199	121	1	.....	587,919
9	Boxes, cigar.....	4	58	3	2	1	1	51	De 65	Mh 40	65	15	50	.....	.....	43,937
10	Boxes, paper, shipping containers and set-up paper boxes.	9	935	2	27	17	23	886	No 1,047	My 757	946	814	632	.....	.....	1,866,465
11	Boxes, wooden packing, except cigar boxes.	13	618	2	34	13	8	561	No 598	Au 409	587	570	15	2	.....	1,356,022
12	Brass and bronze products.....	22	1,088	12	70	39	20	947	Au 1,126	Ja 702	1,062	1,047	15	.....	.....	2,266,462
13	Bread and other bakery products.....	288	3,198	282	99	518	115	2,184	De 2,887	Fe 1,948	2,408	1,779	621	2	6	6,534,286
14	Brooms, from broom corn.....	10	84	7	6	2	2	67	De 69	Ja 64	69	58	11	.....	.....	151,331
15	Butter.....	7	175	2	9	17	23	114	Jy 131	Ja 98	112	73	39	.....	.....	842,977
16	Carriages and wagons, including repairs.	18	240	17	23	8	6	186	.....	.....	196	195	1	.....	.....	699,581
17	Carriages and wagons.....	6	161	5	16	8	5	127	Oc 134	Ja 113	130	129	1	.....	.....	512,761
18	Repair work only.....	12	79	12	7	.....	1	59	Ja 64	Se 50	66	66	.....	.....	.....	186,820
19	Cars and general shop construction and repairs by steam-railroad companies.	8	4,463	.....	216	120	46	4,081	De 4,225	Ap 3,866	4,225	4,197	28	.....	.....	8,222,056
20	Chemicals.....	9	1,309	.....	61	150	77	1,021	De 1,311	My 735	1,311	1,123	187	1	.....	7,406,647
21	Cleansing and polishing preparations.	17	124	14	18	20	11	61	Ja 75	Se 48	69	37	32	.....	.....	252,405
22	Clothing, men's.....	73	3,900	65	145	214	202	3,174	.....	.....	3,080	1,259	2,415	2	4	13,328,013
23	Regular factories.....	52	3,447	38	143	214	201	2,851	No 3,884	Ja 2,415	3,323	1,139	2,178	2	4	13,298,593
24	Contract work.....	21	353	27	2	.....	1	323	De 354	Ja 288	357	120	237	.....	.....	29,450
25	Clothing, women's.....	103	6,938	79	292	553	388	5,626	.....	.....	5,494	1,991	3,499	4	.....	16,343,308
26	Regular factories.....	80	6,755	59	291	553	387	5,465	.....	.....	5,293	1,927	3,362	4	.....	16,278,402
27	Suits, skirts, and cloaks.....	44	4,536	33	87	403	305	3,608	Se 3,981	No 3,206	3,583	1,633	1,946	4	.....	12,335,290
28	Shirt waists and dresses, except house dresses.	26	2,006	17	90	136	68	1,695	Au 1,918	De 1,513	1,525	278	1,247	.....	.....	3,503,838
29	All other.....	10	213	9	14	14	14	162	Au 192	My 128	185	16	109	.....	.....	439,304
30	Contract work.....	23	188	25	1	.....	1	161	Jy 205	Ja 120	201	64	137	.....	.....	64,906
31	Coffee, roasting and grinding.....	9	430	.....	23	75	28	304	Se 349	Ja 267	307	120	187	.....	.....	2,214,080
32	Confectionery and ice cream.....	41	1,703	23	85	134	126	1,395	Oc 1,959	Ap 965	1,706	645	1,061	.....	.....	5,936,460
33	Cooperage, hogsheads and barrels.....	5	307	5	8	5	2	287	Oc 325	Mh 266	317	317	.....	.....	.....	1,054,817
34	Copper, tin, and sheet-iron work.....	100	766	109	64	19	26	548	De 643	Ja 444	647	642	3	2	.....	1,396,322
35	Electrical machinery, apparatus, and supplies.	78	10,261	15	416	1,035	682	8,113	De 9,292	Fe 7,444	13,301	10,940	2,355	6	.....	30,373,821
36	Electroplating.....	21	151	18	15	2	4	112	De 141	Au 99	141	140	1	.....	.....	169,295
37	Engines, steam, gas, and water.....	9	302	.....	35	43	11	213	De 503	Ja 139	508	508	.....	.....	.....	2,885,723
38	Flavoring extracts.....	12	227	12	8	34	16	157	Ja 234	Oc 126	147	110	37	.....	.....	1,376,483
39	Flour-mill and gristmill products.....	8	109	2	11	15	7	74	No 86	Jy 60	88	85	3	.....	.....	1,363,052
40	Food preparations, not elsewhere specified.	24	684	20	42	75	40	507	Au 759	Ap 384	466	294	160	7	5	3,262,473
41	Foundry and machine-shop products.	213	24,163	77	1,053	1,543	757	20,738	.....	.....	23,378	22,752	622	4	.....	70,529,977
42	Boiler shops.....	8	336	2	22	23	5	284	Ja 320	Ja 247	304	299	5	.....	.....	1,079,443
43	Foundries.....	27	8,538	1	283	339	170	7,745	De 9,613	Jy 6,797	9,598	9,431	107	.....	.....	1,879,623
44	Machine shops.....	166	12,126	72	589	918	500	10,047	No 10,818	Ap 9,387	10,706	10,255	447	4	.....	53,183,349
45	Machine shop and foundry combined.	12	3,163	2	159	203	82	2,657	Oc 2,853	My 2,478	2,770	2,767	3	.....	.....	14,387,562
46	Fur goods.....	24	201	27	12	5	12	145	No 198	Fe 109	186	58	128	.....	.....	465,390
47	Furnishing goods, men's, neckwear.	4	160	4	12	25	6	113	Oc 133	My 99	133	12	121	.....	.....	313,392
48	Furniture.....	25	794	12	38	41	26	677	.....	.....	722	674	47	1	.....	1,594,850
49	Wood furniture, other than rattan and willow.	15	618	9	21	32	20	531	Se 574	Ja 438	566	523	42	1	.....	1,214,225
50	Metal furniture and store and office fixtures.	10	181	3	17	9	6	146	Au 160	Ja 102	156	151	5	.....	.....	380,625
51	Gas and electric fixtures.....	18	435	16	19	35	20	345	No 412	Ja 284	406	349	41	10	.....	1,568,541
52	Glass, cutting, staining, and ornamenting.	11	93	9	11	3	3	67	De 74	Fe 58	75	67	8	.....	.....	161,168
53	Hats and caps, other than felt, straw, and wool.	14	255	14	18	24	8	191	De 222	Ja 161	234	136	98	.....	.....	602,465
54	House-furnishing goods, not elsewhere specified.	7	71	7	9	4	9	42	No 55	Ja 27	54	22	32	.....	.....	271,339
55	Iron and steel, steel works and rolling mills.	16	10,773	2	254	625	173	9,719	Ja 12,026	Oc 2,821	10,513	10,289	224	.....	.....	60,891,582
56	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.	11	3,931	.....	81	152	95	3,603	Ja 4,137	Oc 2,790	3,617	2,939	666	12	.....	14,564,378
57	Iron and steel, forgings, not made in steel works or rolling mills.	13	2,013	3	74	93	42	1,801	De 2,145	My 1,482	2,145	2,141	4	.....	.....	10,727,658
58	Iron and steel, tempering and welding.	12	86	14	11	4	.....	57	No 79	Ap 41	74	74	.....	.....	.....	184,967
59	Jewelry.....	17	94	14	3	2	5	70	De 82	Se 59	84	82	2	.....	.....	161,514
60	Knit goods.....	16	2,660	7	73	94	63	2,453	No 3,090	Ja 1,803	3,002	523	2,432	25	22	8,065,090
61	Liquors, malt.....	8	903	.....	31	71	43	758	Jy 887	De 642	650	639	11	.....	.....	9,305,482
62	Lithographing.....	9	742	1	40	17	47	637	De 752	Ja 554	752	610	140	2	.....	2,734,681
63	Lumber, planing-mill products, not including planing mills connected with sawmills.	38	777	16	54	49	23	635	Oc 748	Mh 502	737	736	1	.....	.....	2,509,740
64	Machine tools.....	27	4,925	8	198	315	232	4,172	De 4,574	Jy 3,853	4,573	4,433	140	.....	.....	19,545,083
65	Marble and stone work.....	26	267	21	23	20	9	194	.....	.....	198	197	.....	1	.....	1,003,090
66	Monuments and tombstones.....	14	93	10	13	8	4	58	Oc 66	Ja 38	65	64	.....	.....	.....	239,670
67	Other marble and stone work, except slate.	12	174	11	10	12	5	136	Ja 147	Fe 111	133	133	.....	.....	.....	763,420

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

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

DOLLARS AND CENTS IN THE LUMBER AND PAPER INDUSTRIES—Continued.															
Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.
20,896,429	33,875,821	211,206,276	5,814,329	3,528,595	44,283,735	581,705,611	31,743,833	1,091,577,490	478,128,046	460,108	174,627	44,841	18,496	50	222,094
8,830	3,447	107,532	.....	2,400	2,264	221,476	3,757	422,808	197,575	130	40	.....	.....	.....	90
1,160,654	1,132,060	10,134,210	58,570	129,606	1,226,521	25,345,561	383,767	44,312,932	18,583,304	22,069	415	40	.....	.....	21,933
1,223,458	2,064,228	17,912,854	95,717	22,923	4,282,677	70,893,051	596,381	110,254,504	38,705,072	9,581	1,300	.....	281	.....	8,131
53,453	51,157	688,890	30,821	89,961	10,505	860,381	18,126	2,095,156	1,216,649	492	20	.....	17	.....	455
58,057	55,047	329,082	.....	5,345	163,361	1,103,338	24,173	1,900,536	833,025	318	.....	.....	.....	.....	93
48,100	17,956	25,505	15	1,740	7,846	221,141	1,384	479,778	257,253	19	.....	.....	.....	.....	19
74,263	9,798	843,798	42,250	19,392	5,064	235,264	6,466	563,746	622,016	222	.....	.....	.....	.....	222
2,372	750	22,854	.....	3,735	191	49,657	1,836	107,539	56,046	54	.....	.....	.....	.....	34
118,617	53,227	673,018	1,219	87,147	124,747	1,427,792	21,121	3,135,027	1,686,114	785	208	.....	.....	.....	577
146,827	32,240	614,954	1,089	22,986	101,389	1,615,642	24,545	2,885,137	1,244,950	1,836	600	.....	.....	.....	1,236
318,865	70,455	1,296,966	1,998	13,227	91,275	4,329,496	122,032	6,622,233	2,170,705	831	.....	.....	.....	.....	821
350,917	1,198,288	2,697,028	6,384	174,879	212,223	11,555,487	256,512	19,413,040	7,601,047	2,513	371	.....	4	.....	2,138
10,260	15,212	71,018	.....	1,800	6,026	200,549	1,993	352,316	143,774	41	.....	.....	.....	.....	41
31,369	51,552	98,946	4,234	12,515	20,565	2,408,016	7,199	2,744,456	329,241	246	.....	.....	55	.....	191
75,025	17,417	271,175	6,400	17,075	21,370	344,544	9,941	890,945	536,460	425	.....	.....	25	.....	400
61,116	16,520	187,443	.....	10,780	18,404	255,314	8,037	636,522	373,171	321	.....	.....	.....	.....	321
14,509	897	83,732	.....	5,295	2,666	89,230	1,904	254,423	163,289	104	.....	.....	25	.....	79
418,105	158,451	6,144,241	6,400	.....	16,068	4,547,946	280,074	11,571,425	6,737,405	6,040	2,440	3,285	.....	.....	315
200,529	339,758	1,404,842	.....	17,200	420,757	3,272,251	820,292	7,593,467	4,000,924	5,305	3,479	.....	11	.....	1,815
33,848	39,245	88,505	.....	31,280	2,379	298,579	2,647	639,537	338,311	93	.....	.....	20	.....	73
860,384	665,070	3,451,808	726,144	169,630	504,100	9,572,073	50,872	19,433,496	9,801,551	748	.....	.....	.....	.....	688
801,084	664,270	3,123,849	725,676	159,836	503,824	9,571,592	55,823	19,012,887	9,384,972	707	60	.....	.....	.....	647
5,800	1,400	327,959	468	9,794	276	481	4,049	421,109	416,579	41	.....	.....	.....	.....	41

* Same number reported for one or more other months.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Fe-male.	Average number.	Number, 15th day of—			Male.	Fe-male.	Male.	Fe-male.	
								Maximum month.	Minimum month.						

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

CLEVELAND—Con.															Dollars.			
1	Mattresses and spring beds, not elsewhere specified.	6	155	3	12	4	12	124	So	139	Ja	100	133	108	25	542,655		
2	Millinery and lace goods, not elsewhere specified.	20	653	34	35	30	16	538	Mh	619	Je	418	581	189	392	1,033,690		
3	Mineral and soda waters.	29	235	37	15	24	7	152	Je	202	Fe	106	160	158	2	583,901		
4	Models and patterns, not including paper patterns.	41	514	41	41	14	10	408	De	530	Ja	268	539	536	3	601,730		
5	Oil, mineral and composite.	11	377	2	34	113	54	174	Je	185	Ja	165	171	162	9	1,515,912		
6	Optical goods.	7	108	3	6	15	10	74	Fe ¹	76	Oc	71	73	63	10	235,153		
7	Paints.	25	1,821	1	106	431	206	1,077	Jy	1,156	Mh	970	1,170	1,058	118	8,650,478		
8	Patent medicines and compounds.	43	286	28	40	34	30	154	Ja	119	Jy	59	186	94	92	1,757,659		
9	Patent and proprietary medicines.	22	159	13	23	11	18	94	Ja	119	Jy	59	122	54	08	1,284,367		
10	Patent and proprietary compounds, including compounds not elsewhere specified.	21	127	15	17	23	12	60	Oc	65	Fe	49	64	40	24	473,292		
11	Perfumery and cosmetics.	13	418	10	33	47	134	194	De	280	Ja	120	280	62	217	1,352,723		
12	Photo-engraving.	7	146	1	15	5	12	113	Se	123	Ja	101	124	121	3	184,372		
13	Plumbers' supplies, not elsewhere specified.	26	1,475	6	91	81	51	1,246					1,400	1,372	88	3,517,160		
14	Printing and publishing, book and job.	221	3,378	188	233	235	215	2,507					2,753	2,117	615	20	7,200,158	
15	Job printing and book publishing and printing.	200	3,219	174	213	204	183	2,445	De	2,708	Ja	2,285	2,679	2,052	606	20	6,905,465	
16	Book publishing without printing.	12	78	9	10	28	31										142,151	
17	Linotype work and typesetting.	9	81	5	10	3	1	62	De	74	Ja ³	52	74	65	9		158,542	
18	Printing and publishing, newspapers and periodicals.	82	2,534	31	157	569	350	1,427					1,523	1,304	168	1	8,434,824	
19	Printing and publishing.	15	1,702	4	48	409	192	1,049	No	1,135	Ja	950	1,111	1,010	101		5,334,308	
20	Printing, publishing, and job printing.	25	689	10	67	125	109	378	De	400	Fe	362	412	354	57	1	2,848,128	
21	Publishing without printing.	42	143	17	42	35	49										252,388	
22	Printing materials.	4	26		7	5	2	12	Se ³	13	Ja ³	11	12	12			60,304	
23	Saddlery and harness.	10	26	8	2			16	(⁴)	16	(⁴)	16	16	16			28,158	
24	Sausage, not made in slaughtering and meat-packing establishments.	19	332	16	26	42	16	232	De	246	Ja	222	244	240	4		832,100	
25	Shipbuilding, wooden, including boat building.	3	8	4				4	Ap	18	Oc ³	3	6	6			4,200	
26	Signs and advertising novelties.	16	226	15	20	41	10	140	Au	161	Ja	102	173	156	17		273,905	
27	Slaughtering and meat packing.	21	2,918	15	94	344	92	2,373	Ja	2,898	My	2,100	2,602	2,406	196		13,034,362	
28	Stamped and enameled ware, not elsewhere specified.	22	974	3	54	21	26	870	No	1,017	Ja	723	977	811	165	1	2,046,754	
29	Steam fittings and steam and hot-water heating apparatus.	13	820	7	35	25	13	740	De	804	My	665	909	900	8	1	2,574,486	
30	Steel barrels, drums, and tanks, portable.	4	346		26	16	7	297	De	451	Oc	170	451	451			1,120,763	
31	Stereotyping and electrotyping.	6	173	5	11	8	9	140	De	162	Ja	129	150	147	3		265,059	
32	Stoves and hot-air furnaces.	12	560	6	42	42	22	448					534	529	5		1,707,044	
33	Stoves and ranges.	6	435	1	31	24	15	304	De	416	Ap ³	331	417	412	5		1,489,161	
34	Hot-air furnaces.	6	125	5	11	18	7	84	De	117	Ap	64	117	117			220,883	
35	Stoves, gas and oil.	15	4,012		77	246	173	3,516	De	4,473	My	2,904	4,495	3,980	515		14,844,496	
36	Structural ironwork, not made in steel works or rolling mills.	26	1,976	13	68	229	85	1,581	Ja	1,860	My	1,438	1,556	1,656			7,325,313	
37	Surgical appliances.	5	14	6			2		Oc	8	Je ³	5	9	7	2		10,545	
38	Tobacco, cigars and cigarettes.	158	1,268	159	31	24	8	1,046	Mh	1,102	Se	845	1,082	353	720	9	1,704,767	
39	Tools, not elsewhere specified.	47	4,050	25	111	272	255	3,387					3,648	3,381	250	17	13,990,619	
40	Machinists' tools.	33	3,448	21	76	243	225	2,883	Ja	3,567	Je	2,519	3,132	2,974	241	17	12,530,026	
41	All other.	14	602	4	35	29	30	504	Mh	638	Ja	455	516	507	9		1,451,553	
42	Trunks and valises.	9	137	8	13	8	7	101	Je	117	Ja	73	101	92	9		250,806	
43	Varnishes.	10	839	2	57	185	117	478	De	533	Ja	450	533	493	69	1	6,421,729	
44	Window and door screens.	4	38	3	3		1	26	Je	37	Ja	11	20	19	1		41,913	
45	Window shades and fixtures.	6	23	7	4	3	2	7	Ja ³	8	Je ³	8	5	2	3		57,818	
46	Wirework, not elsewhere specified.	16	1,734	4	50	167	36	1,477	Ja	1,610	Je	1,356	1,595	1,374	221		8,401,071	
47	All other industries*.	391	44,065	198	1,501	4,802	2,013	35,551					38,469	31,058	5,880	1,523	8	226,983,468

*All other industries embrace—
 Airplanes, seaplanes, and airships, and parts.
 Agricultural implements.
 Aluminum manufactures.
 Artificial flowers.
 Artificial limbs.
 Artists' materials.
 Asbestos products, textile-mill products, other than steam packing.
 Babbitt metal and solder.
 Bags, other than paper, not including bags made in textile mills.
 Bags, paper, exclusive of those made in paper mills.
 Baskets, and rattan and willow ware.
 Bells.
 Belting and hose, other than leather and rubber.
 Belting, leather.
 Bluing.

Boots and shoes, not including rubber boots and shoes.
 Brick and terra-cotta products.
 Brushes.
 Buttons.
 Canning and preserving, fish.
 Card cutting and designing.
 Carpets, rag.
 Carriage and wagon materials.
 Carriages and sleds, children's.
 Cars and general shop construction and repairs by electric-railroad companies.
 Cars, electric-railroad, not including operations of railroad companies.
 Cash registers and calculating machines.
 Cheese.
 Chewing gum.
 Chocolate and cocoa products.
 Clocks.

Clothing, men's, buttonholes.
 Coal-tar products.
 Coffins, burial cases, and undertakers' goods.
 Coke, not including gas-house coke.
 Collars and cuffs, men's.
 Cordials and flavoring sirups.
 Cotton goods.
 Crucibles, glass house pots.
 Cutlery and edge tools.
 Dental goods.
 Druggists' preparations.
 Dyeing and finishing textiles, exclusive of that done in textile mills.
 Emery and other abrasive wheels.
 Enameling.
 Engraving and diesinking.
 Engraving, steel and copper plate, including plate printing.
 Engraving, wood.
 Envelopes.

Fancy articles, not elsewhere specified.
 Fertilizers.
 Files.
 Flags and banners.
 Foundry supplies.
 Furs, dressed.
 Galvanizing.
 Gas, illuminating and heating.
 Gas machines and gas and water meters.
 Glass.
 Gold and silver, reducing and refining, not from the ore.
 Grease and tallow, not including lubricating greases.
 Hair work.
 Hand stamps.
 Hardware.
 Hats, raw-felt.
 Hats, straw.
 Hats, wool-felt.
 Ice, manufactured.

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.	Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.		Water power.^{1}	Rent- ed.^{2}

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

Dollars. 44,182	Dollars. 18,972	Dollars. 148,128	Dollars. 13,161	Dollars. 24,610	Dollars. 495,096	Dollars. 7,358	Dollars. 854,205	Dollars. 351,751	262						262	1
126,851	70,899	539,557	280	30,943	74,295	1,162,633	15,097	2,353,760	1,176,030	357	85				272	70
51,660	29,992	199,290	14,477	60,061	520,526	7,575	1,096,047	567,946	208						208	3
115,815	20,584	763,618	25,028	10,352	211,444	11,693	1,534,376	1,311,239	416						402	21
141,155	171,056	203,195	1,800	10,320	71,323	4,317,053	12,792	5,906,753	1,576,908	251	74				177	5
27,976	28,927	90,397	19,914	12,248	222,405	3,269	541,687	316,013	46						46	6
585,273	732,036	1,087,288	52	23,750	441,107	10,632,268	112,373	17,436,225	6,691,584	4,323	490				3,803	42
137,438	95,099	156,095	200	24,056	250,532	1,130,151	11,131	2,957,378	1,796,096	189					189	8
71,012	35,420	97,696	10,607	246,751	708,530	4,148	2,014,084	1,241,406	77						77	9
66,426	59,679	59,290	200	13,449	5,081	361,621	6,983	923,294	554,690	112					112	10
106,771	179,250	156,092	17,509	165,900	1,026,515	4,432	3,229,193	2,198,246	88	45					43	11
55,346	26,331	208,284	16,449	15,673	72,086	4,202	510,858	434,570	61						61	12
333,668	286,154	1,392,092	21,027	29,895	59,324	2,244,029	85,662	5,393,331	3,063,640	1,518	85		150		1,253	13
818,235	533,607	3,277,040	395,275	223,175	252,852	4,637,077	81,395	13,382,254	8,663,782	2,548	75		69		2,413	37
755,113	489,552	3,175,633	120,583	212,472	246,272	4,570,764	70,315	12,002,751	7,952,672	2,522	75		60		2,387	37
38,662	36,985	261,448	6,423	4,784	51,304		527,475	476,171								16
24,460	7,070	101,407	4,244	4,280	1,796	15,009	2,080	252,028	231,939	26					26	17
598,978	1,353,308	2,308,522	440,017	120,934	694,486	4,836,033	69,461	15,570,029	10,663,935	943	175		30		738	75
297,389	836,926	1,776,407	81,095	551,690	4,034,663	50,453	11,419,323	7,334,207	197						197	19
203,763	359,208	532,115	1,850	19,904	131,376	605,885	19,008	3,108,831	2,393,938	746	175		30		541	75
97,836	157,174	438,167	19,935	11,420	106,085		1,041,875	935,790								21
17,868	9,489	15,231	5,780	3,646	27,701	1,154	133,153	101,298	19						19	22
4,450	21,653	2,480	2,480	711	38,116	324	92,466	54,026	6						6	23
83,267	75,454	361,308	2,960	66,001	3,646,845	30,840	4,667,136	989,451	1,050	155		45			850	24
		2,464	120	15	5,500	94	15,929	10,245	10						5	25
59,476	77,050	203,634	8,316	34,753	16,638	274,821	1,809	778,130	501,500	36					36	26
388,932	632,362	3,225,090	13,322	11,424	438,074	63,991,190	409,495	71,061,098	6,660,413	6,914	3,220		70		3,624	27
214,440	65,514	1,083,764	4,183	30,724	87,885	1,435,201	74,781	3,382,622	1,872,644	1,015	320		110		585	28
216,923	36,198	957,738	9,603	12,927	270,590	814,906	107,268	2,866,616	1,944,238	855	305				550	29
99,945	30,211	281,671	7,840	122,531	1,564,156	6,504	2,446,421	875,761	337						287	30
33,140	17,239	177,087	15,225	12,129	4,695	125,115	10,262	601,551	466,174	251					251	31
143,535	84,510	518,757	2,196	13,685	58,321	1,242,079	31,569	2,417,750	1,144,102	715	500		40		175	32
111,233	52,221	420,016	2,196	3885	56,921	832,292	25,200	1,799,984	942,492	550	375		40		135	33
32,302	32,289	67,841	13,600	1,400	409,787	6,369	617,766	201,610	165	125					40	34
426,150	746,851	4,725,558	13,602	1,316,871	8,661,692	179,870	19,489,305	10,647,743	3,099	710		33			2,356	35
343,059	373,181	2,080,776	14,729	343,341	7,487,585	86,677	11,721,132	4,146,870	5,529			75			5,454	36
	1,664	7,307	1,705	45	6,560	226	24,396	17,610	14						14	37
96,894	58,226	889,069	52,975	463,102	1,647,001	11,069	3,752,964	2,094,894	71						71	38
399,787	666,158	4,619,356	42,200	1,998,190	5,811,219	189,828	17,602,520	11,601,473	6,495	2,000					4,473	39
289,300	569,686	3,847,346	25,870	1,043,702	4,510,287	156,572	15,605,948	10,939,089	5,815	2,000					3,803	40
110,487	96,292	772,010	18,330	54,488	1,300,932	33,256	1,996,572	662,384	680						670	41
56,071	17,421	133,868	13,177	3,596	267,204	1,768	585,373	318,401	25						25	42
277,757	327,087	568,612	2,300	152,712	5,828,825	55,148	9,050,542	3,166,589	951	450					501	43
5,825	2,202	29,490	1,110	318	31,932	860	93,179	60,387	76						51	44
9,776	6,027	5,408	2,520	238	47,378	170	75,718	28,170	2						2	45
295,311	302,874	1,832,878	21,540	333,426	3,378,052	98,262	7,071,352	3,595,038	2,865	1,675		120			1,073	46
5,707,306	8,600,950	47,113,078	374,118	9,988,455	114,201,600	18,805,289	236,289,773	103,284,884	137,644	65,605	6,867	12,896	50		52,426	47

Ink, printing.....	1	Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Roofing materials.....	8	Steam packing.....	3
Ink, writing.....	2	Musical instruments and materials, not specified.....	4	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	6	Stencils and brands.....	4
Instruments, professional and scientific.....	7	Musical instruments, organs.....	4	Rules, ivory and wood.....	1	Tin plate and terneplate.....	2
Iron and steel, blast furnaces.....	5	Needles, pins, and hooks and eyes.....	2	Sales.....	2	Tinware, not elsewhere specified.....	2
Iron and steel, cast-iron pipe.....	1	Oil, linseed.....	1	Salt.....	1	Tobacco, chewing and smoking, and snuff.....	14
Iron and steel, wire nails and spikes.....	2	Oleomargarine.....	1	Saws.....	2	Toys and games.....	5
Iron and steel, wrought pipe.....	1	Paper and wood pulp, paper mills exclusively.....	1	Screws, machine.....	9	Type founding.....	1
Japanning.....	1	Paper goods, not elsewhere specified.....	3	Sewing-machine cases.....	1	Typewriters and supplies, ribbon.....	2
Labels and tags.....	1	Paving materials.....	1	Sewing machines and attachments.....	3	Umbrellas and canes.....	1
Lamps and reflectors.....	2	Peanuts, grading, roasting, cleaning, and shelling.....	1	Shipbuilding, steel, new vessels and repair work.....	5	Wall paper, not made in paper mills.....	2
Lead, bar, pipe, and sheet.....	2	Pens, fountain, and stylographic.....	1	Shirts.....	5	Wall plaster and composition flooring.....	3
Leather goods, not elsewhere specified.....	2	Petroleum, refining.....	2	Show cases.....	1	Washing machines and clothes wringers.....	3
Leather, tanned, curried, and finished.....	2	Phonographs and graphophones.....	2	Smelting, lead.....	1	Waste.....	2
Liquors, vinous.....	1	Photographic materials.....	2	Smelting and refining, not from the ore.....	2	Wire.....	4
Looking-glass and picture frames.....	7	Pickles, preserves, and sauces.....	5	Soap.....	4	Wood, turned and carved.....	6
Lubricating greases.....	4	Printing and publishing, music.....	2	Soda-water apparatus.....	2	Wool shoddy.....	2
Mirrors, framed and unframed, not elsewhere specified.....	1	Pumps, not including power pumps.....	3	Sporting and athletic goods.....	2	Woolen goods.....	2
Motorcycles, bicycles, and parts.....	2	Refrigerators.....	1	Springs, steel, automobile.....	4	Worsted goods.....	1
				Statuary and art goods.....	2		

* Same number reported for one or more other months.

* Same number reported throughout the year.

MANUFACTURES—OHIO.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.		
								Maximum month.							Minimum month.

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

1	COLUMBUS—All industries....	690	32,560	480	1,278	2,834	1,217	26,751	No	28,673	Ap	25,052	25,960	23,598	5,266	44	52	Dollars. 99,383,222
2	Automobile bodies and parts.....	13	968	7	43	35	63	820	Da	933	Ja	519	1,007	634	373			1,762,264
3	Automobile repairing.....	23	110	29	4		3	74	Au	79	Ja	70	78	78				134,660
4	Awnings, tents, and sails.....	3	31	1	2	5	2	21	Jy	32	Ja	14	18	12	5			57,698
5	Boots and shoes, not including rubber boots and shoes.....	9	2,059	1	34	96	56	1,872	De	1,973	Ja	1,799	1,961	1,057	904			7,046,498
6	Bread and other bakery products.....	64	898	64	41	121	55	617	De	646	Fe	575	647	56	183	3	2	1,549,898
7	Brooms, from broom corn.....	6	21	8		2	1	10	No	11	Ja	8	11	19		1		15,120
8	Cars and general shop construction and repairs by steam-railroad companies.....	5	5,411		29	492	34	4,856	De	5,187	Mh	4,435	5,187	5,144	43			4,316,648
9	Clothing, men's.....	4	47	6		7	1	33	No	45	Ja	25	45	9	35	1		31,300
10	Confectionery and ice cream.....	19	656	15	39	50	39	513					562	357	205			1,379,078
11	Confectionery.....	13	272	11	18	32	10	201	No	284	Jy	145	266	81	185			570,027
12	Ice cream.....	6	354	4	21	18	29	312	Je	376	Ja	272	296	276	20			803,051
13	Copper, tin, and sheet-iron work.....	10	270	8	13	18	20	211	De	283	Se	170	283	279	4			1,098,352
14	Electrical machinery, apparatus, and supplies.....	6	84	3	5	8	7	58	De	69	Mh	51	70	49	21			162,353
15	Electroplating.....	3	26	2	2	1		21	(4)	21	(4)	21	21	21				11,468
16	Fertilizers.....	3	252		10	15	5	252	Se	566	Ma	174	191	191				1,954,690
17	Flavoring extracts.....	4	10	2	2	1	1	4	Je	6	Ja	3	3	1	2			8,350
18	Food preparations, not elsewhere specified.....	8	35	9	2		1	23	Ma	28	De	14	25	14	11			83,623
19	Foundry and machine-shop products.....	49	4,555	37	125	467	189	3,737					4,122	4,018	103	1		17,098,828
20	Boiler shops.....	4	45	3	6		4	32	Mh	40	No	28	34	34				80,449
21	Foundries.....	9	432	12	16	7	2	395	De	476	Fe	342	473	473				565,824
22	Machine shops.....	36	4,078	22	103	460	183	3,310	Ja	3,761	Ap	3,069	3,615	3,511	103	1		10,446,455
23	Lumber, planing-mill products, not including planing mills connected with sawmills.....	14	294	10	30	24	6	224	No	269	Ja	161	264	262	1	1		1,265,625
24	Marble and stone work, except slate.....	6	40	4	3	4		29	Ap	34	Ma	20	32	32				128,421
25	Models and patterns, not including paper patterns.....	9	60	12	3		1	44	Je	51	Ap	36	49	49				65,043
26	Patent medicines and compounds and druggists' preparations, including perfumery and cosmetics.....	28	350	20	36	93	44	157	No	176	Ja	143	172	58	114			810,098
27	Printing and publishing, book and job.....	57	743	47	60	21	33	582	De	609	Ja	555	610	408	200	2		1,373,453
28	Printing and publishing, newspapers and periodicals.....	43	885	11	54	330	84	406	Mh	416	Jy	403	405	358	32	15		3,331,213
29	Shirts.....	5	40	7	1	2	1	29	Ap	32	Au	26	29	3	26			33,150
30	Slaughtering and meat packing.....	7	318	5	20	45	7	241	Fe	260	Au	229	244	240	4			1,122,645
31	Stoves and hot-air furnaces, including gas and oil stoves.....	12	326	12	17	17	12	268	No	326	Ja	219	323	314	9			796,939
32	Trunks and valises.....	5	37	11	2	3		21	Je	25	Jy	16	20	17	3			31,677
33	All other industries*.....	275	14,004	149	698	977	552	11,628					12,581	9,523	2,988	20	50	53,709,330

*All other industries embrace—

1	Agricultural implements.....	1																
1	Aluminum manufactures.....	1																
2	Artificial limbs.....	2																
4	Artificial stone products.....	4																
4	Automobiles.....	4																
1	Bags, other than paper, not including bags made in textile mills.....	1																
1	Baskets, and rattan and willow ware.....	1																
1	Belting, leather.....	1																
1	Billiard tables and accessories.....	1																
4	Bookbinding and blank-book making.....	4																
1	Boot and shoe cut stock.....	1																
1	Boot and shoe findings.....	1																
1	Boxes, cigar.....	1																
3	Boxes, shipping containers and set-up paper boxes.....	3																
2	Boxes, wooden packing, except cigar boxes.....	2																
4	Brass and bronze products.....	4																
3	Butter.....	3																
3	Card cutting and designing.....	3																
3	Carpets, rag.....	3																
2	Carriages and wagons, repair work only.....	2																
3	Cars and general shop construction and repairs by electric-railroad companies.....	3																
1	Cars, steam-railroad, not including operations of railroad companies.....	1																
1	Chemicals.....	1																
1	Cleansing preparations.....	1																
5	Clothing, women's.....	5																
1	Coal-tar products.....	1																
4	Coffee, roasting and grinding.....	4																
5	Coffins, burial cases, and undertakers' goods.....	5																
2	Cooperage, hogsheads and barrels.....	2																
2	Cordials and flavoring sirups.....	2																
3	Dairymen's and poultrymen's supplies.....	3																
1	Dental goods, teeth.....	1																
3	Engraving, steel and copper plate, including plate printing.....	3																
1	Files.....	1																
1	Fire extinguishers, chemical.....	1																
1	Flags and banners.....	1																
4	Flour-mill and gristmill products.....	4																
2	Fur goods.....	2																
2	Furnishing goods, men's, neckwear.....	2																
5	Furniture.....	5																
1	Galvanizing.....	1																
5	Gas and electric fixtures.....	5																
1	Gas, illuminating and heating.....	1																
1	Gas machines and gas and water meters.....	1																
2	Glass.....	2																
3	Glass, cutting, staining, and ornamenting.....	3																
1	Gloves and mittens, leather.....	1																
1	Gloves and mittens, cloth, not including gloves made in textile mills.....	1																
1	Hair work.....	1																
2	Hand stamps.....	2																
2	Hardware.....	2																
1	Hats and caps, other than felt, straw, and wool.....	1																
1	House-furnishing goods, mops and dusters.....	1																
5	Ice, manufactured.....	5																
2	Instruments, professional and scientific.....	2																
1	Iron and steel, blast furnaces.....	1																
1	Iron and steel, steel works and rolling mills.....	1																
1	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	1																
2	Iron and steel, cast-iron pipe.....	2																
1	Iron and steel, doors and shutters.....	1																
1	Iron and steel, forgings, not made in steel works or rolling mills.....	1																
5	Iron and steel, forgings, not made in steel works or rolling mills.....	5																
3	Iron and steel, welding.....	3																

1	DAYTON—All industries.....	571	36,495	394	733	2,604	1,633	31,131	De	35,110	Fe	26,887	35,376	29,656	5,670	42	8	121,658,316
2	Automobile repairing.....	18	155	10	7	8	10	120	De	171	Fe	88	144	144				202,801
3	Awnings, tents, and sails.....	5	26	6			1	19	Je ^s	28	Ja	11	18	8	10			43,671
4	Boxes, set-up paper boxes and cartons.....	5	479		12	10	9	439	Ap	471	Ja	368	436	119	317			1,002,773
5	Brass, bronze, and copper products.....	9	245	4	11	10	4	216	De	242	Fe	162	244	230	14			510,502
6	Bread and other bakery products.....	57	732	67	16	75	44	530	No	608	Ja	367	592	379	212	1		2,016,833
7	Carriages and wagons, including repairs.....	3	19	3	1	1		14	My	17	No ^s	12	12	12	212			19,662
8	Cars and general shop construction and repairs by electric-railroad companies.....	4	56			1		55	Fe	60	Je	51	56	56				97,497
9	Clothing, men's.....	7	356	2	8	16	47	283	De	335	Ap	244	335	49	286			542,719

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent- ed. ²
											Steam en- gines (not tur- bines).	Steam tur- bines.	Inter- nal- com- bus- tion en- gines.	Wa- ter pow- er. ¹		

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

Dollars. 4,086,532	Dollars. 6,315,589	Dollars. 30,978,549	Dollars. 290,773	Dollars. 529,088	Dollars. 5,704,347	Dollars. 108,739,276	Dollars. 3,979,963	Dollars. 184,021,849	Dollars. 71,302,610	66,292	25,906	565	4,488	.....	35,333	7,289	1
161,755	118,617	685,045	1,491	24,830	165,706	2,121,974	20,427	3,668,580	1,526,179	821	.....	.....	53	.....	768	.....	2
7,100	3,164	95,112	.....	16,335	3,612	132,874	7,176	326,513	156,463	148	.....	.....	33	.....	115	.....	3
6,021	10,354	23,012	.....	2,040	3,027	61,245	864	145,335	83,226	17	.....	.....	.....	.....	17	.....	4
227,771	534,481	1,700,171	.....	26,217	317,736	6,103,637	47,927	10,198,135	4,046,571	1,264	.....	.....	.....	.....	1,264	.....	5
125,136	255,320	599,599	20,285	32,829	187,748	3,021,593	70,030	5,203,881	2,112,258	1,057	140	.....	40	.....	877	149	6
.....	2,212	10,327	.....	660	289	37,731	331	67,037	28,975	22	.....	.....	19	.....	3	.....	7
75,278	911,571	5,873,499	.....	.....	.....	7,991,683	361,698	15,213,729	6,860,348	7,826	1,778	500	1,150	.....	4,398	3,446	8
.....	8,194	35,232	.....	1,650	117	88,710	620	160,900	71,570	6	.....	.....	.....	.....	6	.....	9
102,436	116,569	483,422	.....	17,946	77,018	1,302,102	66,130	2,575,127	1,206,835	1,837	390	.....	590	.....	867	114	10
50,940	54,281	141,698	.....	12,130	45,438	629,819	6,957	1,112,374	476,098	186	.....	.....	.....	.....	186	.....	11
51,496	62,288	341,724	.....	5,816	31,580	672,843	59,173	1,462,753	730,737	1,651	390	.....	580	.....	681	114	12
39,383	49,091	223,214	.....	6,119	12,757	555,123	12,330	848,266	280,813	463	.....	.....	36	.....	427	.....	13
18,647	15,311	37,557	1,630	1,530	6,279	166,706	1,743	338,575	170,121	44	.....	.....	.....	.....	44	.....	14
3,640	540	22,475	.....	1,620	124	11,872	900	55,604	42,832	93	.....	.....	93	.....	93	.....	15
54,159	37,910	301,091	.....	87,543	1,673,851	29,553	2,832,917	1,229,513	1,342	345	.....	.....	.....	.....	997	422	16
3,120	600	4,829	.....	1,320	72	15,731	22	42,532	26,770	6	.....	.....	5	.....	1	.....	17
3,120	720	18,162	.....	3,975	747	188,913	1,572	242,672	52,187	53	.....	.....	10	.....	43	.....	18
677,445	1,261,508	5,219,686	4,732	20,313	1,346,442	7,898,582	478,218	18,632,901	10,256,101	6,215	1,595	55	664	.....	3,901	793	19
11,480	3,260	34,304	4,237	660	2,219	53,017	1,928	143,271	88,326	105	40	.....	.....	.....	65	.....	20
49,348	15,900	581,846	.....	1,500	109,150	437,563	41,928	1,487,967	1,008,476	290	.....	.....	.....	.....	290	.....	21
616,617	1,242,346	4,603,536	495	18,153	1,235,073	7,408,002	434,362	17,001,663	9,159,299	5,820	1,555	55	664	.....	3,546	793	22
66,972	37,921	281,382	.....	10,310	21,438	974,960	18,592	1,691,612	698,060	1,709	340	.....	90	.....	1,279	.....	23
4,560	4,980	45,910	.....	1,941	1,225	62,674	1,509	162,732	98,549	50	.....	.....	6	.....	44	.....	24
5,986	800	50,531	.....	2,910	2,500	20,597	1,142	133,664	111,925	57	.....	.....	.....	.....	57	.....	25
101,464	198,670	109,026	1,583	14,010	89,105	590,589	8,028	1,693,121	1,094,504	172	.....	.....	2	.....	170	.....	26
144,595	57,283	586,605	2,916	45,182	31,693	833,526	24,538	2,185,510	1,327,446	630	.....	.....	54	.....	576	.....	27
154,374	383,973	437,823	228,792	28,940	181,990	1,246,748	19,096	4,094,919	2,829,075	567	.....	.....	18	.....	549	.....	27
2,080	4,092	21,160	.....	3,044	1,152	60,654	464	117,092	55,974	10	.....	.....	.....	.....	10	.....	29
38,156	60,584	240,774	.....	2,780	33,130	5,819,002	38,041	6,516,428	659,385	1,110	910	.....	.....	.....	200	20	30
44,907	82,245	330,345	.....	6,460	18,471	593,387	11,661	1,133,658	523,610	380	.....	.....	32	.....	348	.....	31
4,160	2,000	18,839	.....	8,300	962	18,368	1,004	34,064	64,692	34	.....	.....	.....	.....	34	.....	32
2,614,367	2,156,477	13,503,131	29,344	238,627	3,173,464	67,241,384	2,756,342	105,656,345	35,658,619	40,359	20,408	10	1,603	.....	18,338	2,345	33

Jewelry.....	6	Musical instruments, pianos.....	1	Saddlery and harness.....	3	Tobacco, cigars.....	16
Lamps, automobile.....	2	Oil, composite.....	1	Safes and vaults.....	1	Tools, not elsewhere specified.....	6
Leather goods, not elsewhere specified.....	1	Oilcloth, enameled.....	1	Sausage, not made in slaughtering and meat-packing establishments.....	1	Toys and games.....	4
Liquors, malt.....	5	Oleomargarine.....	1	Saws.....	2	Type founding.....	1
Lithographing.....	2	Optical goods.....	4	Scales and balances.....	1	Varnishes.....	1
Looking-glass and picture frames.....	1	Paints.....	2	Show cases.....	4	Wall plaster and composition flooring.....	1
Lubricating greases.....	1	Paper goods, not elsewhere specified.....	2	Signs, electric and other.....	4	Washing machines and clothes wringers.....	2
Lumber and timber products.....	1	Paving materials.....	1	Smelting and refining, not from the ore.....	1	Window and door screens and weather strips.....	3
Mattresses and spring beds, not elsewhere specified.....	3	Petroleum, refining.....	1	Soap.....	2	Window shades and fixtures.....	2
Millinery, lace goods, not elsewhere specified.....	4	Phonographs and graphophones.....	1	Stationery goods, not elsewhere specified.....	2	Wirework, not elsewhere specified.....	4
Mineral and carbonated waters.....	4	Photographic materials.....	3	Statuary and art goods.....	1	Wood, turned and carved.....	1
Mirrors, framed and unframed, not elsewhere specified.....	1	Photo-engraving.....	1	Steam fittings and steam and hot-water heating apparatus.....	3	Wooden goods, not elsewhere specified.....	1
Mucilage, paste, and other adhesives, not elsewhere specified.....	2	Plumbers' supplies, not elsewhere specified.....	1	Stereotyping and electrotyping.....	2	Wool pulling.....	1
Musical instruments and materials, not specified.....	1	Printing and publishing, music.....	1	Structural ironwork, not made in steel works or rolling mills.....	6		
Musical instruments, organs.....	1	Pumps, not including power pumps.....	1	Surgical appliances.....	2		
		Pumps, steam and other power.....	3				
		Refrigerators.....	1				
		Regalia, and society badges and emblems.....	3				

4,996,567	5,304,287	39,680,372	236,569	836,486	6,398,815	76,193,383	2,267,085	174,990,607	96,530,139	52,749	16,597	2,395	848	38	32,871	17,262	1
27,630	13,818	156,023	50	10,137	8,228	315,817	7,536	617,463	294,110	172	.....	.....	10	.....	162	.....	2
.....	1,709	14,404	175	1,236	483	44,846	680	78,031	32,505	14	.....	.....	.....	.....	14	.....	3
59,496	39,872	274,233	400	4,800	32,753	508,275	9,425	1,256,889	739,169	364	100	.....	.....	.....	264	.....	4
80,731	17,263	273,794	.....	11,062	3,889	704,701	28,517	1,271,610	537,392	318	.....	.....	8	.....	310	.....	5
76,839	156,801	574,792	3,500	16,960	176,208	2,855,319	67,304	4,522,347	1,569,724	912	.....	.....	.....	.....	912	.....	6
1,347	867	18,294	.....	1,886	160	20,660	718	49,656	28,278	43	.....	.....	24	.....	19	.....	7
2,979	1,160	53,938	.....	.....	6,000	20,905	3,116	88,098	64,077	104	.....	.....	.....	.....	104	.....	8
57,438	67,668	184,495	.....	10,224	30,812	811,310	3,986	1,787,391	972,095	73	.....	.....	.....	.....	73	.....	9

³ Same number reported for one or more other months.⁴ Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

[illegible]

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

DAYTON—Continued.																	Dollars.
1	Confectionery and ice cream.....	20	355	22	12	39	21	261	Se	344	Fe	216	323	135	173	15	985,591
2	Confectionery.....	12	252	14	9	35	16	178	Oc	256	Je	122	247	84	163	.....	557,235
3	Ice cream.....	8	103	8	3	4	5	83	Jy	111	De	45	76	51	10	15	428,356
4	Copper, tin, and sheet-iron work.....	0	47	5	2	1	1	38	Ja	53	Ap	25	43	43	.....	.....	93,681
5	Foundry and machine-shop products.....	60	4,814	32	91	232	112	4,297	De	4,884	Fe	3,864	4,894	4,798	95	1	16,100,549
6	Furniture.....	7	483	3	12	20	16	432	De	483	Ja	354	488	429	56	3	1,037,347
7	Ice, manufactured.....	4	78	2	4	3	3	66	Jy	85	Ja	50	68	68	.....	.....	722,128
8	Iron and steel, tempering and welding.....	5	28	8	3	2	1	15	Ma ^a	20	Ja ^a	9	18	18	.....	.....	42,890
9	Lumber, planing-mill products, not including planing mills connected with sawmills.....	7	390	4	13	29	8	336	Oc	394	Ja	274	385	383	1	1	1,254,925
10	Marble and stone work, except slate.....	6	70	12	3	2	1	52	De ^a	61	Ma	41	54	54	.....	.....	153,739
11	Mattresses and spring beds, not elsewhere specified.....	3	21	1	4	.....	1	15	No	20	Ja	12	16	14	2	.....	40,480
12	Mineral and carbonated waters.....	7	47	5	4	13	1	24	Jy	37	Ja	13	27	27	.....	.....	162,628
13	Models and patterns, not including paper patterns.....	12	84	15	.....	4	.....	65	De	98	Ja	34	99	99	.....	.....	86,322
14	Printing and publishing, book and job.....	30	340	25	18	16	18	263	De	285	Fe	249	288	188	98	2	558,161
15	Printing and publishing, newspapers and periodicals.....	20	792	11	22	155	104	500	De	527	Je ^a	470	527	440	87	.....	2,831,498
16	Pumps, power, other than steam.....	3	411	.....	11	58	34	308	De	467	Ja	150	467	459	8	.....	1,303,935
17	Slaughtering and meat packing.....	12	364	10	8	53	3	290	Ja	301	Oc	282	294	279	15	.....	1,399,261
18	Stationery goods, not elsewhere specified.....	4	548	.....	7	87	56	398	No	434	Ja	356	437	305	182	.....	2,045,416
19	Tobacco, cigars.....	29	1,164	27	12	14	9	1,102	Oc	1,198	Je	1,027	1,171	1,04	1,067	.....	1,662,534
20	Tools, not elsewhere specified.....	36	1,336	20	40	35	1	1,200	De	1,475	Fe	900	1,473	1,404	58	11	2,048,802
21	Toys and games.....	8	242	4	11	4	3	220	Oc	337	Ja	34	305	134	164	6	368,683
22	Varnishes.....	4	77	.....	5	15	8	49	Oc	58	Fe ^a	42	54	54	.....	.....	637,718
23	All other industries *.....	180	22,735	96	395	1,641	1,079	19,524	.....	.....	.....	.....	22,108	19,224	2,875	2	82,975,559

*All other industries embrace—	Brick, building.	1	Dairymen's supplies, cream separa-	1	Flags and banners.	2
Airplanes, seaplanes, and airships,	Brooms, from broom corn.	2	tors.	1	Flavoring extracts.	1
and parts.	Carriage and wagon materials.	1	Dental goods.	2	Flour-mill and gristmill products.	2
Agricultural implements.	Cars and general shop construction	1	Druggists' preparations.	2	Food preparations, not elsewhere	
Aluminum ware.	and repairs by steam-railroad com-		Electrical machinery, apparatus, and		specified.	5
Artificial stone products.	panies.	3	supplies.	9	Fur goods.	2
Automobile bodies and parts.	Cash registers and parts.	12	Electroplating.	2	Gas machines.	1
Bags, other than paper, not including	Chemicals.	1	Emery and other abrasive wheels.	1	Glass, cutting, staining, and orna-	
bags made in textile mills.	Chewing gum.	1	Engines, steam, gas, and water.	3	menting.	2
Baskets, and rattan and willow ware.	Cleansing and polishing prepara-	2	Engraving, steel and copper plate,		Gloves and mittens, cloth, not in-	
Blacking, stains, and dressings.	tions.	2	including plate printing.	1	cluding gloves made in textile mills.	2
Bookbinding and blank-book making	Clothing, women's.	1	Envelopes.	2	Hand stamps.	3
Boxes, cigar.	Coffee, roasting and grinding.	3	Fertilizers.	1	Hardware.	2
Boxes, wooden packing, except cigar	Coffins, burial cases, and under-		Files.	1	Instruments, professional and scien-	
boxes.	takers' goods.	1	Fire extinguishers, chemical.	1	tific.	1

	SPRINGFIELD—All industries..	200	15,459	152	537	1,155	1,351	12,264	De 13,153	Ap 11,549	13,143	11,117	2,013	6	7	54,582,930
1	Agricultural implements.....	6	1,947	1	80	234	57	1,575	Mh 1,719	Jy 1,443	1,654	1,625	29			10,823,782
2	Artificial stone products.....	4	20	5				15	Se 21	Ja * 10	15	15				19,100
3	Automobile repairing.....	8	31	11				20	Se 21	Mh 19	20	20				18,800
4	Bread and other bakery products..	14	138	15	8	8	5	102	My * 104	Fe 97	104	87	17			274,951
5	Brooms, from broom corn.....	3	8	3	1			4	(*) 4	(*) 4	4	4				11,620
6	Cars and general shop construction	3	49		2	1		46	No 60	My 32	58	58				128,702
7	and repairs by electric-railroad companies.															
8	Copper, tin, and sheet-iron work.....	7	42	11	1		2	28	Je 36	Fe 19	33	33				52,128
9	Engines, steam, gas, and water.....	5	967	1	18	54	31	863	De 969	Ap 722	969	961	8			3,973,757
10	Foundry and machine-shop products.	22	1,548	15	60	87	43	1,337	De 1,462	Ap 1,260	1,460	1,447	13			4,334,505
11	Models and patterns, not including paper patterns.	6	28	8			1	19	De 22	Mh * 16	22	22				14,931
12	Musical instruments, piano materials.	3	543		18	13	4	508	De 587	Ja 391	587	584	3			1,993,632
13	Patent medicines and compounds.....	5	28	2	3	5	3	19	No * 15	Mh 10	15	8	10	1	1	145,217
14	Printing and publishing, book and job.	16	220	15	15	7	7	176	De 194	Je * 167	195	147	48			456,232
15	Tobacco, cigars.....	7	28	8				20	De 22	Mh 18	22	14	8			21,287
16	All other industries*.....	97	9,874	57	325	746	1,198	7,548	De 22	Mh 18	7,985	6,097	1,877	5	6	32,611,166

[illegible]

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

[illegible][illegible]

Iron and steel, steel works and rolling mills	1	Patent medicines and compounds	12	Sausage, not made in slaughtering and meat-packing establishments	1	Stoves and hot-air furnaces	4
Jewelry	1	Perfumery and cosmetics	3	Saws	2	Structural iron work, not made in steel works or rolling mills	1
Labels and tags	5	Phonographs and graphophones	2	Scales and balances	2	Surgical appliances	1
Lasts	1	Photographic materials	1	Screws, machine	2	Typewriters and supplies, carbon paper	1
Liquors, malt	2	Pickles and preserves	1	Screws, wood	1	Umbrellas and canes	1
Lumber and timber products	2	Plumbers' supplies, not elsewhere specified	1	Shirts	1	Vault lights and ventilators	1
Machine tools	1	Pottery, earthen and stone ware	1	Show cases	1	Washing machines and clothes wringers	1
Motorcycles, bicycles, and parts	1	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments	1	Signs, other than electric	1	Wood, turned and carved	1
Musical instruments and materials, not specified	1	Pumps, not including power pumps	2	Soap	4		
Ordinance and accessories	2	Rubber tires, tubes, and rubber goods, not elsewhere specified	4	Steam fittings and steam and hot-water heating apparatus	1		
Paints	4	Saddlery and harness	1	Steel barrels, drums, and tanks, portable	1		
Paper and wood pulp	2			Stereotyping and electrotyping	2		
Paper goods, not elsewhere specified	1						

1,925,478	2,381,694	13,371,657	218,933	79,883	2,167,875	33,123,629	766,670	67,759,001	33,868,702	20,191	4,515	1,653	1,072	.....	12,051	4,490	1
226,327	231,058	1,633,249		1,200	257,604	3,198,615	102,493	7,205,752	3,001,644	3,081	1,120	1,833			628	2,329	2
		14,310			164	17,449	408	40,481	22,624	29			14		15		3
		30,900		3,100	323	11,107	1,453	62,581	50,021	18			4		12		4
16,331	16,111	118,075		5,435	3,584	538,746	12,889	818,379	286,744	208		50	15		143	11	5
1,500		2,490		303	23	18,956	249	29,351	10,146	4					4		6
3,950	1,050	56,463			3,145	22,589	4,817	92,014	64,608	230					230		7
3,050	1,346	34,003		1,606	514	69,215	715	133,815	63,885	12					12		8
74,562	91,327	1,091,224			138,721	1,486,983	72,086	4,180,910	2,621,841	1,934			595		1,189	345	9
282,974	197,568	1,537,940	26,888	5,065	236,958	2,771,464	111,204	6,564,071	3,671,843	2,166	150		322		1,469	100	10
	250	26,532		1,524	322	4,209	472	58,261	53,580	22	375		4		18		11
96,352	35,987	660,205			118,818	563,744	32,506	2,038,594	1,440,344	975			340		635		12
13,900	7,872	9,795		1,170	5,806	69,170	659	180,828	111,008	13					13		13
55,567	13,653	172,188	524	13,402	10,803	197,894	10,455	607,139	398,790	195					195		14
		10,230		840	6,318	19,451	249	42,529	22,829								15
1,150,915	1,785,522	7,970,963	191,521	46,238	1,384,572	24,134,037	416,024	45,716,296	21,166,235	11,304	2,870	270	676		7,488	1,705	16

Leather, tanned, curried, and finished.....	1	Photo-engraving.....	1	Saddlery and harness.....	2	Structural ironwork, not made in steel works or rolling mills.....	1
Liquors, malt.....	2	Pickles and sauces.....	1	Safes and vaults.....	1	Suspenders, garters, and elastic woven goods.....	1
Lumber and timber products.....	1	Plumbers' supplies, not elsewhere specified.....	1	Signs and advertising novelties.....	1	Slaughtering and meat packing.....	2
Lumber, planing-mill products, not including planing mills connected with sawmills.....	2	Pocketbooks.....	1	Stationery goods, not elsewhere specified.....	1	Stationery goods, not elsewhere specified.....	1
Machine tools.....	3	Printing and publishing, newspapers and periodicals.....	7	Steam fittings and steam and hot-water heating apparatus.....	2	Stationery goods, not elsewhere specified.....	1
Mattresses and spring beds, not elsewhere specified.....	2	Printing materials.....	3	Stereotyping and electrotyping.....	1	Stoves and hot-air furnaces.....	1
Mineral and carbonated waters.....	1	Pumps, not including power pumps.....	3	Stoves and hot-air furnaces.....	1		
		Rubber tires, tubes, and rubber goods, not elsewhere specified.....	1				

³ Same number reported for one or more other months.
⁴ Same number reported throughout the year.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.		
								Maximum month.							Minimum month.

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

1	TOLEDO—All industries.....	671	48,776	417	1,451	3,051	1,767	42,090	De	48,141	My	31,205	47,688	40,493	7,041	138	16	Dollars. 206,032,674
2	Artificial stone products.....	11	68	8	5	1	3	51	Se	79	Ja	27	61	61				199,498
3	Automobile bodies and parts.....	10	1,452	1	58	46	56	1,291	De	1,637	Je	875	1,638	1,502	139			5,730,339
4	Automobile repairing.....	8	40	1	4	3		32	Ja	34	Fe	30	31	31				61,135
5	Bread and other bakery products.....	79	1,002	86	34	155	66	661	De	722	Mh	611	725	545	178		2	2,098,848
6	Brooms, from broom corn.....	5	20	6				14	Ja	16	De	10	14	12				19,200
7	Butter.....	4	204	14	14	26		150	Je	171	Fe	119	165	147	18			1,088,552
8	Carriages and wagons, including repairs.....	3	17	5	1	1		11	No	13	Ja	10	11	11				13,050
9	Cars and general shop construction and repairs, by steam-railroad companies.....	5	1,111	56	30	3		1,022	Oc	1,082	Je	956	1,125	1,125				1,833,702
10	Clothing, women's.....	8	796	31	60	32		673	Au	794	My	508	620	217	403			1,390,670
11	Confectionery and ice cream.....	12	445	6	24	55	54	306	No	364	My	254	335	107	220		2	936,718
12	Copper, tin, and sheet-iron work.....	14	116	1	14	2	7	92	Oc	120	Fe	67	105	105				276,250
13	Electrical machinery, apparatus, and supplies.....	13	3,897	100	281	150		3,365	No	4,018	My	1,465	3,963	2,429	1,522	12		14,406,032
14	Flour-mill and gristmill products.....	6	283	18	19	10		236	Se	284	Fe	194	235	235				3,805,684
15	Foundry and machine-shop products.....	50	6,076	36	245	316	174	5,305	De	5,757	Ja	5,021	5,685	5,411	168	106		12,799,730
16	Furniture.....	9	240	8	12	10		199	De	218	Ap	173	222	220	2			581,176
17	Gloves and mittens, cloth, not including gloves made in textile mills.....	5	886	19	19	27		821	Ja	1,126	My	643	1,087	141	940			1,993,544
18	Grease and tallow, not including lubricating greases.....	3	47	2	4	6		35	De	40	Ap	32	40	40				371,240
19	House-furnishing goods, not elsewhere specified.....	5	48	1	7	3	8	29	Jy	41	Ja	18	26	20	6			94,027
20	Lumber, planing-mill products, not including planing mills connected with sawmills.....	15	399	6	31	27	7	328	Oc	360	Ja	283	346	346				1,451,104
21	Marble and stone work, except slate.....	6	120	4	10	18	3	85	De	99	Se	76	99	99				301,957
22	Mineral and carbonated waters.....	8	60	1	5	4	2	48	Au	54	My	42	49	49				199,830
23	Models and patterns, not including paper patterns.....	9	110	1	7	3	2	97	De	145	Ja	65	146	144	2			98,382
24	Patent medicines and compounds.....	19	84	15	7	17	11	84	Je	37	Mh	31	34	24	10			171,588
25	Printing and publishing, book and job.....	59	683	50	53	44	58	478	No	517	Ja	441	508	394	110	4		1,441,468
26	Printing and publishing, newspapers and periodicals.....	19	667	7	35	177	110	338	Oc	357	Fe	314	352	332	20			1,601,272
27	Tobacco, cigars.....	22	202	23	1			178	Mh	200	No	150	154	51	103			117,662
28	Tools, not elsewhere specified.....	9	265	6	16	9	3	231	Fe	273	Je	189	238	237		1		420,038
29	All other industries*.....	260	29,432	142	636	1,729	945	25,980					29,674	26,458	3,189	15	12	152,529,955

*All other industries embrace—
 Agricultural implements.....
 Artificial flowers.....
 Artificial limbs.....
 Automobiles.....
 Awnings, tents, and sails.....
 Bags, paper, exclusive of those made in paper mills.....
 Baking powders.....
 Belting, leather.....
 Bookbinding and blank-book making.....
 Boxes, cigar.....
 Boxes, paper and other, not elsewhere specified.....
 Boxes, wooden packing, except cigar boxes.....
 Brass, bronze, and copper products.....
 Brick and tile, building brick, sewer pipe, and drain tile.....
 Brushes, toilet.....

Canning and preserving, vegetables.....
 Card cutting and designing.....
 Carpets, rag.....
 Carriage and wagon materials.....
 Carriages and sleds, children's.....
 Cars and general shop construction and repairs by electric-railroad companies.....
 Chemicals.....
 Chewing gum.....
 Cleansing and polishing preparations.....
 Clothing, horse.....
 Clothing, men's.....
 Coal-tar products.....
 Coffee and spice, roasting and grinding.....
 Coke, not including gas-house coke.....
 Cooperage, hogsheads and barrels.....
 Corsets.....
 Cotton goods.....

Crucibles.....
 Cutlery and edge tools, axes and hatchets.....
 Druggists' preparations.....
 Dyeing and finishing textiles, exclusive of that done in textile mills.....
 Electroplating.....
 Engines, steam, gas, and water.....
 Engraving, steel and copper plate, including plate printing.....
 Engraving, wood.....
 Fancy articles, not elsewhere specified.....
 Fertilizers.....
 Flags and banners.....
 Flavoring extracts.....
 Food preparations, not elsewhere specified.....
 Fur goods.....
 Gas and electric fixtures.....

Gas, illuminating and heating.....
 Glass.....
 Glass, cutting, staining, and ornamenting.....
 Hair work.....
 Hand stamps.....
 Hardware, locks.....
 Hats and caps, other than felt, straw, and wool.....
 Ice, manufactured.....
 Instruments, professional and scientific.....
 Iron and steel, blast furnaces.....
 Iron and steel, steel works and rolling mills.....
 Iron and steel forgings, not made in steel works or rolling mills.....
 Iron and steel, welding.....
 Iron and steel, wrought pipe.....
 Jewelry.....

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		Rent- ed.^{2}

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

Dollars. 6, 885, 853	Dollars. 7, 551, 320	Dollars. 53, 363, 067	Dollars. 982, 295	Dollars. 547, 117	Dollars. 10, 063, 262	Dollars. 164, 529, 733	Dollars. 8, 757, 886	Dollars. 293, 520, 900	Dollars. 120, 233, 281									
9, 017	2, 561	70, 504	.....	693	1, 451	148, 986	3, 567	293, 286	140, 733	80	.....	22	.....	58	.....	2	3
179, 669	115, 378	1, 640, 738	.....	4, 720	51, 645	2, 878, 682	157, 103	5, 922, 578	2, 886, 793	1, 923	.....	17	.....	1, 909	.....	2	3
6, 035	2, 310	42, 869	.....	5, 570	675	62, 798	1, 958	139, 975	75, 219	45	.....	.....	.....	45	.....	4	5
135, 339	211, 788	756, 817	560	35, 170	111, 465	3, 452, 924	96, 729	5, 774, 946	2, 225, 293	943	60	.....	.....	579	24	5	4
.....	17, 700	.....	.....	153	47, 420	317	80, 412	32, 675	31, 814	12	.....	2	.....	10	.....	6	5
60, 805	50, 652	221, 536	.....	20, 686	19, 589	3, 423, 387	46, 506	4, 324, 608	854, 715	354	95	.....	.....	259	438	7	6
.....	1, 196	16, 497	386	1, 500	397	22, 009	1, 112	54, 935	.....	30	.....	.....	.....	30	.....	8	7
139, 007	44, 382	1, 591, 857	.....	.....	2, 577	650, 445	117, 195	2, 600, 557	1, 841, 917	1, 660	375	.....	.....	1, 285	883	9	8
190, 346	216, 456	720, 179	6, 000	18, 560	57, 408	2, 325, 465	9, 766	4, 163, 468	1, 828, 237	163	.....	.....	.....	163	.....	10	9
131, 672	141, 575	246, 408	.....	27, 779	108, 033	1, 704, 752	43, 300	2, 776, 615	1, 028, 557	599	.....	.....	.....	599	.....	11	10
25, 267	5, 283	105, 035	100	8, 162	5, 904	236, 678	2, 404	513, 413	274, 331	43	.....	.....	.....	43	.....	12	11
580, 798	676, 632	3, 186, 553	.....	22, 270	1, 548, 505	8, 748, 527	122, 441	19, 245, 500	10, 374, 532	5, 413	.....	25	.....	5, 388	.....	13	12
156, 687	38, 531	291, 394	.....	120	164, 725	11, 430, 618	85, 418	13, 432, 512	1, 916, 476	2, 723	2, 340	35	120	228	340	14	13
786, 242	593, 687	7, 502, 902	3, 708	36, 661	354, 479	8, 128, 806	789, 387	22, 416, 062	13, 497, 889	10, 987	2, 591	379	132	8, 017	1, 944	15	14	
36, 723	30, 436	215, 283	.....	5, 459	8, 533	285, 466	11, 018	763, 156	466, 672	370	60	.....	.....	178	.....	16	15
81, 269	55, 368	486, 936	1, 501	13, 934	128, 037	1, 572, 149	16, 720	2, 840, 984	1, 252, 115	190	.....	.....	.....	190	.....	17	16
10, 239	7, 042	53, 849	.....	.....	13, 124	145, 882	37, 213	359, 646	176, 551	258	230	.....	.....	26	.....	18	17
15, 085	11, 155	29, 165	.....	2, 880	2, 025	115, 350	1, 065	202, 035	85, 620	7	.....	.....	.....	7	.....	19	18
110, 041	40, 741	368, 227	.....	3, 018	28, 583	1, 490, 796	23, 059	2, 238, 609	724, 754	1, 814	675	.....	20	1, 119	.....	20	19
22, 703	34, 037	165, 739	530	3, 061	3, 238	278, 134	3, 435	659, 032	377, 463	167	.....	70	.....	97	.....	21	20
9, 550	8, 730	66, 112	.....	3, 080	6, 215	183, 035	3, 128	337, 838	151, 675	125	20	.....	.....	105	.....	22	21
21, 910	4, 210	168, 884	.....	7, 362	605	54, 076	3, 686	323, 158	265, 396	78	.....	.....	.....	78	.....	23	22
16, 736	57, 549	39, 109	.....	9, 466	3, 437	111, 302	2, 980	408, 420	294, 138	91	.....	.....	.....	91	.....	24	23
148, 981	90, 706	547, 713	48, 893	55, 568	15, 751	851, 770	22, 290	2, 279, 574	1, 405, 514	578	.....	2	.....	578	.....	25	24
107, 204	390, 787	493, 896	672, 893	17, 363	141, 756	1, 032, 241	18, 780	3, 514, 811	2, 463, 790	621	.....	.....	.....	621	.....	26	25
8, 050	.....	137, 336	.....	4, 144	55, 491	203, 419	1, 220	476, 719	272, 080	9	.....	.....	.....	9	.....	27	26
59, 239	19, 808	303, 828	.....	10, 167	8, 960	95, 394	7, 925	596, 299	492, 980	213	.....	29	.....	184	.....	28	27
3, 836, 339	4, 730, 320	33, 875, 401	247, 724	229, 724	7, 210, 501	114, 849, 222	7, 128, 158	196, 772, 752	74, 795, 372	63, 733	21, 877	5, 570	1, 825	336	34, 125	10, 758	29	28

Knit goods.....	1	Paving materials.....	2	Saws.....	1	Stoves and hot-air furnaces.....	3
Liquors, malt.....	4	Peanuts, grading, roasting, cleaning, and shelling.....	1	Scales and balances.....	1	Structural ironwork, not made in steel works or rolling mills.....	6
Lithographing.....	3	Pens, fountain and stylographic.....	2	Screws, machine.....	1	Surgical appliances.....	2
Looking-glass and picture frames.....	1	Perfumery and cosmetics.....	3	Shipbuilding, steel.....	1	Tinware, not elsewhere specified.....	1
Machine tools.....	3	Petroleum, refining.....	2	Shipbuilding, wooden, repair work only.....	2	Tobacco, chewing and smoking.....	2
Mattresses and spring beds, not elsewhere specified.....	2	Photographic materials.....	5	Shirts.....	1	Toys and games.....	5
Millinery, trimmed hats and hat frames, etc.....	1	Photo-engraving.....	5	Show cases.....	1	Trunks and valises.....	1
Mirrors, framed and unframed.....	2	Pickles and sauces.....	3	Signs and advertising novelties.....	1	Umbrellas and canes.....	1
Motorcycles, bicycles, and parts.....	1	Plumbers' supplies, not elsewhere specified.....	2	Slaughtering and meat packing.....	6	Varnishes.....	3
Mucilage and paste.....	1	Pottery, earthen and stone ware.....	1	Soap.....	1	Vinegar and cider.....	2
Musical instruments and materials, not specified.....	1	Refrigerators.....	1	Springs, steel, automobile.....	1	Wall plaster and composition flooring.....	2
Musical instruments, organ materials.....	1	Roofing materials.....	1	Stamped ware.....	5	Waste.....	1
Oil, linseed.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	4	Steam fittings and steam and hot-water heating apparatus.....	2	Wheelbarrows.....	1
Oil, composite.....	3	Saddlery and harness.....	4	Steel barrels, drums, and tanks, portable.....	1	Window and door screens.....	1
Optical goods.....	2	Safes.....	1	Stencils and brands.....	1	Wirework, not elsewhere specified.....	2
Paints.....	3	Sausage, not made in slaughtering and meat-packing establishments.....	1	Stereotyping and electrotyping.....	2	Wood preserving.....	2
Paper goods, not elsewhere specified.....	2					Wooden goods, not elsewhere specified.....	3

* Same number reported for one or more other months.

TABLE 46.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.		
								Maximum month.							Minimum month.

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

1	YOUNGSTOWN—All industries.....	239	23,047	200	500	2,045	888	19,414	Se	22,303	Oc	10,916	20,522	19,621	895	6	Dollars.
																	186,774,621
2	Artificial stone products.....	7	22	4	3	.....	1	14	Ja	18	Ja	7	14	14	.....	.....	34,760
3	Automobile repairing.....	13	146	8	2	4	8	124	De	139	Mh	110	137	134	3	.....	442,335
4	Bread and other bakery products.....	44	348	59	11	27	13	238	Jy	246	Mh	231	249	212	36	1	610,173
5	Confectionery and ice cream.....	11	130	10	14	6	32	68	Je	85	Fe	42	73	51	22	.....	415,672
6	Foundry and machine-shop products.....	15	1,419	5	83	96	31	1,204	Ja	1,399	My	976	1,351	1,328	53	.....	10,988,101
7	Marble and stone work, except slate.....	4	33	4	2	1	1	25	Jy	38	Ja	13	22	22	.....	.....	112,351
8	Models and patterns, not including paper patterns.....	5	29	6	4	.....	1	18	Oc	32	Fe	9	27	27	.....	.....	58,414
9	Patent and proprietary medicines.....	4	12	4	.....	.....	1	7	(1)	7	(1)	7	5	2	8	.....	18,630
10	Printing and publishing.....	28	495	32	34	68	66	295	De	313	Ja	275	313	256	54	3	1,077,743
11	All other industries*.....	108	20,413	68	347	1,843	734	17,421					18,301	17,575	724	2	173,016,412

*All other industries embrace—							
Artificial limbs.....	2	Cars and general shop construction and repairs by electric-railroad companies.....	1	Coal-tar products.....	2	Food preparations, not elsewhere specified.....	2
Automobile bodies and parts.....	3			Coffee, roasting and grinding.....	1	Furniture, metal.....	1
Automobiles.....	1	Cars and general shop construction and repairs by steam-railroad companies.....	1	Coke, not including gas-house coke.....	1	Gas and electric fixtures.....	3
Baskets, and rattan and willow ware.....	1			Copper, tin, and sheet-iron work.....	5	Gas, illuminating and heating.....	1
Brass, and bronze products.....	1			Dental goods.....	2	Grease and tallow, not including lubricating greases.....	1
Brooms, from broom corn.....	1	Cars, steam-railroad, not including operations of railroad companies.....	1	Electrical machinery, apparatus, and supplies.....	8	Hand stamps.....	1
Butter.....	2			Electroplating.....	1	Hardware, locks.....	1
Carpets, rag.....	1	Chemicals.....	1	Engraving, steel and copper plate, including plate printing.....	1	Hats and caps, other than felt, straw, and wool.....	1
		Cleaning preparations.....	2	Flour-mill and gristmill products.....	1		
		Clothing, men's.....	2				

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

1	ALLIANCE.....	74	6,176	70	146	622	221	5,117	Ja	5,898	De	4,480	4,652	4,298	354	.....	23,907,795
2	ASHTABULA.....	62	4,509	45	114	129	58	4,172	Au	4,455	Oc	3,925	4,166	3,949	216	1	10,766,883
3	BARBERTON.....	32	5,829	18	167	674	208	4,762	Ja	5,661	Je	4,364	5,086	4,659	427	.....	33,880,212
4	BELLAIRE.....	45	2,496	38	71	70	39	2,277	Au	2,734	No	1,906	2,881	2,456	420	4	8,994,616
5	BUCYRUS.....	43	2,107	35	79	74	58	1,861	Ja	2,421	Ap	1,637	2,282	2,112	169	1	7,506,268
6	CAMBRIDGE.....	32	2,034	21	69	117	45	1,782	De	1,882	Fe	1,654	1,899	1,749	145	5	4,213,735
7	CHILLICOTHE.....	35	1,893	35	99	86	55	1,038	Je	1,966	Mh	1,359	1,864	1,496	362	4	5,164,695
8	COSHOCOTON.....	45	2,844	29	103	167	86	1,959	Se	2,098	Ja	1,772	2,090	1,364	722	4	5,311,902
9	CUYAHOGA FALLS.....	30	998	27	50	89	51	784	Au	899	Ja	700	870	821	39	10	4,906,690
10	EAST CLEVELAND.....	17	127	13	14	4	8	88	Ja	95	No	81	91	70	21	.....	232,933
11	EAST LIVERPOOL.....	67	4,653	40	182	55	85	4,311	Oc	4,518	Fe	4,116	4,464	3,174	1,261	24	7,602,589
12	ELYRIA.....	75	5,132	42	155	170	175	4,590	Ja	3,843	De	5,555	5,577	4,695	879	3	21,765,093
13	FINDLAY.....	75	2,012	66	91	59	81	1,715	De	1,900	Mh	1,555	1,965	1,408	532	7	4,084,226
14	FREMONT.....	53	3,409	32	94	220	64	2,999	No	3,293	Ap	2,783	3,298	2,587	709	2	9,935,870
15	HAMILTON.....	130	9,704	113	270	521	247	8,553	Au	9,251	Fe	7,927	9,178	8,043	1,124	11	33,078,213
16	IBONTON.....	52	2,238	37	103	72	55	1,971	Oc	2,217	Jy	1,827	2,147	1,725	382	40	10,819,350
17	KENMORE.....	7	153	7	5	1	5	135	Jy	139	Ja	130	137	129	8	.....	553,951
18	LAKEWOOD.....	33	2,163	24	34	164	120	1,821	De	2,225	Ap	1,610	2,226	1,914	312	.....	8,170,514
19	LANCASTER.....	43	2,286	30	53	133	46	2,024	De	2,083	Je	1,952	2,241	1,745	495	1	5,411,591
20	LIMA.....	108	5,726	98	150	412	165	4,901	Ja	5,619	Se	4,080	5,647	4,012	1,565	24	18,347,876
21	LORAIN.....	55	12,622	40	208	583	134	11,677	Mh	12,323	Jy	11,003	12,967	12,866	85	10	130,835,811
22	MANSFIELD.....	132	5,892	120	183	605	273	4,711	My	4,321	De	5,239	5,001	3,967	1,029	5	21,840,929
23	MARIETTA.....	50	1,649	55	76	127	106	1,285	De	1,670	Fe	925	1,720	1,522	195	2	5,585,807
24	MARION.....	70	4,852	43	151	345	135	4,125	No	4,257	Je	3,990	4,319	3,774	512	4	17,221,927
25	MARTINS FERRY.....	40	1,766	30	76	111	32	1,517	Fe	2,293	Oc	339	1,804	1,725	77	2	7,083,260
26	MASSILLON.....	80	2,566	77	125	97	114	2,153	Je	2,271	Fe	2,039	2,353	2,126	219	5	48,886,957
27	MIDDLETOWN.....	56	7,529	38	212	542	295	6,442	De	6,698	My	6,164	6,636	5,475	1,159	2	59,626,309
28	NEW PHILADELPHIA.....	43	1,426	33	37	72	37	1,247	Oc	1,397	Ap	1,028	1,381	1,244	128	8	4,025,171
29	NEWARK.....	79	5,077	67	140	145	152	4,570	De	4,963	Jy	4,150	4,967	4,330	624	6	15,056,227
30	NILES.....	40	3,257	23	95	114	80	2,945	Ja	3,770	Oc	1,026	3,444	3,312	130	2	14,834,187
31	NORWOOD.....	70	9,682	49	200	606	454	8,283	De	9,222	Ap	7,615	9,178	7,886	1,491	1	36,511,561
32	PIQUA.....	66	3,907	40	140	335	99	3,293	De	3,809	Jy	2,907	3,818	2,651	1,163	3	12,586,017
33	PORTSMOUTH.....	60	6,701	45	270	213	259	5,914	De	6,860	Mh	5,365	6,886	5,061	1,604	200	22,282,655
34	SALEM.....	36	2,609	17	119	136	100	2,237	De	2,565	My	2,040	2,500	2,387	113	.....	9,598,287
35	SANDUSKY.....	115	4,202	92	222	283	158	3,447	De	3,781	Je	3,241	4,055	3,369	675	11	18,138,900
36	STUEBENVILLE.....	57	4,328	54	196	157	66	3,855	Se	4,803	Oc	1,262	4,826	4,560	241	20	35,341,250
37	Tiffin.....	75	2,619	90	71	130	115	2,213	De	2,430	My	2,084	2,403	2,136	263	.....	7,751,130
38	WARREN.....	96	3,036	76	148	187	192	2,432	De	2,802	My	2,177	2,847	2,212	629	4	11,229,221
39	ZANESVILLE.....	97	3,490	74	129	167	106	3,014	Fe	3,117	Ap	2,847	3,318	2,557	719	28	10,137,023

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

* Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

[illegible]

CITIES OF 50,000 INHABITANTS OR MORE--ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES--Continued.

[illegible]CITIES OF 10,000 TO 50,000 INHABITANTS^a—ALL INDUSTRIES COMBINED.

508,526	1,461,478	5,769,253	6,103	14,078	1,449,914	14,029,769	759,668	32,871,087	18,081,650	12,481	7,232	127	5,122	8,808	1	
412,047	278,544	5,812,960	446	11,568	1,346,950	10,660,064	308,804	23,098,509	12,129,641	9,013	5,933	984	2,096	3,305	2	
574,688	1,370,864	6,261,269	57,074	2,619	1,646,073	12,622,825	2,072,914	27,713,226	13,017,487	29,000	8,117	12,472	2,719	15,659	3	
241,042	182,841	2,728,920	14,257	8,387	158,351	8,700,641	1,227,871	14,502,401	4,573,889	15,387	1,020	530	1,365	2,804	4	
257,308	169,258	2,237,599	36,852	137,669	4,245,249	155,680	8,435,746	4,034,817	5,590	2,405	90	614	2,481	1,205	5	
182,907	208,225	3,037,727	550	5,320	180,790	5,549,363	303,804	11,226,809	5,373,642	5,160	4,825	102	233	1,249		
216,694	125,356	1,840,121	1,840	8,663	118,495	4,060,050	250,169	7,667,182	3,326,963	5,036	3,350	1,155	169	2,586		
328,088	346,719	1,652,477	6,514	5,575	194,097	3,688,522	184,147	7,684,762	3,812,093	5,439	1,670	453	3,221	1	7	
199,131	173,883	1,091,229	9,862	2,895	196,309	2,929,652	110,385	5,829,347	2,789,310	4,193	513	225	2,908	762	9	
26,065	6,009	103,968	-----	7,689	2,057	181,456	9,491	420,505	229,558	217	80	547	137	-----	10	
480,562	235,251	4,545,720	648,544	20,381	392,315	3,902,922	988,158	12,501,181	7,610,101	5,911	2,674	648	2,589	870	11	
620,300	485,496	6,028,980	2,531,021	17,124	1,027,645	9,831,280	396,334	25,191,454	14,963,840	14,481	5,870	529	7,622	3,782	12	
223,549	129,406	1,543,118	14,765	9,287	239,012	4,677,153	150,608	7,924,282	3,096,521	4,098	1,587	469	2,042	88	13	
341,136	104,585	3,113,882	-----	15,115	207,920	5,106,358	331,306	12,915,695	7,477,431	5,762	1,655	487	3,610	622	14	
1,259,875	927,192	10,094,428	32,170	66,110	2,372,355	21,631,260	1,006,182	47,024,031	24,880,589	27,596	18,097	3,950	5,288	113	15	
299,660	163,252	2,252,265	3,053	12,985	515,514	5,595,289	3,241,553	14,071,850	5,235,008	16,968	10,739	200	5,204	1,035	16	
22,100	8,804	166,222	-----	1,730	4,834	593,697	10,684	844,303	230,022	391	75	-----	316	-----	17	
111,609	366,363	2,253,919	5,875	15,497	106,013	3,578,482	274,097	7,602,808	3,750,224	2,435	300	-----	1,675	1,575	18	
188,754	904,263	3,303,300	400	4,894	399,182	6,576,405	155,899	11,478,888	7,646,576	3,189	1,415	-----	1,226	128	19	
492,077	820,969	5,292,337	719	48,888	1,300,865	12,312,811	490,480	23,633,764	10,895,478	11,075	6,091	105	4,706	6,212	20	
856,896	1,122,904	22,955,023	-----	11,030	4,687,397	53,022,361	12,972,401	116,908,616	50,913,851	148,253	95,614	11,800	28,580	46,776	21	
730,884	1,295,240	2,969,635	1,040	41,371	1,068,871	16,897,756	461,382	31,877,551	14,518,413	9,123	1,116	-----	6,969	261	22	
239,679	177,204	1,213,003	297,519	18,835	322,033	2,756,805	94,063	5,917,469	3,065,611	9,136	1,365	402	1,949	6	23	
541,326	770,899	8,831,217	200	17,609	845,923	9,937,709	446,221	20,712,973	10,339,043	9,601	7,052	628	1,923	8,579	24	
221,762	191,789	2,731,599	12,066	6,936	312,136	9,595,214	676,831	15,402,280	5,130,213	11,355	10,196	675	373	2,806	25	
476,238	290,820	7,714,641	62,150	15,377	367,365	6,834,527	239,300	13,984,871	6,911,044	9,931	2,750	-----	429	6,752	26	
1,239,188	1,133,212	8,728,511	50	26,267	8,878,829	33,551,637	2,135,275	62,638,289	27,151,077	56,386	40,088	13,356	311	2,631	27	
101,711	139,733	1,912,441	464	5,456	100,112	4,617,980	233,693	8,445,658	3,593,985	4,214	3,550	-----	161	7,911	28	
415,349	379,018	4,322,104	34,950	22,940	414,839	7,006,311	1,265,315	16,583,149	8,291,523	10,314	3,203	-----	1,953	5,168	29	
405,515	316,058	4,569,036	-----	7,878	567,269	9,232,095	843,779	18,358,773	8,282,899	16,834	11,645	-----	122	5,067	30	
1,357,160	1,588,938	8,148,787	463	17,351	4,020,036	19,816,624	406,246	47,947,183	27,724,313	18,218	13,061	-----	642	2,515	31	
562,752	570,511	3,037,223	100	18,492	757,204	10,764,491	190,536	19,921,345	8,966,318	7,212	8,877	-----	329	3,006	32	
825,997	871,776	6,005,854	113,007	10,039	1,403,872	17,420,921	2,756,835	36,645,736	16,407,980	22,302	13,978	6,328	795	1,291	33	
422,625	408,245	3,070,379	-----	3,725	447,683	4,016,367	204,234	11,069,550	6,848,949	7,076	2,500	585	458	3,533	34	
772,955	532,139	6,665,754	-----	118,437	752,211	10,082,968	576,677	19,248,571	8,588,926	15,949	7,770	618	922	6,639	35	
627,368	310,890	3,689,050	3,620	21,989	3,531,734	14,231,884	2,143,866	30,903,344	14,527,594	44,531	25,263	3,745	1,356	14,167	1,890	36
240,509	269,169	2,433,691	17,625	14,148	490,539	4,434,827	315,647	10,516,369	5,765,895	3,748	1,142	6	688	1,777	262	37
492,471	405,570	2,373,503	6,517	46,190	819,245	11,596,698	333,885	19,747,395	7,816,812	6,083	2,330	160	84	3,509	761	38
388,345	378,282	2,941,594	26,520	22,867	277,646	6,831,825	595,464	13,437,777	6,010,488	7,557	4,683	-----	381	2,493	96	39

3 Same number reported for one or more other months.

1 Same number reported throughout the year.

⁵ Excludes Cleveland Heights and East Youngstown to avoid disclosure of individual operations.

OKLAHOMA.

GENERAL STATISTICS.

General character of the state.—Oklahoma has a gross area of 70,057 square miles, of which 69,414 represent land surface. The inhabitants of the state in 1900 numbered 790,391; in 1910, 1,657,155; and in 1920, 2,028,283. In total population Oklahoma ranked twenty-first among the states in 1920. The number of inhabitants per square mile in 1910 was 23.9, the corresponding figures for 1920 being 29.2.

In 1920 there were 12 cities in the state—Ardmore, Bartlesville, Chickasha, Enid, Guthrie, McAlester, Muskogee, Oklahoma City, Okmulgee, Sapulpa, Shawnee, and Tulsa—having more than 10,000 inhabitants. These 12 cities, the combined population of which in that year was 317,264, or 15.6 per cent of the total for Oklahoma, reported 33.3 per cent of the value of the state's manufactured products in 1919.

Importance and growth of manufactures (Table 1).—The large increases in salaries and wages, cost of materials, and the value of products, from 1914 to 1919, as presented in Table 1, are chiefly due to the change in industrial conditions brought about by the World War, and therefore can not properly be used to measure the growth of manufactures during the census period 1914–1919. The increases shown, however, in number of wage earners and horsepower are indicative of a decided growth in the manufacturing activities of the state. The addition of the Federal income tax since 1914 will account for the large increase in "Rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of county totals for 1919 with those for prior censuses.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is not always satisfactory as indicating their importance from a manufacturing standpoint. In some instances their ranking would change materially if based upon the average number of wage earners or value added by manufacture.

Persons engaged in manufacturing industries (Table 4).—The age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." The classification by sex for 1919 was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures for individual industries will be found in Table 26.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table are those which employed more than 500 wage earners

in 1919, and for which statistics can be shown without the possibility of disclosing the operations of individual establishments.

Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more (Table 6).—In general, increases from 1914 to 1919 are shown in all of the details for the 12 cities included in this table.

Wage earners, by months (Table 7).—The statistics for wage earners are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the several census years.

Wage earners, by months, for selected industries and for cities (Table 8).—In addition to the number of wage earners employed by months, similar data are given for males and females for all industries combined, and also for each of the 12 cities having more than 10,000 inhabitants. There were a number of industries in the state in 1919 in which the number of female wage earners predominated. The 12 cities combined reported a somewhat larger proportion of female wage earners than the state as a whole, 11.2 per cent, as compared with 6.3 per cent for the state.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working-day in Oklahoma. In that year 25 per cent of the wage earners were included in the group "48 and under," as against 44.2 per cent in 1919. In 1914 the "60" and "over 60" groups constituted 45.1 per cent of the total wage earners, as compared with 25.4 per cent in 1919.

Size of establishments, by average number of wage earners, for selected industries and for cities (Table 10).—The predominance of small establishments, based on the number of wage earners employed, is evidenced in this table by the fact that of the total number of establishments in the state, 97.8 per cent were in the several classes having fewer than 101 wage earners, while such establishments employed but 48.9 per cent of the total number of wage earners. On the other hand, the establishments employing an average of more than 100 wage earners represented only 2.2 per cent of the total number of manufacturing establishments in the state, but reported 51.1 per cent of the total number of wage earners.

Size of establishments, by value of products (Table 11).—At the censuses of 1909 and 1914 establishments with products valued at "\$100,000 to \$1,000,000" constituted one group, but at the census of 1919 this

group was subdivided into "\$100,000 to \$500,000" and "\$500,000 to \$1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups in the case of all items for 1909, and in the case of average number of wage earners and value added by manufacture for 1914.

Size of establishments, by value of products, for selected industries (Table 12).—In the preparation of this table it was necessary in several instances to combine the establishments of one group of the industry with those of some other group of that industry, to avoid the possibility of disclosing the operations of individual establishments.

Size of establishments, by value of products, for cities of 10,000 inhabitants or more (Table 13).—This table strikingly illustrates the fact that the number of establishments of itself is no real index of manufacturing activities.

Character of ownership (Table 14).—The preponderance of corporate ownership is clearly brought out in this table. Although corporations owned but 29 per cent of the number of establishments in the state in 1919, they reported 85.6 per cent of the average number of wage earners and 91.6 per cent of the total value of products. During the five-year period 1914-1919, the average number of wage earners in corporations increased 12,230, or 93.8 per cent, and the value of products \$278,772,155, or 314.3 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the combined number of establishments in the 12 cities in 1919 represented 30.5 per cent of

the total in the state. They reported in that year 38.8 per cent of the average number of wage earners and 33.3 per cent of the total value of products.

Principal industries in Oklahoma City and Tulsa, with per cent of total for the state (Table 16).—This table includes all industries in Oklahoma City and Tulsa having products of \$500,000 and over, the figures being given for those which can be shown without disclosing the operations of individual establishments.

It is deemed of first importance to present the statistics of the state as a whole for all industries which can be shown without disclosing the operations of individual establishments. In so doing, however, it sometimes happens that quite important industries can not be shown in the city, since to do so might disclose the operations of establishments located outside, by the simple deduction of the totals shown for the industry in the city from that given in the detailed state table.

Number and horsepower of types of prime movers (Table 17).—The total horsepower reported in 1919, as compared with that for 1914, shows an increase of 42,675 horsepower, or 43.9 per cent. This increase, however, is chiefly due to the gain of 25,595 horsepower, or 249.1 per cent, in rented power. The owned power increased 17,080 horsepower, or 19.6 per cent, during the five-year period.

Fuel consumed (Table 18).—This table shows the principal kinds of fuel used by the manufacturing plants in the state in 1919 and 1914, and gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	MANUFACTURING INDUSTRIES.					PER CENT OF INCREASE. ¹			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	2,445	2,518	2,310	1,123	495	-2.9	9.0	105.7	126.9
Persons engaged.....	38,314	22,700	18,034	7,456	(?)	68.8	25.9	141.9	.....
Proprietors and firm members.....	2,320	2,464	2,698	1,187	(?)	-5.8	-8.7	127.3	.....
Salaried employees.....	6,491	2,793	2,193	813	269	132.4	27.4	169.7	202.2
Wage earners (average number).....	29,503	17,443	13,143	5,456	2,381	69.1	32.7	140.9	120.1
Primary horsepower.....	139,983	97,308	71,139	29,608	11,572	43.9	36.8	140.3	155.9
Capital.....	\$277,034,318	\$65,477,654	\$38,872,938	\$16,124,417	\$4,054,391	323.1	68.4	141.1	297.7
Salaries and wages.....	46,987,133	14,213,375	9,285,472	3,517,822	1,112,729	230.6	53.1	164.0	216.1
Salaries.....	11,961,191	3,202,332	2,045,295	718,420	218,662	273.5	56.6	184.7	228.6
Wages.....	35,025,942	11,011,043	7,240,177	2,799,402	894,067	218.1	52.1	158.6	213.1
Paid for contract work.....	475,181	307,885	373,954	91,140	(?)	54.3	-17.7	310.3	.....
Rent and taxes.....	5,608,944	909,729	562,667	188,348	(?)	516.6	61.7	.....	.....
Cost of materials.....	312,605,829	70,969,760	34,152,894	16,393,952	5,430,447	340.5	107.8	108.3	201.9
Value of products.....	401,362,899	102,005,693	53,682,405	24,459,107	8,133,936	293.5	90.0	119.5	200.7
Value added by manufacture.....	88,757,040	31,035,943	19,529,511	8,065,155	2,703,489	186.0	58.9	142.1	193.3

¹ A minus sign (-) denotes decrease.
² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—OKLAHOMA.

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TABLE 2.—STATISTICS FOR THE STATE, BY COUNTIES: 1919.

COUNTY.	Number of establishments.	WAGE EARNERS.		Rents and taxes.	Cost of materials.	Value of products.	Value added by manufacture.	Primary horse-power.
		Average number.	Wages.					
The state.....	2,445	29,503	\$35,025,942	\$5,608,944	\$312,605,829	\$401,362,869	\$88,757,040	139,983
Adair.....	17	87	92,883	3,561	163,456	336,062	172,606	225
Alfalfa.....	25	59	59,781	47,232	1,004,768	1,251,515	246,749	733
Atoka.....	26	32	64,968	5,880	91,569	234,769	143,170	838
Beaver.....	9	12	15,215	936	31,668	72,509	40,841	71
Beckham.....	21	43	46,267	13,639	673,027	820,451	146,824	1,061
Blaine.....	22	115	131,400	21,162	1,603,316	1,990,048	386,732	799
Bryan.....	33	88	85,649	14,892	902,590	1,170,548	267,958	887
Caddo.....	36	75	53,318	9,400	837,163	1,030,733	173,550	1,030
Canadian.....	27	534	748,127	201,804	10,393,299	12,221,827	1,528,528	3,336
Carter.....	49	484	493,942	128,052	7,824,159	10,596,990	2,772,831	2,033
Cherokee.....	8	14	10,586	2,615	111,017	147,040	36,023	239
Choctaw.....	35	497	509,075	56,103	1,449,648	2,551,527	1,101,879	2,894
Cleveland.....	13	49	57,263	13,140	370,276	518,157	148,881	524
Coal.....	5	7	7,086	1,718	11,476	20,988	18,512	103
Comanche.....	28	145	180,602	26,934	534,284	1,491,058	956,764	1,517
Cotton.....	15	19	17,848	2,749	68,500	126,704	58,204	168
Craig.....	20	238	354,476	30,581	7,468,350	8,709,450	1,241,100	887
Creek.....	84	1,456	1,545,212	160,653	6,855,974	9,970,940	3,114,966	4,266
Custer.....	34	68	83,406	65,280	2,113,923	2,616,070	502,147	1,424
Delaware.....	19	17	15,088	1,683	203,584	276,769	73,185	320
Dewey.....	7	4	3,906	885	5,289	23,193	17,904	21
Ellis.....	12	16	17,289	3,415	258,187	335,684	77,677	263
Garfield.....	73	566	704,038	126,745	11,799,246	14,289,300	2,490,054	2,799
Garvin.....	29	68	68,928	22,430	1,095,287	1,428,140	332,833	1,061
Grady.....	31	610	748,374	67,708	3,868,244	5,210,092	1,841,848	2,541
Grant.....	20	38	45,492	9,826	1,424,912	1,573,942	149,030	519
Greer.....	15	72	72,114	12,823	441,074	643,202	202,128	836
Harmon.....	8	13	16,688	4,757	128,813	195,119	66,306	265
Harper.....	14	17	17,424	3,611	33,905	79,515	45,610	148
Haskell.....	11	72	46,978	6,761	229,485	318,060	88,575	385
Hughes.....	24	50	50,462	10,711	327,977	464,755	136,778	615
Jackson.....	20	120	139,146	20,710	1,048,904	1,481,917	433,013	1,111
Jefferson.....	14	105	129,037	32,942	825,810	1,100,027	274,217	593
Johnston.....	10	5	6,930	990	17,374	39,337	21,963	25
Kay.....	70	1,126	1,359,752	198,509	13,179,944	16,843,510	3,663,566	5,031
Kingfisher.....	17	64	58,038	41,332	1,504,008	1,766,829	262,821	690
Kiowa.....	30	81	74,460	11,052	472,576	663,475	190,899	1,249
Latimer.....	13	93	69,188	5,772	93,143	231,465	138,322	642
Le Flore.....	31	413	525,413	15,228	707,451	1,606,874	899,423	2,032
Lincoln.....	29	100	88,142	20,004	1,343,304	1,663,343	320,039	1,038
Logan.....	53	409	320,323	60,517	4,265,998	5,328,317	1,060,319	2,126
Love.....	4	5	4,790	2,498	17,940	35,704	17,755	42
McClain.....	13	33	39,536	8,782	550,519	649,330	98,811	461
McCurtain.....	35	1,271	1,216,689	175,810	934,302	3,080,140	2,145,838	4,149
McIntosh.....	19	155	140,281	17,697	476,535	754,624	278,089	840
Major.....	12	19	17,606	3,314	75,389	134,593	50,204	142
Marshall.....	12	43	38,100	9,678	689,059	776,254	87,195	399
Mayes.....	23	15	12,708	3,256	98,155	153,263	55,108	287
Murray.....	12	109	50,533	12,790	85,710	243,811	158,101	579
Muskogee.....	96	1,595	1,912,885	156,808	6,463,360	10,108,649	3,645,289	5,568
Noble.....	19	49	62,253	9,932	1,331,635	1,544,914	213,279	394
Nowata.....	17	48	53,985	9,243	75,029	250,571	175,542	168
Okfuskee.....	21	87	87,475	11,866	464,242	631,074	166,832	461
Oklahoma.....	251	5,822	6,469,925	1,410,683	87,567,959	101,688,647	14,120,688	16,312
Oklmulgee.....	65	1,630	2,220,689	242,704	11,128,009	15,156,854	4,028,845	3,249
Osage.....	51	214	299,601	42,363	1,049,597	1,760,427	710,830	1,080
Ottawa.....	55	223	259,527	38,786	1,810,017	2,504,964	694,947	1,377
Pawnee.....	25	102	160,462	19,083	1,782,252	2,280,089	497,837	204
Payne.....	67	981	1,019,536	222,230	27,533,669	30,481,653	2,947,984	3,009
Pittsburg.....	55	488	541,525	53,619	2,065,648	3,068,089	1,002,441	7,801
Pontotoc.....	34	493	597,827	75,495	2,672,498	4,510,079	1,837,581	1,887
Pottawatomie.....	60	1,171	1,517,773	61,994	4,245,782	6,568,265	2,322,483	3,951
Pushmataha.....	24	112	127,804	5,343	202,976	394,717	191,741	870
Roger Mills.....	3	2	1,134	297	10,282	15,418	5,136	39
Rogers.....	17	77	63,840	6,848	234,923	382,476	147,553	427
Seminole.....	12	7	6,501	1,078	16,575	38,989	22,414	100
Sequoyah.....	12	36	35,260	14,393	382,516	483,816	101,300	439
Stephens.....	15	27	28,349	5,750	131,209	221,618	90,409	219
Texas.....	16	22	24,098	3,696	52,817	110,283	57,466	168
Tillman.....	16	37	45,031	8,009	126,804	270,149	143,345	372
Tulsa.....	194	4,765	6,605,749	1,306,591	63,966,212	86,727,224	22,761,012	27,216
Wagoner.....	22	117	118,420	9,876	1,198,567	1,559,299	360,732	756
Washington.....	48	1,356	1,805,714	108,750	6,771,020	10,073,724	3,302,704	7,639
Washita.....	15	30	32,967	5,900	248,158	331,165	83,007	301
Woods.....	24	162	223,854	50,209	2,007,408	2,404,307	456,899	1,156
Woodward.....	24	49	45,021	7,951	335,421	459,269	123,848	546

MANUFACTURES—OKLAHOMA.

TABLE 3.—PRINCIPAL INDUSTRIES, RANKED BY VALUE OF PRODUCTS: 1919

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.			Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.
All industries.....	2,445	29,503	100.0	\$401,363	100.0	\$88,757	100.0	Printing and publishing, book and job.....	97	505	1.7	\$2,507	0.6	\$1,650	1.9
Petroleum, refining.....	66	4,612	15.6	150,673	37.5	23,524	26.5	Coffee, roasting and grinding.....	7	168	0.6	2,402	0.6	434	0.5
Flour-mill and gristmill products.....	227	958	3.3	49,844	12.4	5,064	6.4	Confectionery, ice cream.....	45	187	0.6	2,246	0.6	921	1.0
Smelting and refining, zinc.....	11	2,272	7.7	19,518	4.9	4,968	5.6	Automobile repairing.....	129	455	1.5	2,108	0.5	1,206	1.4
Oil and cake, cottonseed.....	51	930	3.2	18,907	4.7	2,575	2.9	Brick and burnt-clay ballast.....	22	628	2.1	1,679	0.4	1,036	1.2
Foundry and machine-shop products.....	114	1,717	5.8	13,610	3.4	7,257	8.2	Confectionery.....	28	194	0.7	1,345	0.3	379	0.4
Bread and other bakery products.....	258	993	3.4	8,129	2.0	3,088	3.5	Mineral and carbonated waters.....	79	156	0.5	1,292	0.3	742	0.8
Butter.....	20	301	1.0	7,718	1.9	994	1.1	Explosives.....	9	76	0.3	1,063	0.3	515	0.6
Printing and publishing, newspapers and periodicals.....	410	1,415	4.8	7,705	1.9	5,522	6.2	Saddlery and harness.....	36	92	0.3	1,042	0.3	392	0.4
Cars and general shop construction and repairs by steam-railroad companies.....	12	2,687	9.1	6,149	1.5	4,094	4.6	Copper, tin, and sheet-iron work.....	75	187	0.6	984	0.2	552	0.6
Lumber and timber products.....	145	1,947	6.6	4,904	1.2	3,592	4.0	Mattresses and spring beds.....	13	99	0.3	700	0.2	322	0.4
Glass.....	16	1,692	5.7	4,751	1.2	2,839	3.2	Brooms, from broom corn.....	32	110	0.4	696	0.2	350	0.4
Ice, manufactured.....	115	831	2.8	3,574	0.9	2,530	2.9	Marble and stone work.....	48	117	0.4	688	0.2	333	0.4
Lumber, planing-mill products, not including planing mills connected with sawmills.....	56	546	1.9	3,150	0.8	1,548	1.7	Oil, mineral and composite.....	3	42	0.1	681	0.2	136	0.2
								Paving materials.....	13	295	1.0	579	0.1	414	0.5
								Shirts.....	4	69	0.2	573	0.1	188	0.2
								All other industries.....	274	5,222	17.7	82,246	20.5	10,942	12.3

¹ Among the industries for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments are a number having products in excess of some for which figures are shown in the table. Of these industries the most important are the following: "Automobiles"; "cement"; "cordage and twine"; "slaughtering and meat packing"; and "smelting and refining, lead."

TABLE 4.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES: 1919, 1914, AND 1909.

CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL.		CLASS.	Census year.	Total.	Male.	Female.	PER CENT OF TOTAL.	
					Male.	Female.						Male.	Female.
All classes.....	1919	33,314	35,134	3,180	91.7	8.3	Clerks and other subordinatesalaried employees.....	1919	4,315	3,100	1,215	71.8	28.2
	1914	22,700	21,235	1,465	93.8	6.2		1914	1,688	1,353	335	80.2	19.8
	1909	18,034	17,071	963	94.7	5.3		1909	1,261	1,059	202	84.0	16.0
Proprietors and officials.....	1919	4,496	4,388	108	97.6	2.4	Wage earners (average number).....	1919	29,503	27,646	1,857	93.7	6.3
	1914	3,569	3,493	76	97.9	2.1		1914	17,443	16,449	994	94.3	5.7
	1909	3,630	3,547	83	97.7	2.3		1909	13,143	12,465	678	94.8	5.2
Proprietors and firm numbers.....	1919	2,320	2,244	76	96.7	3.3	16 years of age and over.....	1919	29,347	27,508	1,839	93.7	6.3
	1914	2,464	2,394	70	97.2	2.8		1914	17,309	16,320	989	94.3	5.7
	1909	2,698	2,628	70	97.4	2.6		1909	13,020	12,345	675	94.8	5.2
Salaried officers of corporations.....	1919	628	609	19	97.0	3.0	Under 16 years of age.....	1919	156	138	18	88.5	11.5
	1914	355	353	2	99.4	0.6		1914	134	129	5	96.3	3.7
	1909	284	278	6	97.9	2.1		1909	123	120	3	97.6	2.4
Superintendents and managers.....	1919	1,548	1,535	13	99.2	0.8							
	1914	750	746	4	99.5	0.5							
	1909	648	641	7	98.9	1.1							

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TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE: 1919 AND 1914.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Un- der 16 years of age.				16 years of age and over.		Un- der 16 years of age.
			Male.	Female.					Male.	Female.	
All industries.....	1919	29,503	93.2	6.2	0.5	Lumber and timber products.....	1919	1,947	99.9	.....	0.1
	1914	17,443	93.6	5.7	0.8		1914	2,245	100.0	.....	(1)
	1909	13,143	93.9	5.1	0.9						
Bread and bakery products.....	1919	993	68.7	30.1	1.2	Lumber, planing-mill products, not includ- ing planing mills connected with sawmills.	1919	546	99.8	0.2	.....
	1914	697	75.6	23.8	0.6		1914	372	98.9	1.1	.....
Brick and burnt-clay ballast.....	1919	628	99.8	0.2	(1)	Oil and cake, cottonseed.....	1919	930	99.8	0.2	.....
	1914	402	99.8	.....	0.2		1914	851	100.0	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.	1919	2,687	99.8	0.2	.....	Petroleum, refining.....	1919	4,612	99.7	0.1	0.2
	1914	1,718	99.8	0.2	.....		1914	516	100.0	.....	.....
Flour-mill and gristmill products.....	1919	958	98.6	2.0	1.5	Printing and publishing, book and job.....	1919	505	73.9	25.3	0.8
	1914	700	100.0	.....	.....		1914	292	79.5	18.2	2.4
Foundry and machine-shop products ²	1919	1,737	99.3	0.3	0.4	Printing and publishing, newspapers and periodicals.	1919	1,415	83.4	15.0	1.6
	1914	785	99.6	0.1	0.3		1914	1,318	79.6	13.5	6.9
Glass.....	1919	1,692	88.9	10.4	0.7	Smelting and refining, zinc.....	1919	2,272	100.0	(1)	.....
	1914	1,270	94.3	5.7	0.1		1914	1,641	100.0	.....	.....
Ice, manufactured.....	1919	831	96.0	0.5	3.5	All other industries.....	1919	7,750	86.8	12.7	0.6
	1914	528	98.9	0.4	0.8		1914	4,108	87.0	12.4	0.6

¹ Less than one-tenth of 1 per cent.

¹ Includes "iron and steel, welding."

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY SEX AND AGE, AND VALUE OF PRODUCTS FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

CITY.	AVERAGE NUMBER OF WAGE EARNERS IN MANUFACTURING INDUSTRIES.											VALUE OF PRODUCTS.			
	Total.			16 years of age and over.						Under 16 years of age.					
				Male.			Female.								
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
Ardmore.....	305			279			25			1			\$4,965,622		
Bartlesville.....	246			236			10						1,905,575		
Chickasha.....	548	337	364	534	326	356	11	11	5	3		3	4,598,973	\$1,719,676	\$1,896,959
Enid.....	478	283	303	414	252	275	64	30	28		1		13,073,672	2,610,533	2,453,188
Guthrie.....	244	185	282	181	137	247	62	32	18	1	16	17	3,330,365	853,485	1,442,795
McAlester.....	149	171	180	139	160	164	9	9	16	1	2		1,529,357	573,611	451,234
Muskogee.....	1,218	828	381	1,128	751	360	89	73	15	1	4	6	8,402,888	2,754,811	2,279,151
Oklahoma City.....	4,375	2,226	1,898	3,615	1,904	1,245	755	316	145	5	6	8	69,970,788	20,725,811	7,867,884
Okmulgee.....	455			434			21						3,991,231		
Sapulpa.....	552	433		516	407		35	15		1	11		2,197,083	604,457	
Shawnee.....	1,114	845	806	1,028	728	730	82	102	73	4	15	3	5,742,944	2,597,965	1,940,823
Tulsa.....	1,749	845	462	1,627	801	428	110	40	25	12	4	9	14,050,073	3,868,326	1,562,642

TABLE 7.—WAGE EARNERS, BY MONTHS: 1919, 1914, AND 1909.

MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.			MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.		
	1919	1914	1909	1919	1914	1909		1919	1914	1909	1919	1914	1909
January.....	28,279	17,365	11,826	87.7	96.0	80.7	July.....	28,648	17,232	13,153	88.8	95.3	89.7
February.....	28,209	17,170	11,732	87.4	95.0	80.4	August.....	30,096	16,902	13,465	93.3	93.4	91.9
March.....	28,518	17,164	12,237	88.4	94.9	83.5	September.....	30,810	17,398	13,826	95.5	96.2	94.3
April.....	27,897	17,493	12,285	86.5	96.7	83.8	October.....	31,482	16,088	14,659	97.6	100.0	100.0
May.....	28,236	17,807	12,518	87.5	98.4	85.4	November.....	31,582	17,911	14,551	97.9	99.0	99.3
June.....	28,020	17,334	12,905	86.9	95.8	88.0	December.....	32,259	17,446	14,505	100.0	96.5	98.9

¹ The figures represent the number employed on the 15th of each month or the nearest representative day. Maximum number indicated by bold-faced figures, minimum by *italic* figures.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES, AND FOR CITIES: 1919.

[The month of maximum employment for each industry is indicated by bold-faced figures and that of minimum employment by *italic* figures.]

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Al Industries.....	29,503	28,279	28,209	28,518	27,897	28,236	28,020	28,648	30,096	30,810	31,482	31,582	32,259	86.5
Males.....	27,646	26,556	26,522	26,825	26,208	26,470	26,217	26,933	28,284	28,827	29,347	29,443	30,120	87.0
Females.....	1,857	1,723	1,687	1,693	1,689	1,766	1,803	1,715	1,182	1,983	2,135	2,139	2,139	78.9
Bread and other bakery products.....	993	887	897	917	910	955	1,019	951	980	1,058	1,074	1,126	1,142	77.7
Brick and burnt-clay ballast.....	628	840	502	543	618	710	689	706	758	711	679	641	633	45.6
Cars and general shop construction and repairs by steam-railroad companies.....	2,687	2,677	2,688	2,676	2,472	2,477	2,491	2,588	2,638	2,649	2,891	2,985	3,012	82.1
Flour-mill and gristmill products.....	958	911	896	876	856	708	772	999	1,098	1,092	1,070	1,084	1,089	69.5
Foundry and machine-shop products.....	1,717	1,462	1,417	1,525	1,550	1,631	1,688	1,768	1,865	1,941	1,930	1,933	1,894	73.0
Glass.....	1,692	1,303	2,142	2,235	2,280	1,971	1,400	987	1,033	1,502	1,713	1,653	2,068	43.0
Ice, manufactured.....	831	469	487	559	712	895	1,081	1,294	1,338	1,172	827	590	548	35.1
Lumber and timber products.....	1,947	1,883	1,889	1,892	1,927	1,884	1,506	1,786	1,960	1,929	2,132	2,207	2,309	67.8
Lumber, planing-mill products, not including planing mills connected with sawmills.....	946	594	403	454	454	486	600	623	644	665	615	598	616	59.2
Oil and cake, cottonseed.....	930	1,379	986	801	329	287	366	424	519	964	1,672	1,733	1,700	16.6
Petroleum, refining.....	4,612	4,482	4,380	4,421	4,464	4,560	4,573	4,677	4,823	4,770	4,699	4,714	4,781	90.8
Printing and publishing, book and job.....	505	481	492	499	516	497	492	503	516	514	513	511	526	91.4
Printing and publishing, newspapers and periodicals.....	1,415	1,348	1,335	1,343	1,370	1,378	1,357	1,411	1,440	1,486	1,503	1,492	1,487	88.8
Smelting and refining, zinc.....	2,272	2,956	2,769	2,457	2,057	2,008	2,000	1,972	2,149	2,032	2,021	2,312	2,531	66.7
All other industries.....	7,770	7,301	6,966	7,320	7,365	7,734	7,896	7,969	8,335	8,325	8,143	8,008	7,923	83.1
<i>Industries showing large proportion of females.</i>														
Bread and other bakery products.....	301	272	278	285	278	305	330	278	278	298	324	346	340	78.6
Glass.....	179	166	181	202	192	189	193	117	123	149	201	194	135	48.5
Printing and publishing, book and job.....	128	126	123	128	135	127	123	126	136	133	127	127	226	90.3
Printing and publishing, newspapers and periodicals.....	214	205	209	204	213	207	211	218	217	218	219	226		
Total for cities.....	11,433	10,581	10,311	10,770	10,560	10,897	11,288	11,689	11,901	12,083	12,417	12,315	12,384	83.0
Males.....	10,150	9,398	9,149	9,581	9,370	9,659	10,050	10,425	10,613	10,718	10,891	10,891	10,965	83.3
Females.....	1,283	1,183	1,162	1,189	1,190	1,238	1,238	1,264	1,288	1,365	1,436	1,424	1,419	80.9
ARDMORE.....	305	296	280	280	277	269	328	348	365	380	343	364	364	60.5
Males.....	280	269	262	266	254	247	307	325	342	352	313	335	335	57.4
Females.....	25	27	28	24	22	22	21	23	23	28	30	29	29	70.0
BARTLESVILLE.....	246	203	189	213	222	240	263	266	269	274	271	262	270	72.6
Males.....	236	193	189	202	211	229	251	255	260	267	264	252	259	70.8
Females.....	10	10	10	11	11	11	12	11	9	7	10	11	11	58.3
CHICKASHA.....	548	545	555	566	502	478	506	531	545	540	627	588	593	76.2
Males.....	537	537	546	557	492	466	494	519	533	528	615	576	581	75.8
Females.....	11	8	9	9	10	12	12	12	12	12	12	12	12	66.7
ENID.....	478	388	394	397	425	447	455	485	540	576	569	548	512	67.4
Males.....	414	346	351	354	372	393	401	422	459	483	462	480	446	71.4
Females.....	64	43	43	43	53	54	54	63	81	93	107	68	66	40.2
GUTHRIE.....	244	245	234	242	243	197	200	226	278	271	274	266	252	70.9
Males.....	182	187	175	180	177	137	140	161	210	205	212	206	194	64.6
Females.....	62	58	59	62	66	60	60	65	68	66	62	60	58	85.3
MCALISTER.....	149	150	94	91	108	130	151	172	197	182	176	169	168	46.2
Males.....	140	141	88	88	99	121	143	164	187	172	168	156	158	44.4
Females.....	9	9	6	8	9	9	8	8	10	10	8	13	10	46.2
MUSKOGEE.....	1,218	1,124	1,192	1,171	1,176	1,176	1,179	1,207	1,203	1,215	1,303	1,317	1,353	83.1
Males.....	1,129	1,046	1,115	1,089	1,089	1,090	1,094	1,123	1,110	1,115	1,203	1,217	1,257	83.2
Females.....	89	78	77	82	87	86	85	84	93	100	100	100	96	77.0
OKLAHOMA CITY.....	4,375	4,107	3,885	4,270	4,129	4,220	4,370	4,358	4,505	4,599	4,652	4,645	4,662	85.4
Males.....	3,619	3,396	3,297	3,582	3,453	3,505	3,645	3,627	3,777	3,788	3,786	3,786	3,810	86.4
Females.....	756	741	693	688	676	715	725	731	728	811	853	859	852	78.7
OKMULGEE.....	455	378	409	449	455	472	462	500	486	458	445	461	485	75.6
Males.....	434	363	390	416	429	449	441	476	462	447	430	444	461	76.3
Females.....	21	15	19	33	26	23	21	24	24	11	15	17	24	33.3
SAPULPA.....	552	501	523	556	554	618	602	599	503	505	579	519	565	81.1
Males.....	517	470	485	518	516	579	564	555	470	477	544	493	533	81.2
Females.....	35	31	38	38	38	39	38	44	33	28	35	26	32	59.1
SHAWNEE.....	1,114	1,177	1,065	1,062	939	835	1,013	1,110	1,131	1,157	1,222	1,296	1,263	72.0
Males.....	1,032	1,114	993	990	886	805	944	1,030	1,040	1,066	1,127	1,193	1,158	72.3
Females.....	82	63	72	72	73	70	69	80	91	91	95	103	105	60.0
TULSA.....	1,749	1,467	1,433	1,523	1,577	1,709	1,818	1,907	1,896	1,941	1,919	1,901	1,897	73.8
Males.....	1,630	1,367	1,325	1,404	1,458	1,573	1,686	1,786	1,780	1,828	1,805	1,775	1,773	72.5
Females.....	119	100	108	119	119	136	132	121	116	113	114	126	124	73.5

TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48.1	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	29,503	917	915	11,197	717	3,342	4,913	4,326	3,176
	1914	17,443	(*)	(*)	4,369	2,247	2,277	687	3,996	3,867
	1909	13,143	(*)	(*)	2,965	303	1,949	526	4,711	2,689
Bread and other bakery products.....	1919	993	5	275	100	55	296	10	159	93
	1914	697	(*)	(*)	83	5	283	22	220	84
Brick and burnt-clay ballast.....	1919	628		15	110		27	19	339	118
	1914	402					49		353	
Cars and general shop construction and repairs by steam-railroad companies.....	1919	2,687		383	1,205		29	1,070		
	1914	1,718	(*)	(*)	748		314	14		642
Flour-mill and gristmill products.....	1919	958	1		331	1	31	7	214	373
	1914	700	(*)	(*)	27	3	30		252	388
Foundry and machine-shop products ¹	1919	1,737	51	64	123	109	985	10	395	
	1914	785	(*)	(*)	56		215	29	485	
Glass.....	1919	1,692	258	126	1,241	67				
	1914	1,270	(*)	(*)	856	156	258			
Ice, manufactured.....	1919	831			27	18	126	149	53	458
	1914	528	(*)	(*)	7		10	16	41	454
Lumber and timber products.....	1919	1,947	99	9	53	56	18		1,712	
	1914	2,245	(*)	(*)	62	17	215	210	1,335	406
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1919	546	8		40	22	415		61	
	1914	372	(*)	(*)	62		166		134	10
Oil and cake, cottonseed.....	1919	930			66				67	797
	1914	851					2		8	841
Petroleum, refining.....	1919	4,612			2,006		112	1,766	814	414
	1914	516	(*)	(*)	1		76	14	64	361
Printing and publishing, book and job.....	1919	505	3		493		9			
	1914	292	(*)	(*)	280		12			
Printing and publishing, newspapers and periodicals.....	1919	1,415	7	3	1,109	31	113	138	13	1
	1914	1,318	(*)	(*)	889	50	281	22	68	8
Smelting and refining, zinc.....	1919	2,272	160		677			1,435		
	1914	1,641				1,359		282		
All other industries.....	1919	7,750	325	40	3,616	358	1,181	309	999	922
	1914	4,108	(*)	(*)	1,298	657	366	78	1,036	673
Total for cities.....	1919	11,433	310	806	4,943	529	2,088	1,255	802	700
	1914	6,153	(*)	(*)	2,117	798	1,056	100	943	1,139
ARDMORE.....	1919	305	5	22	116		43	48	34	37
BARTLESVILLE.....	1919	246			63		44	14	92	33
CHICKASHA.....	1919	548		383	54		48	2	16	45
	1914	337	(*)	(*)	225		2		41	69
ENID.....	1919	478			72		128	25	135	118
	1914	283	(*)	(*)	35	16	39	28	106	59
GUTHRIE.....	1919	244			163	27	15		23	16
	1914	185	(*)	(*)	96	8	12		9	60
MCALISTER.....	1919	149	3		24		56	7	30	29
	1914	171	(*)	(*)	56		25	9	16	65
MUSKOGEE.....	1919	1,218		2	584	48	140	357	21	66
	1914	828	(*)	(*)	157	6	370	12	63	220
OKLAHOMA CITY.....	1919	4,375	188	272	2,504	330	594	173	182	132
	1914	2,226	(*)	(*)	600	603	521	34	256	212
OKMULGER.....	1919	455	1		137		106	145	66	
SAPULPA.....	1919	552	3	126	68	38		209	14	4
	1914	433	(*)	(*)	46	74	6		29	278
SHAWNEE.....	1919	1,114	56	1	908		44		15	90
	1914	845	(*)	(*)	725	5	18	8	9	80
TULSA.....	1919	1,749	54		250	86	870	185	174	130
	1914	845	(*)	(*)	177	86	63	9	414	96

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Includes "iron and steel, welding."

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	TOTAL.		ESTABLISHMENTS EMPLOYING—																
	Establishments.	Wage earners (average number).	No wage earners.	1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.	
			Establishments.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries.....	2,445	29,503	427	1,409	2,956	374	4,009	136	4,295	46	3,168	37	6,209	11	3,323	1	818	4	4,725
Bread and other bakery products.....	288	993	52	208	436	24	195	3	90	.....	.....	.....	.....	1	272	.....	.....	.....	.....
Brick and burnt-clay ballast.....	22	628	.....	3	10	9	155	7	245	3	218	.....	.....	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	12	2,687	.....	.....	.....	.....	.....	4	148	1	83	2	312	4	1,326	1	818	.....	.....
Flour-mill and gristmill products.....	227	958	92	99	175	26	265	6	212	4	306	.....	.....	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.....	114	1,717	7	52	148	31	350	15	471	8	552	1	196	.....	.....	.....	.....	.....	.....
Glass.....	16	1,692	.....	1	4	.....	.....	1	29	6	424	8	1,235	.....	.....	.....	.....	.....	.....
Ice, manufactured.....	115	831	.....	68	180	39	388	6	152	2	111	.....	.....	.....	.....	.....	.....	.....	.....
Lumber and timber products.....	145	1,947	3	123	223	12	139	3	123	2	104	.....	.....	1	291	.....	.....	1	1,067
Lumber, planing-mill products, not including planing mills connected with sawmills.....	56	546	23	30	67	17	190	4	109	2	180	.....	.....	.....	.....	.....	.....	.....	.....
Oil and cake, cottonseed.....	51	930	.....	8	31	19	240	24	659	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Petroleum, refining.....	66	4,612	.....	7	22	24	275	18	651	5	394	10	1,776	1	291	.....	.....	1	1,203
Printing and publishing, book and job.....	97	505	23	53	137	14	150	7	218	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing, newspapers and periodicals.....	410	1,415	138	227	432	38	387	3	113	1	59	3	424	4	1,143	.....	.....	.....	.....
Smelting and refining, zinc.....	11	2,272	.....	.....	14	.....	.....	.....	.....	6	1,115	4	1,143	.....	.....	.....	.....	.....	.....
All other industries.....	815	7,770	109	530	1,091	120	1,261	35	1,075	12	737	7	1,151	.....	.....	.....	.....	2	2,455
Total for cities.....	745	11,433	80	371	911	192	2,077	62	1,891	24	1,648	10	1,518	4	1,299	1	818	1	1,271
ARDMORE.....	35	305	2	20	46	9	94	3	94	1	71	.....	.....	.....	.....	.....	.....	.....	.....
BARTLESVILLE.....	32	246	2	18	43	9	109	3	94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
CHICKASHA.....	24	548	1	15	35	5	75	2	56	.....	.....	.....	.....	1	382	.....	.....	.....	.....
ENID.....	51	478	7	22	63	18	192	3	100	.....	.....	1	123	.....	.....	.....	.....	.....	.....
GUTHRIE.....	36	244	7	19	42	8	92	1	26	1	84	.....	.....	.....	.....	.....	.....	.....	.....
MCALISTER.....	20	149	2	9	21	7	79	2	49	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
MUSKOGEE.....	82	1,218	9	45	109	19	171	4	117	2	147	2	318	1	356	.....	.....	.....	.....
OKLAHOMA CITY.....	227	4,375	34	101	267	49	544	30	934	8	562	3	525	1	272	.....	.....	1	1,271
OKMULGEE.....	29	455	1	15	32	8	91	2	64	2	155	1	113	.....	.....	.....	.....	.....	.....
SAPULPA.....	29	552	3	17	39	6	70	1	28	.....	.....	1	126	1	289	.....	.....	.....	.....
SHAWNEE.....	45	1,114	4	28	54	8	69	3	117	1	56	.....	.....	.....	.....	1	818	.....	.....
TULSA.....	135	1,749	8	62	160	46	491	8	212	9	573	2	313	.....	.....	.....	.....	.....	.....

TABLE 11.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	2,445	2,518	2,310	29,503	17,443	13,143	\$401,362,869	\$102,005,693	\$53,682,405	\$88,757,040	\$31,035,943	\$19,529,511
Less than \$5,000.....	710	1,403	1,182	397	1,618	1,668	1,846,360	3,168,934	2,675,597	1,151,348	2,012,505	1,792,660
\$5,000 to \$20,000.....	848	707	727	1,825	2,570	2,863	8,819,084	6,824,096	7,194,668	4,893,614	3,783,033	4,142,194
\$20,000 to \$100,000.....	541	256	295	4,217	3,065	3,908	24,158,633	10,885,671	13,057,308	11,360,589	4,718,895	5,877,865
\$100,000 to \$500,000.....	215	121	102	6,087	7,233	4,406	47,539,096	25,811,975	25,870,562	16,810,315	11,361,582	7,001,117
\$500,000 to \$1,000,000.....	59	17	.....	3,904	.....	.....	40,090,878	11,972,363	.....	10,968,092	.....	.....
\$1,000,000 and over.....	72	14	4	13,073	2,951	298	278,908,413	43,342,654	4,884,270	43,573,082	9,159,928	715,775
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	29.0	55.7	51.2	1.3	9.3	12.7	0.5	3.1	5.0	1.3	6.5	9.2
\$5,000 to \$20,000.....	34.7	28.1	31.5	6.2	14.8	21.8	2.2	6.7	13.4	5.5	12.2	21.2
\$20,000 to \$100,000.....	22.1	10.2	12.8	14.3	17.6	29.7	6.0	10.7	24.3	12.8	15.2	30
\$100,000 to \$500,000.....	8.8	4.8	.....	20.6	41.5	33.5	11.8	25.3	.....	18.9	.....	.....
\$500,000 to \$1,000,000.....	2.4	0.7	.....	13.2	.....	.....	10.0	11.7	48.2	12.4	36.6	35.8
\$1,000,000 and over.....	3.0	0.6	0.2	44.4	16.9	2.3	69.5	42.5	9.1	49.1	29.5	3.7

MANUFACTURES—OKLAHOMA.

1921

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.			
			Percent distribution.				Percent distribution.				Percent distribution.				Percent distribution.	
	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914	1919	1914
BREAD AND OTHER BAKERY PRODUCTS.....	288	342	100.0	100.0	993	697	100.0	100.0	\$8,128,632	\$2,773,811	100.0	100.0	\$3,088,390	\$1,193,015	100.0	100.0
Less than \$5,000.....	53	203	18.4	59.4	17	109	1.7	15.6	144,904	515,820	1.8	18.6	63,635	235,037	2.1	19.7
\$5,000 to \$20,000.....	137	120	47.6	35.1	189	242	19.0	34.7	1,518,685	1,076,800	18.7	38.8	594,265	467,571	19.2	39.2
\$20,000 to \$100,000.....	90	119	31.2	5.6	379	1346	38.2	49.6	1,181,191	3,559,976	43.8	42.6	1,220,441	1,490,407	39.5	41.1
\$100,000 and over.....	8	—	2.8	—	408	—	41.1	—	2,905,067	—	35.7	—	1,209,849	—	39.2	—
FLOUR-MILL AND GRISMILL PRODUCTS.....	227	253	100.0	100.0	958	700	100.0	100.0	49,843,800	16,688,690	100.0	100.0	5,663,705	2,321,724	100.0	100.0
Less than \$5,000.....	53	101	23.3	39.9	3	34	0.3	4.9	141,410	264,261	0.3	1.6	25,981	65,436	0.5	2.8
\$5,000 to \$20,000.....	72	72	31.7	28.5	25	79	2.6	11.3	786,393	782,774	1.6	4.7	129,913	163,306	2.3	7.0
\$20,000 to \$100,000.....	57	48	25.1	19.0	116	120	12.1	17.1	2,784,409	1,940,908	5.5	11.6	432,538	322,945	7.6	13.9
\$100,000 to \$500,000.....	21	24	9.3	9.5	126	2367	13.2	52.4	4,935,898	5,946,569	9.9	35.6	661,090	1,321,462	11.7	56.9
\$500,000 to \$1,000,000.....	9	5	4.0	2.0	91	—	9.5	—	5,655,064	3,957,957	11.3	23.7	821,301	—	14.5	—
\$1,000,000 and over.....	15	3	6.6	1.2	597	100	62.3	14.3	35,560,656	3,796,231	71.3	22.7	3,592,882	448,585	63.4	19.3
FOUNDRY AND MACHINE-SHOP PRODUCTS¹.....	124	99	100.0	100.0	1,737	785	100.0	100.0	13,608,577	2,856,571	100.0	100.0	7,331,668	1,341,946	100.0	100.0
Less than \$5,000.....	21	38	16.9	38.4	11	50	0.6	6.4	65,474	94,875	0.5	3.3	48,431	74,381	0.7	5.5
\$5,000 to \$20,000.....	39	31	31.5	31.3	122	164	7.0	20.9	446,141	300,855	3.3	10.5	320,561	204,903	4.4	15.3
\$20,000 to \$100,000.....	33	22	26.6	22.2	304	230	17.5	29.3	1,590,789	871,197	11.7	30.5	1,014,825	420,058	13.8	31.3
\$100,000 to \$500,000.....	25	28	20.2	8.1	804	2341	49.7	43.4	5,632,292	2,158,944	41.4	55.6	2,888,374	2,642,604	39.4	47.9
\$500,000 and over.....	6	—	4.8	—	436	—	25.1	—	5,873,881	—	43.2	—	3,050,475	—	41.7	—
ICE, MANUFACTURED.....	115	97	100.0	100.0	831	528	100.0	100.0	3,574,431	1,604,146	100.0	100.0	2,530,356	1,202,018	100.0	100.0
Less than \$5,000.....	13	20	11.3	20.6	13	17	1.6	3.2	37,160	44,566	1.0	2.8	24,471	29,866	1.0	2.5
\$5,000 to \$20,000.....	51	55	44.3	56.7	150	220	18.1	41.7	590,555	643,636	16.5	40.1	396,968	474,750	15.7	39.5
\$20,000 to \$100,000.....	42	22	36.5	22.7	400	291	48.1	55.1	1,774,504	915,944	49.6	57.1	1,292,783	697,402	51.1	58.0
\$100,000 to \$500,000.....	9	—	7.8	—	268	—	32.3	—	1,172,212	—	32.8	—	816,134	—	32.3	—
OIL AND CAKE, COTTONSEED.....	51	60	100.0	100.0	930	851	100.0	100.0	18,907,312	7,589,813	100.0	100.0	2,575,169	1,306,410	100.0	100.0
Less than \$100,000.....	8	25	15.7	41.7	45	188	4.8	22.1	359,577	1,128,143	1.9	14.9	54,056	200,326	2.1	15.4
\$100,000 to \$500,000.....	28	35	54.9	58.3	470	663	50.5	77.9	8,191,228	6,461,670	43.3	85.1	1,289,537	1,106,084	50.1	84.7
\$500,000 and over.....	15	—	29.4	—	415	—	44.6	—	10,356,507	—	54.8	—	1,231,576	—	47.8	—
PETROLEUM, REFINING.....	66	23	100.0	100.0	4,612	516	100.0	100.0	150,673,458	13,014,372	100.0	100.0	23,523,736	3,423,635	100.0	100.0
Less than \$100,000.....	6	6	9.1	26.1	28	29	0.6	5.6	206,567	305,091	0.1	2.3	31,427	79,428	0.1	2.3
\$100,000 to \$500,000.....	14	9	21.2	39.1	116	270	2.5	52.3	4,562,827	3,349,212	3.0	25.7	236,164	1,468,562	1.0	42.9
\$500,000 to \$1,000,000.....	14	3	21.2	13.0	285	—	6.2	—	10,021,902	1,817,099	6.7	14.0	1,538,976	—	6.5	—
\$1,000,000 and over.....	32	5	48.5	21.7	4,183	217	90.7	42.1	135,847,162	7,842,970	90.2	58.0	21,717,109	1,875,645	92.3	54.8
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODICALS.....	410	542	100.0	100.0	1,415	1,318	100.0	100.0	7,704,823	3,237,734	100.0	100.0	5,521,909	2,532,255	100.0	100.0
Less than \$5,000.....	209	421	51.0	77.7	105	413	7.4	31.3	529,285	859,052	6.9	26.5	410,543	692,182	7.4	27.3
\$5,000 to \$20,000.....	154	103	37.6	19.0	341	382	24.1	29.0	1,424,481	816,717	18.5	25.2	1,085,920	648,529	19.7	25.4
\$20,000 to \$100,000.....	38	13	9.3	2.4	371	218	26.2	16.5	1,606,310	615,525	20.8	19.0	1,238,945	459,260	22.4	18.1
\$100,000 to \$500,000.....	6	5	1.5	0.9	224	305	15.8	23.1	1,224,721	946,440	16.0	29.2	920,565	737,284	16.7	29.1
\$500,000 and over.....	3	—	0.7	—	374	—	26.4	—	2,910,026	—	37.8	—	1,863,936	—	33.8	—

¹ Includes the group "\$100,000 to \$500,000."

² Includes the group "\$500,000 to \$1,000,000."

³ Includes "iron and steel, welding."

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
ARDMORE.....	35	305	100.0	\$4,965,622	100.0	\$1,397,682	100.0	GUTHRIE.....	36	244	100.0	\$3,330,365	100.0	\$527,378	100.0
Less than \$5,000.....	7	6	2.0	27,591	0.6	15,660	1.1	Less than \$5,000.....	14	12	4.9	30,997	0.9	22,102	4.2
\$5,000 to \$20,000.....	8	16	5.2	85,774	1.7	52,357	3.7	\$5,000 to \$20,000.....	10	25	10.2	112,439	3.4	54,561	10.3
\$20,000 to \$100,000.....	16	124	40.7	796,056	16.0	396,789	28.4	\$20,000 to \$100,000.....	12	207	84.8	3,186,929	95.7	450,715	85.5
\$100,000 and over.....	4	169	52.1	4,056,201	81.7	932,876	66.7	MCALISTER.....	20	149	100.0	1,529,357	100.0	469,538	100.0
BARTLESVILLE.....	32	246	100.0	1,905,575	100.0	1,022,868	100.0	Less than \$5,000.....	4	1	0.7	9,160	0.6	5,202	1.1
Less than \$5,000.....	6	3	1.2	17,495	0.9	6,312	0.6	\$5,000 to \$20,000.....	4	7	4.7	35,072	2.3	18,596	3.9
\$5,000 to \$20,000.....	8	14	5.7	87,451	4.6	48,413	4.7	\$20,000 to \$100,000.....	9	102	68.5	458,564	30.0	273,210	58.2
\$20,000 to \$500,000.....	18	229	93.1	1,800,629	94.5	968,143	94.7	\$100,000 to \$500,000.....	3	39	26.2	1,026,501	67.1	172,730	36.8
CHICKASHA.....	24	548	100.0	4,598,973	100.0	1,223,018	100.0	MUSKOGEE.....	82	1,218	100.0	8,402,888	100.0	3,027,312	100.0
Less than \$5,000.....	4	3	0.5	14,539	0.3	7,845	0.6	Less than \$5,000.....	10	6	0.5	34,057	0.4	21,962	0.7
\$5,000 to \$20,000.....	8	23	4.2	83,555	1.8	43,647	3.6	\$5,000 to \$20,000.....	36	90	7.4	421,371	5.0	249,272	8.2
\$20,000 to \$100,000.....	7	51	9.3	325,610	7.1	122,169	10.0	\$20,000 to \$100,000.....	24	148	12.2	981,033	11.7	497,108	16.4
\$100,000 and over.....	5	471	85.9	4,175,269	90.8	1,049,357	85.8	\$100,000 to \$500,000.....	6	210	17.2	1,495,287	17.8	772,049	23.5
ENID.....	51	478	100.0	13,073,672	100.0	2,223,029	100.0	\$500,000 and over.....	6	764	62.7	5,471,120	65.1	1,486,921	49.1
Less than \$5,000.....	9	3	0.6	25,171	0.2	17,743	0.8	OKLAHOMA CITY.....	227	4,375	100.0	69,970,788	100.0	11,326,614	100.0
\$5,000 to \$20,000.....	14	40	8.4	145,713	1.1	85,440	3.8	Less than \$5,000.....	39	15	0.3	100,860	0.1	65,960	0.6
\$20,000 to \$100,000.....	17	130	27.2	847,033	6.5	393,989	17.9	\$5,000 to \$20,000.....	67	155	3.5	808,679	1.2	516,760	4.6
\$100,000 to \$500,000.....	5	60	12.6	1,015,044	7.8	253,492	11.4	\$20,000 to \$100,000.....	69	619	14.1	3,526,405	5.0	1,775,615	15.7
\$500,000 and over.....	0	245	51.3	11,040,711	84.5	1,467,395	66.0	\$100,000 to \$500,000.....	38	1,071	24.5	8,025,937	11.5	3,210,037	28.3
								\$500,000 to \$1,000,000.....	5	185	4.2	3,596,106	5.1	596,144	5.3
								\$1,000,000 and over.....	9	2,330	53.3	53,912,801	77.1	5,162,098	45.6

TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919—Continued.

CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
OKMULGEE.....	29	455	100.0	\$3,991,231	100.0	\$986,131	100.0	SHAWNEE.....	45	1,114	100.0	\$5,742,944	100.0	\$2,188,943	100.0
Less than \$5,000.....	6	4	0.9	13,886	0.5	12,074	1.2	Less than \$5,000.....	12	9	0.8	33,223	0.6	17,640	0.8
\$5,000 to \$20,000.....	7	15	3.3	97,828	2.5	62,974	6.4	\$5,000 to \$20,000.....	10	45	4.0	197,100	3.4	110,939	5.1
\$20,000 to \$100,000.....	2	79	17.4	355,062	8.9	171,874	17.4	\$20,000 to \$100,000.....	9	95	8.5	467,979	8.1	288,349	13.2
\$100,000 and over.....	8	357	78.5	3,519,455	88.2	749,209	76.0	\$100,000 and over.....	5	905	86.6	5,044,642	87.8	1,772,015	81.0
SAPULPA.....	29	552	100.0	2,197,083	100.0	1,116,038	100.0	TULSA.....	135	1,749	100.0	14,050,073	100.0	7,393,008	100.0
Less than \$5,000.....	3	1	0.2	12,530	0.6	8,874	0.8	Less than \$5,000.....	18	12	0.7	48,477	0.3	33,575	0.5
\$5,000 to \$20,000.....	13	25	4.5	143,678	6.5	87,400	7.8	\$5,000 to \$20,000.....	37	81	4.6	415,420	3.0	239,209	3.2
\$20,000 to \$100,000.....	9	71	12.9	435,642	19.8	245,359	22.0	\$20,000 to \$100,000.....	49	393	22.5	2,300,775	16.4	1,199,142	16.2
\$100,000 to \$1,000,000.....	4	455	82.4	1,605,533	73.1	774,405	69.4	\$100,000 to \$500,000.....	23	649	37.1	4,402,965	31.3	2,211,329	29.9
								\$500,000 and over.....	8	614	35.1	6,882,397	49.0	3,709,753	50.2

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Cen- sus year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
		Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.	Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
						Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.	Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.		Indi- vid- u-als.	Cor- pora- tions.	All oth- ers.							
All industries.....	1919	1,264	708	473	29,503	2,891	25,267	1,345	9.8	85.6	4.6	\$401,362,899	\$22,749,408	\$367,461,271	\$11,152,190	05.7	91.6	2.8				
	1914	1,533	549	436	17,443	3,008	13,037	1,398	17.2	74.7	8.0	102,005,693	8,048,451	88,689,116	5,268,126	7.9	86.9	5.2				
	1909	1,257	501	552	18,143	3,113	8,225	1,805	23.7	62.6	13.7	53,682,405	7,699,080	89,390,339	6,592,986	14.3	73.4	12.3				
Bread and other bakery products.	1919	225	12	51	993	464	412	117	46.7	41.5	11.8	8,128,632	4,206,377	2,819,655	1,102,600	51.7	34.7	13.6				
	1914	280	5	57	697	366	213	118	52.5	30.6	16.9	2,773,811	1,648,706	539,469	585,636	59.4	19.4	21.1				
Flour-mill and gristmill products.	1919	93	76	58	958	57	832	69	5.9	86.8	7.2	49,843,800	1,997,989	44,485,782	3,360,029	4.0	89.3	6.7				
	1914	117	66	70	700	97	508	95	13.9	72.6	13.6	16,688,690	1,086,923	14,022,694	1,579,073	6.5	84.0	9.5				
Foundry and machine-shop products. ¹	1919	48	56	20	1,737	279	1,390	68	16.1	80.0	3.9	13,608,577	2,132,111	11,108,731	367,735	15.7	81.6	2.7				
	1914	48	32	19	785	199	492	94	25.3	62.7	12.0	2,856,571	687,347	1,954,653	214,571	24.1	68.4	7.5				
Ice, manufactured.....	1919	15	79	21	831	30	736	65	3.6	88.6	7.8	3,574,431	111,862	3,191,482	271,087	3.1	89.3	7.6				
	1914	10	69	18	528	25	435	68	4.7	82.4	12.9	1,604,146	76,958	1,336,356	190,832	4.8	83.3	11.9				
Oil and cake, cottonseed..	1919	1	45	5	930	.....	873	² 57	.....	93.9	6.1	18,907,312	.....	17,805,814	¹ 1,101,498	.....	94.2	5.8
	1914	5	52	3	851	21	823	7	2.5	96.7	0.8	7,589,813	95,079	7,462,185	32,549	1.3	98.3	0.4				
Petroleum, refining.....	1919	1	65	.....	4,612	.....	² 4,612	.....	.....	100.0	.....	150,673,458	.....	² 150,673,458	.....	.....	100.0	.....			
	1914	.....	23	.....	516	.....	516	.....	.....	100.0	.....	13,014,372	.....	13,014,372	.....	.....	100.0	.....			
Printing and publishing, newspapers and periodicals.	1919	273	60	77	1,415	386	885	144	27.3	62.5	10.2	7,704,823	1,627,982	5,314,538	762,303	21.1	69.0	9.9				
	1914	306	74	72	1,318	541	642	135	41.0	48.7	10.2	3,237,734	1,096,261	1,808,350	333,123	33.9	55.8	10.3				
Total for cities.....	1919	321	205	129	11,433	1,188	9,815	430	10.4	85.8	3.8	133,758,571	11,116,860	119,382,901	3,258,810	8.3	89.3	2.4				
	1914	231	201	109	6,153	1,746	5,003	404	12.1	81.3	6.6	36,308,575	2,366,804	32,386,701	1,555,070	6.5	89.2	4.3				
ARDMORE.....	1919	17	11	7	305	70	215	20	23.0	70.5	6.6	4,965,622	353,489	4,434,204	177,929	7.1	89.3	3.6				
BARTLESVILLE.....	1919	17	10	5	246	102	131	13	41.5	53.3	5.3	1,905,575	848,907	922,678	133,990	44.5	48.4	7.0				
CHICKASHA.....	1919	9	11	4	548	30	510	8	5.5	93.1	1.5	4,598,973	110,903	4,418,830	69,240	2.4	96.1	1.5				
	1914	15	8	6	337	19	293	25	5.6	86.9	7.4	1,719,676	63,059	1,592,330	64,287	3.7	92.6	3.7				
ENID.....	1919	21	22	8	478	103	358	17	21.5	74.9	3.6	13,073,672	4,162,940	8,848,585	62,147	31.8	67.7	0.5				
	1914	16	20	9	283	34	225	24	12.0	79.5	8.5	2,610,533	106,015	2,412,498	92,020	4.1	92.4	3.5				
GUTHRIE.....	1919	22	5	9	244	.....	² 244	.....	.....	100.0	.....	3,330,365	.....	² 3,330,365	.....	.....	100.0	.....			
	1914	19	6	5	185	43	128	14	23.2	69.2	7.6	853,485	110,715	705,639	37,131	13.0	82.7	4.4				
MCALISTER.....	1919	7	10	3	149	11	125	13	7.4	83.9	8.7	1,529,357	117,063	1,327,198	85,096	7.7	86.8	5.6				
	1914	16	11	6	171	26	120	25	15.2	70.2	14.6	573,511	72,657	410,347	90,507	12.7	71.5	15.8				
MUSKOGEE.....	1919	34	30	18	1,218	105	1,072	41	8.6	88.0	3.4	8,402,888	605,832	7,390,868	406,188	7.2	88.0	4.8				
	1914	34	33	13	828	92	694	42	11.1	83.8	5.1	2,754,811	227,467	2,345,000	182,344	8.3	85.1	6.6				
OKLAHOMA CITY.....	1919	79	109	39	4,375	277	3,929	169	6.3	89.8	3.9	69,970,788	1,789,793	66,994,890	1,188,105	2.6	95.7	1.7				
	1914	86	76	33	2,226	202	1,861	163	9.1	83.6	7.3	20,725,811	730,011	19,462,231	533,569	3.5	93.9	2.6				
OKMULGEE.....	1919	14	10	5	455	33	402	20	7.3	88.4	4.4	3,991,231	231,272	3,636,040	123,919	5.8	91.1	3.1				
SAPULPA.....	1919	16	7	6	552	55	479	18	10.0	80.8	3.3	2,197,083	272,275	1,755,204	169,604	12.4	79.9	7.7				
	1914	16	7	7	433	45	369	19	10.4	85.2	4.4	604,457	102,387	416,467	85,603	16.9	68.9	14.2				
SHAWNEE.....	1919	23	14	8	1,114	47	1,038	29	4.2	93.2	2.6	5,742,944	191,727	5,364,571	186,646	3.3	93.4	3.3				
	1914	27	11	8	845	32	750	13	9.7	88.8	1.5	2,597,965	182,719	2,334,728	80,518	7.0	89.9	3.1				
TULSA.....	1919	62	56	17	1,749	355	1,312	82	20.3	75.0	4.7	14,050,073	2,432,659	10,959,468	657,946	17.3	78.0	4.7				
	1914	52	29	22	845	203	563	79	24.0	66.6	9.3	3,868,326	771,774	2,707,461	389,091	20.0	70.0	10.0				

¹ Includes "iron and steel, welding."² Includes the group "Individuals."³ Includes the groups "Individuals" and "All others."

MANUFACTURES—OKLAHOMA.

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TABLE 15.—MANUFACTURES, BY POPULATION GROUPS, IN CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	Cen- sus year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER						THE STATE OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 OR OVER.	
			Total.		10,000 to 25,000.		25,000 to 100,000.		Number or amount.	Per cent of aggre- gate.
			Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.		
Number of places.....	1919 1914 1909	----- ----- -----	12 9 8	----- ----- -----	9 6 6	----- ----- -----	3 3 2	----- ----- -----	-----	-----
Population ¹	1920 1915 1910	2,028,283 2,026,534 1,657,155	317,264 237,094 188,866	15.6 11.7 10.2	123,617 88,452 79,383	6.1 4.4 4.8	193,647 148,642 89,483	9.5 7.3 5.4	1,711,019 1,789,440 1,488,289	84.4 88.3 89.8
Number of establishments.....	1919 1914 1909	2,445 2,518 2,310	745 591 486	30.5 23.5 21.0	301 213 251	12.3 8.5 10.9	444 378 235	18.2 15.0 10.2	1,700 1,927 1,824	69.5 76.5 79.0
Average number of wage earners.....	1919 1914 1909	29,503 17,443 13,143	11,433 6,153 4,176	38.8 35.3 31.8	4,091 2,254 2,397	13.9 12.9 18.2	7,342 3,899 1,779	24.9 22.4 13.5	18,070 11,290 8,967	61.2 64.7 68.2
Value of products.....	1919 1914 1909	\$401,362,899 102,005,693 53,682,405	\$133,758,571 30,308,575 19,864,076	33.3 35.6 37.0	\$41,334,822 8,959,627 9,717,641	10.3 8.8 18.1	\$92,423,749 27,348,948 10,147,035	23.0 26.8 18.9	\$267,604,298 65,097,118 33,817,729	66.7 64.4 63.0
Value added by manufacture.....	1919 1914 1909	88,757,040 31,035,943 19,529,511	32,901,550 10,106,225 6,966,763	37.1 32.6 35.7	11,154,625 2,731,838 3,443,467	12.6 8.8 17.6	21,746,034 7,374,387 3,523,296	24.5 23.8 18.0	55,855,481 20,929,718 12,562,748	62.9 67.4 64.3

¹ Population of 1920, as of Jan. 1, 1920: 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of Apr. 15, 1910.

TABLE 16.—PRINCIPAL INDUSTRIES IN CITIES OF 50,000 INHABITANTS OR MORE, WITH PER CENT OF TOTAL FOR STATE: 1919.

CITY AND INDUSTRY.	VALUE OF PRODUCTS.				CITY AND INDUSTRY.	VALUE OF PRODUCTS.			
	Amount 1919.	Per cent of total for the state.	Increase over 1914.			Amount 1919.	Per cent of total for the state.	Increase over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
OKLAHOMA CITY.					TULSA.				
Flour-mill and gristmill products.....	\$8,752,649	17.6	\$6,007,013	218.8	Foundry and machine-shop products.....	\$6,669,577	49.4	\$5,251,034	370.2
Bread and other bakery products.....	2,845,186	35.0	1,990,719	235.3	Printing and publishing, newspapers and periodicals.....	1,377,209	17.9	1,080,082	363.5
Printing and publishing, newspapers and periodicals.....	2,362,773	30.7	1,551,329	191.2	Lumber, planing-mill products, not in- cluding planing mills connected with saw mills.....	844,744	26.8	552,214	188.8
Printing and publishing, book and job.....	1,409,474	58.2	962,470	215.3	Bread and other bakery products.....	700,805	8.6	509,765	266.8
Confectionery and ice cream.....	1,154,844	32.2	839,585	266.3	Printing and publishing, book and job.....	503,226	20.1	430,255	589.6
Lumber, planing-mill products, not includ- ing planing mills connected with saw mills.....	809,724	25.7	594,522	276.3	Flour-mill and gristmill products.....	(1)	(1)	(1)	(1)
Automobiles.....									
Butter.....									
Coffee, roasting and grinding.....									
Druggists' preparations.....	(1)	(1)	(1)	(1)					
Oil and cake, cottonseed.....									
Petroleum, refining.....									
Saddlery and harness.....									
Slaughtering and meat packing.....									

¹ Relative rank can not be shown without disclosing individual operations.

TABLE 17.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	5,822	3,254	2,265	139,983	97,308	71,139	100.0	100.0	100.0
Owned.....	1,846	1,538	1,407	104,115	87,035	65,791	74.4	89.4	92.5
Steam.....	1,080	842	802	79,707	70,803	59,043	56.0	72.8	70.6
Engines.....	1,041	(¹)	(¹)	72,723	(¹)	(¹)	52.0		
Turbines.....	39	(¹)	(¹)	6,981	(¹)	(¹)	5.0		
Internal-combustion engines.....	744	685	539	24,133	15,976	8,676	17.2	16.4	12.2
Water.....	22	11	6	275	256	472	0.2	0.3	0.7
Water wheels and turbines.....	11	8	5	259	253	470	0.2	0.3	0.7
Water motors.....	11	8	1	18	3	2	(²)	(²)	(²)
Rented.....	3,976	1,716	858	35,868	10,273	5,348	25.6	10.6	7.5
Electric.....	3,976	1,716	858	35,435	10,053	5,281	25.3	10.3	7.4
Other.....				433	205	67	0.3	0.2	0.1
Electric.....	4,957	2,324	985	54,605	23,760	7,887	100.0	100.0	100.0
Rented.....	3,976	1,716	858	35,435	10,053	5,281	64.9	42.4	67.0
Generated by establishments reporting.....	981	608	127	19,170	13,692	2,606	35.1	57.6	33.0

¹ Not reported separately.

² Less than one-tenth of 1 per cent.

TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRIES AND CITIES.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).	
	Anthracite ¹ (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).					
All industries.....	1919..	44,433	478,734	37,409	3,163,152	9,108	40,523,914
Per cent of increase.....	1914..	1,682	429,745	29,879	224,575	(²)	24,078,701
			11.4	25.2	1312.6	(²)	68.3
Brick and burnt-clay ballast.....			27,587		11,138		1,964,706
Cars and general shop construction and repairs by steam-railroad companies.....		1	9,374	94	47,030		1,100,043
Cement.....			86,156		5,413		2,300,000
Coke, not including gas-house coke.....			17,848				
Flour-mill and gristmill products.....		50	23,504		54,952	1,192	259,652
Foundry and machine-shop products.....		113	923	4,703	12,817	964	400,901
Glass.....			10		3,042	167	2,332,616
Ice, manufactured.....		992	33,460		69,916	343	1,893,013
Oil and cake, cottonseed.....		1,566	46,372		32,454	2,082	394,025
Petroleum, refining.....			91,798	482	2,632,184	573	11,847,807
Slaughtering and meat packing.....			5,268		241,362	24	512,688
Smelting and refining, zinc.....		41,228	102,005	31,353		110	15,526,316
All other industries.....		483	34,429	777	52,844	3,653	1,992,144
Total for cities.....		111	26,367	3,524	534,836	1,816	3,670,612
ARDMORE.....		30	302	125	60,632	615	142,404
BARTLESVILLE.....		24	180	126			503,374
CHICKASHA.....		4	3,244		35,116	139	1,711
ENID.....			2,553	134	82,788	201	160,174
GUTHRIE.....			4		7,450	10	81,236
MCALISTER.....			2,876				29,459
MUSKOGEE.....			6,669	342	103,272	91	325,353
OKLAHOMA CITY.....		13	6,892	675	167,922	202	885,426
OKMULGEE.....		26	3	360	44,356	125	642,443
SAPULPA.....						17	252,813
SHAWNEE.....		4	2,118	214	7,634	13	198,585
TULSA.....		10	1,526	1,548	25,668	403	447,634

¹ Includes some semianthracite coal.² Included in figures for fuel oils.

SPECIAL STATISTICS.

For a number of important industries the Census Bureau collects, by means of special schedules, certain details which do not appear on the general schedule. Data for three of these industries for Oklahoma are here presented.

Petroleum, refining (Table 19).—Measured by value of products, this industry, which in 1909 was eleventh in the state, and third in 1914, now holds first rank, with products constituting in value 37.5 per cent of the total for all manufacturing industries. Among the states it ranks fifth, being exceeded only by New Jersey, Texas, California, and Pennsylvania, in the order named. In 1914 the state ranked eighth in the petroleum refining industry. Table 19 gives the statistics in detail for 1919 in comparison with 1914 and 1909.

The total production of refined oils in 1919, the same including gasoline and naphthas, fuel oils, illumi-

nating oils, and lubricating oils, was 33,200,145 barrels of 50 gallons, as compared with 8,610,533 barrels in 1914, and 792,682 in 1909.

The figures show a quantity increase from 1914 to 1919 of 286 per cent. The ratio increase from 1909 to 1914 was somewhat higher on account of the relatively small production in 1909. Of the total production of refined oils in 1919, fuel oils constituted 49.1 per cent; gasoline and naphthas, 33.4 per cent; illuminating oils, 15.8 per cent; and lubricating oils, 1.7 per cent. In 1914 the distribution percentages were fuel oils, 55.1; gasoline and naphthas, 23.5; illuminating oils, 20.4; and lubricating oils, 1 per cent; whereas in 1909 the percentages were, respectively, 51.6, 15.8, 30.9, and 1.7. Although all classes of refined oils have increased, the distribution percentages show progressive increases for gasoline and naphthas, with decreases for illuminating oils, and for the last semidecade in fuel oils.

TABLE 19.—PETROLEUM, REFINING: 1919, 1914, AND 1909.

	1919	1914	1909		1919	1914	1909
MATERIALS.				PRODUCTS—continued.			
Total cost.....	\$127,149,722	\$9,590,737	\$573,473	Lubricating oils:			
Crude petroleum:				Gallons.....	28,394,810	4,379,550	655,500
Barrels (42 gallons).....	42,430,815	9,966,176	1,078,286	Value.....	\$4,317,900	\$341,256	\$33,396
Cost.....	\$108,744,915	\$8,746,159	\$489,552	Liquid asphaltic road oils:			
Distillates purchased and rerun:				Gallons.....	3,042,660	7,975,400	2,190,200
Barrels.....	125,270	(¹)	(¹)	Value.....	\$137,557	\$85,489	\$23,119
Cost.....	\$177,622			Partly refined oils sold for rerunning:			
Casing-head gasoline purchased:				Gallons.....	13,575,730	(²)	(²)
Barrels.....	957,744	(¹)	(¹)	Value.....	\$902,996		
Cost.....	\$7,239,075			Lubricating greases:			
Sulphuric acid:				Gallons.....	399,700	16,750	
Tons (net).....	17,541			Value.....	\$88,225	\$3,281	
Cost.....	\$433,206			Paraffin wax:			
Caustic soda:				Gallons.....	4,078,190	829,900	\$35,710
Pounds.....	4,593,856	\$104,500	\$22,000	Value.....	\$1,061,755	\$65,340	
Cost.....	\$218,273			Other special products, value.....	\$135,723	\$327,064	
Other chemicals, cost.....	\$91,460			All other products, value.....	\$95,759		
Fuller's earth:				EQUIPMENT (CAPACITY, GALLONS).			
Tons.....	5,702	(¹)	(¹)	Stills:			
Cost.....	\$181,423	(¹)	(¹)	Steam—			
Other filtering material, cost.....	\$12,103	(¹)	(¹)	Number.....	238	56	10
Containers and materials therefor, cost.....	\$256,095	\$34,932	\$8,185	Capacity.....	3,115,100	1,023,600	121,600
All other materials, cost.....	\$9,704,950	\$705,146	\$55,676	Fire—			
PRODUCTS.				Number.....	491	125	20
Total value.....	\$150,673,458	\$13,014,372	\$1,055,011	Capacity.....	10,439,400	2,411,800	279,300
Naphthas and lighter products:				Pressure—			
Gasoline—				Number.....	76	(²)	(²)
Gallons.....	515,964,850	\$1,099,900		Capacity.....	1,335,800		
Value.....	\$90,213,435	\$5,824,332		Agitators:			
Naphtha—				Number.....	138	47	12
Gallons.....	19,353,450		6,258,950	Capacity.....	4,066,000		
Value.....	\$2,984,639	20,071,700	\$350,167	Chilling houses for paraffin:			
Benzine, etc.—				Number.....	8	(²)	(²)
Gallons.....	18,878,560	\$1,074,237		Capacity.....	274,000		
Value.....	\$2,015,000			Filter houses:			
Illuminating oils:				Number.....	10	(²)	(²)
Gallons.....	262,455,270	87,734,150	12,255,450	Capacity.....	413,200		
Value.....	\$22,186,742	\$2,238,898	\$369,662	Hydraulic or other presses:			
Fuel oils:				Number.....	33	(²)	(²)
Distillates—				Capacity.....	190,700		
Gallons.....	24,521,840	19,192,900		Storage tanks for:			
Value.....	\$1,755,051	\$522,159		Crude petroleum—			
Gas oils—				Number.....	217	61	33
Gallons.....	116,833,380	9,791,650	20,464,200	Capacity.....	156,541,000	28,826,000	1,794,000
Value.....	\$5,006,896	\$151,508	\$242,957	Refined petroleum—			
Residual fuel oils—				Number.....	1,673	412	112
Gallons.....	673,605,070	208,256,800		Capacity.....	216,154,000	48,791,000	5,477,000
Value.....	\$19,771,750	\$2,380,808		Fuel oil—			

¹ Included with "All other materials."² Residuum or tar.³ Figures not available.

Flour-mill and gristmill products (Table 20).—This table shows the kind, quantity, and value of the flour-mill and gristmill products for 1919, 1914, and 1909.

Wheat flour was the product of chief value in 1919 as it was in 1914, forming 74.3 per cent and 58.9 per cent, respectively, of the total value of all products of the industry in the state. The total value of products for the industry increased \$33,155,110, or 198.7 per cent, during the five-year period, and the value of wheat flour \$27,216,114, or 276.8 per cent. There was a comparatively smaller increase, however, in the number of barrels of wheat flour, this being 1,392,049, or 67.1 per cent.

TABLE 20.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$49,843,800	\$16,688,690	\$19,144,475
Wheat flour:			
Barrels.....	3,464,289	2,072,240	2,205,039
Value.....	\$37,048,315	\$9,832,201	\$10,959,367
Corn meal and corn flour:			
Barrels.....	293,863	266,284	382,721
Value.....	\$2,316,596	\$964,488	\$1,124,244
Bran and middlings:			
Tons.....	132,036	83,282	286,005
Value.....	\$5,908,371	\$1,660,005	\$6,760,825

TABLE 20.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909—Continued.

	1919	1914	1909
Feed and offal:			
Tons.....	72,526	141,419	288,005
Value.....	\$4,148,441	\$3,803,072	\$6,760,825
All other cereal products, value.....	\$415,327	\$10,533	\$998
All other products, value.....	\$6,750	\$418,391	\$299,041

Printing and publishing (Table 21).—This table gives the number and aggregate circulation per issue of the various classes of publications reported in Oklahoma in 1919, 1914, and 1909:

TABLE 21.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	480	506	593	1,020,130	1,081,933	857,959
Daily.....	62	59	67	347,673	242,305	183,479
Sunday.....	20	12	11	187,199	117,138	77,326
Weekly.....	382	500	500	352,255	504,595	513,979
Monthly.....	16	25	15	133,003	217,573	81,175

¹ Includes, in 1919, 5 semiweeklies and 1 triweekly; in 1914, 3 semiweeklies; in 1909, 1 semiweekly.

² Includes, in 1919, 1 semimonthly and 1 quarterly; in 1914, 1 quarterly and 4 semimonthlies, and in 1909, 3 semimonthlies.

The increase in circulation of daily newspapers for the five-year period from 1914 to 1919 was 105,368, or 43.5 per cent. Fifty-one of the dailies were published in the afternoon. Their circulation was 217,264, which is 62.5 per cent of the total daily circulation, and an increase of 53,512, or 32.7 per cent, over the afternoon circulation reported for 1914.

The circulation of the Sunday newspapers increased 70,041, or 59.8 per cent, during the five-year period from 1914 to 1919, and they were also more numerous than in 1914.

The disappearance of a number of weekly newspapers and monthly publications and the decreased circulation reported for certain semimonthlies are the causes of the decreases in number and circulation of all publications.

All publications were printed in English with the exception of two German weeklies.

Laundries (Table 22). Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 22, however, summarizes the statistics for such laundries in the state of Oklahoma for 1919 and 1914.

TABLE 22.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	99	101	-2.0
Persons engaged.....	2,355	1,632	44.3
Proprietors and firm members.....	117	115	1.7
Salaried employees.....	244	101	141.6
Wage earners (average number).....	1,994	1,416	40.8
Primary horsepower.....	2,191	1,766	24.1
Capital.....	\$2,157,041	\$986,074	118.8
Salaries and wages.....	1,707,624	753,997	126.5
Salaries.....	376,873	100,677	274.3
Wages.....	1,330,751	653,320	103.7
Paid for contract work.....	250	674	-62.9
Rent and taxes.....	79,240	53,506	48.1
Cost of materials.....	875,092	359,743	143.3
Amount received for work done.....	3,561,059	1,669,721	113.3

¹ A minus sign (-) denotes decrease.

Dyeing and cleaning (Table 23).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this table.

TABLE 23.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	50
Persons engaged.....	363
Proprietors and firm members.....	73
Salaried employees.....	35
Wage earners (average number).....	255
Primary horsepower.....	259
Capital.....	\$425,037
Salaries and wages.....	341,552
Salaries.....	43,129
Wages.....	298,423
Paid for contract work.....	3,472
Rent and taxes.....	38,270
Cost of materials.....	152,201
Amount received for work done.....	844,692

Data for dyeing and cleaning establishments are not included in the general tables nor in the totals for manufacturing industries for censuses since 1900. This presentation is the first of its kind that has been made since the census statistics were confined to manufacturing industries as distinguished from the hand trades, household industries, etc.

Custom sawmills and custom gristmills (Table 24).—This table shows, for 1919 and 1909, a summary for custom sawmills and custom gristmills. Statistics for these custom mills are not included in the general tables nor in the totals for manufacturing industries, but are presented by the totals in this table.

TABLE 24.—CUSTOM SAWMILLS AND GRISTMILLS: 1919 AND 1909.

	CUSTOM SAWMILLS.			CUSTOM GRISTMILLS.		
	1919	1909	Per cent of increase, ¹ 1909-1919.	1919	1909	Per cent of increase, ¹ 1909-1919.
Number of establishments.....	7	4	.....	96	147	-34.7
Persons engaged.....	11	12	.....	120	323	-62.8
Proprietors and firm members.....	8	5	.....	114	182	-37.4
Salaried employees.....	.....	.....	.....	.....	4	.....
Wage earners (average number).....	3	7	.....	6	137	-95.6
Primary horsepower.....	218	118	84.7	1,510	4,123	-63.4
Capital.....	\$13,868	\$5,325	160.4	\$185,028	\$180,518	2.5
Salaries and wages.....	2,454	1,908	28.6	5,826	12,906	-54.9
Salaries.....	.....	.....	.....	.....	426	.....
Wages.....	2,454	1,908	28.6	5,826	12,480	-53.3
Rent and taxes.....	91	(²)	.....	4,113	(³)	.....
Cost of materials.....	910	65	.....	350,847	369,149	-5.0
Value of products.....	9,833	4,725	108.1	431,360	465,348	-7.3

¹ A minus sign (-) denotes decrease; percentages are omitted where base is less than 100.

² Figures not available.

³ Includes estimates of all grain ground. Value of products for custom sawmills represents the amount charged for work performed.

GENERAL TABLES.

Table 25 gives, for 1919, 1914, and 1909, for selected industries in the state and in Oklahoma City, the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products; and for the 8 other cities of 10,000 inhabitants or more for which figures are available, similar data for all industries combined.

Table 26 presents, for 1919, for the state as a whole and for Oklahoma City and Tulsa, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments; and for the 10 cities having from 10,000 to 50,000 inhabitants, similar data for all industries combined.

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TABLE 25.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1919	2,445	29,503	139,983	\$35,026	\$312,606	\$401,363	Glass.....	1919	16	1,692	2,795	\$1,754	\$1,912	\$4,751
	1914	2,518	17,443	97,308	11,011	70,970	102,006		1914	12	1,270	1,291	992	720	2,006
	1909	2,310	13,143	71,139	7,240	34,153	53,682	Ice, manufactured.....	1919	115	831	18,394	944	1,044	3,574
Bread and other bakery prod- ucts.	1919	288	993	1,265	966	5,040	8,129		1914	97	528	15,195	353	402	1,604
	1914	342	697	569	381	1,581	2,774		1909	77	449	10,359	270	307	1,273
	1909	252	418	223	252	969	1,794	Lumber and timber products ² ..	1919	201	2,493	10,682	2,543	2,914	8,054
Brick and burnt-clay ballast....	1919	22	628	4,452	581	643	1,679		1914	284	2,651	12,799	1,308	1,685	4,111
	1914	23	402	3,231	217	129	496		1909	342	3,175	12,397	1,269	1,457	4,439
	1909	38	730	3,733	378	226	1,029	Marble and stone work.....	1919	48	117	475	160	304	688
Brooms, from broom corn.....	1919	32	110	96	116	346	696		1914	55	142	453	96	122	340
	1914	36	97	115	53	107	227		1909	41	147	257	111	187	418
	1909	23	76	51	43	145	248	Mattresses and spring beds....	1919	13	99	184	100	378	700
Butter.....	1919	20	301	835	291	6,725	7,718		1914	11	75	259	42	164	268
	1914	14	46	282	28	673	809		1909	7	49	151	30	99	153
	1909	19	62	427	36	928	1,150	Mineral and carbonated waters..	1919	79	156	393	130	550	1,292
Cars and general shop construc- tion and repairs by electric- railroad companies.	1919	10	138	238	163	112	313		1914	108	122	222	70	210	472
	1914	7	58	125	48	43	98		1909	105	143	183	64	145	455
	1909	4	47	110	30	26	65	Oil and cake, cottonseed.....	1919	51	630	14,243	879	16,332	18,907
Cars and general shop construc- tion and repairs by steam- railroad companies.	1919	12	2,687	2,130	3,778	2,055	6,149		1914	60	851	16,315	360	6,283	7,590
	1914	13	1,718	954	1,155	956	2,270		1909	39	581	10,720	235	4,245	5,187
	1909	8	1,412	957	942	642	1,702	Patent medicines and com- pounds.	1919	17	64	23	31	219	455
Coffee, roasting and grinding....	1919	7	168	298	132	1,968	2,402		1914	13	16	7	10	25	62
	1914	6	60	171	28	618	757	Paving materials.....	1919	13	295	2,291	218	165	579
	1909	4	18	69	9	429	500		1914	3	100	625	48	23	91
Confectionery and ice cream....	1919	73	381	2,074	362	2,291	3,591	Petroleum, refining.....	1919	66	4,612	24,477	5,910	127,150	150,673
	1914	88	156	1,386	91	542	931		1914	23	516	3,304	432	9,591	13,014
	1909	62	233	46	184	411	799		1909	9	75	231	54	575	1,055
Copper, tin, and sheet-iron work	1919	75	187	42	263	432	984	Printing and publishing ³	1919	510	1,931	2,659	2,332	3,049	10,241
	1914	72	141	94	99	241	474		1914	624	1,619	2,288	1,022	923	4,024
	1909	62	233	46	184	411	799		1909	598	1,698	1,664	1,044	1,004	3,989
Explosives.....	1919	9	76	439	149	549	1,063	Saddlery and harness.....	1919	36	92	50	134	650	1,042
	1914	6	73	477	80	320	538		1914	30	54	39	43	240	308
Flour-mill and gristmill prod- ucts.	1919	227	958	16,573	1,021	44,180	49,844		1909	15	66	26	62	226	375
	1914	253	700	14,050	420	14,367	16,689	Smelting and refining, zinc.....	1919	11	2,272	6,952	3,174	14,550	19,518
	1909	295	842	16,400	473	16,493	19,144		1914	6	1,641	4,143	1,310	7,879	9,939
Food preparations, not else- where specified.	1919	10	40	456	27	242	337		1909	3	566	1,181	343	2,133	3,002
	1914	11	41	470	18	143	220	All other industries.....	1919	222	4,948	21,234	5,700	71,093	81,385
	1909	8	40	556	24	104	175		1914	199	2,783	16,001	1,631	21,309	28,658
Foundry and machine-shop products. ¹	1919	262	2,304	6,133	3,168	7,713	16,599		1909	297	1,859	10,285	1,067	2,785	5,359
	1914	122	886	2,443	676	1,674	3,173								
	1909	64	457	1,113	320	587	1,371								
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
OKLAHOMA CITY.....	1919	227	4,375	12,453	\$4,895	\$58,644	\$60,971	Lumber, planing-mill products, not including planing mills connected with sawmills. ⁵	1919	7	162	432	\$185	\$395	\$510
All industries.	1914	195	2,228	9,172	1,853	10,232	20,726		1914	5	85	389	60	140	215
	1909	171	1,398	4,132	973	5,146	7,568		1909	8	150	277	106	193	388
Bread and other bakery prod- ucts.	1919	16	400	332	334	1,638	2,845	Patent medicines and com- pounds.	1919	9	45	11	22	91	191
	1914	16	283	229	130	602	848		1914	9	13	7	9	22	52
	1909	17	85	99	59	214	365		1909	8	11	3	6	9	35
Confectionery and ice cream....	1919	9	129	916	117	689	1,155	Printing and publishing ⁶	1919	52	554	733	698	1,263	3,772
	1914	7	43	883	31	181	315		1914	53	426	505	256	349	1,269
	1909	7	43	883	31	181	315		1909	44	367	347	288	419	1,269
Flour-mill and gristmill prod- ucts.	1919	6	170	1,350	162	7,867	8,763	All other industries.....	1919	111	2,738	8,333	3,151	46,230	51,572
	1914	6	81	1,195	60	2,468	2,746		1914	82	1,162	5,669	725	12,343	14,799
	1909	7	75	1,187	56	1,839	2,087		1909	80	623	2,089	395	2,375	3,502
Foundry and machine-shop products. ⁴	1919	17	177	346	226	471	873	TULSA.....	1919	135	1,749	5,207	2,317	6,657	14,050
	1914	17	133	265	82	227	482	All industries. ⁷	1914	103	845	3,030	684	2,170	3,968
	1909	7	87	185	63	97	222		1909	53	462	1,586	315	874	1,563
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
CHICKASHA.....	1919	24	548	1,847	\$693	\$3,376	\$4,599	MCALISTER.....	1919	20	149	1,053	\$168	\$1,060	\$1,529
	1914	29	337	1,633	285	1,277	1,720		1914	33	171	1,111	101	298	574
	1909	30	364	1,488	242	1,285	1,867		1909	29	180	895	101	195	451
ENID.....	1919	51	478	2,247	578	10,851	13,074	MUSKOGEE.....	1919	82	1,218	3,807	1,539	5,376	8,408
	1914	45	283	1,715	175	2,048	2,611		1914	80	828	2,220	560	1,573	2,279
	1909	65	303	1,722	191	1,807	2,453		1909	64	381	1,421	241	1,478	2,276
GUTHRIE.....	1919	36	244	976	179	2,803	3,330	SAPULPA.....	1919	29	552	1,531	641	1,081	2,197
	1914	30	185	1,211	116	563	853		1914	30	433	670	228	235	604
	1909	34	282	1,281	163	947	1,443	SHAWNEE.....	1919	45	1,114	2,055	1,467	3,554	5,743
									1914	46	845	2,059	533	1,806	2,588
									1909	40	806	1,831	473	1,165	1,941

¹ Includes "automobile repairing"; "gas machines"; "hardware"; "iron and steel, welding"; and "structural ironwork, not made in steel works or rolling mills," in all years; and "hardware, saddlery," and "pumps, steam, and other power," in 1919 and 1914.

² Includes "lumber, planing-mill products, not including planing mills connected with sawmills," in all years; and "boxes, wooden packing, except cigar boxes," in 1914 and 1909.

³ Includes "bookbinding and blank-book making" in all years; and "engraving, steel and copper plate, including plate printing," in 1919 and 1914.

⁴ Includes "automobile repairing"; "gas machines"; "hardware"; and "structural ironwork, not made in steel works or rolling mills."

⁵ Includes "boxes, wooden packing, except cigar boxes," in 1914 and 1909.

⁶ Includes "bookbinding and blank-book making" in 1914 and 1909, and "engraving, steel and copper plate, including plate printing," in 1914.

⁷ Comparative statistics by industries for 1914 and 1909 not available.

TABLE 26.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Num- ber of estab- lish- ments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Propri- etors and firm mem- bers.	Sala- ried offi- cers, super- inten- dents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Fe- male.	Aver- age num- ber.	Number, 15th day of—		Male.	Fe- male.	Male.	Fe- male.		
								Maximum month.							Minimum month.

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

																Dollars.
1	All industries.....	2,445	38,314	2,320	2,170	3,100	1,215	29,503	De 32,259	Ap 27,897	(*)	(*)	(*)	(*)	(*)	277,034,318
2	Artificial stone products.....	35	87	38	3	2	44	44	Apr 50	Ja 37	57	57	.....	.....	.....	109,526
3	Automobile bodies and parts.....	18	142	17	9	5	105	105	Se 113	Ja 92	102	95	7	.....	.....	175,674
4	Automobile repairing.....	129	715	166	41	33	20	455	Se 498	Ja 403	497	490	.....	7	.....	1,066,264
5	Awnings, tents, and sails.....	9	56	8	6	3	36	36	My 52	Ja 21	40	20	20	.....	.....	76,677
6	Bread and other bakery products.....	288	1,562	339	46	97	87	993	De 1,142	Ja 887	1,146	800	333	11	2	3,028,473
7	Brick and burnt-clay ballast.....	22	705	7	38	23	9	628	Au 758	Ja 346	716	715	1	.....	.....	1,906,508
8	Brooms, from broom corn.....	32	175	40	7	8	4	110	De 121	Mh 81	127	117	10	.....	.....	243,614
9	Butter.....	20	408	12	29	43	23	301	Au 357	Mh 257	258	195	63	.....	.....	1,097,181
10	Carriages and wagons, including re- pairs.....	11	35	16	2	.....	1	16	.....	.....	16	16	.....	.....	.....	40,400
11	Carriages and wagons.....	3	9	3	.....	.....	6	6	(c) 6	(c) 6	6	6	.....	.....	.....	17,800
12	Repair work only.....	8	26	13	2	.....	1	10	Jy 12	Ja 8	10	10	.....	.....	.....	22,000
13	Cars and general shop construction and repairs by electric-railroad companies.....	10	151	.....	7	4	2	138	No 145	Mh 130	144	144	.....	.....	.....	548,879
14	Cars and general shop construction and repairs by steam-railroad companies.....	12	2,828	.....	71	52	18	2,687	De 3,012	Ap 3,472	3,012	3,007	5	.....	.....	1,672,447
15	Cleansing preparations.....	3	27	1	1	6	2	17	De 18	Ja 16	11	11	.....	.....	.....	75,730
16	Coffee, roasting and grinding.....	7	212	1	14	21	8	168	De 209	Ja 137	208	116	92	.....	.....	1,417,088
17	Confectionery and ice cream.....	73	563	79	47	40	16	381	.....	.....	420	241	178	1	.....	2,271,358
18	Confectionery.....	28	262	29	12	23	4	194	De 282	Ja 147	264	92	172	.....	.....	1,191,781
19	Ice cream.....	45	301	50	35	17	12	187	Jy 279	Ja 109	156	149	6	1	.....	1,079,575
20	Copper, tin, and sheet-iron work.....	75	298	85	16	6	4	187	Oct 202	Ja 185	205	202	2	1	.....	458,249
21	Explosives.....	9	129	.....	37	13	3	76	Se 90	Fe 87	74	74	.....	.....	.....	1,292,118
22	Flour-mill and gristmill products.....	227	1,630	224	163	218	67	958	Au 1,098	My 763	1,095	1,062	17	16	.....	18,746,451
23	Food preparations, not elsewhere specified.....	10	60	6	5	6	3	40	.....	.....	54	41	13	.....	.....	183,481
24	Macaroni and other food prepara- tions for human consumption.....	5	40	5	2	6	3	24	Se 33	No 14	24	11	13	.....	.....	85,231
25	For animals and fowls.....	5	20	1	3	.....	16	16	Se 30	Ja 9	30	30	.....	.....	.....	98,250
26	Foundry and machine-shop products.....	114	2,148	82	176	136	37	1,717	.....	.....	1,921	1,909	4	8	.....	13,404,942
27	Boiler shops.....	16	320	15	27	8	4	266	Se 320	Fe 201	238	238	.....	.....	.....	1,087,320
28	Foundries.....	5	149	16	2	1	130	130	Se 159	Mh 107	141	141	.....	.....	.....	601,161
29	Machine shops.....	83	1,436	64	108	112	26	1,128	Oct 1,297	Fe 937	1,280	1,268	4	8	.....	10,893,196
30	Machine shop and foundry com- bined.....	10	243	3	25	14	6	195	De 215	Fe 167	214	214	.....	.....	.....	913,265
31	Furniture.....	7	40	3	2	2	1	26	.....	.....	47	46	.....	1	.....	79,742
32	Wood furniture, other than rattan and willow.....	3	21	3	2	2	.....	14	De 19	Ja 7	21	21	.....	.....	.....	35,222
33	Store and office fixtures.....	4	19	5	1	.....	1	12	De 26	Jy 6	26	25	.....	1	.....	44,520
34	Glass.....	16	1,811	6	79	19	15	1,692	Ap 2,297	Jy 987	2,103	1,855	232	12	4	4,248,214
35	Hand stamps.....	4	9	5	.....	.....	8	8	De 4	Se 2	4	3	.....	.....	.....	5,075
36	Ice, manufactured.....	115	1,185	84	167	66	37	831	Au 1,338	Ja 460	918	881	5	31	1	6,712,039
37	Iron and steel welding.....	10	40	17	1	1	1	20	Ja 21	Mh 19	21	21	.....	.....	.....	42,019
38	Lumber and timber products.....	145	2,224	174	61	33	9	1,947	De 2,309	Fe 1,566	2,504	2,501	.....	3	.....	3,668,782
39	Lumber, planing-mill products, not including planing mills connected with sawmills.....	56	717	44	62	49	16	546	Se 665	Ja 394	642	641	1	.....	.....	1,981,625
40	Marble and stone work.....	48	202	62	9	12	2	117	.....	.....	125	123	.....	2	.....	347,390
41	Monuments and tombstones.....	41	138	52	6	12	2	66	My 75	Fe 59	72	70	.....	2	.....	252,333
42	Other marble and stone work, except slate.....	7	64	10	3	.....	51	51	Se 65	Ja 40	53	53	.....	.....	.....	95,057
43	Mattresses and spring beds.....	13	132	11	14	6	2	99	De 115	Ja 83	115	96	19	.....	.....	416,147
44	Mineral and carbonated waters.....	79	306	99	26	17	8	156	Au 257	Ja 78	168	146	3	19	.....	710,643
45	Oil and cake, cottonseed.....	51	1,169	11	171	45	12	930	No 1,733	My 287	1,544	1,543	1	.....	.....	9,796,104
46	Oil, mineral and composite.....	3	61	.....	8	9	2	42	De 77	Ap 9	77	77	.....	.....	.....	631,147
47	Patent medicines and compounds.....	17	133	23	8	29	9	64	.....	.....	88	13	75	.....	.....	393,317
48	Patent and proprietary medicines.....	11	24	16	.....	.....	1	7	Ja 9	Fe 4	9	2	7	.....	.....	9,474
49	Patent and proprietary com- pounds, not elsewhere specified.....	6	109	7	8	29	8	57	De 69	Ja 51	79	11	68	.....	.....	383,843
50	Paving materials.....	13	371	10	27	36	3	295	Au 433	Jy 237	414	413	1	.....	.....	696,110
51	Perfumery and cosmetics.....	3	12	2	2	1	1	6	(c) 6	(c) 6	7	3	2	1	1	54,596
52	Petroleum refining.....	66	6,213	1	313	957	330	4,612	Au 4,823	Fe 4,380	4,787	4,787	2	8	.....	152,529,830
53	Photo-engraving.....	4	36	1	7	4	2	22	(c) 22	(c) 22	24	21	3	.....	.....	42,148
54	Printing and publishing, book and job printing.....	97	784	88	66	78	47	505	De 514	Ja 474	517	379	134	4	.....	1,348,566
55	Book publishing without printing.....	91	768	84	64	78	47	495	.....	.....	505	368	133	4	.....	1,310,355
56	Lithotype work, typesetting, etc.....	3	13	1	2	.....	10	10	De 12	Ja 7	12	11	1	.....	.....	31,211
57	Printing and publishing, newspapers and periodicals.....	410	2,673	416	167	477	198	1,415	.....	.....	1,501	1,244	232	23	2	5,124,641
58	Printing and publishing.....	16	673	7	46	332	89	499	Oct 527	Fe 469	515	439	75	1	.....	2,080,423
59	Printing, publishing, and job printing.....	365	1,624	393	109	137	92	893	Oct 949	Ja 839	960	784	152	22	2	2,988,552
60	Printing without printing.....	29	76	16	12	8	17	23	De 27	Ja 20	26	21	5	.....	.....	55,666

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

MANUFACTURES—OKLAHOMA.

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COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		Rent-^{2}

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

Dollars. 6,172,107	Dollars. 5,789,084	Dollars. 35,025,942	Dollars. 475,181	Dollars. 663,719	Dollars. 4,945,225	Dollars. 301,539,816	Dollars. 11,066,013	Dollars. 401,362,869	Dollars. 88,757,040	139,983	72,723	6,984	24,133	275	35,868	19,170	1
6,509	3,733	44,860		2,371	894	87,345	1,311	204,525	115,869	64			29		35		2
24,598	9,485	137,835		14,060	6,306	164,489	5,274	428,072	253,309	105					105		3
92,440	58,417	602,889	8,785	62,534	14,908	889,346	32,754	2,108,455	1,206,355	1,041	4		452		555	10	4
16,200	6,755	23,748		6,679	634	147,654	658	244,660	90,348	22					22		5
67,877	200,164	966,305	53,028	95,135	77,739	4,899,397	140,845	8,128,032	3,088,390	1,265	30	2	70		1,163	10	6
109,280	37,936	580,875		365	20,189	235,176	408,267	1,679,129	1,035,686	4,452	3,460		503		459	1,005	7
15,040	17,777	116,326	200	5,026	3,345	342,681	3,072	695,646	349,893	96			11		85	3	8
111,379	74,471	290,528		17,757	29,908	6,670,716	53,786	7,718,428	993,926	835	190		76		569	5	9
2,400	500	16,748		1,570	506	11,909	1,615	46,584	33,160	68			36		32		10
		5,500			225	2,934	460	11,600	8,206	23			18		5		11
2,400	500	11,248		1,570	281	8,975	1,055	34,954	24,954	45			18		27		12
15,900	6,475	162,973			1,542	108,272	4,118	312,753	200,363	238			100		138		13
215,618	80,600	3,777,544			3,382	1,859,992	195,108	6,149,067	4,093,967	2,130	415		866		849	50	14
3,000	7,143	15,420		600	1,068	32,248	462	69,286	36,576	44					44		15
36,916	45,774	132,308		7,992	42,223	1,958,726	9,291	2,401,791	433,774	298					298		16
118,015	78,951	362,344	750	31,774	51,751	2,206,493	84,946	3,590,714	1,299,275	2,074	1,300		46	7	721	70	17
29,188	49,734	138,934		19,455	29,839	960,331	5,937	1,344,999	378,731	211					211		18
88,827	29,217	223,410	750	12,319	21,812	1,246,162	79,009	2,245,715	920,544	1,863	1,300		46	7	510	70	19
29,125	10,700	262,717	2,696	18,068	6,149	427,853	4,074	933,826	551,869	42					35		20
83,066	18,373	149,013		5,454	41,616	537,048	11,477	1,033,310	514,785	439	439				405	21	21
423,717	374,804	1,021,017	3,800	5,695	726,115	43,812,330	367,765	49,843,900	5,663,705	16,573	7,590	39	5,007	238	3,699	1,031	22
6,015	12,748	27,255		3,266	1,604	235,730	6,481	337,357	95,146	456	325		50		81		23
3,160	12,748	16,577		3,026	279	77,410	2,845	121,931	42,176	63	50				12		24
2,865		10,678		240	1,325	158,320	4,136	215,426	52,970	393	275		50		68		25
516,840	248,990	2,382,175	10,269	21,267	525,697	5,976,461	276,428	13,590,544	7,250,655	4,829	494		895		3,440	80	26
70,047	21,265	385,563	4,690	1,214	36,561	794,086	22,390	1,695,624	878,548	1,379	220		470		689	80	27
70,428	4,280	168,858		1,200	176,696	490,760	9,744	1,242,963	742,459	156			25		131		28
306,081	194,195	1,580,516	5,275	18,630	290,383	4,369,634	214,600	9,666,117	5,141,883	2,775	224		399		2,152		29
58,284	29,250	247,238	304	223	22,057	331,381	29,694	904,840	493,765	519	50		1		468		30
4,800	4,000	46,148		3,360	236	82,339	1,645	170,405	86,421	162					162		31
3,600	3,600	16,974		1,480	120	43,505	784	78,439	34,150	67					67		32
1,200	400	29,174		1,880	116	38,834	861	91,966	52,271	95					95		33
224,012	60,300	1,753,686		85	63,291	1,007,933	304,362	4,760,844	2,838,549	2,795	350		1,950		495	977	34
	1,600	2,784	600	2,340	106	4,228	280	19,851	15,343	1					1		35
257,928	78,322	944,215	4,498	4,125	168,141	379,459	664,586	3,574,431	2,530,356	18,394	14,280	725	2,261		1,128	760	36
1,300	858	32,747	225	3,758	905	1,673	1,673	99,033	75,011	13					13		37
160,097	66,263	1,937,871	215,739	1,857	187,654	1,243,547	68,227	4,903,853	3,592,079	8,829	8,006	687	90	16	30	1,020	38
157,350	95,055	604,664	43	8,227	74,509	1,570,987	30,830	3,149,868	1,548,051	1,853	470		81		1,302	290	39
18,781	15,166	160,275	500	3,443	3,887	263,639	10,615	687,591	383,337	475	100		148		227	8	40
11,050	15,166	86,908	500	2,738	2,651	180,557	6,797	425,141	237,767	265			108		157	8	41
7,731		73,367		705	1,236	113,082	3,818	262,450	145,550	210	100		40		70		42
25,404	10,058	99,822		6,932	13,043	373,070	4,970	700,368	322,328	184			48		136		43
43,248	20,301	130,295	1,200	12,088	43,768	537,840	12,519	1,292,096	741,737	393	18	2	75	1	297	3	44
290,562	71,178	879,095	5,625	5,381	275,434	15,976,402	366,741	18,907,312	2,575,169	14,343	12,036		1,219		1,088	139	45
18,120	24,596	24,390		1,463	536,439	8,187	900	680,622	135,996	572					572		46
18,514	66,551	30,809	1,500	4,165	5,599	218,450	91	454,577	235,221	23			1		22		47
		5,666	1,500	2,526	236	17,557	809	42,069	24,421	1			1				48
18,514	66,551	25,143		1,639	5,363	200,893		412,508	210,806	22					22		49
54,056	51,621	217,721		17,167	5,087	121,033	44,022	578,925	413,870	2,291	1,820		281		190		50
3,800	2,105	6,890		1,320	1,646	75,514	232	104,712	28,966	1					1		51
1,620,943	2,023,780	5,909,664	27,784	22,960	1,188,857	122,435,363	4,714,359	150,673,458	23,523,736	24,477	9,328	5,524	3,523		6,102	1,718	52
12,410	7,100	40,880		2,004	2,004	10,222	2,183	98,930	86,525	21					21		53
222,363	346,041	593,569	35,964	69,821	19,839	833,043	24,862	2,507,449	1,649,544	513			3	2	508	2	54
217,192	346,041	580,423	15,145	68,981	19,709	831,507	24,105	2,443,684	1,588,072	508			3	2	503		55
			20,819			250		31,800	31,550								56
5,171		13,146		840	130	1,286	757	31,965	29,922	5					5		57
403,295	546,179	1,728,638	102,889	140,830	84,105	2,098,231	84,638	7,704,823	5,521,909	2,136			385	11	1,740	1	58
																	59
141,432	326,596	699,998	3,265	43,410	30,637	1,206,106	21,505	3,631,898	2,404,287	684			7		677		60
238,553	201,680	981,033	11,111	92,905	51,490	862,997	61,688	3,785,682	2,860,997	1,421			378	11	1,032	1	61
23,310	16,903	47,607	88,513	4,425	1,978	29,128	1,490	287,243	256,625	31					31		61

* No figures given for reasons stated under "Explanation of terms."

* Same number reported throughout the year.

* Same number reported for one or more other months.

TABLE 26.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY AND CITY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.	
								Maximum month.	Minimum month.					

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

1	Rubber tires, tubes, and rubber goods, not elsewhere specified.	8	67	-----	9	25	7	26	Oc	71	Ja *	8	65	36	29	-----	Dollars.
2	Saddlery and harness.	36	153	41	11	6	3	92	Se	115	Fe	67	111	107	3	1	418,153
3	Shirts.	4	89	2	4	11	3	69	No	111	Ja	52	104	6	85	3	129,431
4	Signs, other than electric.	3	10	1	2	-----	-----	7	Je *	10	Ja	3	6	6	-----	-----	12,402
5	Smelting and refining, zinc.	11	2,410	-----	47	66	25	2,272	Ja	2,956	Jy	1,972	2,446	2,445	1	-----	12,045,470
6	Tobacco, cigars.	18	111	21	2	1	-----	87	De	104	Ja	72	106	36	70	-----	72,733
7	Wirework.	3	7	-----	-----	-----	-----	4	Jy	6	Ja *	2	3	3	-----	-----	7,388
8	All other industries *	101	5,418	63	192	433	169	4,561	-----	-----	-----	-----	-----	-----	-----	-----	27,001,108

*All other industries embrace—	Boxes, set-up paper boxes.	1	Charcoal, not including production in the lumber and wood distillation industries.	3	Cordials and flavoring sirups.	1
Agricultural implements.	Boxes, wooden packing, except cigar boxes.	2	Chemicals.	2	Druggists' preparations.	4
Artificial limbs.	Buttons.	1	Clothing, men's.	2	Electroplating.	1
Automobiles.	Canning and preserving, fruits.	1	Coffins, burial cases, and undertakers' goods.	1	Engines, steam, gas, and water.	1
Bags, other than paper, not including bags made in textile mills.	Carpets, rag.	2	Coke, not including gas-house coke.	1	Engraving, steel and copper plate, including plate printing.	1
Baking powders.	Carriage and wagon materials.	1	Cooperage, hogsheads and barrels.	1	Gas and electric fixtures.	1
Bone and carbon black.	Cars, steam-railroad, not including operations of railroad companies.	1	Cordage and twine.	1	Gas, illuminating and heating.	2
Bookbinding and blank-book making.	Cement.	3			Gas machines.	1
Boots and shoes.					Glass, cutting, staining, and ornamenting.	1

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

1	OKLAHOMA CITY—All industries.	227	5,806	159	292	707	273	4,375	De	4,662	Fe	3,983	4,670	3,804	862	3	1	29,371,247
2	Automobile bodies and parts.	7	66	6	3	4	2	51	Se	58	Ja	39	46	44	2	-----	-----	55,478
3	Automobile repairing.	3	48	1	4	3	2	38	Au	41	Mh	34	38	38	-----	-----	-----	43,190
4	Bread and other bakery products.	16	496	18	9	43	26	400	De	472	Jy	345	470	271	199	-----	-----	1,006,054
5	Brooms, from broom corn.	4	85	7	4	7	2	65	Se	73	Mh	47	68	63	5	-----	-----	110,749
6	Confectionery and ice cream.	9	166	5	12	18	2	129	Se	189	Ja	74	153	77	76	-----	-----	917,242
7	Copper, tin, and sheet-iron work.	7	55	10	5	1	1	38	Ap *	42	No *	34	35	35	-----	-----	-----	82,444
8	Flour-mill and gristmill products.	6	228	1	24	24	9	170	No	197	My	146	187	187	-----	-----	-----	3,839,812
9	Food preparations, not elsewhere specified.	5	29	3	2	3	3	18	Se	24	No	10	22	12	10	-----	-----	44,200
10	Foundry and machine-shop products.	11	132	6	17	4	4	101	Se	132	Fe	76	121	121	-----	-----	-----	371,183
11	Ice, manufactured.	4	76	-----	6	12	3	55	Au	71	Ja *	44	64	64	-----	-----	-----	589,295
12	Lumber, planing-mill products, not including planing mills connected with sawmills.	7	210	2	22	16	8	162	Se	188	Ja	116	187	187	-----	-----	-----	740,430
13	Mattresses and spring beds.	4	70	-----	10	3	2	55	De	67	Ja	45	67	59	8	-----	-----	218,942
14	Mineral and carbonated waters.	5	25	4	2	3	-----	16	Jy *	24	Ja	10	9	9	-----	-----	-----	122,082
15	Patent medicines and compounds.	9	68	10	3	6	4	45	De	63	Ja *	41	63	7	56	-----	-----	117,195
16	Printing and publishing, book and job.	34	401	30	34	48	25	264	Ap *	271	Ja	255	264	194	70	-----	-----	607,979
17	Printing and publishing, newspapers and periodicals.	18	551	9	26	172	54	290	Oc *	323	Mh	259	311	272	38	1	-----	1,286,071
18	All other industries *	78	3,100	47	109	340	126	2,478	-----	-----	-----	-----	2,565	2,164	398	2	1	19,218,901

* All other industries embrace—	Bookbinding and blank-book making.	1	Chemicals.	2	Electroplating.	1
Agricultural implements.	Boxes, set-up paper boxes.	1	Cleansing preparations.	1	Engraving, steel and copper plate, including plate printing.	1
Artificial limbs.	Boxes, wooden packing, except cigar boxes.	1	Clothing, men's.	2	Furniture, store and office fixtures.	2
Artificial stone products.	Buttons.	2	Coffee, roasting and grinding.	3	Gas, illuminating and heating.	1
Automobiles.	Cars and general shop construction and repairs by electric-railroad companies.	1	Coffins, burial cases, and undertakers' goods.	1	Gas machines.	1
Awnings, tents, and sails.			Cooperage, hogsheads and barrels.	1	Hand stamps.	1
Bags, other than paper, not including bags made in textile mills.			Cordials and flavoring sirups.	1	Hardware, builders'.	1
Baking powders.			Druggists' preparations.	2		

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

* Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
9,915	18,205	26,543	-----	2,503	5,182	100,838	1,427	207,726	105,461	184	125	-----	26	-----	13	-----
34,142	9,979	133,685	-----	15,478	7,218	647,182	2,747	1,042,107	392,178	50	-----	-----	2	-----	48	-----
12,757	38,757	39,905	-----	3,140	8,626	384,556	434	572,757	187,767	19	-----	-----	-----	-----	19	-----
2,765	-----	13,822	-----	1,507	2,440	5,934	200	31,376	25,242	3	-----	-----	2	-----	1	-----
167,582	133,530	3,174,486	-----	-----	242,191	12,743,825	1,806,153	19,517,566	4,967,588	6,952	3,945	5	1,315	-----	1,687	2,545
2,700	2,000	63,482	-----	2,488	24,034	143,782	1,690	266,063	120,711	2	-----	-----	-----	-----	2	-----
-----	-----	3,839	-----	225	-----	9,004	81	21,970	12,885	1	-----	-----	-----	-----	1	-----
502,358	795,843	5,353,183	4,138	26,896	951,129	68,501,716	1,300,868	79,128,557	9,316,973	20,245	7,998	-----	4,575	-----	7,672	9,029

Grease and tallow, not including lubricating greases.....	1	Mirrors, framed and unframed, not elsewhere specified.....	1	Poultry, killing and dressing, not done in slaughtering and meat-packing establishments.....	3	Structural ironwork, not made in steel works or rolling mills.....	2
Hardware, builders'.....	2	Models and patterns, not including paper patterns.....	2	Pumps, steam and other power.....	2	Sulphuric, nitric, and mixed acids.....	1
Hardware, saddlery.....	2	Musical instruments and materials, not elsewhere specified.....	1	Roofing materials.....	2	Vinegar.....	1
House-furnishing goods, feather pillows.....	1	Optical goods.....	2	Show cases.....	1	Wall plaster and composition flooring.....	4
Jewelry.....	1	Paints.....	2	Slaughtering and meat packing.....	5	Washing machines and clothes wringers.....	1
Lime.....	1	Peanuts, grading, roasting, cleaning, and shelling.....	2	Smelting and refining, lead.....	1	Window and door screens and weather strips.....	1
Looking-glass and picture frames.....	1	Photographic apparatus.....	1	Stoves and ranges.....	1	Wood preserving.....	1
Minerals and earths, ground or otherwise treated.....	2			Stoves, gas and oil.....	2	Wood, turned and carved.....	1

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

920,316	1,372,101	4,895,192	93,941	162,390	1,119,800	58,023,514	620,660	66,970,788	11,326,614	12,453	6,835	100	144	-----	5,374	3,106	1
3,948	5,308	60,065	-----	6,460	2,242	57,779	1,824	157,901	98,298	29	-----	-----	-----	-----	29	-----	2
7,540	5,460	49,643	-----	4,725	824	39,729	1,222	123,429	87,478	25	-----	-----	-----	-----	25	-----	3
16,910	107,320	333,666	820	8,150	46,774	1,608,007	30,475	2,845,186	1,266,704	332	30	-----	-----	-----	302	-----	4
10,690	16,277	66,937	-----	2,463	2,131	183,304	1,103	365,526	181,119	30	-----	-----	-----	-----	30	-----	5
45,479	30,078	117,457	-----	4,535	19,642	647,503	41,987	1,154,844	465,354	916	765	-----	-----	-----	151	70	6
8,842	2,224	58,560	-----	2,485	1,171	87,492	453	184,182	96,237	9	-----	-----	-----	-----	9	-----	7
73,013	48,969	162,131	-----	696	115,418	7,812,488	54,565	8,752,649	885,596	1,350	950	-----	-----	-----	400	168	8
3,150	7,700	10,869	-----	2,216	188	82,149	1,363	118,658	35,146	16	-----	-----	-----	-----	16	-----	9
41,776	7,637	125,414	-----	6,632	4,011	177,488	10,488	440,637	252,301	265	-----	-----	35	-----	230	-----	10
15,200	8,770	60,740	-----	-----	8,159	39,403	75,703	264,342	149,236	1,545	1,360	100	-----	-----	85	125	11
60,214	32,351	185,461	-----	3,595	39,484	388,828	6,541	809,724	414,355	432	180	-----	-----	-----	252	290	12
18,004	10,538	53,716	-----	4,770	10,616	181,607	2,416	370,776	186,753	104	-----	-----	40	-----	64	-----	13
5,068	5,400	21,759	-----	856	7,865	121,345	2,530	216,185	92,310	36	-----	-----	-----	-----	36	-----	14
6,207	32,555	22,110	-----	2,369	5,151	90,273	559	101,288	100,456	11	-----	-----	-----	-----	11	-----	15
138,380	291,416	329,891	27,996	32,727	10,191	495,078	12,189	1,409,474	902,207	267	-----	-----	-----	-----	287	-----	16
113,461	193,816	367,935	61,535	36,810	14,291	745,023	10,629	2,362,773	1,607,121	466	-----	-----	-----	-----	466	-----	17
352,434	566,282	2,868,838	3,590	42,901	831,642	45,265,658	366,613	50,198,214	4,565,943	6,620	3,550	-----	69	-----	3,001	2,453	18

House-furnishing goods, feather pillows.....	1	Musical instruments and materials, not elsewhere specified.....	1	Petroleum, refining.....	2	Slaughtering and meat packing.....	1
Jewelry.....	1	Oil and cake, cottonseed.....	1	Photo-engraving.....	2	Stoves, gas and oil.....	1
Marble and stone work.....	3	Oil, mineral.....	2	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	6	Structural iron work, not made in steel works or rolling mills.....	1
Mirrors, framed and unframed, not elsewhere specified.....	1	Optical goods.....	2	Saddlery and harness.....	1	Vinegar.....	1
Models and patterns, not including paper patterns.....	1	Paints.....	1	Shirts.....	1	Window and door screens and weather strips.....	1
		Paving materials.....	1	Show cases.....	1	Wire work.....	2
		Perfumery and cosmetics.....	2	Signs, other than electric.....	2		

* Same number reported for one or more other months.

MANUFACTURES—OKLAHOMA.

TABLE 26.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.			
					Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.		
								Maximum month.							Minimum month.

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

1	TULSA—All industries.....	135	2,454	99	181	338	87	1,749	Se 1,941	Fe 1,433	2,000	1,866	120	4	10	Dollars. 12,620,091
2	Artificial stone products.....	9	32	9	3	1	19	19	Se 22	Fe 16	23	23				42,695
3	Automobile bodies and parts.....	6	42	5	3	2	32	32	Mh 33	Ja 28	33	29	4			67,687
4	Automobile repairing.....	9	95	11	5	22	77	77	Se 89	Ja 70	78	78				56,179
5	Bread and other bakery products.....	8	110	5	8	22	6	69	De 88	Fe 54	88	79	9			435,369
6	Confectionery and ice cream.....	8	77	9	7	6	55	55	Je 66	Ja 38	62	36	26			397,097
7	Copper, tin, and sheet-iron work.....	7	52	12	3	1	34	34	Jy 40	Fe 26	39	37	2			124,061
8	Foundry and machine-shop products.....	18	763	3	59	58	13	630	No 761	Fe 531	764	764				8,020,970
9	Ice, manufactured.....	3	152		11	6	1	134	Au 214	Ja 73	146	145	1			712,828
10	Lumber, planing-mill products, not including planing mills connected with sawmills.....	8	221	3	14	26	3	175	Au 233	Ja 125	199	199				434,306
11	Marble and stone work.....	4	26	4	2		20	20	Se 30	Fe 14	22	22				44,494
12	Mineral and carbonated waters.....	5	28	4	3	4	17	17	Je 25	Ja 10	14	14				90,167
13	Printing and publishing, book and job.....	16	123	12	13	7	3	88	De 102	Ja 83	95	78	17			329,841
14	Printing and publishing, newspapers and periodicals.....	7	424	5	22	155	44	198	My 211	Se 191	193	158	35			743,726
15	All other industries*.....	27	309	17	28	50	13	201			244	204	26	4	10	1,120,671

*All other industries embrace—
Awnings, tents, and sails..... 3
Brooms, from broom corn..... 1

Cars and general shop construction and repairs by electric-railroad companies..... 2

Cleansing preparations..... 1
Coffee, roasting and grinding..... 1
Engines, steam, gas, and water..... 1

Flour-mill and gristmill products.... 1
Furniture, store and office fixtures... 2
Glass, cutting, staining, and ornamenting..... 1

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

1	ARDMORE.....	35	478	38	51	67	15	305	Oc 380	Fe 230	354	326	27	1		5,017,216
2	BARTLESVILLE.....	32	327	32	24	17	8	246	Se 274	Fe 199	270	259	11			1,087,287
3	CHICKASHA.....	24	625	18	34	15	10	548	Oc 627	My 478	589	574	12	3		1,960,427
4	ENID.....	51	654	33	53	58	32	478	Se 576	Ja 388	510	445	65			5,197,530
5	GUTHRIE.....	36	341	38	19	20	20	244	Au 278	My 197	254	195	53	1		806,008
6	MCALISTER.....	20	207	13	21	16	8	149	Au 197	Mh 91	178	167	10	1		976,232
7	MUSKOGEE.....	82	1,580	72	62	142	66	1,218	De 1,353	Ja 1,124	1,355	1,260	94	1		5,301,814
8	OKMULGEE.....	29	577	24	30	48	20	455	Jy 600	Ja 378	504	478	26			8,464,128
9	SAPULPA.....	29	644	30	28	18	16	552	My 618	Ja 501	597	564	32	1		1,442,900
10	SHAWNEE.....	45	1,287	39	57	57	20	1,114	No 1,296	My 933	1,285	1,175	105	5		2,121,484

¹ Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

² Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent. ²
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.							
545,704	471,876	2,316,844	59,885	90,184	419,495	6,372,475	284,590	14,050,073	7,393,008	5,207	1,205	894	3,108	151	1	
5,400	300	19,249	1,600	329	40,679	1,043	96,304	54,582	29	29	6	23	2			
8,400	1,745	46,867	4,920	2,140	70,449	1,057	166,724	95,213	32	32		32	3			
26,600	3,000	73,263	6,780	746	76,386	3,217	224,402	144,799	72	72	3	69	4			
9,751	39,155	79,361	11,519	4,577	426,011	11,013	700,805	263,781	187	187		187	5			
14,973	7,849	53,454	8,039	4,344	304,481	4,199	445,510	136,830	118	118		118	6			
6,207	2,822	52,113	2,385	1,533	73,291	510	196,892	123,091	2	2		2	7			
241,719	105,511	904,933	8,418	312,629	2,795,582	130,547	6,609,577	3,743,448	2,185	120	422	1,643	8			
26,824	8,628	132,351		29,062	32,875	85,562	495,725	377,288	1,233	720	410	103	9			
42,628	52,679	216,205	1,775	17,991	430,581	14,177	844,744	399,986	400		25	376	10			
4,731		33,247	885	250	73,727	357	154,376	80,292	32			32	11			
6,240	4,800	19,147	2,050	7,399	65,052	1,542	108,078	41,484	70	15	3	52	12			
38,974	12,743	131,076	19,078	3,819	169,120	5,356	503,226	328,750	85			85	13			
46,225	145,030	340,174	10,980	7,568	15,668	482,822	7,742	1,377,209	886,645	181			181	14		
67,032	87,614	215,404	15,167	19,003	1,331,419	18,268	2,066,501	716,814	581	350	25	206	2	15		

Hand stamps.....	2	Mattresses and spring beds.....	1	Photo-engraving.....	1	Shirts.....	1
Iron and steel, welding.....	1	Oil and cake, cottonseed.....	1	Pumps, steam and other power.....	1	Stoves and ranges.....	1
Looking-glass and picture frames....	1	Patent medicines and compounds....	2	Saddlery and harness.....	1	Wirework.....	1

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

101,620	62,344	350,136	5,475	14,795	87,489	3,465,606	102,334	4,965,622	1,397,682	1,298	865	85	4	344	25	1
67,985	23,035	335,506	1,636	7,846	39,759	538,775	43,932	1,905,575	1,022,868	752	215	35		502		2
77,858	24,602	693,495	678	8,062	53,738	3,289,588	86,367	4,598,973	1,223,018	1,847	1,025	663		129	230	3
137,805	112,165	577,527	2,837	23,309	90,550	10,671,769	178,874	13,073,672	2,223,029	2,247	1,370	114		763		4
40,062	61,676	178,519	4,400	7,445	18,416	2,754,913	48,074	3,330,365	527,378	976	800	8		168	106	5
45,530	35,532	167,861		6,240	28,629	1,034,345	25,474	1,529,357	469,638	1,053	820	4		229		6
195,962	190,975	1,538,744	10,466	33,290	112,588	5,104,387	271,189	8,402,888	3,027,312	3,807	2,192	218		1,397		7
81,454	103,742	554,189		7,199	63,752	2,887,358	117,742	3,991,231	986,131	816	95	158		563	36	8
77,232	45,238	640,676	3,669	8,462	37,504	1,009,908	71,137	2,197,083	1,116,038	1,531	545	176		811		9
152,128	84,044	1,467,075	62	13,000	41,534	3,456,216	97,785	5,742,944	2,188,943	2,055	395	651		1,009		10

* Same number reported for one or more other months.

OREGON.

GENERAL STATISTICS.

General character of the state.—Oregon has a gross area of 96,699 square miles, of which 95,607 represent land surface. The inhabitants of the state in 1900 numbered 413,536; in 1910, 672,765; and in 1920, 783,389. In total population Oregon ranked thirty-fourth among the states in 1920. The number of inhabitants per square mile in 1910 was 7, the corresponding figure for 1920 being 8.2.

In 1920 there were four cities in the state—Astoria, Eugene, Portland, and Salem—having more than 10,000 inhabitants. The combined population of these cities in that year was 300,587, which formed 38.4 per cent of the total for Oregon. Of the total value of the state's manufactured products, 60.4 per cent were reported by these four cities.

Importance and growth of manufactures (Table 1).—The increases in wages, cost of materials, and value of products, from 1914 to 1919, as presented in Table 1, are in a great measure due to the changes in industrial conditions brought about by the World War. The increases in average number of wage earners and horsepower, however, are indicative of a decided growth in the manufacturing activities of the state. The addition of the Federal income tax since 1914 accounts for the large increase in "Rent and taxes."

Statistics for the state, by counties (Table 2).—Figures are not available for comparison of county totals for 1919 with those for prior censuses. Of the 36 counties in the state, Multnomah, containing the city of Portland, reported 58.6 per cent of the total value of products in the state and 49 per cent of the average number of wage earners.

Principal industries, ranked by value of products (Table 3).—The ranking of industries by value of products is not always conclusive as indicating their importance from a manufacturing standpoint. In many instances their ranking would change materially if based upon the average number of wage earners or value added by manufacture.

Persons engaged in manufacturing industries (Table 4).—The age classification of the average number of wage earners in this and other tables is an estimate obtained by the method described in the "Explanation of terms." The classification by sex, for 1919, was reported separately, but for 1914 and 1909 was obtained in the same manner as the distribution by age. Figures for individual industries will be found in Table 31.

Average number of wage earners for selected industries (Table 5).—The industries covered by this table are those which employed 200 or more wage earners in 1919, and for which statistics can be shown without the possibility of disclosing the operations of individual establishments.

Average number of wage earners, by sex and age, and value of products for cities of 10,000 inhabitants or more (Table 6).—During the census period 1914-1919 all cities show increases in value of products, due largely to the increased value of commodities at the latter period. Portland is by far the most important city in the state and shows an increase during this five-year period of 15,540, or 137.9 per cent, in the average number of wage earners, and \$140,682,706, or 252.6 per cent, in value of products.

Wage earners, by months (Table 7).—The statistics for wage earners in this table are intended to show the steadiness of employment, or the reverse, in accordance with the industrial conditions existing during the several census years.

Wage earners, by months, for selected industries and for cities (Table 8).—In addition to the number of wage earners employed by months, this table gives similar data for males and females for all industries combined for the state and for cities of 10,000 inhabitants or more. The table also shows a number of industries in the state in 1919 employing a considerable proportion of female wage earners.

Prevailing hours of labor (Table 9).—Since 1914 there has been a marked shortening of the working-day in Oregon. In that year only 13.8 per cent of the wage earners were reported in the group "48 and under" as against 89.4 per cent in 1919. In 1914 the "60" and "Over 60" groups constituted 54.9 per cent of the total wage earners, as compared with 3.4 per cent in 1919.

Size of establishments, by average number of wage earners, for selected industries and for cities (Table 10).—The predominance of the number of small establishments, when based on the number of wage earners employed, is evidenced in this table by the fact that of the total number of establishments in the state, 95.5 per cent were in the several classes having fewer than 101 wage earners, while such establishments employed but 35.1 per cent of the total number of such employees. On the other hand, the establishments employing an average of more than 100 wage earners represented only 4.5 per cent of the total manufacturing establish-

ments in the state, but reported 64.9 per cent of the total number of wage earners.

Size of establishments, by value of products (Table 11).—At the censuses of 1909 and 1914 establishments with products valued at "\$100,000 to \$1,000,000" constituted one group, but at the census of 1919 this group was subdivided into "\$100,000 to \$500,000" and "\$500,000 to \$1,000,000." Separate figures for the number of establishments and value of products have been compiled, however, from the returns for 1914. The table, therefore, gives combined figures for these two groups for 1909, and in the case of average number of wage earners and value added by manufacture for 1914.

Size of establishments, by value of products, for selected industries (Table 12).—In the preparation of this table it was necessary in some instances to combine the establishments of one group of the industry with those of some other group of that industry to avoid the possibility of disclosing the operations of individual establishments.

Size of establishments, by value of products, for cities of 10,000 inhabitants or more (Table 13).—This table strikingly illustrates the fact that the number of establishments of itself is no real index of the extent of manufacturing activities.

Character of ownership (Table 14).—The predominance of corporate ownership is clearly brought out in this table. Although corporations owned but 34.5 per cent of the number of establishments in the state in 1919, they reported 86.9 per cent of the average number of wage earners and 87.9 per cent of the total value of products. During the five-year period 1914

to 1919 the average number of wage earners in corporations increased 26,813, or 111.5 per cent, and the value of products \$230,980,628, or 252.8 per cent.

Manufactures, by population groups, in cities of 10,000 inhabitants or more (Table 15).—This table shows that the combined number of establishments in these four cities in 1919 represented 39.2 per cent of the total in the state. They reported in that year 50.9 per cent of the average number of wage earners and 60.4 per cent of the value of products.

Principal industries in Portland (the only city in the state having 50,000 inhabitants or more), with per cent of total for the state (Table 16).—This table includes all industries in the city of Portland, having products of \$1,000,000 and over, for which figures can be shown without disclosing individual operations.

Number and horsepower of types of prime movers (Table 17).—The total horsepower reported in 1919, as compared with that for 1914, shows an increase of 90,124 horsepower, or 42.1 per cent. Of this increase, 36,064 horsepower, or 40 per cent, was owned power, and 54,060, or 60 per cent, rented power. During this five-year period, owned power increased 20.6 per cent and rented power 138.4 per cent.

Fuel consumed (Table 18).—This table shows the principal kinds of fuel used by the manufacturing plants in the state in 1919 and 1914, and gives separately for 1919 the amounts consumed by a number of important industries which use considerable quantities of fuel. There was an increase in the quantities of each of the several kinds of fuel used in 1919 as compared with 1914.

TABLE 1.—COMPARATIVE SUMMARY: 1919, 1914, 1909, 1904, AND 1899.

	MANUFACTURING INDUSTRIES.					PER CENT OF INCREASE. ¹			
	1919	1914	1909	1904	1899	1914-1919	1909-1914	1904-1909	1899-1904
Number of establishments.....	2,707	2,320	2,246	1,602	1,406	16.7	3.3	40.2	13.9
Persons engaged.....	68,005	35,449	34,722	22,018	(²)	91.8	2.1	57.7	.....
Proprietors and firm members.....	2,540	2,189	2,499	1,726	(²)	16.0	-12.4	44.8	.....
Salaries employees.....	6,906	4,431	3,473	1,769	1,143	55.9	27.6	96.3	54.8
Wage earners (average number).....	58,559	28,829	28,750	18,523	14,450	103.1	0.3	55.2	28.1
Primary horsepower.....	304,346	214,222	175,019	81,348	60,005	42.1	22.4	115.1	35.6
Capital.....	\$237,254,736	\$139,500,379	\$89,081,873	\$44,023,548	\$23,359,089	70.1	56.6	102.4	55.2
Salaries and wages.....	95,092,955	20,614,328	23,949,428	13,576,026	8,044,171	257.3	11.1	76.4	68.8
Salaries.....	13,999,171	5,682,751	4,047,494	2,132,514	1,222,160	146.3	40.4	89.8	74.5
Wages.....	81,093,784	20,931,577	19,901,934	11,443,512	6,822,011	287.4	5.2	73.9	67.7
Paid for contract work.....	1,936,402	725,562	576,699	459,571	(²)	166.9	25.8	25.5	.....
Rent and taxes.....	13,703,803	2,135,047	1,418,564	688,506	(²)	541.9	50.5	.....	.....
Cost of materials.....	206,206,041	63,257,821	50,552,470	30,596,763	20,788,833	226.0	25.1	65.2	47.2
Value of products.....	366,782,627	109,761,951	93,004,845	55,525,123	36,592,714	234.2	18.0	87.5	51.7
Value added by manufacture.....	180,576,536	40,504,130	42,452,375	24,928,360	15,803,881	245.3	9.5	70.3	57.7

¹ A minus sign (—) denotes decrease.

² Figures not available.

³ Exclusive of internal revenue.

⁴ Value of products less cost of materials.

MANUFACTURES—OREGON.

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TABLE 2.—STATISTICS FOR THE STATE, BY COUNTIES: 1919.

COUNTY.	Number of establishments.	WAGE EARNERS.		Rent and taxes.	Cost of materials.	Value of products.	Value added by manufacture.	Primary horsepower.
		Average number.	Wages.					
The state.....	2,707	58,559	\$81,093,784	\$13,703,868	\$206,206,041	\$366,782,627	\$160,576,586	304,346
Baker.....	63	1,017	1,169,070	72,153	2,453,997	4,454,298	2,000,301	4,809
Benton.....	51	660	749,472	31,646	1,494,804	2,782,202	1,287,398	3,735
Clackamas.....	72	2,206	2,786,664	293,517	4,690,157	10,320,872	5,630,715	48,574
Clatsop.....	111	3,742	5,962,231	357,614	13,873,082	23,796,180	9,923,098	25,613
Columbia.....	73	2,154	2,813,900	272,713	3,402,212	7,525,743	4,123,531	17,521
Coos.....	95	2,661	4,211,776	221,592	4,760,147	11,476,647	6,716,500	26,211
Crook.....	12	38	40,219	1,977	62,408	145,738	83,330	413
Curry.....	18	352	542,454	14,845	575,658	1,227,582	651,924	1,704
Deschutes.....	29	1,359	2,141,375	501,795	1,072,252	5,715,195	4,642,943	4,934
Douglas.....	87	776	1,028,773	25,658	1,466,652	3,087,854	1,621,202	6,021
Gilliam.....	5	8	12,293	1,044	22,715	48,163	25,448	17
Grant.....	22	323	448,445	13,944	265,020	1,052,401	787,381	2,605
Harney.....	14	12	14,851	1,566	57,072	109,971	52,899	279
Hood River.....	23	447	565,175	28,793	877,282	1,687,103	809,821	5,894
Jackson.....	61	345	401,131	26,261	887,404	1,656,661	769,257	1,734
Jefferson.....	7	4	2,991	1,146	40,699	54,249	13,550	200
Josephine.....	24	163	161,918	8,582	244,554	552,698	308,144	806
Klamath.....	69	1,645	2,180,216	245,088	3,483,525	8,287,311	4,803,756	6,669
Lake.....	6	5	4,072	738	88,219	103,844	15,025	120
Lane.....	138	2,414	2,792,430	103,012	3,111,592	8,029,039	4,917,447	16,444
Lincoln.....	25	77	80,587	6,357	350,585	526,713	176,128	708
Linn.....	85	788	823,470	49,286	2,469,792	4,109,466	1,639,674	5,647
Malheur.....	14	34	45,260	4,190	67,984	165,058	97,074	54
Marion.....	170	2,559	3,025,626	346,817	9,093,720	14,735,464	5,641,744	10,915
Morrow.....	14	15	21,528	2,472	75,471	138,546	63,075	163
Multnomah.....	879	28,713	41,313,793	10,309,294	125,716,200	214,932,519	80,216,319	80,593
Polk.....	50	575	796,886	44,002	1,654,055	3,030,645	1,376,590	2,418
Sherman.....	9	22	24,017	1,405	44,047	96,347	52,300	143
Tillamook.....	81	883	1,171,751	80,946	2,704,490	4,825,452	2,030,962	6,911
Umatilla.....	81	466	592,028	86,405	4,841,131	6,318,556	1,477,425	2,870
Union.....	59	1,314	1,778,863	67,955	2,998,103	5,625,771	2,627,668	4,452
Wallowa.....	44	474	648,929	71,925	808,868	1,921,515	1,112,647	3,465
Wasco.....	41	613	684,821	144,616	5,076,048	6,739,460	1,663,412	2,065
Washington.....	68	1,022	1,311,473	199,802	3,697,077	6,246,244	2,549,167	6,196
Wheeler.....	13	23	25,419	856	82,537	54,473	54,473	378
Yamhill.....	94	650	719,277	56,856	3,560,955	5,174,583	1,613,628	3,566

TABLE 3.—PRINCIPAL INDUSTRIES, RANKED BY VALUE OF PRODUCTS: 1919.

INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		INDUSTRY.	Number of establishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.			Average number.	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.	Amount (expressed in thousands).	Per cent distribution.
All industries.....	2,707	58,559	100.0	\$366,783	100.0	\$160,577	100.0	Food preparations, not elsewhere specified.....	13	169	0.3	\$4,218	1.1	\$574	0.3
Lumber and timber products.....	625	22,884	39.1	85,348	23.3	53,213	33.1	Condensed milk.....	8	180	0.3	4,180	1.1	927	0.6
Flour-mill and gristmill products.....	116	822	1.4	42,550	11.6	4,748	3.0	Boxes, wooden packing, except cigar boxes.....	20	610	1.0	4,112	1.1	2,001	1.2
Foundry and machine-shop products.....	121	3,265	5.6	21,136	5.8	12,413	7.7	Coffee, roasting and grinding.....	8	106	0.2	3,590	1.0	612	0.4
Slaughtering and meat packing.....	21	772	1.3	15,868	4.3	2,119	1.3	Confectionery and ice cream.....	37	450	0.8	3,466	0.9	1,246	0.8
Shipbuilding, wooden, including boat building.....	30	2,990	5.1	13,778	3.8	6,924	4.3	Printing and publishing, book and job.....	122	567	1.0	3,396	0.9	2,138	1.3
Canning and preserving, fruits and vegetables.....	59	1,720	2.9	12,266	3.3	4,050	2.5	Woolen goods.....	5	808	1.4	3,357	0.9	1,410	0.9
Bread and other bakery products.....	146	1,076	1.8	9,031	2.5	3,322	2.1	Furniture.....	23	895	1.5	3,183	0.9	1,962	1.2
Butter.....	76	349	0.6	8,728	2.4	1,288	0.8	Gas, illuminating and heating.....	11	334	0.6	2,927	0.8	2,109	1.3
Canning and preserving, fish.....	36	476	0.8	6,531	1.8	1,867	1.2	Cheese.....	52	66	0.1	2,854	0.8	310	0.2
Cars and general shop construction and repairs by steam-railroad companies.....	21	2,751	4.7	6,473	1.8	4,019	2.5	Automobile repairing.....	229	727	1.2	2,605	0.7	1,814	1.1
Printing and publishing, newspapers and periodicals.....	224	929	1.6	6,408	1.7	4,764	3.0	Clothing, men's.....	5	481	0.8	2,034	0.6	705	0.4
Structural ironwork, not made in steel works or rolling mills.....	6	1,111	1.9	6,392	1.7	2,544	1.6	Saddlery and harness.....	33	182	0.3	1,931	0.5	993	0.6
Lumber, planing-mill products, not including planing mills connected with sawmills.....	61	1,084	1.9	5,804	1.6	2,526	1.6	Pickles, preserves, and sauces.....	8	148	0.3	1,794	0.5	308	0.2
								Copper, tin, and sheet-iron work.....	63	204	0.3	1,339	0.4	741	0.5
								Mineral and soda waters.....	33	109	0.2	1,083	0.3	422	0.3
								Patent medicines and compounds.....	16	99	0.2	1,064	0.3	484	0.3
								All other industries ¹	479	12,195	20.8	79,337	21.6	38,023	23.7

¹ Among the industries for which statistics can not be shown separately without the possibility of disclosing the operations of individual establishments are seven having products in excess of some for which figures are shown in the table. These industries are as follows: "Bags, other than paper, not including bags made in textile mills"; "cars, steam-railroad, not including operations of railroad companies"; "engines, steam, gas, and water"; "paper and wood pulp"; "shipbuilding, steel"; "tinware, not elsewhere specified"; and "wool pulling."

TABLE 4.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES: 1919, 1914, AND 1909.

CLASS.	Cen- sus year.	Total.	Male.	Fe- male.	PER CENT OF TOTAL.	
					Male.	Fe- male.
All classes.....	1919	68,005	61,519	6,486	90.5	9.5
	1914	35,449	32,625	2,824	92.0	8.0
	1909	34,722	31,849	2,873	91.7	8.3
Proprietors and officials.....	1919	4,951	4,810	141	97.2	2.8
	1914	3,630	3,545	85	97.7	2.3
	1909	3,719	3,667	52	98.6	1.4
Proprietors and firm members...	1919	2,540	2,463	77	97.0	3.0
	1914	2,189	2,117	72	96.7	3.3
	1909	2,499	2,453	46	98.2	1.8
Salaried officers of corporations...	1919	917	878	39	95.7	4.3
	1914	537	527	10	98.1	1.9
	1909	344	340	4	98.8	1.2
Superintendents and managers...	1919	1,494	1,469	25	98.3	1.7
	1914	904	901	3	99.7	0.3
	1909	876	874	2	99.8	0.2
Clerks and other subordinate salaried employees.	1919	4,495	2,963	1,532	65.9	34.1
	1914	2,990	2,315	675	77.4	22.6
	1909	2,253	1,702	551	75.5	24.5
Wage earners (average number).....	1919	58,559	53,746	4,813	91.8	8.2
	1914	28,829	26,765	2,064	92.8	7.2
	1909	28,750	26,480	2,270	92.1	7.9
16 years of age and over.....	1919	58,409	53,646	4,763	91.8	8.2
	1914	28,742	26,728	2,014	93.0	7.0
	1909	28,652	26,406	2,246	92.2	7.8
Under 16 years of age.....	1919	150	100	50	66.7	33.3
	1914	87	37	50	42.5	57.5
	1909	98	74	24	75.5	24.5

TABLE 5.—AVERAGE NUMBER OF WAGE EARNERS FOR SELECTED INDUSTRIES, WITH PER CENT, BY SEX AND AGE:
1919 AND 1914.

INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.			INDUSTRY.	Cen- sus year.	Wage earners (aver- age num- ber).	PER CENT OF TOTAL.		
			16 years of age and over.		Un- der 16 years of age.				16 years of age and over.		Un- der 16 years of age.
			Male.	Fe- male.					Male.	Fe- male.	
All industries	1919	53,550	91.6	8.1	0.3	Foundry and machine-shop products.....	1919	3,265	99.4	0.2	0.4
	1914	23,829	92.7	7.0	0.3		1914	660	100.0	.....	.....
	1909	28,750	91.8	7.8	0.4	Furniture.....	1919	895	94.5	5.5	.....
Automobile repairing	1919	727	97.8	1.7	0.6		1914	673	99.1	0.9	.....
	1914	185	99.5	.....	0.5	Gas, illuminating and heating.....	1919	334	100.0	.....	.....
Boxes, wooden packing, except cigar boxes..	1919	610	85.6	14.1	0.3		1914	385	100.0	.....	.....
	1914	327	94.8	4.3	0.9	Lumber and timber products.....	1919	22,884	98.2	1.7	0.1
Bread and other bakery products.....	1919	1,076	63.7	34.9	1.4		1914	12,829	99.6	0.3	(?)
	1914	700	74.8	24.6	0.6	Lumber, planing-mill products, not includ- ing planing mills connected with sawmills.	1919	1,084	95.2	4.6	0.2
Butter	1919	349	83.7	16.0	0.3		1914	732	100.0	.....	.....
	1914	260	92.7	7.3	.....	Printing and publishing, book and job.....	1919	567	76.7	21.9	1.4
Canning and preserving, fish.....	1919	476	88.2	11.8	.....		1914	515	83.7	15.1	1.2
	1914	301	90.4	9.6	.....	Printing and publishing, newspapers and periodicals.	1919	929	87.3	10.7	2.0
Canning and preserving, fruits and vege- tables.....	1919	1,720	39.2	58.8	2.0		1914	945	88.0	10.7	1.3
	1914	417	33.6	63.5	2.9	Shipbuilding, wooden, including boat build- ing.	1919	2,990	99.6	0.4	.....
Cars and general shop construction and re- pairs by electric-railroad companies.	1919	230	99.1	0.9	.....		1914	163	100.0	.....	.....
	1914	225	98.7	1.3	.....	Slaughtering and meat packing.....	1919	772	87.4	12.3	0.3
Cars and general shop construction and re- pairs by steam-railroad companies.	1919	2,751	98.4	1.6	.....		1914	442	96.4	3.6	.....
	1914	1,601	99.9	.....	0.1	Structural iron work, not made in steel works or rolling mills.	1919	1,111	100.0	.....	.....
Clothing, men's ¹	1910	481	14.8	85.0	0.2		1914	161	100.0	.....	.....
Confectionery and ice cream.....	1919	450	41.6	58.4	.....	Woolen goods.....	1919	898	58.5	45.8	0.7
	1914	402	33.1	60.4	6.5		1914	648	61.4	37.7	0.9
Copper, tin, and sheet-iron work.....	1919	204	100.0	.....	.....	All other industries.....	1919	13,024	90.4	9.5	0.2
	1914	212	100.0	.....	.....		1914	5,596	85.8	14.0	0.2
Flour-mill and gristmill products.....	1919	822	97.8	2.2	.....					
	1914	450	100.0	.....	.....				

¹ Not shown separately in 1914.

^a Less than one-tenth of 1 per cent.

TABLE 6.—AVERAGE NUMBER OF WAGE EARNERS, BY SEX AND AGE, AND VALUE OF PRODUCTS FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

CITY.	AVERAGE NUMBER OF WAGE EARNERS IN MANUFACTURING INDUSTRIES.												VALUE OF PRODUCTS.		
	Total.			16 years of age and over.						Under 16 years of age.					
				Male.			Female.								
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
Astoria.....	1,404	1,172	-----	1,274	1,125	-----	130	46	-----	-----	1	-----	\$13,398,627	\$4,587,301	-----
Engene.....	534	238	-----	358	157	-----	176	51	-----	-----	-----	-----	2,459,647	810,346	-----
Portland.....	26,813	11,273	12,214	24,143	9,875	10,596	2,633	1,353	1,600	37	45	18	196,380,146	55,697,440	\$46,860,767
Selem.....	1,080	732	597	762	409	452	310	310	144	8	13	1	9,435,070	2,845,844	2,208,031

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TABLE 7.—WAGE EARNERS, BY MONTHS: 1919, 1914, AND 1909.

MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.			MONTH.	NUMBER. ¹			PER CENT OF MAXIMUM.		
	1919	1914	1909	1919	1914	1909		1919	1914	1909	1919	1914	1909
January.....	55,393	26,154	23,554	88.6	82.8	75.4	July.....	61,965	31,005	30,175	99.2	98.4	97.4
February.....	54,251	26,715	24,833	86.8	84.6	80.2	August.....	62,488	30,505	30,269	100.0	96.6	97.7
March.....	57,708	28,527	26,859	92.4	90.3	86.7	September.....	60,261	29,243	30,978	96.4	92.6	100.0
April.....	59,180	30,806	29,179	94.7	97.5	94.2	October.....	60,641	28,421	30,402	97.0	90.0	98.1
May.....	61,804	31,586	30,302	98.9	100.0	97.8	November.....	58,396	26,531	29,423	93.5	84.0	95.0
June.....	61,122	31,540	30,806	97.8	99.8	99.4	December.....	49,499	24,815	28,410	79.2	78.5	91.7

¹ The figures represent the number employed on the 15th of each month or the nearest representative day. Maximum number indicated by **bold-faced figures**, minimum by *italic figures*.

TABLE 8.—WAGE EARNERS, BY MONTHS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

[The month of maximum employment for each industry is indicated by **bold-faced figures** and that of minimum employment by *italic figures*.]

INDUSTRY AND CITY.	Average number employed during year.	NUMBER EMPLOYED ON 15TH DAY OF THE MONTH OR NEAREST REPRESENTATIVE DAY.												Per cent minimum is of maximum.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
All industries.....	58,559	55,393	54,251	57,708	59,180	61,804	61,122	61,965	62,488	60,261	60,641	58,396	49,499	79.2
Males.....	53,746	51,515	50,678	54,267	55,675	58,089	56,128	55,956	56,287	54,718	53,027	51,776	44,776	77.1
Females.....	4,813	3,878	3,573	3,441	3,505	3,735	4,994	6,009	6,201	5,495	5,399	4,723	4,723	53.7
Automobile repairing.....	727	608	617	661	697	723	732	761	798	810	798	770	749	75.1
Boxes, wooden packing, except cigar boxes.....	610	573	437	485	571	563	670	814	828	644	639	576	522	52.9
Bread and other bakery products.....	1,076	1,065	1,045	1,029	1,041	1,028	1,076	1,113	1,102	1,086	1,099	1,128	1,101	91.3
Butter.....	349	292	311	324	358	382	414	398	394	373	338	320	324	68.6
Canning and preserving, fish.....	470	115	130	171	247	557	572	796	940	839	630	523	192	12.2
Canning and preserving, fruits and vegetables.....	1,720	775	862	866	309	497	1,847	2,875	3,004	3,476	3,008	2,423	1,598	7.2
Cars and general shop construction and repairs by electric-railroad companies.....	230	239	228	236	225	221	226	227	227	224	231	237	239	92.5
Cars and general shop construction and repairs by steam-railroad companies.....	2,751	2,678	2,680	2,721	2,648	2,608	2,551	2,639	2,726	2,785	2,855	2,976	3,145	81.1
Clothing, men's.....	481	489	435	596	404	486	429	506	501	464	516	543	603	65.7
Confectionery and ice cream.....	450	401	392	403	430	456	471	450	449	474	494	484	496	79.0
Copper, tin, and sheet-iron work.....	204	153	162	169	185	180	201	234	237	226	248	228	225	61.7
Flour-mill and gristmill products.....	822	855	826	824	785	760	690	652	830	848	895	940	959	98.0
Foundry and machine-shop products.....	3,265	4,856	4,550	4,154	3,555	3,162	3,199	3,234	2,966	2,707	2,441	2,234	2,122	43.7
Furniture.....	895	734	748	777	785	847	899	957	984	973	1,006	1,012	1,018	72.1
Gas, illuminating and heating.....	334	261	287	280	286	288	322	322	345	390	406	407	414	63.6
Lumber and timber products.....	22,884	15,787	16,585	18,735	21,720	24,357	24,957	26,074	27,697	26,830	26,314	25,008	20,544	57.0
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1,084	704	835	830	908	978	1,090	1,232	1,811	1,229	1,303	1,274	1,224	60.6
Printing and publishing, book and job.....	567	567	558	549	551	570	565	554	559	548	566	586	618	88.3
Printing and publishing, newspapers and periodicals.....	929	882	877	889	908	921	926	928	929	940	957	992	999	87.8
Shipbuilding, wooden, including boat building.....	2,990	7,830	6,563	4,862	3,377	3,060	2,631	2,238	1,560	1,471	674	726	988	8.6
Slaughtering and meat packing.....	772	927	881	904	739	732	715	698	726	718	712	744	768	75.3
Structural ironwork, not made in steel works or rolling mills.....	1,111	97	86	930	972	891	685	690	726	651	3,346	2,870	1,388	2.6
Woolen goods.....	808	731	722	701	756	786	805	834	848	909	880	863	855	77.1
All other industries.....	13,024	13,683	13,934	16,412	16,723	16,751	14,549	12,739	11,803	10,448	10,264	10,534	8,448	50.5
<i>Industries showing large proportion of females.</i>														
Bread and other bakery products.....	386	381	374	354	373	358	387	412	403	389	397	419	390	84.2
Canning and preserving, fruits and vegetables.....	1,039	373	93	50	57	162	1,282	2,003	2,111	2,419	1,813	1,324	781	2.1
Clothing, men's.....	409	425	373	354	340	417	355	421	415	399	449	470	510	65.5
Confectionery and ice cream.....	263	238	234	227	251	255	266	244	242	277	299	306	317	71.6
Printing and publishing, book and job.....	124	129	126	128	124	134	128	116	116	116	118	124	129	86.6
Printing and publishing, newspapers and periodicals.....	100	91	94	94	95	95	98	102	104	103	105	109	110	82.7
Woolen goods.....	376	340	331	327	348	370	374	393	396	426	413	396	398	76.8
Total for cities.....	29,831	33,007	31,867	33,789	32,333	32,549	30,917	29,898	28,725	26,690	28,173	26,950	23,065	68.3
Males.....	26,562	30,237	29,257	31,370	29,739	29,837	27,331	25,957	24,694	22,805	24,317	23,442	19,858	63.5
Females.....	3,269	2,770	2,610	2,419	2,594	2,712	3,586	3,941	4,031	3,894	3,856	3,508	3,207	62.5
ASTORIA.....	1,404	1,871	1,658	1,700	1,376	1,474	1,120	1,353	1,640	1,384	1,120	1,125	1,027	54.9
Males.....	1,274	1,769	1,559	1,591	1,253	1,336	981	1,197	1,443	1,233	989	1,015	922	52.1
Females.....	130	102	99	109	123	138	139	156	197	151	131	110	105	50.3
EUGENE.....	534	354	354	373	399	414	755	772	793	660	640	447	447	44.6
Males.....	358	288	293	306	326	338	393	409	426	395	381	372	369	67.6
Females.....	176	66	61	67	73	76	362	363	367	265	259	75	78	16.6
PORTLAND.....	26,813	29,938	29,150	30,991	29,838	29,932	27,840	26,514	24,835	23,130	25,050	23,974	20,564	66.4
Males.....	24,167	27,546	26,792	28,745	27,547	27,533	25,220	23,539	21,950	20,232	21,999	21,114	17,787	61.9
Females.....	2,646	2,392	2,358	2,246	2,291	2,399	2,620	2,975	2,885	2,898	3,051	2,856	2,777	73.6
SALEM.....	1,080	844	705	725	720	729	1,202	1,259	1,457	1,525	1,363	1,404	1,027	46.2
Males.....	763	634	613	628	613	630	737	812	875	945	948	941	780	64.7
Females.....	317	210	92	97	107	99	465	447	582	580	415	463	247	15.8

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TABLE 9.—AVERAGE NUMBER OF WAGE EARNERS, BY PREVAILING HOURS OF LABOR PER WEEK, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	Total.	IN ESTABLISHMENTS WHERE THE PREVAILING HOURS OF LABOR PER WEEK WERE—							
			44 and under.	Between 44 and 48.	48. ¹	Between 48 and 54.	54.	Between 54 and 60.	60.	Over 60.
All industries.....	1919	58,559	11,975	477	39,915	458	1,892	1,829	1,774	239
	1914	28,829	(²)	(²)	3,979	775	6,917	1,324	14,839	995
	1909	28,750	(²)	(²)	3,396	762	3,880	1,030	17,861	1,821
Automobile repairing.....	1919	727	(²) 52	(²) 6	376	17	223	20	31	2
	1914	185	(²)	(²)	54	1	117		11	2
Boxes, wooden packing, except cigar boxes.....	1919	610	(²)	(²)	509	28	57		16	
	1914	327	(²)	(²)	2		88	91	146	
Bread and other bakery products.....	1919	1,076	(²) 79	(²)	914	8	43	11	21	
	1914	700	(²)	(²)	61	191	314	10	101	17
Butter.....	1919	349	(²) 1	(²)	137	22	73	23	65	28
	1914	260	(²)	(²)	17	6	54	8	83	92
Canning and preserving, fish.....	1919	476	(²) 11	(²)	221		76	30	129	9
	1914	301	(²)	(²)	14		117		107	63
Canning and preserving, fruits and vegetables.....	1919	1,720	(²) 3	(²)	724		382		606	5
	1914	417	(²)	(²)	19	19	318	23	34	4
Cars and general shop construction and repairs by electric-railroad companies.....	1919	230	(²)	(²) 55	173			2		
	1914	225	(²)	(²)	1		164		60	
Cars and general shop construction and repairs by steam-railroad companies.....	1919	2,751	(²)	(²)	1,569			1,153	29	
	1914	1,601	(²)	(²)	56		1,414		30	101
Clothing, men's*.....	1919	481	311		170					
Confectionery and ice cream.....	1919	450	(²) 9	(²)	345	4	10			82
	1914	402	(²)	(²)	31	89	148	93	4	37
Copper, tin, and sheet-iron work.....	1919	204	(²) 156	(²)	47		1			
	1914	212	(²)	(²)	183	4	25			
Flour-mill and gristmill products.....	1919	822	(²)	(²)	399	2	49	166	203	3
	1914	450	(²)	(²)	50	3	14		383	
Foundry and machine-shop products.....	1919	3,265	(²) 528	(²)	2,678	13	44		2	
	1914	660	(²)	(²)	86	11	484	12	2	65
Furniture.....	1919	895	(²) 7	(²)	881		7			
	1914	673	(²)	(²)	240		13	119	301	
Gas, illuminating and heating.....	1919	334	(²)	(²)	25			302		7
	1914	385	(²)	(²)	350		19	8		8
Lumber and timber products.....	1919	22,884	(²) 18	(²) 164	21,992	85	283	6	336	
	1914	12,820	(²)	(²)	84	9	870	110	11,756	
Lumber, planing-mill products, not including planing mills connected with sawmills.....	1919	1,084	(²) 57	(²)	968	10	40		9	
	1914	732	(²)	(²)	81	33	156	112	351	
Printing and publishing, book and job.....	1919	567	(²) 31	(²) 14	522					
	1914	515	(²)	(²)	491	5	19			
Printing and publishing, newspapers and periodicals.....	1919	920	(²) 87	(²) 8	785	32	15	1		1
	1914	945	(²)	(²)	790	37	103		13	2
Shipbuilding, wooden, including boat building.....	1919	2,990	(²) 2,409	(²)	577	4				
	1914	163	(²)	(²)	154		8		1	
Slaughtering and meat packing.....	1919	772	(²) 12	(²)	647		85	12	16	
	1914	442	(²)	(²)	9	7	5	14	395	12
Structural ironwork, not made in steel works or rolling mills.....	1919	1,111	(²) 1,096	(²)	15					
	1914	161	(²)	(²)	9		152			
Woolen goods.....	1919	808			434		191		183	
	1914	648					25	226	397	
All other industries.....	1919	13,024	(²) 7,108	(²) 230	4,807	233	313	103	128	102
	1914	5,696	(²)	(²)	1,197	360	2,291	492	664	592
Total for cities.....	1919	29,831	(²) 11,518	(²) 312	16,010	296	707	527	330	131
	1914	13,415	(²)	(²)	2,833	668	4,489	627	4,485	313
ASTORIA.....	1919	1,404	(²) 461	(²) 8	835	4	59	18	19	
	1914	1,172	(²)	(²)	91		199	5	847	30
EUGENE.....	1919	534	(²)	(²)	344	10	112	10	50	8
	1914	238	(²)	(²)	48	12	51	92	32	3
PORTLAND.....	1919	26,813	(²) 10,999	(²) 304	14,285	282	332	480	8	123
	1914	11,273	(²)	(²)	2,558	629	3,987	386	3,433	280
SALEM.....	1919	1,080	(²) 58	(²)	546		204	19	253	
	1914	732	(²)	(²)	136	27	252	144	173	

¹ Includes 48 and under for 1914 and 1909.² Corresponding figures not available.³ Not shown separately in 1914.

TABLE 10.—SIZE OF ESTABLISHMENTS, BY AVERAGE NUMBER OF WAGE EARNERS, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY	TOTAL.		ESTABLISHMENTS EMPLOYING—																	
	Establishments.	Wage earners (average number).	No wage earners.		1 to 5 wage earners, inclusive.		6 to 20 wage earners, inclusive.		21 to 50 wage earners, inclusive.		51 to 100 wage earners, inclusive.		101 to 250 wage earners, inclusive.		251 to 500 wage earners, inclusive.		501 to 1,000 wage earners, inclusive.		Over 1,000 wage earners.	
			Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.	Establishments.	Wage earners.
All industries.....	2,707	58,559	388	1,421	3,136	526	5,854	165	5,470	84	6,090	81	12,623	26	8,600	12	8,194	4	8,577	
Automobile repairing.....	229	727	19	189	399	18	172	6	150	4	230	1	196	.....	.....	.....	.....	.....	.....
Boxes, wooden packing, except cigar boxes.....	20	610	2	3	9	8	109	2	66	4	230	1	196	.....	.....	.....	.....	.....	.....
Bread and other bakery products.....	146	1,076	27	93	228	17	177	4	115	3	199	2	357	.....	.....	.....	.....	.....	.....
Butter.....	76	349	6	57	125	11	130	1	32	1	62	.....	.....	.....	.....	.....	.....	.....	.....
Canning and preserving, fish.....	36	476	1	14	48	15	188	5	160	1	80	.....	.....	.....	.....	.....	.....	.....	.....
Canning and preserving, fruits and vegetables.....	59	1,720	.....	19	35	16	196	16	522	4	372	4	595	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by electric-railroad companies.....	4	230	.....	1	2	.....	.....	1	43	1	55	1	130	.....	.....	.....	.....	.....	.....
Cars and general shop construction and repairs by steam-railroad companies.....	21	2,751	.....	.....	.....	6	62	3	82	5	328	4	543	2	881	1	855	.....	.....
Clothing, men's.....	5	481	.....	.....	.....	1	17	1	23	1	66	1	103	1	272	.....	.....	.....	.....
Confectionery and ice cream.....	37	450	5	21	53	5	50	3	108	3	239	.....	.....	.....	.....	.....	.....	.....	.....
Copper, tin, and sheet-iron work.....	63	204	12	41	81	8	70	2	53	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Flour-mill and gristmill products.....	116	822	28	63	150	17	182	5	144	1	66	2	280	.....	.....	.....	.....	.....	.....
Foundry and machine-shop products.....	121	3,265	10	50	105	39	405	10	316	6	384	4	517	1	257	.....	.....	1	1,281
Furniture.....	23	895	4	5	14	5	55	5	191	2	144	2	491	.....	.....	.....	.....	.....	.....
Gas, illuminating and heating.....	11	334	.....	4	10	6	54	.....	.....	.....	.....	.....	.....	1	270	.....	.....	.....	.....
Lumber and timber products.....	625	22,884	40	305	743	130	1,449	55	1,936	30	2,248	40	6,269	19	6,204	6	4,035	.....	.....
Lumber, planing-mill products, not including planing mills connected with sawmills.....	61	1,084	4	28	65	14	170	8	233	5	338	2	278	.....	.....	.....	.....	.....	.....
Printing and publishing, book and job.....	122	567	30	70	143	17	190	3	96	2	138	.....	.....	.....	.....	.....	.....	.....	.....
Printing and publishing, newspapers and periodicals.....	224	929	92	100	164	27	293	2	80	1	72	2	320	.....	.....	.....	.....	.....	.....
Shipbuilding, wooden, including boat building.....	30	2,990	2	13	23	2	30	1	28	1	86	0	1,535	.....	.....	2	1,288	.....	.....
Slaughtering and meat packing.....	21	772	1	9	27	10	139	.....	.....	.....	.....	.....	.....	.....	.....	1	606	.....	.....
Structural ironwork, not made in steel works or rolling mills.....	6	1,111	.....	1	4	3	43	1	33	.....	.....	.....	.....	.....	.....	.....	.....	1	1,031
Woolen goods.....	5	808	.....	.....	.....	.....	.....	1	43	1	81	2	293	1	391	.....	.....	.....	.....
All other industries.....	646	13,024	105	338	708	151	1,673	30	1,010	12	902	5	716	1	334	2	1,410	2	6,235	
Total for cities.....	1,060	29,831	160	476	1,107	250	2,832	77	2,490	43	3,123	35	5,518	12	4,042	3	2,142	4	8,577	
ASTORIA.....	78	1,404	10	39	85	15	187	5	148	4	294	5	690	.....	.....	.....	.....	.....	.....
EUGENE.....	52	534	9	27	63	13	147	.....	.....	2	135	1	189	.....	.....	.....	.....	.....	.....
PORTLAND.....	846	26,813	119	377	885	201	2,249	70	2,264	34	2,432	26	4,222	12	4,042	3	2,142	4	8,577	
SALEM.....	84	1,080	22	33	74	21	249	2	78	3	262	3	417	.....	.....	.....	.....	.....	.....

TABLE 11.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS: 1919, 1914, AND 1909.

VALUE OF PRODUCT.	NUMBER OF ESTABLISHMENTS.			AVERAGE NUMBER OF WAGE EARNERS.			VALUE OF PRODUCTS.			VALUE ADDED BY MANUFACTURE.		
	1919	1914	1909	1919	1914	1909	1919	1914	1909	1919	1914	1909
All classes.....	2,707	2,320	2,246	58,559	28,829	28,750	\$366,782,627	\$109,761,951	\$93,004,845	\$160,576,586	\$40,504,130	\$42,452,375
Less than \$5,000.....	664	907	789	373	927	957	1,691,344	2,220,810	1,928,913	1,179,409	1,522,173	1,343,938
\$5,000 to \$20,000.....	851	752	786	2,229	2,618	3,214	9,077,091	7,809,972	8,208,981	5,834,548	4,684,557	5,082,474
\$20,000 to \$100,000.....	712	451	432	6,130	5,549	7,104	31,975,446	19,632,477	21,453,056	16,214,657	8,990,230	10,626,549
\$100,000 to \$500,000.....	343	171	181	11,296	16,447	15,110	77,258,954	37,673,837	47,622,078	33,695,754	24,344,165	20,766,801
\$500,000 to \$1,000,000.....	68	26	...	8,830	...	...	46,693,045	17,229,020	...	21,081,227	...	...
\$1,000,000 and over.....	69	13	8	26,901	3,288	2,365	200,086,747	25,145,829	14,398,817	82,671,091	6,963,005	4,632,613
PER CENT DISTRIBUTION.												
All classes.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5,000.....	24.5	39.1	35.1	0.6	3.2	3.3	0.5	2.0	2.1	0.7	3.3	3.2
\$5,000 to \$20,000.....	31.4	32.4	35.0	3.8	9.1	11.2	2.5	7.1	8.8	3.6	10.1	12.0
\$20,000 to \$100,000.....	26.3	19.4	21.5	10.5	19.2	24.7	8.7	17.9	23.1	10.1	19.3	25.0
\$100,000 to \$500,000.....	12.7	7.4	...	24.4	57.1	52.6	21.1	34.3	50.6	21.0	52.3	48.9
\$500,000 to \$1,000,000.....	2.5	1.1	...	14.7	...	...	12.7	15.7	...	13.1	...	...
\$1,000,000 and over.....	2.5	0.6	0.4	45.9	11.4	8.2	54.6	22.9	15.5	51.4	15.0	10.0

TABLE 12.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR SELECTED INDUSTRIES: 1919 AND 1914.

INDUSTRY AND VALUE OF PRODUCT.	NUMBER OF ESTAB- LISHMENTS.				AVERAGE NUMBER OF WAGE EARNERS.				VALUE OF PRODUCTS.				VALUE ADDED BY MANUFACTURE.				
	1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		1919	1914	Per cent distribution.		
			1919	1914			1919	1914			1919	1914			1919	1914	
BREAD AND OTHER BAKERY PRODUCTS.....	146	163	100.0	100.0	1,076	709	100.0	100.0	\$9,031,478	\$3,325,789	100.0	100.0	\$3,322,409	\$1,446,261	100.0	100.0	
Less than \$5,000.....	22	66	15.1	40.5	4	33	0.4	4.7	62,701	190,113	0.7	5.7	25,358	85,565	0.8	5.9	
\$5,000 to \$20,000.....	56	69	38.4	42.3	73	129	6.8	18.4	632,083	614,951	7.0	18.5	246,389	280,853	7.4	19.4	
\$20,000 to \$100,000.....	54	20	37.0	12.3	255	131	23.7	18.7	2,200,397	617,490	24.4	18.6	780,211	245,640	23.7	17.0	
\$100,000 to \$500,000.....	10	8	6.8	4.9	257	407	23.9	58.1	2,142,419	1,903,235	23.7	57.2	701,522	834,203	21.1	57.7	
\$500,000 and over.....	4	2	2.7	.....	487	.....	45.3	.....	3,993,278	.....	44.2	.....	1,562,929	.....	47.0	.....
BUTTER.....	76	72	100.0	100.0	349	260	100.0	100.0	8,727,869	4,268,652	100.0	100.0	1,289,211	689,150	100.0	100.0	
Less than \$5,000.....	7	7	.....	9.7	3	3	.....	1.2	19,173	.....	.....	0.4	3,706	.....	.....	0.5
\$5,000 to \$20,000.....	9	22	11.8	30.6	4	24	1.1	9.2	99,967	294,353	1.1	6.9	16,831	46,330	1.3	6.7	
\$20,000 to \$100,000.....	39	33	51.3	45.8	84	108	24.1	41.5	2,127,730	1,597,955	24.4	37.4	308,044	277,252	23.9	40.2	
\$100,000 to \$500,000.....	25	10	32.9	13.9	150	125	43.0	48.1	4,429,986	2,357,171	50.8	55.2	647,593	361,862	50.2	52.5	
\$500,000 to \$1,000,000.....	3	3	3.9	.....	111	.....	31.8	.....	2,070,176	.....	23.7	.....	316,743	.....	24.6	.....
CANNING AND PRESERVING, FISH.....	36	25	100.0	100.0	476	301	100.0	100.0	6,531,462	2,929,657	100.0	100.0	1,866,974	1,054,162	100.0	100.0	
Less than \$100,000.....	22	14	61.1	56.0	117	62	24.6	20.6	975,461	534,783	14.9	18.3	266,969	170,716	14.3	16.2	
\$100,000 to \$500,000.....	10	11	27.8	44.0	185	239	38.9	79.4	2,337,010	2,394,874	35.8	81.7	755,733	833,446	40.5	83.8	
\$500,000 and over.....	4	.....	11.1	.....	174	.....	36.6	.....	3,218,991	.....	49.3	.....	844,272	.....	45.2	.....
CANNING AND PRESERVING, FRUITS AND VEGETABLES.....	59	37	100.0	100.0	1,720	417	100.0	100.0	12,265,651	1,552,077	100.0	100.0	4,050,163	493,918	100.0	100.0	
Less than \$5,000.....	4	17	6.8	45.9	4	33	0.2	7.9	13,426	36,430	0.1	2.3	7,597	16,784	0.2	3.4	
\$5,000 to \$20,000.....	11	8	18.6	21.6	28	35	1.6	8.4	142,373	79,395	1.2	5.1	65,512	33,105	1.6	6.7	
\$20,000 to \$100,000.....	15	6	25.4	16.2	187	95	10.9	22.8	814,147	258,923	6.6	16.7	291,152	50,405	7.2	10.2	
\$100,000 to \$500,000.....	20	6	33.9	16.2	642	254	37.3	60.9	3,381,646	1,177,329	27.6	75.9	1,140,643	393,624	28.2	79.7	
\$500,000 to \$1,000,000.....	6	.....	10.2	.....	547	.....	31.8	.....	3,960,045	.....	32.5	.....	1,350,749	.....	33.3	.....
\$1,000,000 and over.....	3	.....	5.1	.....	312	.....	18.1	.....	3,924,014	.....	32.0	.....	1,194,480	.....	29.5	.....
FLOUR-MILL AND GRISTMILL PRODUCTS.....	116	95	100.0	100.0	822	450	100.0	100.0	42,549,987	11,192,573	100.0	100.0	4,748,239	1,365,342	100.0	100.0	
Less than \$5,000.....	11	10	9.5	10.5	1	3	0.1	0.7	27,667	31,958	0.1	0.3	6,447	7,192	0.1	0.5	
\$5,000 to \$20,000.....	29	31	25.0	32.6	14	28	1.7	6.2	344,526	394,850	0.8	3.5	72,684	72,103	1.5	5.3	
\$20,000 to \$100,000.....	36	35	31.0	36.8	77	83	9.4	18.4	1,678,110	1,582,655	3.9	14.1	271,325	244,268	5.7	17.9	
\$100,000 to \$500,000.....	130	116	25.9	16.8	211	141	25.7	31.3	18,508,076	3,833,184	20.0	34.3	1,995,988	530,752	21.0	33.9	
\$1,000,000 and over.....	10	3	8.6	3.2	519	195	63.1	43.4	31,991,608	5,349,926	75.2	47.8	3,402,795	511,027	71.7	37.4	
FOUNDRY AND MACHINE- SHOP PRODUCTS.....	121	98	100.0	100.0	3,265	660	100.0	100.0	21,136,153	1,870,540	100.0	100.0	12,413,037	1,090,248	100.0	100.0	
Less than \$5,000.....	17	33	14.0	33.7	9	37	0.3	5.6	40,019	88,284	0.2	4.7	27,750	64,457	0.2	5.9	
\$5,000 to \$20,000.....	38	42	31.4	42.9	83	106	2.5	25.2	391,641	446,436	1.9	23.9	272,741	288,192	2.2	26.4	
\$20,000 to \$100,000.....	44	19	36.4	19.4	443	270	13.6	40.9	1,971,762	792,740	9.3	42.4	1,205,697	430,330	9.7	39.5	
\$100,000 to \$500,000.....	16	4	13.2	4.1	711	187	21.8	28.3	3,484,829	643,080	16.5	29.0	2,218,244	307,269	17.9	28.2	
\$500,000 to \$1,000,000.....	3	.....	2.5	.....	327	.....	10.0	.....	1,853,994	.....	8.8	.....	1,306,037	.....	10.5	.....
\$1,000,000 and over.....	3	.....	2.5	.....	1,692	.....	51.8	.....	13,393,908	.....	63.4	.....	7,381,698	.....	59.5	.....
LUMBER AND TIMBER PROD- UCTS.....	625	439	100.0	100.0	22,884	12,829	100.0	100.0	85,347,711	27,509,638	100.0	100.0	53,213,068	15,020,570	100.0	100.0	
Less than \$5,000.....	160	206	25.6	46.9	131	350	0.6	2.7	383,506	430,064	0.4	1.6	813,640	351,824	0.6	2.3	
\$5,000 to \$20,000.....	203	116	32.5	26.4	847	737	3.7	5.7	2,226,456	1,137,371	2.6	4.1	1,779,614	863,742	3.3	5.8	
\$20,000 to \$100,000.....	133	57	21.3	13.0	1,922	1,295	8.4	10.1	6,074,581	2,220,877	7.1	8.1	4,451,288	1,493,933	8.4	9.9	
\$100,000 to \$500,000.....	84	46	13.4	10.5	6,401	19,144	28.0	71.3	22,429,267	11,651,283	26.3	42.4	13,218,817	10,314,554	24.8	63.7	
\$500,000 to \$1,000,000.....	23	11	3.7	2.5	4,718	.....	20.6	.....	15,940,725	7,272,195	18.7	26.4	7,536,539	.....	19.8	.....
\$1,000,000 and over.....	22	3	3.5	0.7	8,865	1,303	38.7	10.2	38,292,876	4,797,848	44.9	17.4	22,913,170	1,996,517	43.1	13.3	
LUMBER, PLANING-MILL PROD- UCTS, NOT INCLUDING PLAN- ING MILLS CONNECTED WITH SAWMILLS.....	61	69	100.0	100.0	1,084	732	100.0	100.0	5,804,349	2,378,642	100.0	100.0	2,526,063	1,020,093	100.0	100.0	
Less than \$5,000.....	8	16	13.1	23.2	4	14	0.4	1.9	20,248	34,958	0.3	1.5	11,093	18,578	0.4	1.8	
\$5,000 to \$20,000.....	18	25	29.5	36.2	38	82	3.5	11.2	200,367	286,922	3.5	12.1	86,457	135,869	3.4	13.3	
\$20,000 to \$100,000.....	19	21	31.1	30.4	153	273	16.9	37.3	886,893	836,501	15.3	35.2	405,374	370,845	16.0	36.4	
\$100,000 to \$500,000.....	16	7	26.2	10.1	1,859	383	79.2	49.6	4,696,841	1,220,261	80.9	51.3	2,023,139	494,801	80.1	48.5	
PRINTING AND PUBLISHING, NEWSPAPERS AND PERIODI- CALS.....	224	251	100.0	100.0	929	945	100.0	100.0	6,408,348	4,126,752	100.0	100.0	4,764,257	3,148,152	100.0	100.0	
Less than \$5,000.....	116	147	51.8	58.6	56	118	6.0	12.5	296,362	358,534	4.6	8.7	235,886	303,037	5.0	9.6	
\$5,000 to \$20,000.....	65	73	29.0	29.1	119	150	12.8	15.9	636,405	734,683	9.9	17.8	525,253	629,576	11.0	20.0	
\$20,000 to \$100,000.....	37	27	16.5	10.8	283	221	30.5	23.4	1,526,486	962,406	23.8	23.3	1,239,574	795,091	26.0	25.3	
\$100,000 to \$500,000.....	3	4	1.3	1.6	80	456	8.6	48.3	447,550	2,071,129	7.0	50.2	377,907	1,420,448	7.9	45.1	
\$500,000 and over.....	3	.....	1.3	.....	391	.....	42.1	.....	3,501,545	.....	54.6	.....	2,385,637	.....	50.1	.....
SHIPBUILDING, WOODEN, IN- CLUDING BOAT BUILDING.....	30	20	100.0	100.0	2,990	163	100.0	100.0	13,777,615	332,074	100.0	100.0	6,924,053	217,626	100.0	100.0	
Less than \$5,000.....	4	9	13.3	45.0	1	2	.....	1.2	9,091	14,672	0.1	4.4	5,833	10,398	0.1	4.8
\$5,000 to \$20,000.....	12	7	40.0	35.0	41	20	1.4	18.4	412,982	67,802	0.9	20.4	475,073	40,784	1.1	18.7	
\$20,000 to \$100,000.....	5	20.0	131	80.4	249,540	75.1	166,494	76.5
\$100,000 to \$500,000.....	10	.....	33.3	.....	1,164	.....	38.9	.....	3,762,890	.....	27.3	.....	2,215,122	.....	32.0	.....
\$1,000,000 and over.....	4	.....	13.3	.....	1,784	.....	59.7	.....	9,881,652	.....	71.7	.....	4,628,025	.....	66.8	.....
SLAUGHTERING AND MEAT PACKING.....	21	14	100.0	100.0	772	442	100.0	100.0	15,868,169	7,486,920	100.0	100.0	2,118,836	1,284,465	100.0	100.0	
\$5,000 to \$20,000.....	3	.....	14.3	.....	3	.....	0.4	.....	4							

1 Includes the group "\$500,000 to \$1,000,000."

2 Includes the groups "\$500,000 to \$1,000,000" and "\$1,000,000 and over."

3 Less than one-tenth of 1 per cent.

4 Includes the group "\$20,000 to \$100,000."

5 Includes the group "\$100,000 to \$500,000."

6 Includes the group "\$5,000 to \$20,000."

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

MANUFACTURES—OREGON.

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TABLE 13.—SIZE OF ESTABLISHMENTS, BY VALUE OF PRODUCTS, FOR CITIES OF 10,000 INHABITANTS OR MORE: 1919.

CITY AND VALUE OF PRODUCT.	Number of estab- lishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.		CITY AND VALUE OF PRODUCT.	Number of estab- lishments.	WAGE EARNERS.		VALUE OF PRODUCTS.		VALUE ADDED BY MANUFACTURE.	
		Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.			Average number.	Per cent of total.	Amount.	Per cent of total.	Amount.	Per cent of total.
ASTORIA.....	78	1,404	100.0	\$13,398,627	100.0	\$4,128,053	100.0	SALEM.....	84	1,090	100.0	\$9,435,070	100.0	\$2,694,262	100.0
Less than \$5,000.....	6	2	0.1	11,913	0.1	8,354	0.2	Less than \$5,000.....	28	6	0.6	72,549	0.8	44,062	1.6
\$5,000 to \$20,000.....	33	62	4.4	339,355	2.5	174,022	4.2	\$5,000 to \$20,000.....	19	45	4.2	224,775	2.4	111,893	4.2
\$20,000 to \$100,000.....	21	187	13.3	1,045,757	7.8	529,840	12.8	\$20,000 to \$100,000.....	20	152	14.1	779,219	8.2	329,112	12.2
\$100,000 to \$500,000.....	12	761	54.2	3,598,128	26.9	1,695,247	38.6	\$100,000 to \$500,000.....	11	269	24.9	2,262,322	24.0	705,325	25.2
\$500,000 and over.....	6	392	27.9	8,403,474	62.7	1,820,560	44.1	\$500,000 to \$1,000,000.....	3	399	36.1	2,157,815	22.9	839,814	30.8
								\$1,000,000 and over.....	3	218	20.2	3,917,590	41.8	673,059	25.0
EUGENE.....	52	534	100.0	2,489,647	100.0	1,017,418	100.0	PORTLAND.....	846	26,813	100.0	196,380,146	100.0	\$4,992,567	100.0
Less than \$5,000.....	11	6	1.1	30,497	1.2	22,742	2.2	Less than \$5,000.....	153	74	0.3	428,065	0.2	294,275	0.3
\$5,000 to \$20,000.....	20	39	7.3	183,623	7.4	108,217	10.6	\$5,000 to \$20,000.....	210	507	1.9	2,615,167	1.3	1,060,815	2.0
\$20,000 to \$100,000.....	16	152	28.5	713,365	28.7	415,855	40.9	\$20,000 to \$100,000.....	262	2,116	7.9	11,785,356	6.0	6,513,036	7.7
\$100,000 and over.....	5	337	63.1	1,562,162	62.7	470,604	46.3	\$100,000 to \$500,000.....	122	4,191	15.6	26,029,883	13.3	12,376,367	14.6
								\$500,000 to \$1,000,000.....	29	2,353	8.9	19,843,847	10.1	6,781,564	8.0
								\$1,000,000 and over.....	40	17,542	65.4	135,647,828	69.1	57,337,570	67.5

TABLE 14.—CHARACTER OF OWNERSHIP, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919 AND 1914.

INDUSTRY AND CITY.	Census year.	NUMBER OF ESTABLISHMENTS OWNED BY—			AVERAGE NUMBER OF WAGE EARNERS.									VALUE OF PRODUCTS.								
					Total.	In establishments owned by—			Per cent of total.			Total.	Of establishments owned by—			Per cent of total.						
		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.		Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.	Indi-vid-u-als.	Cor-pora-tions.	All oth-ers.				
All industries.....	1919	1,146	934	627	58,559	3,415	50,860	4,284	5.8	86.9	7.3	\$366,782,627	\$19,399,351	\$322,331,966	\$25,051,310	5.3	87.9	6.8				
	1914	1,062	710	548	28,829	2,678	24,047	2,104	9.3	84.4	7.3	109,761,951	9,860,214	91,351,338	8,550,399	9.0	83.2	7.8				
	1909	1,031	640	575	28,750	3,552	22,063	3,135	12.4	76.7	10.9	93,004,845	11,482,192	70,781,269	10,741,384	12.3	76.1	11.5				
Bread and other bakery products.	1919	96	20	30	1,076	199	754	123	18.5	70.1	11.4	9,031,478	1,626,093	6,303,798	1,101,557	18.0	69.8	12.2				
	1914	116	11	36	700	168	401	131	24.0	57.3	18.7	3,325,789	811,144	1,775,375	739,270	24.4	53.4	22.2				
Butter.....	1919	18	34	24	349	32	241	76	9.2	69.1	21.8	8,727,869	1,166,384	5,549,998	2,011,487	13.4	63.6	23.0				
	1914	21	29	22	260	38	161	61	14.6	61.9	23.5	4,268,652	654,325	2,367,778	1,246,549	15.3	55.5	29.2				
Canning and preserving, fish.	1919	2	31	3	476	.....	442	134	.....	92.9	7.1	6,531,462	.....	6,190,624	1,340,838	.....	94.8	5.2
	1914	1	23	1	301	.....	301	.....	.....	100.0	.....	2,929,657	.....	2,929,657	.....	.....	100.0	.....			
Canning and preserving, fruits and vegetables.	1919	10	34	15	1,720	54	1,562	104	3.1	90.8	6.0	12,265,651	305,114	10,254,242	1,706,295	2.5	83.6	13.9				
	1914	12	16	9	417	52	291	74	12.5	69.8	17.7	1,552,077	91,315	994,995	465,767	5.9	64.1	30.0				
Cars and general shop construction and repairs by steam-railroad companies.	1919	.....	21	.....	2,751	.....	2,751	.....	.....	100.0	.....	6,472,962	.....	6,472,962	.....	.....	100.0	.....			
	1914	.....	14	.....	1,601	.....	1,601	.....	.....	100.0	.....	2,583,653	.....	2,583,653	.....	.....	100.0	.....			
Flour-mill and gristmill products.	1919	49	47	20	822	79	702	41	9.6	85.4	5.0	42,549,987	2,316,789	38,821,400	1,411,798	5.4	91.2	3.3				
	1914	34	40	21	450	46	372	32	10.2	82.7	7.1	11,192,573	1,050,684	9,586,401	555,488	9.4	85.6	5.0				
Foundry and machine-shop products.	1919	45	53	23	3,265	135	2,987	143	4.1	91.5	4.4	21,136,153	730,594	19,682,980	722,579	3.5	93.1	3.4				
	1914	41	37	20	660	124	464	72	18.8	70.3	10.9	1,870,540	344,284	1,282,810	243,446	18.4	68.6	13.0				
Lumber and timber products	1919	236	199	190	22,884	1,333	20,223	1,328	5.8	88.4	5.8	85,347,711	4,441,423	76,537,842	4,368,446	5.2	89.7	5.1				
	1914	170	129	140	12,829	647	11,484	1,698	5.0	89.5	5.4	27,509,638	951,054	26,399,013	1,159,571	3.5	92.3	4.2				
Lumber, planing-mill products, not including planing mills connected with saw-mills.	1919	17	30	14	1,084	48	954	82	4.4	88.0	7.6	5,804,349	198,669	5,206,402	399,278	3.4	89.7	6.9				
	1914	20	28	21	732	69	571	92	9.4	78.0	12.6	2,378,642	228,829	1,779,798	370,015	9.6	74.8	15.6				
Printing and publishing, newspapers and periodicals.	1919	136	51	37	929	184	698	47	19.8	75.1	5.1	6,408,348	975,747	5,162,507	270,094	15.2	80.6	4.2				
	1914	164	47	40	945	206	680	59	21.8	72.0	6.2	4,126,752	861,014	2,972,100	293,638	20.9	72.0	7.1				
Shipbuilding, wooden, including boat building.	1919	9	14	7	2,990	17	2,732	241	0.6	91.4	8.1	13,777,615	60,940	12,963,534	753,141	0.4	94.1	5.5				
	1914	9	2	9	163	29	.....	134	17.8	.....	82.2	332,074	71,242	.....	260,832	21.5	.....	78.5
Slaughtering and meat packing.	1919	5	14	2	772	36	736	.....	4.7	95.3	.....	15,808,169	482,492	15,355,677	.....	3.0	97.0	.....			
	1914	4	8	2	442	12	430	.....	2.7	97.3	.....	7,486,920	429,285	7,257,635	.....	3.1	96.9	.....			
Total for cities.....	1919	413	443	204	29,831	1,354	26,445	2,032	4.5	88.6	6.8	221,703,490	7,717,425	201,095,956	12,890,079	3.5	90.7	5.8				
	1914	402	374	222	13,415	1,284	11,157	974	9.6	83.2	7.3	63,940,931	5,045,373	54,392,178	4,603,380	7.9	85.1	7.0				
ASTORIA.....	1919	27	35	16	1,404	210	1,177	17	15.0	83.8	1.2	13,398,627	1,030,649	12,200,426	167,552	7.7	91.1	1.2				
	1914	23	22	12	1,172	69	1,059	44	5.9	90.4	3.7	4,587,301	227,979	4,187,168	172,154	5.0	91.3	3.7				
EUGENE.....	1919	23	14	15	534	64	413	57	12.0	77.3	10.7	2,489,647	319,150	1,700,686	469,811	12.8	63.3	18.9				
	1914	14	9	14	238	54	135	49	22.7	56.7	20.6	810,346	167,352	358,578	254,356	20.7	47.9	31.4				
PORTLAND.....	1919	322	373	151	26,813	975	23,976	1,862	3.6	89.4	6.9	196,380,146	5,646,022	179,517,773	11,216,351	2.9	91.4	5.7				
	1914	336	325	176	11,273	1,077	9,467	729	9.5	84.0	6.5	55,097,440	4,263,753	48,151,708	3,281,979	7.7	86.4	5.9				
SALEM.....	1919	41	21	22	1,080	105	879	96	9.7	81.4	8.9	9,435,070	721,604	7,677,101	1,036,365	7.6	81.4	11.0				
	1914	29	18	20	732	84	496	152	11.5	67.7	20.8	2,845,844	356,259	1,664,724	794,861	13.6	58.5	27.9				

¹ Includes the group "Individuals."
² Includes the groups "Individuals" and "All others."

³ Includes the group "Corporations."
⁴ Includes the group "All others."

TABLE 15.—MANUFACTURES, BY POPULATION GROUPS, IN CITIES OF 10,000 INHABITANTS OR MORE: 1919, 1914, AND 1909.

	Census year.	Aggregate.	CITIES HAVING A POPULATION OF 10,000 OR OVER.						THE STATE OUTSIDE OF CITIES HAVING A POPULATION OF 10,000 OR OVER.	
			Total.		10,000 to 25,000.		100,000 and over.			
			Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.	Number or amount.	Per cent of aggre- gate.
Number of places.....	1919 1914 1909	..... ..... .....	4 4 2	..... ..... .....	3 3 1	..... ..... .....	1 1 1	..... ..... .....	..... ..... .....
Population ¹	1920 1915 1910	783,389 783,239 672,765	300,587 301,087 221,308	38.4 38.4 32.9	42,299 40,486 14,094	5.4 5.2 2.1	258,288 260,601 207,214	33.0 33.3 30.8	482,802 482,152 451,457	61.6 61.6 67.1
Number of establishments.....	1919 1914 1909	2,707 2,320 2,246	1,060 998 711	39.2 43.0 31.7	214 161 62	7.9 6.9 2.8	846 837 649	31.3 36.1 28.9	1,647 1,322 1,535	60.8 57.0 68.3
Average number of wage earners.....	1919 1914 1909	58,550 28,829 28,750	29,831 13,415 12,811	50.9 46.5 44.6	3,018 2,142 507	5.2 7.4 2.1	26,813 11,273 12,214	45.8 39.1 42.5	28,728 15,414 15,939	49.1 53.5 55.4
Value of products.....	1919 1914 1909	\$366,782,627 109,761,951 93,004,845	\$221,703,490 63,940,931 49,068,798	60.4 58.3 52.8	\$25,323,344 8,243,491 2,208,031	6.9 7.5 2.4	\$196,380,146 55,697,440 46,860,767	53.5 50.7 50.4	\$145,079,137 45,821,020 43,936,047	39.6 41.7 47.2
Value added by manufacture.....	1919 1914 1909	160,576,586 46,504,130 42,452,375	92,833,300 25,348,901 21,815,981	57.8 54.5 51.4	7,839,733 3,550,114 1,030,830	4.9 7.6 2.4	84,993,567 21,798,787 20,785,151	52.9 46.9 49.0	67,743,286 21,155,229 20,636,394	42.2 45.5 48.6

¹ Population of 1920, as of Jan. 1, 1920; 1915, estimated population as of July 1, 1914 (per reports census of manufactures, 1914); 1910, as of Apr. 15, 1910.

TABLE 16.—PRINCIPAL INDUSTRIES IN PORTLAND (THE ONLY CITY IN THE STATE HAVING 50,000 INHABITANTS OR MORE), WITH PER CENT OF TOTAL FOR STATE: 1919.

INDUSTRY.	VALUE OF PRODUCTS.				INDUSTRY.	VALUE OF PRODUCTS.			
	Amount, 1919.	Per cent of total for the state.	Increase over 1914.			Amount, 1919.	Per cent of total for the state.	Increase over 1914.	
			Amount.	Per cent.				Amount.	Per cent.
Flour-mill and gristmill products.....	\$22,525,761	52.9	\$17,296,849	330.8	Clothing, men's.....	\$2,034,335	100.0	(¹)	.....
Foundry and machine-shop products.....	19,423,232	91.9	18,039,641	1,303.8	Saddlery and harness.....	1,635,654	84.7	\$845,500	107.0
Lumber and timber products.....	18,845,793	22.1	12,259,074	186.1	Automobile repairing.....	1,265,165	48.6	756,747	148.8
Shipbuilding, wooden, including boat building.....	9,881,322	71.7	9,801,397	.....	Copper, tin, and sheet-iron work.....	1,129,107	84.3	(¹)	.....
Bread and other bakery products.....	7,157,084	79.2	4,630,536	183.3	Bags, other than paper, not including bags made in textile mills.....				
Structural ironwork, not made in steel- works or rolling mills.....	6,392,273	100.0	5,742,669	884.0	Cars and general shop construction and repairs by steam-railroad companies.....				
Printing and publishing, newspapers and periodicals.....	4,630,780	72.3	1,995,957	75.8	Cars, steam-railroad, not including opera- tions of railroad companies.....	(¹)	(¹)	(¹)	(¹)
Food preparations, not elsewhere specified.....	4,217,694	100.0	3,340,150	380.6	Engines, steam, gas, and water.....				
Coffee, roasting and grinding.....	3,590,207	100.0	1,540,363	75.1	Gas, illuminating and heating.....				
Printing and publishing, book and job.....	3,119,527	91.9	1,599,221	105.2	Shipbuilding, steel, new vessels.....				
Confectionery and ice cream.....	2,935,436	84.7	(¹)	.....	Slaughtering and meat packing.....				
Furniture.....	2,899,667	91.1	1,652,662	132.5	Tinware, not elsewhere specified.....				
Lumber, planing-mill products, not includ- ing planing mills connected with sawmills.....	2,716,868	46.8	1,634,025	150.9	Wool pulling.....				
Butter.....	2,652,847	30.4	926,506	53.7	Woolen goods.....				

¹ Figures can not be shown without disclosing individual operations.

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TABLE 17.—NUMBER AND HORSEPOWER OF TYPES OF PRIME MOVERS: 1919, 1914, AND 1909.

POWER.	NUMBER OF ENGINES OR MOTORS.			HORSEPOWER.					
	1919	1914	1909	Amount.			Per cent distribution.		
				1919	1914	1909	1919	1914	1909
Primary power, total.....	9,674	5,188	3,442	304,346	214,222	175,019	100.0	100.0	100.0
Owned.....	2,130	1,719	1,921	211,219	175,155	160,110	69.4	81.8	91.5
Steam.....	1,692	1,308	1,572	165,801	116,591	112,244	54.5	54.4	64.1
Engines.....	1,650	(1)	(1)	140,040	(1)	(1)	46.2	.....	.....
Turbines.....	42	(1)	(1)	25,161	(1)	(1)	8.3	.....	.....
Internal-combustion engines.....	250	133	81	2,166	1,289	428	0.7	0.6	0.2
Water.....	188	278	268	43,252	57,275	47,438	14.2	26.7	27.1
Water wheels and turbines.....	170	234	237	43,057	56,972	47,041	14.1	26.6	26.9
Water motors.....	18	44	31	195	303	397	0.1	0.1	0.2
Rented.....	7,544	3,469	1,521	93,127	39,067	14,909	30.6	18.2	8.5
Electric.....	7,544	3,469	1,521	92,576	39,010	14,811	30.4	18.2	8.4
Other.....	.....	.....	.....	551	57	98	0.2	(*)	0.1
Electric.....	8,795	3,937	1,745	118,187	48,739	20,802	100.0	100.0	100.0
Rented.....	7,544	3,469	1,521	92,576	39,010	14,811	78.3	80.0	71.2
Generated by establishments reporting.....	1,251	408	224	25,611	9,729	5,991	21.7	20.0	28.8

* Not reported separately.

* Less than one-tenth of 1 per cent.

TABLE 18.—FUEL CONSUMED, FOR SELECTED INDUSTRIES AND FOR CITIES: 1919.

INDUSTRY AND CITY.	COAL.		Coke (tons, 2,000 pounds).	Fuel oils (barrels).	Gasoline and other volatile oils (barrels).	Gas (1,000 cubic feet).
	Anthracite (tons, 2,240 pounds).	Bituminous (tons, 2,000 pounds).				
All industries.....	1,825	72,695	10,070	1,350,459	19,873	402,457
Per cent of increase.....	1,821 0.2	14,437 403.5	6,106 79.7	940,377 45.7	(1) (1)	61,988 549.2
Brass and bronze products.....	.....	2	53	2,689	36	1,497
Bread and other bakery products.....	156	465	459	16,350	135	30,497
Brick and tile, terra-cotta, and fire-clay products.....	12	3,016	.....	942	5	.....
Canning and preserving, fish.....	12	870	.....	9,623	1,049	1,482
Canning and preserving, fruits and vegetables.....	300	6,328	30	16,196	12	.....
Cars and general shop construction and repairs by steam-railroad companies.....	.....	36,126	104	26,058	9,720	.....
Cement.....	.....	.....	.....	37,097	.....	.....
Cordage and twine.....	.....	.....	.....	14,011	.....	.....
Foundry and machine-shop products.....	254	9,411	7,778	9,199	344	17,676
Gas, illuminating and heating.....	.....	4,492	785	585,235	.....	.....
Lumber and timber products.....	69	2,732	8	177,134	4,011	.....
Paper and wood pulp.....	.....	.....	.....	313,368	.....	.....
Shipbuilding, steel, new vessels.....	721	350	51	45,330	184	75,321
Slaughtering and meat packing.....	.....	1,019	.....	15,159	.....	690
Structural ironwork, not made in steel works or rolling mills.....	28	5	350	14,500	.....	172,000
Woolen goods.....	.....	1,186	.....	17,851	.....	.....
All other industries.....	285	6,693	1,319	49,717	4,377	103,294
Total for cities.....	1,395	38,333	9,923	759,463	5,387	398,863
ASTORIA.....	89	882	26	11,282	905	2,651
EUGENE.....	.....	697	872	3,964	4	1,134
PORTLAND.....	1,006	34,048	8,701	733,717	4,465	394,468
SALEM.....	300	2,726	324	10,500	13	610

* Included in figures for fuel oils.

SPECIAL STATISTICS.

For a number of important industries the Census Bureau collects, by means of special schedules, certain details which do not appear on the general schedule. Data for seven of these industries in Oregon are here presented.

Lumber and timber products (Table 19).—This table presents statistics pertaining to the chief products of the lumber industry for 1919, 1914, and 1909. The growth of this industry in Oregon has been very rapid since 1899. The relative rank of the state in the production of lumber has advanced from twenty-third place in that year, to ninth, in 1909, fifth, in 1914, and third, in 1919.

Oregon is credited with having the largest stand of timber of any state in the Union, the principal species being Douglas fir and western yellow pine. In the production of lumber from these woods in 1919, this state occupied second place and first place, respectively, producing 30.4 per cent of the total cut of Douglas fir and 27.4 per cent of the total cut of western yellow pine in the United States.

The lumber cut from the principal species in 1919 was reported as follows: Douglas fir, 1,795,492,000 feet, or 69.7 per cent of the total cut from all species in the state; western yellow pine, 480,514,000 feet, or 18.6 per cent; spruce, 166,056,000 feet, or 6.4 per cent; hemlock, 52,906,000 feet, or 2.1 per cent; Port Orford cedar, 25,360,000 feet, or 1 per cent; white fir, 22,731,000 feet, or nine-tenths of 1 per cent; and larch, 18,968,000 feet, or seven-tenths of 1 per cent. Seven other woods were reported as manufactured into lumber, the most important of these being cedar, sugar pine, cottonwood, and maple.

TABLE 19.—LUMBER, LATH, AND SHINGLES: 1919, 1914, AND 1909.

PRODUCT.	QUANTITY. ¹		
	1919	1914	1909
Lumber.....M feet b. m...	2,577,403	1,817,875	1,898,995
Lath.....thousands...	122,848	(?)	161,512
Shingles.....thousands...	530,066	(?)	293,644

¹ The output of custom mills is included in 1919 and 1909, but not in 1914.

* Not reported.

Flour-mill and gristmill products (Table 20).—Wheat flour was the product of chief value in 1919 as in 1914, forming 81 per cent and 69.2 per cent, respectively, of the total value of products for the industry in the state. The value of bran and middlings and feed and offal combined was second in value of products, forming 18 per cent of the total for the industry in 1919 and 27.5 per cent in 1914. During this five-year period, the total value for the industry increased \$31,357,414, or 280.2 per cent. The value

of flour increased \$26,728,139, or 344.9 per cent, and the quantity, 1,550,422 barrels, or 86.6 per cent. Similarly, bran and middlings increased 220.4 per cent in value and 89.6 per cent in quantity, while feed and offal increased 103.3 per cent in value, but decreased 7 per cent in quantity.

TABLE 20.—FLOUR-MILL AND GRISTMILL PRODUCTS (MERCHANT MILLS): 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$42,549,987	\$11,192,573	\$8,891,001
Wheat flour:			
Barrels.....	3,341,756	1,791,334	1,360,281
Value.....	\$31,477,758	\$7,749,619	\$6,015,845
Barley meal:			
Pounds.....	1,132,930	1,836,913	1,095,604
Value.....	\$29,961	\$34,806	\$17,963
Corn meal and corn flour:			
Barrels.....	557	2,867	559
Value.....	\$4,534	\$14,050	\$2,236
Bran and middlings:			
Tons.....	98,122	51,758	
Value.....	\$3,800,078	\$1,185,918	104,262
Feed and offal:			
Tons.....	66,239	71,254	\$2,688,095
Value.....	\$3,846,156	\$1,892,079	
Breakfast foods:			
Pounds.....	2,191,040	5,396,437	
Value.....	\$113,642	\$188,715	\$64,056
All other cereal products, value.....	\$216,450	\$109,689	
All other products, value.....	\$31,408	\$17,697	\$102,806

Slaughtering and meat packing (Table 21).—This table presents for the slaughtering and meat-packing industry for the census years 1919, 1914, and 1909, the number and cost of the most important classes of animals slaughtered, the cost of "All other materials," which includes that for goats and kids, poultry, dressed meat purchased for curing, cottonseed oil for making lard compounds and substitutes, butter and whole milk for making oleomargarine, curing materials, seasoning, refrigeration, containers, fuel, rent of power, mill supplies, and freight; and the kind, quantity, and value of the principal products that can be shown without disclosing individual operations. The value of minor and auxiliary specified products are grouped under "All other products" and include beef, pickled and other cured, canned sausage, lard compounds and substitutes, lard oil and other oils, oleomargarine, casings, fertilizers and fertilizer materials, glue, wool, and stock feed.

From 1914 to 1919 there was an actual decrease of 38,555 in the total number of all classes of animals slaughtered. This decrease was in sheep and lambs and hogs, which together show a decrease of 59,561; while, on the other hand, there was an increase of 21,006 in the number of beeves and calves combined. The cost of each of these classes, however, shows a large increase. The total cost of materials increased \$7,546,878, or 121.7 per cent, and value of products \$8,381,249, or 111.9 per cent, during this five-year period.

Of the several products for which the values are shown, the same general proportions of the total for the industry prevailed in 1919 as in 1914, with the exception of fresh pork, which was second in importance, with 16.2 per cent of the total in 1914 as compared with third in 1919, with but 7.9 per cent.

TABLE 21.—SLAUGHTERING AND MEAT PACKING: 1919, 1914, AND 1909.

	1919	1914	1909
MATERIALS.			
Total cost.....	\$13,749,333	\$6,202,455	\$5,014,846
Animals slaughtered:			
Beaves—			
Number.....	50,413	33,431	51,922
Cost.....	\$4,086,350	\$2,549,284	\$2,391,659
Calves—			
Number.....	5,312	1,288	6,034
Cost.....	\$116,052	\$20,246	\$70,659
Sheep and lambs—			
Number.....	98,571	141,892	92,038
Cost.....	\$837,190	\$700,294	\$397,387
Hogs—			
Number.....	143,252	159,492	75,395
Cost.....	\$5,151,435	\$2,394,147	\$1,295,899
All other materials, cost.....	\$3,558,306	\$538,604	\$859,242
PRODUCTS.			
Total value.....	\$15,868,169	\$7,486,920	\$5,879,615
Fresh meat:			
Beef—			
Pounds.....	24,574,531	18,550,133	28,759,934
Value.....	\$3,976,454	\$2,237,855	\$2,235,816
Vedl—			
Pounds.....	572,588	162,928	851,558
Value.....	\$117,018	\$19,888	\$88,663
Mutton and lamb—			
Pounds.....	4,095,504	7,242,761	3,866,798
Value.....	\$820,599	\$633,165	\$351,170
Pork—			
Pounds.....	5,131,830	10,635,553	4,256,595
Value.....	\$1,259,403	\$1,213,683	\$517,974
Edible offal and other fresh meat—			
Pounds.....	2,114,637	1,737,778	72,535
Value.....	\$385,310	\$153,971	\$8,303
Pork, pickled and other cured:			
Pounds.....	12,030,437	7,817,795	5,123,483
Value.....	\$3,703,376	\$1,192,045	\$752,137
Sausage:			
Pounds.....	2,948,094	2,180,304	2,069,163
Value.....	\$595,472	\$307,751	\$250,822
Lard:			
Pounds.....	3,385,854	3,591,540	5,709,268
Value.....	\$971,858	\$419,179	\$635,628
Tallow:			
Pounds.....	1,529,865	1,239,341	827,738
Value.....	\$143,256	\$65,371	\$45,024
Hides:			
Cattle—			
Number.....	50,413	33,431	
Pounds.....	3,063,524	2,456,098	
Value.....	\$876,335	\$324,668	
Calf—			
Number.....	5,308	1,188	
Pounds.....	53,292	16,108	
Value.....	\$32,240	\$2,569	
Sheep pelts—			
Number.....	97,597	141,892	92,038
Value.....	\$191,073	\$103,966	\$52,589
All other products, value.....	\$2,795,775	\$312,809	\$514,310

Shipbuilding, including boat building (Tables 22 and 23).—This industry includes the building and repairing of steel and wooden vessels, as well as small craft, and the manufacture of masts, spars, oars, and rigging. The number and tonnage of all vessels launched in 1919 and 1916 are shown, by classes, in the following table.

No steel vessels were launched in Oregon during 1916. In 1919, 28 vessels of this class of 135,042 tons were launched at Portland. Twenty-seven of these vessels were steam, all large sized, designed for freight service and equipped with oil burners. Some of them exceeded 6,000 gross tons.

Although two less wooden vessels were launched in 1919 than in 1916, there was an increase during the three-year period of 71,065 in tonnage, or 609.9 per cent. The wooden vessels constructed were mostly of a uniform type and tonnage, and like the steel vessels were built largely to meet the exigencies of the World War.

TABLE 22.—SHIPBUILDING, INCLUDING BOAT BUILDING—NUMBER AND TONNAGE: 1919 AND 1916.

	1919		1916	
	Num-ber.	Gross tonnage.	Num-ber.	Gross tonnage.
Vessels, 5 gross tons and over, launched during the year.....	62	217,759	36	11,652
Steel.....	23	135,042		
Steam.....	27	135,020		
Motor.....	1	22		
Wooden.....	34	82,717	36	11,652
Steam.....	20	51,734	5	4,719
Motor.....	1	14	9	118
Sail.....	1	1,728	19	6,255
Unrigged.....	12	29,241	3	560
Power boats, less than 5 gross tons.....	49		73	

The value of work done upon vessels of all kinds during 1919 and 1916 is shown in Table 23.

TABLE 23.—SHIPBUILDING, INCLUDING BOAT BUILDING—VALUE: 1919 AND 1916.

	1919	1916
Total value of work.....	\$53,501,950	\$2,915,346
Work done during the year on new vessels, 5 gross tons and over.....	52,809,785	2,627,046
Steel.....	39,707,334	800,000
Wood.....	13,102,451	1,827,046
Boats of less than 5 tons.....	51,294	60,566
Power boats of all kinds.....	46,654	39,856
Sailboats, rowboats, etc.....	4,640	20,710
Repair work.....	243,291	152,017
Steel.....	17,061	25,000
Wood.....	226,290	127,017
Masts.....	130,152	(¹)
All other products.....	267,428	75,717

¹ Included in "All other products."

The figures in this table are not strictly comparable with those for tonnage launched, as shown in Table 22, since they include only the value of work done in the shipyards of Oregon in 1919 and 1916, while part of the cost of construction of the vessels actually launched may have been an expenditure during prior years, just as the value of the work reported in Table 23 represents the expense of any work done during the year on vessels on the ways.

Canning and preserving (Table 24).—This table shows in detail the quantity and value of the principal kinds of fruits, vegetables, and fish canned and preserved during 1919, 1914, and 1909.

From 1914 to 1919 the total value of all products for the industry increased \$15,853,068, or 334.6 per cent. Of this increase, \$10,713,574, or 67.6 per cent, was in fruits and vegetables, \$3,559,729, or 22.5 per cent, in fish and oysters, and \$1,579,765, or 10 per

cent, in pickles, preserves, and sauces. These three branches of the canning industry show increases in 1919 over 1914 in value of products as follows: Fruits and vegetables 690.3 per cent; fish and oysters 119.8 per cent; and pickles, preserves, and sauces 737.3 per cent. Practically all items in this table show increases in quantity, as well as in value during this five-year period, except salted fish and smoked or dried fish, both of which while increasing in value decreased in quantity.

TABLE 24.—CANNING AND PRESERVING: 1919, 1914, AND 1909

	1919	1914	1909
Total value ¹	\$20,591,135	\$4,738,067	\$3,207,060
Canning and preserving, fruits and vegetables.....	\$12,265,651	\$1,552,077	\$708,285
Canning and preserving, fish and oysters.....	6,531,492	2,971,733	2,386,412
Pickles, preserves, and sauces.....	1,794,022	214,257	162,363
Canned vegetables.....	\$258,609	\$27,883	\$48,219
Beans—			
Cases.....	30,569	9,292	12,831
Value.....	\$93,890	\$16,231	\$26,179
All other—			
Cases.....	54,865	6,099	10,565
Value.....	\$164,729	\$11,632	\$22,040
Dried vegetables:			
Pounds.....	1,204,713	(²)	(²)
Value.....	\$343,512	(²)	(²)
Canned fruits.....	\$6,701,131	\$539,675	\$117,818
Loganberries—			
Cases.....	195,535	(²)	(²)
Value.....	\$1,458,019	(²)	(²)
Blackberries—			
Cases.....	222,633	2,219	4,408
Value.....	\$1,206,411	\$4,114	\$9,321
Pears—			
Cases.....	164,733	(²)	(²)
Value.....	\$1,161,462	(²)	(²)
Cherries—			
Cases.....	142,146	38,479	22,770
Value.....	\$890,103	\$112,928	\$49,203
Apples—			
Cases.....	230,321	24,872	8,557
Value.....	\$862,515	\$40,148	\$15,918
Raspberries—			
Cases.....	37,416	29,641	9,658
Value.....	\$285,028	\$91,187	\$23,206
Strawberries—			
Cases.....	21,107	15,194	3,490
Value.....	\$217,253	\$55,692	\$10,361
All other—			
Cases.....	166,882	50,061	14,033
Value.....	\$620,340	\$157,404	\$26,967
Dried fruits:			
Pounds.....	24,743,396	12,863,689	14,028,251
Value.....	\$3,443,070	\$849,900	\$473,008
Prunes—			
Pounds.....	19,930,935	12,621,817	14,009,597
Value.....	\$2,785,373	\$822,837	\$470,911
All other—			
Pounds.....	4,812,451	241,872	18,654
Value.....	\$657,697	\$27,063	\$2,097
Canned fish, clams, etc.....	\$5,505,849	\$2,366,075	\$1,352,281
Salmon—			
Cases.....	511,325	376,492	.....
Value.....	\$5,447,491	\$2,314,771	\$1,341,481
All other—			
Cases.....	10,974	14,062	.....
Value.....	\$58,358	\$51,304	\$10,800
Salted fish—			
Pounds.....	2,086,628	3,672,277	5,333,674
Value.....	\$591,062	\$473,458	\$731,600
Smoked or dried fish—			
Pounds.....	126,559	189,920	137,700
Value.....	\$35,729	\$21,507	\$20,800
Pickles, preserves, and sauces, value.....	\$1,794,022	\$214,257	\$162,363
All other products of canning and preserving, fish and oysters, value.....	\$398,802	(²)	(²)
All other products of canning and preserving, fruits and vegetables, value.....	\$1,519,329	\$245,332	\$240,971

¹ In addition, products to the value of \$78,045 in 1919, \$20,433 in 1914, and \$10,338 in 1909, were reported by establishments engaged primarily in other industries.

² Reported in "All other products" in 1914 and 1909.

³ Reported in "All other" canned fruits in 1914 and 1909.

⁴ Not reported separately in 1914 and 1909.

Butter, cheese, and condensed milk (Table 25).—This table shows the quantity and value of the principal products of the combined industries for

1919, 1914, and 1909. From 1914 to 1919, the total value of products for the three industries increased \$9,194,263, or 140 per cent. Butter was the product of chief value in 1919 as in 1914, forming 51.1 per cent and 50.3 per cent, respectively, of the total for the industry. From 1914 to 1919 much larger percentages of increase are shown for values than for quantities; for instance, butter increased 143.8 per cent in value and 25 per cent in quantity, while the corresponding increases for cheese were 210.5 per cent in value and 49.2 per cent in quantity.

TABLE 25.—BUTTER, CHEESE, AND CONDENSED MILK: 1919, 1914, AND 1909.

	1919	1914	1909
Total value.....	\$15,762,212	\$6,567,949	\$4,920,402
Butter:			
Pounds.....	13,984,185	11,182,937	8,472,660
Value.....	\$3,061,141	\$3,306,464	\$2,682,106
Packed solid—			
Pounds.....	6,594,846	3,714,736	992,102
Value.....	\$3,647,179	\$1,022,496	\$298,721
Prints or rolls—			
Pounds.....	7,389,339	7,468,201	7,480,558
Value.....	\$4,413,962	\$2,283,968	\$2,383,385
Cheese:			
Pounds.....	9,424,399	6,314,757	4,218,953
Value.....	\$2,956,032	\$952,101	\$640,868
Evaporated milk: ¹			
Pounds.....	34,084,196	23,157,414	21,788,937
Value.....	\$4,038,583	\$1,392,698	\$1,164,360
All other butter, cheese, and condensed-milk factory products, value.....	\$684,080	\$663,035	\$154,350
All other products, value.....	\$22,376	\$253,651	\$278,778

¹ Includes condensed milk for 1914 and 1909, the value of which for 1919 is included in "All other butter, cheese, and condensed-milk factory products" to avoid disclosure of individual operations.

Printing and publishing (Table 26).—This table gives the number and aggregate circulation per issue of all newspapers and periodicals published in Oregon as reported at the censuses of 1919, 1914, and 1909.

TABLE 26.—PRINTING AND PUBLISHING: 1919, 1914, AND 1909.

PERIOD OF ISSUE.	NUMBER OF PUBLICATIONS.			AGGREGATE CIRCULATION PER ISSUE.		
	1919	1914	1909	1919	1914	1909
Total.....	265	289	254	1,005,889	917,846	735,363
Daily.....	33	34	31	293,204	218,449	150,500
Sunday.....	11	7	6	191,830	140,975	93,142
Semiweekly ¹	11	14	11	25,575	30,009	26,725
Weekly.....	174	201	176	281,324	349,363	229,585
Monthly ²	36	33	30	214,456	173,050	235,351

¹ Includes in 1919 and 1914, 2 triweekly publications, and in 1909, 1 triweekly publication.

² Includes in 1919, 2 semi-monthly, 1 bi-monthly, and 1 three-times-a-year publications; in 1914, 4 semi-monthly, 6 quarterly, and 1 semi-annual publications; and in 1909, 2 semi-monthly, 1 quarterly, and 1 "All other" publications.

The decrease in total number of newspapers during the five-year period from 1914 to 1919 is due to the decrease in weeklies, which fact is in accordance with that existing in many states owing to high cost of paper. The aggregate circulation per issue of all publications, however, increased by 88,043, or 9.6 per cent, during the same five years.

Circulation of the daily newspapers increased 74,755, or 34.2 per cent. Of these, 25 with a circulation of

202,334, or 69 per cent of the total daily circulation, were issued in the afternoon, an increase of 61,511, or 43.7 per cent, over the afternoon circulation reported for 1914.

The increase in number of Sunday newspapers was four for the five-year period, and in circulation 44,355, or 30.2 per cent.

The foreign-language publications in 1919 numbered 11 with a circulation of 67,230, compared with 10 in 1914 having a circulation of 23,335, and of 8 in 1909 with a circulation of 50,675. In 1919 there were 2 daily newspapers, both published in the afternoon, 1 in Finnish and the other in Japanese; 7 weeklies, 2 in German and 2 in Italian, and 1 each in Finnish, Norwegian-Danish, and Swedish; 1 tri-weekly in Finnish, and 1 monthly in German. The German papers led in circulation with 47,470, the Finnish following with 14,135.

Laundries (Table 27).—Statistics for power laundries are not included in the general tables nor in the totals for manufacturing industries. Table 27, however, summarizes the statistics for such laundries in the state of Oregon for 1919 and 1914.

TABLE 27.—POWER LAUNDRIES: 1919 AND 1914.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1914-1919.
	1919	1914	
Number of establishments.....	73	78	.....
Persons engaged.....	2,253	1,969	14.4
Proprietors and firm members.....	60	74	.....
Salaried employees.....	160	150	6.7
Wage earners (average numbers).....	2,033	1,745	16.5
Primary horsepower.....	2,334	2,338	-0.2
Capital.....	\$2,117,225	\$1,669,317	26.8
Salaries and wages.....	2,015,967	1,136,059	77.5
Salaries.....	237,322	174,382	36.1
Wages.....	1,778,645	961,677	85.0
Paid for contract work.....	6,664	.....	.....
Rent and taxes.....	68,289	49,055	39.2
Cost of materials.....	723,313	385,166	87.8
Amount received for work done.....	3,629,983	2,146,868	69.1

¹ A minus sign (—) denotes decrease; percentages are omitted where base is less than 100.

Dyeing and cleaning (Table 28).—Statistics for dyeing and cleaning establishments that were operated by mechanical power in 1919 are presented in this

table. Statistics for such establishments are not included in the general tables nor in the totals for manufacturing industries for censuses since 1900. This presentation is the first of its kind that has been made since the census statistics were confined to manufacturing industries as distinguished from the hand trades, household industries, etc.

TABLE 28.—DYEING AND CLEANING: 1919.

	Number or amount.
Number of establishments.....	23
Persons engaged.....	274
Proprietors and firm members.....	24
Salaried employees.....	43
Wage earners (average number).....	207
Primary horsepower.....	198
Capital.....	\$187,110
Salaries and wages.....	242,539
Salaries.....	37,740
Wages.....	204,799
Paid for contract work.....	565
Rent and taxes.....	16,223
Cost of materials.....	126,459
Amount received for work done.....	534,282

Custom gristmills (Table 29).—Statistics for custom gristmills are not included in the general tables nor in the totals for manufacturing industries. Data for these custom mills were not collected in 1914. Table 29, however, summarizes the statistics for such mills for 1919 and 1909. The value of products for custom gristmills represents the selling value of the grain milled.

TABLE 29.—CUSTOM GRISTMILLS: 1919 AND 1909.

	NUMBER OR AMOUNT.		Per cent of increase, ¹ 1909-1919.
	1919	1909	
Number of establishments.....	12	15	.....
Persons engaged.....	16	22	.....
Proprietors and firm members.....	15	16	.....
Wage earners (average number).....	1	6	.....
Primary horsepower.....	208	344	-39.5
Capital.....	\$54,066	\$40,710	32.8
Wages.....	1,500	2,048	-26.7
Rent and taxes.....	387	398	-2.8
Cost of materials ²	66,561	97,323	-31.6
Value of products ²	87,138	116,984	-25.5

¹ A minus sign (—) denotes decrease; percentages are omitted where base is less than 100.

² Includes estimate of all grain ground.

GENERAL TABLES.

Table 30 gives the number of establishments, average number of wage earners, primary horsepower, wages, cost of materials, and value of products for all industries combined and selected industries for the state and Portland, and for Astoria, Eugene, and Salem similar data for all industries combined for 1919, 1914, and 1909. Certain kindred industries are com-

bined in some instances for comparison with the 1909 figures. Table 31 presents, for 1919, for the state and for Portland, statistics in detail for each industry for which figures can be shown without disclosing the operations of individual establishments, and the statistics for all industries combined for Astoria, Eugene, and Salem.

MANUFACTURES—OREGON.

TABLE 30.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES: 1919, 1914, AND 1909.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
THE STATE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
All industries.....	1919	2,707	58,559	304,346	81,094	208,206	366,753	Gas, illuminating and heating.	1919	11	334	1,010	353	818	2,927
	1914	2,320	28,829	214,222	20,932	63,258	109,762		1914	9	385	2,482	310	404	1,528
	1909	2,246	28,750	175,019	19,902	50,552	93,005		1909	8	260	1,483	194	200	909
Artificial stone products.....	1919	14	43	103	69	109	265	Ice, manufactured.....	1919	30	108	2,440	158	105	556
	1914	19	40	252	33	43	146		1914	27	106	2,650	92	118	376
	1909	20	47	46	35	46	113		1909	25	69	1,569	53	76	257
Automobile bodies and parts..	1919	17	46	93	71	118	259	Leather goods ¹	1919	44	255	277	336	1,154	2,400
	1914	6	35	42	32	50	115		1914	48	202	205	158	673	1,075
	1909								1909	48	353	173	262	989	1,629
Boxes, set-up paper boxes and cartons.	1919	5	169	167	125	304	585	Leather, tanned, curried, and finished.	1919	5	39	203	49	236	315
	1914	4	90	50	49	73	219		1914	5	34	163	20	148	188
	1909	4	42	66	49	41	122		1909	8	49	224	34	181	244
Brass and bronze products.....	1919	4	58	250	96	275	525	Lumber and timber products ⁴ .	1919	706	24,578	173,178	34,427	37,524	95,264
	1914	6	35	138	34	59	140		1914	526	13,888	101,832	9,942	14,399	30,920
	1909	4	42	66	49	41	122		1909	713	15,066	95,213	10,172	2,413	30,200
Bread and other bakery prod- ucts.	1919	146	1,076	1,125	1,143	5,709	9,031	Marble and stone work.....	1919	17	55	318	89	149	354
	1914	103	700	589	403	1,880	3,326		1914	24	88	278	85	146	346
	1909	151	613	336	441	1,621	2,829		1909	23	76	159	75	113	297
Brick and tile, terra-cotta, and fire-clay products.	1919	23	152	1,166	165	92	386	Mattresses and spring beds, not elsewhere specified.	1919	6	82	155	90	329	534
	1914	42	382	2,894	201	165	521		1914	8	59	171	40	115	211
	1909	61	385	1,922	266	155	675		1909	7	83	105	68	211	350
Brooms.....	1919	7	84	103	72	294	412	Mineral and soda waters.....	1919	33	109	1,097	154	661	1,083
	1914	5	85	74	18	66	103		1914	33	57	135	37	86	211
	1909								1909	29	69	69	43	83	239
Butter, cheese, and condensed milk.	1919	136	595	3,333	707	13,237	15,762	Patent medicines and com- pounds.	1919	16	99	162	91	580	1,064
	1914	118	434	1,827	325	5,502	6,568		1914	20	42	25	22	109	217
	1909	95	420	1,935	290	3,952	4,920	Paving materials.....	1919	11	99	1,600	144	69	266
Canning and preserving ¹	1919	103	2,344	4,397	2,018	14,366	20,591		1914	4	26	1,201	22	98	131
	1914	71	799	1,655	339	3,090	4,738	Printing and publishing ⁵	1919	358	1,595	2,584	2,195	3,006	10,155
	1909	71	661	1,318	315	2,187	3,207		1914	377	1,556	2,230	1,407	1,563	6,011
Cars and general shop construc- tion and repairs by electric- railroad companies.	1919	4	230	728	328	219	578		1909	324	1,459	1,927	1,448	1,103	5,041
	1914	4	225	737	196	305	536	Shipbuilding, wooden, includ- ing boat building.	1919	30	2,990	7,282	4,609	6,854	13,778
Cars and general shop construc- tion and repairs by steam- railroad companies.	1919	21	2,751	2,938	3,664	2,454	6,473		1914	20	163	445	158	114	332
	1914	14	1,601	1,370	1,343	1,019	2,584		1909	24	212	287	190	204	477
	1909	8	777	933	544	509	1,163	Slaughtering and meat packing.	1919	21	772	3,048	958	13,749	15,868
Coffee, roasting and grinding...	1919	8	106	420	98	2,978	3,590		1914	14	442	1,344	309	6,202	7,487
	1914	9	99	329	61	1,532	2,050		1909	14	366	752	280	5,015	5,880
	1909	5	72	298	52	1,096	1,427	Stoves and hot-air furnaces....	1919	6	126	136	184	181	598
Coffins, burial cases, and un- takers' goods.	1919	4	73	144	113	290	494		1914	10	80	88	75	129	289
	1914	3	7	27	5	14	37		1909	11	86	183	79	130	351
Confectionery and ice cream...	1919	37	450	872	392	2,220	3,466	Tobacco, cigars.....	1919	41	91	6	96	165	267
	1914	35	402	713	208	1,090	2,026		1914	63	154	2	109	148	383
	1909								1909	55	186	.....	171	170	471
Flour-mill and gristmill prod- ucts.	1919	116	822	13,314	1,166	37,802	42,550	Vinegar and cider.....	1919	10	60	219	57	390	529
	1914	95	450	8,565	330	9,827	11,193		1914	5	19	94	13	49	113
	1909	114	394	11,541	278	7,667	8,891		1909	4	16	54	9	51	87
Food preparations, not else- where specified.	1919	13	169	1,729	170	3,643	4,218	Woolen goods.....	1919	5	808	2,341	754	1,946	3,357
	1914	18	79	633	53	625	878		1914	7	648	1,670	373	943	1,702
	1909	8	50	275	36	352	580		1909	6	466	1,558	201	522	919
Foundry and machine-shop products. ³	1919	369	5,338	14,032	9,320	14,357	31,689	All other industries.....	1919	301	10,894	59,610	15,591	38,505	73,041
	1914	169	1,254	4,238	1,035	1,616	3,823		1914	312	3,505	73,392	2,584	10,254	17,714
	1909	82	1,055	2,709	892	1,472	3,135		1909	304	4,815	48,371	3,067	9,413	17,307
Fur goods.....	1919	6	59	34	64	107	270								
	1914	6	35	8	29	60	190								
	1909	5	51	12	35	96	191								
Furniture.....	1919	23	895	2,832	978	1,221	3,183								
	1914	21	673	1,674	422	544	1,335								
	1909	19	552	1,501	323	484	1,094								

¹ Includes "canning and preserving, fish"; "canning and preserving, fruits and vegetables"; and "pickles, preserves, and sauces," in all years; and "canning and preserv-
ing, oysters," in 1914 and 1909.

² Includes "automobile repairing"; "engines, steam, gas, and water"; "hardware"; "iron and steel, cast-iron pipe"; "iron and steel, welding"; "structural ironwork,
not made in steel works or rolling mills," in all years; "hardware, saddlery," in 1919 and 1914; "gas machines"; "pumps, power, other than steam," in 1919; and "steam
fittings and steam and hot-water heating apparatus" in 1914.

³ Includes "saddlery and harness" and "trunks and valises" in all years, and "pocketbooks" in 1914.

⁴ Includes "boxes, wooden packing, except cigar boxes," and "lumber, planing-mills products, not including planing mills connected with sawmills," in all years; and
"window and door screens" in 1914.

⁵ Includes "bookbinding and blank-book making"; and "engraving, steel and copper plate, including plate printing," in all years; and "lithographing" in 1914 and 1909.

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TABLE 30.—COMPARATIVE SUMMARY FOR SELECTED INDUSTRIES AND FOR CITIES, 1919, 1914, AND 1909—Continued.

INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.	INDUSTRY AND CITY.	Cen- sus year.	Num- ber of estab- lish- ments	Wage earn- ers (aver- age num- ber).	Pri- mary horse- power.	Wages.	Cost of mate- rials.	Value of prod- ucts.
					Expressed in thou- sands of dollars.								Expressed in thou- sands of dollars.		
CITIES OF 50,000 INHABITANTS OR MORE—ALL INDUSTRIES COMBINED AND SELECTED INDUSTRIES.															
PORTLAND.....	1919	846	26,813	70,536	38,758	111,387	196,380	Fur goods.....	1919	6	59	34	61	107	270
All industries.	1914	837	11,273	36,188	8,542	33,899	55,697		1914	6	35	8	29	60	190
	1909	649	12,214	32,122	8,979	26,076	46,861		1909	5	51	12	35	96	191
Automobile bodies and parts..	1919	10	44	79	66	104	217	Furniture.....	1919	14	769	2,551	871	1,106	2,900
	1914	6	35	42	32	50	115		1914	12	608	1,466	389	503	1,247
	1909	4	90	50	49	73	219		1909	11	478	1,207	283	458	993
Boxes, set-up paper boxes and cartons.	1919	5	169	167	125	304	585	Ice, manufactured.....	1919	7	51	957	84	58	275
	1914	4	90	50	49	73	219		1914	7	54	1,213	46	61	178
	1909	63	511	297	363	1,275	2,196		1909	4	16	575	14	45	108
Bread and other bakery prod- ucts.	1919	61	853	805	887	4,489	7,157	Leather goods ²	1919	22	222	259	283	1,005	2,104
	1914	60	536	438	354	1,441	2,527		1914	24	170	186	130	583	911
	1909	63	511	297	363	1,275	2,196		1909	26	304	136	220	868	1,386
Butter.....	1919	10	142	725	152	2,185	2,653	Lumber and timber products ⁴ .	1919	38	3,892	22,210	5,542	10,612	21,563
	1914	9	124	589	92	1,444	1,726		1914	35	2,557	14,130	1,957	4,628	7,847
	1909	8	139	860	105	1,102	1,431		1909	42	3,669	13,998	2,672	5,067	10,111
Canning and preserving ¹	1919	9	235	219	195	886	1,454	Marble and stone work.....	1919	6	30	161	51	100	241
	1914	6	135	192	72	316	585		1914	11	67	226	64	111	264
	1909	8	133	77	49	250	464		1909	7	38	90	38	71	175
Coffee, roasting and grinding...	1919	8	106	420	98	2,978	3,590	Mineral and soda waters.....	1919	6	75	937	119	510	795
	1914	9	99	329	61	1,532	2,050		1914	3	18	9	12	16	46
	1909	5	72	238	52	1,096	1,427		1909	5	33	27	19	39	101
Confectionery and ice cream...	1919	26	359	768	339	1,933	2,935	Printing and publishing ⁵	1919	143	1,031	1,827	1,534	2,446	7,905
	1914	20	348	618	174	989	1,830		1914	149	1,029	1,505	975	1,260	4,336
	1909	5	73	1,222	54	1,179	1,337		1909	132	952	1,402	1,036	847	3,736
Flour-mill and gristmill prod- ucts.	1919	7	374	3,179	553	20,110	22,526	Shipbuilding, wooden, includ- ing boat building.	1919	9	1,787	3,658	2,907	5,409	9,881
	1914	6	183	1,925	135	4,699	5,229		1914	5	40	84	37	19	80
	1909	5	73	1,222	54	1,179	1,337		1909	7	101	68	92	90	231
Food preparations, not else- where specified.	1919	13	169	1,729	170	3,643	4,218	All other industries.....	1919	301	11,908	17,598	16,846	39,983	76,653
	1914	18	79	633	53	625	878		1914	333	4,054	9,222	3,027	14,173	22,246
	1909	8	50	275	36	352	580		1909	269	4,795	9,498	3,207	12,019	19,867
Foundry and machine-shop products. ³	1919	145	4,538	12,253	7,872	13,409	28,458								
	1914	114	1,012	3,323	854	1,311	3,193								
	1909	44	799	2,080	704	1,222	2,527								
CITIES OF 10,000 TO 50,000 INHABITANTS—ALL INDUSTRIES COMBINED.															
ASTORIA.....	1919	78	1,404	6,832	2,072	9,271	13,399	SALEM.....	1919	84	1,080	3,324	1,179	6,741	9,435
	1914	57	1,172	8,090	866	2,649	4,587		1914	67	732	3,185	404	1,637	2,846
	1909	62	597	1,688	387	1,177	2,208		1909	62	597	1,688	387	1,177	2,208
EUGENE.....	1919	52	534	2,133	474	1,472	2,490								
	1914	37	238	1,061	167	407	810								

¹ Includes "canning and preserving, fish"; "canning and preserving, fruits and vegetables"; and "pickles, preserves, and sauces," in all years; and "canning and preserving, oysters," in 1914.

² Includes "automobile repairing"; "engines, steam, gas, and water"; "hardware"; "iron and steel, welding"; and "structural ironwork, not made in steel works or rolling mills," in all years; "hardware, saddlery," in 1919 and 1914; "gas machines" and "pumps, power, other than steam," in 1919.

³ Includes "saddlery and harness" and "trunks and valises."

⁴ Includes "lumber, planing-mill products, not including planing mills connected with sawmills," in all years; "boxes, wooden packing, except cigar boxes," in 1914 and 1909; and "window and door screens" in 1914.

⁵ Includes "engraving, steel and copper plate, including plate printing," in all years; "bookbinding and blank-book making"; and "lithographing" in 1914 and 1909.

MANUFACTURES—OREGON.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.		Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.										WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.					Capital.
			Total.	Proprietors and firm members.	Salaried officers, superintendents and managers.	Clerks, etc.		Wage earners.		Total.	16 and over.		Under 16.					
						Male.	Female.	Average number.	Number, 15th day of—		Male.	Female.	Male.	Female.				
									Maximum month.						Minimum month.			
All industries.....		2,707	68,005	2,540	2,411	2,963	1,532	58,559	Au 62,488	De 49,499	(*)	(*)	(*)	(*)	(*)	Dollars. 237,254,736		
1	Artificial stone products.....	14	71	12	9	1	1	48	Oc 71	Ja 16	73	73				218,493		
2	Automobile bodies and parts.....	17	70	22	1	1		46	Jy 55	Ja 31	50	48	1	1		115,256		
3	Automobile repairing.....	229	1,163	294	46	57	39	727	Se 810	Ja 608	813	797	12	4		1,492,590		
4	Baskets, and rattan and willow ware.....	3	22	2	3			17	(*) 17	(*) 17	19	14	5			21,343		
5	Bookbinding and blank-book making.....	6	69	4	6	1	3	55	Au 67	Ja 49	55	24	29	2		91,881		
6	Boxes, set-up paper boxes and cartons.....	5	185	2	7	3	5	169	De 205	Ja 149	205	71	134			323,641		
7	Boxes, wooden packing, except cigar boxes.....	20	662	14	24	12	2	610	Au 826	Fe 437	620	528	90	2		1,479,065		
8	Brass and bronze products.....	4	72	1	10	1	2	58	Mh 65	Oc 49	52	52				283,288		
9	Bread and other bakery products.....	146	1,550	164	71	149	90	1,076	No 1,126	My 1,028	1,116	716	385	5	10	2,986,540		
10	Brick and tile, terra-cotta, and fire-clay products.....	23	187	22	11	1	1	152			285	281	1	3		1,034,650		
11	Building brick.....	15	104	16	4			84	Jy 197	Ja 10	161	158		3		322,880		
12	Stove lining, sewer pipe, drain-tile, and terra-cotta products.....	8	83	6	7	1	1	68	Oc 123	Ja 17	124	123	1			711,770		
13	Brooms.....	7	100	3	8	3	2	84	De 104	My 61	105	71	34			267,994		
14	Butter.....	76	570	44	61	58	58	349	Je 414	De 284	328	280	47	1		2,686,548		
15	Canning and preserving, fish.....	36	578	8	51	28	15	476	Au 940	Ja 115	1,034	849	185			7,302,838		
16	Canning and preserving, fruits and vegetables.....	59	1,937	37	92	39	49	1,720			3,759	1,384	2,300	15	60	5,027,763		
17	Canned fruits.....	34	1,482	13	75	33	37	1,324	Se 2,897	Ap 199	2,811	891	1,846	14	60	3,412,502		
18	Dried fruits.....	21	302	24	12	1	9	256	Oc 603	Mh 44	635	399	235	1		1,148,103		
19	Canned and dried vegetables.....	4	153		5	5	3	140	Au 287	Fe 18	313	94	219			407,158		
20	Carpets, rag.....	3	39	3	3	3	1	29	Oc 36	Ja 24	34	27	7			12,861		
21	Carriages and wagons, repair work only.....	4	22	5				17	Jy 22	Mh 15	19	18		1		22,832		
22	Cars and general shop construction and repairs by electric-railroad companies.....	4	250		6	12	2	230	Ja 239	My 221	237	235	2			631,351		
23	Cars and general shop construction and repairs by steam-railroad companies.....	21	2,924		95	47	31	2,751	De 3,145	Je 2,551	3,145	3,106	39			3,858,129		
24	Cheese.....	52	96	25	2	2	1	66	Jy 91	Ja 34	87	85	1	1		409,726		
25	Clothing, men's.....	5	549	8	19	25	16	481	De 603	Mh 396	603	92	510	1		1,077,643		
26	Clothing, women's.....	7	64	8		1	2	53			65	11	54			80,556		
27	Suits, skirts, and cloaks.....	3	23	5				18	Oc 26	Ja 12	26	6	20			46,134		
28	All other.....	4	41	3		1	2	35	Oc 46	Ja 24	39	5	34			34,422		
29	Coffee, roasting and grinding.....	8	176	2	16	44	8	106	Jy 113	Ap 97	104	54	50			1,548,296		
30	Coffins, burial cases, and undertakers' goods.....	4	93	1	9	5	5	73	Ja 80	Se 65	76	62	14			407,828		
31	Condensed milk.....	8	247		21	29	17	180	De 241	Ap 138	249	207	47			2,494,314		
32	Confectionery and ice cream.....	37	637	38	41	65	43	450			495	179	316			1,210,956		
33	Confectionery.....	30	496	32	27	55	36	346	De 417	Mh 304	417	109	308			787,046		
34	Ice cream.....	7	141	6	14	10	7	104	Jy 129	De 79	78	70	8			423,910		
35	Cooperage, hogheads and barrels.....	4	28	5	4			19	Oc 31	Fe 10	24	24				91,946		
36	Copper, tin, and sheet-iron work.....	63	338	69	28	25	12	204	Oc 248	Ja 153	227	227				761,340		
37	Dairymen's, poultrymen's, and apiculturists' supplies.....	3	8	2	1		1	4	De 8	Je 2	7	6		1		21,000		
38	Dental goods.....	5	18	5				13	Ap 15	Fe 12	12	9	3			8,942		
39	Electrical machinery, apparatus, and supplies.....	3	31	2	4	3	2	20	Se 23	Ap 17	21	18	3			50,256		
40	Engraving, steel and copper plate, including plate printing.....	6	58	6	2		6	44	De 51	Ja 37	51	43	8			72,018		
41	Fertilizers.....	3	9	1	2			6	Ap 7	Au 5	7	7				10,950		
42	Flavoring extracts.....	4	21	4	1	2	3	11	Mh 14	My 8	10	7				75,486		
43	Flour-mill and gristmill products.....	116	1,232	99	142	113	56	822	De 959	Jy 652	954	929	25			23,099,592		
44	Food preparations, not elsewhere specified.....	13	259	10	29	34	17	169			171	134	37			2,561,087		
45	Macaroni, vermicelli, and noodles.....	4	29	3	1	2	2	21	Oc 22	Se 18	22	17	5			95,775		
46	All other.....	9	230	7	28	32	15	148	Oc 187	Jy 112	149	117	32			2,465,312		
47	Foundry and machine-shop products.....	121	3,722	95	153	152	57	3,265	Ja 2,957	De 868	2,460	2,442	8	9	1	7,388,394		
48	Boiler shops and foundries.....	18	1,738	9	32	67	18	1,612	Ja 2,957	De 868	2,460	2,442	8	9	1	2,634,702		
49	Machine shops.....	82	1,222	72	85	47	28	990	Ap 1,113	De 799	855	838				3,042,208		
50	Machine shop and foundry combined.....	21	762	14	36	38	11	663	Ja 828	De 455	737	736	1			1,711,484		
51	Fur goods.....	6	83	8	5	5	6	59	Se 71	Ap 48	65	20	44	1		196,843		
52	Furniture.....	23	1,004	14	46	34	15	895			1,019	970	49			2,979,542		
53	Wood, other than rattan and willow.....	17	870	9	35	28	13	785	De 879	Ja 658	880	835	45			2,613,466		
54	All other.....	6	134	5	11	6	2	110	Oc 150	Ja 76	139	135				366,076		
55	Gas, illuminating and heating.....	11	540		36	98	72	334	De 414	Ja 261	414	414				14,549,796		
56	Hardware, saddlery.....	3	6	2				4	Fe 6	Mh 3	5	5				5,000		
57	Hats and caps, other than felt, straw, and wool.....	3	30	3	3		3	21	No 30	Mh 15	29	8	21			43,454		

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

* Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

* No figures given for reasons stated under "Explanation of terms."

MANUFACTURES—OREGON.

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COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.					
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.				
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		Rent.^{2}

THE STATE—ALL INDUSTRIES COMBINED AND SPECIFIED INDUSTRIES.

Dollars. 7,815,628	Dollars. 6,183,543	Dollars. 81,093,784	Dollars. 1,936,402	Dollars. 1,285,941	Dollars. 12,417,927	Dollars. 201,354,721	Dollars. 4,851,320	Dollars. 366,782,627	Dollars. 160,676,586	304,346	140,640	25,161	2,166	43,252	93,127	25,611	
24,346	1,242	69,089	.....	2,351	1,861	106,211	2,749	265,385	156,425	103	.....	.....	3	.....	100	.....	1
1,650	300	71,358	.....	12,718	1,424	113,705	3,940	255,678	141,633	93	.....	.....	.....	.....	93	.....	2
78,713	80,884	1,027,133	405,620	107,166	15,305	745,746	44,360	2,604,602	1,814,496	1,202	2	.....	196	11	993	3	3
5,520	.....	12,858	.....	80	259	10,747	466	44,447	33,234	12	.....	.....	.....	.....	12	.....	4
20,354	4,304	52,843	2,520	3,875	2,738	74,618	1,705	195,734	119,411	38	.....	.....	.....	.....	38	.....	5
38,040	8,944	124,739	.....	14,958	10,589	298,585	5,554	585,249	281,110	167	50	.....	.....	.....	117	.....	6
92,855	30,309	600,391	7,440	5,850	70,816	2,084,192	27,156	4,112,237	2,000,889	3,540	820	.....	5	.....	2,715	110	7
28,010	6,774	96,289	.....	5,770	50,024	263,834	11,525	525,105	249,746	250	.....	.....	.....	.....	250	.....	8
170,456	342,494	1,142,911	638	93,183	168,803	5,573,984	135,085	9,031,478	3,322,409	1,125	106	.....	10	.....	1,099	19	9
23,689	2,969	165,424	1,983	180	9,242	26,581	65,139	385,531	235,861	1,166	556	.....	10	.....	600	20	10
5,608	.....	89,937	.....	30	1,590	13,319	32,620	189,153	143,214	680	275	.....	10	.....	395	.....	11
18,081	2,969	75,487	1,983	150	7,662	13,262	32,519	199,428	150,647	486	281	.....	.....	.....	205	20	12
19,744	8,653	72,167	.....	4,420	7,143	291,190	3,211	412,060	117,659	103	50	.....	.....	.....	53	.....	13
116,231	111,387	395,827	861	31,270	21,155	7,369,497	69,161	8,727,869	1,288,211	1,714	289	.....	25	.....	1,400	39	14
125,723	58,419	606,090	211,107	8,617	164,905	4,605,178	59,310	6,531,462	1,896,974	1,390	999	25	59	.....	307	15	15
234,506	100,505	1,225,144	361	12,590	322,956	8,108,554	106,934	12,265,651	4,050,163	2,574	1,204	30	120	60	1,160	.....	16
201,356	72,154	904,884	196	10,884	312,886	4,832,551	59,215	8,251,293	3,350,527	1,909	1,072	.....	8	42	787	.....	17
23,300	21,218	221,093	165	1,706	4,390	3,009,545	27,335	3,584,160	547,280	371	87	30	2	.....	252	.....	18
9,850	7,133	99,107	.....	5,680	5,680	266,458	20,384	430,108	145,456	294	45	.....	.....	.....	121	.....	19
1,650	2,432	30,813	.....	1,685	50	18,340	866	71,624	52,418	38	7	.....	.....	.....	31	.....	20
.....	.....	24,004	.....	3,106	206	29,304	1,503	77,394	46,587	32	.....	.....	.....	.....	32	.....	21
15,087	15,431	323,169	.....	.....	364	206,775	12,056	578,091	359,260	728	.....	.....	.....	.....	728	.....	22
242,710	110,436	3,063,827	.....	.....	4,420	2,232,075	222,263	6,472,962	4,018,624	2,938	763	.....	.....	.....	2,175	72	23
2,800	907	89,007	3,714	1,578	35,953	2,524,379	20,394	2,854,282	309,509	498	397	.....	12	10	79	.....	24
42,159	36,675	348,455	.....	9,000	26,549	1,322,435	6,587	2,034,335	705,313	224	150	.....	.....	.....	74	50	25
8,530	44,255	44,255	.....	5,921	1,088	81,309	1,277	153,695	71,109	11	.....	.....	.....	.....	11	.....	26
.....	.....	13,555	.....	900	784	29,696	466	48,675	18,513	3	.....	.....	.....	.....	3	.....	27
48,379	3,530	30,710	.....	5,021	304	51,613	811	105,020	52,596	8	.....	.....	.....	.....	8	.....	28
30,904	88,213	97,524	.....	17,130	49,692	2,964,540	13,557	3,690,207	612,110	420	.....	.....	.....	.....	420	.....	29
40,805	7,895	113,268	.....	1,500	10,857	288,452	1,792	494,442	204,198	144	.....	.....	.....	.....	144	.....	30
120,511	57,999	221,469	2,040	250	169,367	3,182,839	70,413	4,180,061	926,809	1,121	618	.....	.....	.....	503	16	31
68,554	142,018	391,594	182	23,379	49,474	2,176,997	42,990	3,455,809	1,245,892	872	75	.....	.....	.....	771	.....	32
51,677	124,482	249,548	182	20,059	22,480	1,301,555	16,983	2,243,438	924,900	230	.....	.....	26	.....	264	.....	33
68,045	18,436	142,036	.....	3,320	26,985	875,442	25,937	1,222,371	320,992	642	75	.....	.....	.....	567	.....	34
1,800	.....	23,688	64	2,856	1,114	100,532	1,020	148,470	40,927	38	.....	.....	.....	.....	38	.....	35
.....	40,698	325,337	1,800	20,697	17,202	589,789	8,411	1,339,365	741,105	264	.....	.....	.....	.....	264	.....	36
.....	150	2,930	.....	.....	304	8,645	316	25,422	16,461	30	.....	.....	.....	.....	30	.....	37
.....	.....	10,222	.....	1,805	41	20,436	74	57,719	37,209	3	.....	.....	.....	.....	3	.....	38
6,916	9,285	20,098	.....	2,782	816	37,241	1,067	103,127	64,819	35	.....	.....	.....	.....	35	.....	39
6,565	4,282	54,818	.....	5,100	521	25,919	2,018	154,837	126,900	72	.....	.....	.....	.....	72	.....	40
1,800	.....	7,192	.....	300	16	13,551	865	31,170	10,754	58	40	.....	3	.....	15	.....	41
1,500	6,920	12,286	.....	3,240	65	141,669	1,207	192,474	49,598	15	.....	.....	.....	.....	15	.....	42
387,018	214,125	1,165,868	30,139	19,788	274,692	37,559,277	242,471	42,549,987	4,748,239	13,314	447	.....	402	3,147	9,318	34	43
69,466	95,447	170,208	.....	12,687	66,207	3,616,096	27,141	4,217,694	574,457	1,729	750	.....	.....	.....	979	.....	44
1,500	3,736	21,887	.....	2,658	1,145	113,607	4,663	164,943	46,673	106	.....	.....	.....	.....	106	.....	45
67,965	91,711	148,321	.....	10,029	65,152	3,502,489	22,478	4,052,751	527,784	1,623	750	.....	.....	.....	873	.....	46
595,467	273,475	6,219,532	7,901	72,579	1,248,396	8,359,694	333,422	21,136,153	12,413,037	7,636	3,175	.....	59	.....	4,402	1,100	47
154,806	99,382	3,373,619	2,750	15,960	916,359	4,677,670	179,316	11,554,161	6,097,175	4,246	3,075	.....	.....	.....	1,171	1,100	48
270,812	99,333	1,500,492	.....	43,624	187,899	2,380,701	83,554	5,861,409	3,397,154	1,781	100	.....	56	.....	1,625	.....	49
164,869	74,760	1,345,451	5,151	12,995	144,138	1,331,323	70,552	3,720,583	2,318,708	1,609	.....	.....	3	.....	1,606	.....	50
13,625	11,270	63,916	854	17,400	8,490	105,174	1,695	270,445	163,576	34	.....	.....	.....	.....	34	.....	51
120,476	82,209	978,203	54	10,582	85,891	1,172,976	48,044	3,182,718	1,961,698	2,832	90	617	2	.....	2,123	.....	52
400,403	73,057	821,197	54	2,755	84,877	1,001,307	44,533	2,694,292	1,648,452	2,658	.....	617	2	.....	2,039	.....	53
26,073	9,212	157,006	.....	7,827	1,014	171,669	3,511	488,426	313,246	174	90	.....	.....	.....	84	.....	54
77,185	193,021	393,324	.....	231,122	214,568	608,907	608,907	2,927,374	2,108,899	1,910	293	1,540	.....	.....	77	2,089	55
.....	.....	5,285	.....	330	28	1,415	332	11,854	10,107	23	.....	.....	15	.....	8	.....	56
5,580	2,412	23,006	.....	1,380	250	45,673	471	103,961	57,817	6	.....	.....	.....	.....	6	.....	57

1 Same number reported throughout the year.
2 Same number reported for one or more other months.

MANUFACTURES—OREGON.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Average number.	Wage earners.		Total.	16 and over.		Under 16.		
					Male.	Female.		Maximum month.	Minimum month.		Male.	Female.	Male.		Female.

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

															Dollars.
1	Hats, fur-felt.....	3	7	3	1	5	4	(3)	4	(3)	4	4	4	4	6,397
2	Ice, manufactured.....	30	159	24	18	2	4	108	Jy 167	Ja 66	115	115	11	11	1,123,460
3	Jewelry.....	6	73	6	4	2	5	55	No 57	Je 53	56	45	11	11	58,993
4	Lapidary work.....	4	11	5	1	1	1	6	(3)	(3)	6	5	1	1	7,489
5	Leather goods, not elsewhere specified	6	22	4	3	2	1	14	De 17	My 11	17	10	7	7	44,378
6	Leather, tanned, curried, and finished	5	46	4	3	1	1	39	Ja 40	No 37	38	38	3	3	242,998
7	Looking-glass and picture frames.....	4	25	6	2	2	6	12	De 13	Ja 11	14	11	3	3	100,071
8	Lumber and timber products.....	625	24,870	701	524	570	197	22,884	Au 27,697	Ja 15,787	27,264	26,780	463	21	83,482,424
9	Lumber, planing-mill products, not including planing mills connected with sawmills.	61	1,305	51	76	68	26	1,084	Au 1,311	Ja 794	1,229	1,157	70	1	3,908,674
10	Marble and stone work.....	17	96	16	8	14	3	55	My 63	Ja 43	59	59	22	22	334,781
11	Mattresses and spring beds, not elsewhere specified.	6	105	8	6	6	3	82	No 111	Ja 57	111	89	11	11	289,886
12	Millinery and lace goods, not elsewhere specified.	6	52	9	2	2	2	41			47	8	39	39	45,718
13	Trimmed hats and hat frames.....	2	20	5				15	Ap 13	Ja 13	16	7	9	9	22,118
14	All other.....	3	32	4	2	2	2	26	De 31	Ja 25	31	1	30	30	23,600
15	Mineral and soda waters.....	33	181	34	8	27	3	109	Je 137	Ja 74	125	120	4	1	1,488,121
16	Models and patterns, not including paper patterns.	5	28	6				22	Je 28	Ja 16	23	23			22,568
17	Patent medicines and compounds.....	16	197	28	25	26	19	99	Oc 116	My 71	96	24	72	72	1,955,550
18	Patent and proprietary medicines	10	163	22	19	21	16	85	Mh 18	De 8	83	14	69	69	1,822,132
19	Patent and proprietary compounds, not elsewhere specified.	6	34	6	6	5	3	14			13	10	8	8	133,718
20	Paving materials.....	11	117	7	8	3	1	91	Se 196	Ja 22	155	153	2	2	344,435
21	Photo-engraving.....	4	25	3	2	1	1	21	De 25	Ap 19	21	14	7	7	21,090
22	Pickles, preserves, and sauces.....	8	214	5	20	26	15	148	Jy 177	De 125	131	79	52	52	1,847,257
23	Printing and publishing, book and job	122	890	120	81	64	58	567			607	471	128	8	2,090,450
24	Job printing.....	113	825	108	78	47	47	545	De 595	Se 524	584	451	126	7	1,968,987
25	All other.....	9	65	12	3	17	11	22	Fe 23	My 20	23	20	2	1	121,463
26	Printing and publishing, newspapers and periodicals.	224	1,857	205	130	374	219	929			1,011	877	114	19	3,493,299
27	Printing and publishing.....	17	172	15	14	25	13	105	De 115	Fe 98	115	101	11	2	300,803
28	Printing, publishing, and job printing.	158	1,540	161	80	320	156	823	De 883	Fe 778	895	776	102	17	3,065,075
29	Publishing without printing.....	49	145	29	36	29	50	1	(*)	(*)	1		1	1	127,421
30	Saddlery and harness.....	33	200	33	18	18	9	182	Ja 281	No 145	156	151	5	5	984,702
31	Shipbuilding, wooden, including boat building.	30	3,255	23	70	120	52	2,990			4,396	4,386	10	10	9,667,360
32	New vessels.....	15	3,171	5	64	117	52	2,933	Ja 7,757	Oc 624	4,328	4,318	10	10	9,437,117
33	Repair work only.....	3	37	4	3	1	1	29	Jy 37	Je 19	24	24			78,014
34	Small boats, and masts, spars, oars and rigging.	12	47	14	3	2	2	28	Ja 46	Oc 17	44	44			152,229
35	Signs, other than electric.....	9	28	10			2	16	Oc 20	Ja 12	18	18			13,318
36	Slaughtering and meat packing.....	21	1,035	10	20	174	50	772	Ja 927	Jy 698	721	629	90	2	5,255,407
37	Stoves and hot-air furnaces.....	6	155	11	11	1	6	126	Ja 169	De 102	102	101		1	245,584
38	Structural ironwork, not made in steel works or rolling mills.	6	1,248	5	26	85	21	1,111	Oc 3,346	Fe 86	1,387	1,387			687,142
39	Tobacco, cigars.....	41	144	47	1	4	1	91	De 108	Fe 84	106	85	20	1	371,257
40	Tools, not elsewhere specified.....	4	24	3	2			19	Ja 22	Fe 16	19	19			40,280
41	Trunks and valises.....	5	77	5	7	4	2	59	No 72	Ja 48	71	39	32	32	198,076
42	Vinegar and cider.....	10	78	4	10	2	2	60	Oc 114	My 20	121	114	7	7	408,157
43	Wood, turned and carved.....	8	75	5	4	1		65	Oc 85	Ja 37	78	55	23	23	127,238
44	Wooden goods, not elsewhere specified.	4	16	3				13	De 25	Ja 8	12	12			26,394
45	Woolen goods.....	5	858		17	27	6	808	Se 909	Mh 701	855	457	392	6	2,459,000
46	All other industries*.....	144	10,742	91	232	286	177	9,956							28,862,919

*All other industries embrace—

Agricultural implements.....	1	Cement.....	1	Furs, dressed.....	1	Hand stamps.....	2
Artificial limbs.....	1	Chemicals.....	1	Galvanizing.....	1	Hardware.....	2
Awnings, tents, and sails.....	2	Cleansing and polishing preparations.....	2	Gas and electric fixtures.....	2	Instruments, professional and scientific.....	1
Babbit metal and solder.....	2	Cordage and twine.....	1	Gas machines.....	1	Iron and steel, steel works and rolling mills.....	1
Bags, other than paper, not including bags made in textile mills.....	2	Cordials and flavoring sirups.....	1	Glass, cutting, staining, and ornamenting.....	2	Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	1
Belting, leather.....	2	Electroplating.....	2	Gloves and mittens, cloth, not including gloves made in textile mills.....	1	Iron and steel, cast-iron pipe.....	1
Blacking, stains, and dressings.....	2	Enameling.....	1	Gloves and mittens, leather.....	2	Iron and steel, cut nails and spikes, not made in steel works or rolling mills.....	1
Bluing.....	2	Engines, steam, gas, and water.....	3	Grease and tallow, not including lubricating greases.....	1	Iron and steel, welding.....	2
Boots and shoes.....	2	Fancy articles, paper and wood novelties.....	2	Hair work.....	1		
Boxes, cigar.....	1	Flags and banners.....	1				
Brushes.....	1	Flax and hemp, dressed.....	1				
Cars, steam-railroad, not including operations of railroad companies.....	1	Furnishing goods, men's neckwear.....	1				

1 Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

2 Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

[illegible][illegible]

⁴ Same number reported for one or more other months.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents, and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Female.	Average number.	Number, 15th day of—			Male.	Female.	Male.		Female.
								Maximum month.	Minimum month.						

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

		846	32,157	609	1,885	1,839	951	26,813	Mh 30,991	De 20,564	29,396	26,241	3,107	32	16	Dollars.
1	PORTLAND—All industries...															106,365,175
2	Artificial stone products.....	6	39	5	5	1	1	27	De 40	Ja 4	44	44	.....	.....	.....	100,349
3	Automobile bodies and parts.....	10	58	12	1	1	1	44	Au 51	Ja 31	46	45	1	.....	.....	76,586
4	Automobile repairing.....	67	497	64	34	34	20	345	Au 372	Fe 304	340	339	7	.....	.....	543,383
5	Boxes, set-up paper boxes and cartons	5	186	2	7	3	5	169	De 205	Ja 149	205	71	134	.....	.....	323,641
6	Bread and other bakery products...	61	1,187	66	63	143	62	853	No 898	My 813	878	554	312	2	10	2,339,969
7	Brick, sewer pipe, and drain tile....	3	49	1	4	.....	.....	44	Oc 111	Ja 3	85	84	1	.....	.....	601,491
8	Brooms.....	7	100	3	8	3	2	84	De 104	My 61	105	71	34	.....	.....	267,994
9	Butter.....	10	231	4	20	42	23	142	Je 172	De 113	115	90	25	.....	.....	1,288,195
10	Carpets, rag.....	3	39	3	3	3	1	29	Oc 36	Ja 24	34	27	7	.....	.....	12,861
11	Clothing, men's.....	5	549	8	19	25	16	481	De 603	Mh 396	603	92	510	1	.....	1,077,643
12	Clothing, women's.....	7	64	8	.....	1	2	53	.....	.....	65	11	54	.....	.....	80,556
13	Suits, skirts, and cloaks.....	3	23	5	.....	.....	.....	18	Oc 26	Ja 12	26	6	20	.....	.....	46,134
14	All other.....	4	41	3	.....	1	2	35	Oc 46	Ja 24	30	5	34	.....	.....	34,422
15	Coffee, roasting and grinding.....	8	176	2	16	44	8	106	Jy 113	Ap 97	104	54	50	.....	.....	1,548,296
16	Coffins, burial cases, and undertakers' goods.	4	93	1	9	5	5	73	Ja 80	Se 65	76	62	14	.....	.....	407,828
17	Confectionery and ice cream.....	26	521	27	32	63	40	359	Oc 402	Fe 316	396	164	232	.....	.....	1,041,796
18	Copper, tin, and sheet-iron work....	40	265	40	27	23	9	166	Oc 199	Ja 127	179	179	.....	.....	.....	626,533
19	Dental goods.....	5	18	5	.....	.....	.....	13	Ap 15	Fe 12	12	9	3	.....	.....	8,942
20	Electrical machinery, apparatus, and supplies.	3	31	2	4	3	2	20	Se 23	Ap 17	21	18	3	.....	.....	50,256
21	Engraving, steel and copper plate, including plate printing.	6	58	6	2	.....	6	44	De 51	Ja 37	51	43	8	.....	.....	72,018
22	Flavoring extracts.....	4	21	4	1	2	3	11	Mh 14	My 8	10	7	3	.....	.....	75,486
23	Flour-mill and gristmill products....	7	529	.....	48	74	33	374	De 440	Jy 316	440	422	18	.....	.....	12,414,228
24	Food preparations, not elsewhere specified.	13	259	10	29	34	17	169	.....	.....	171	134	37	.....	.....	2,561,087
25	Macaroni, vermicelli, and noodles.	4	29	3	1	2	2	21	Oc 22	Se 18	22	17	5	.....	.....	95,775
26	All other.....	9	230	7	28	32	15	148	Oc 187	Jy 112	149	117	32	.....	.....	2,465,312
27	Foundry and machine-shop products.	64	3,254	36	132	140	49	2,897	.....	.....	2,017	2,007	6	4	.....	6,025,122
28	Boiler shops and foundries.....	14	1,723	4	31	66	18	1,604	Ja 2,953	De 857	857	857	.....	.....	.....	2,600,364
29	Machine shops.....	45	1,079	29	83	45	25	897	Ap 1,021	De 711	757	747	6	4	.....	2,668,961
30	Machine shop and foundry combined.	5	452	3	18	29	6	396	Ja 529	De 301	403	403	.....	.....	.....	755,797
31	Fur goods.....	6	83	8	5	5	6	59	Se 71	Ap 48	65	20	44	1	.....	196,843
32	Furniture.....	14	852	7	37	27	12	769	Oc 882	Ja 625	879	842	37	.....	.....	2,608,226
33	Hats and caps, other than felt, straw, and wool.	3	30	3	3	.....	3	21	No 30	Mh 15	29	8	21	.....	.....	43,454
34	Hats, fur-felt.....	3	7	3	.....	.....	.....	4	(*) Jy 4	(*) De 4	4	.....	4	.....	.....	6,397
35	Ice, manufactured.....	7	75	7	11	3	3	51	Jy 71	De 37	41	41	.....	.....	.....	686,371
36	Leather goods, not elsewhere specified	6	22	4	1	2	1	14	De 17	My 11	17	10	7	.....	.....	44,378
37	Looking-glass and picture frames....	4	25	6	2	.....	5	12	De 13	Ja 11	14	11	3	.....	.....	100,071
38	Lumber and timber products.....	19	3,542	1	80	74	44	3,843	Jy 3,978	Ja 2,221	3,656	3,578	76	2	.....	16,877,218
39	Lumber, planing-mill products, not including planing mills connected with sawmills.	19	655	12	39	38	17	549	No 626	Ja 422	614	585	27	1	1	1,474,474
40	Marble and stone work, monuments and tombstones.	6	54	6	6	11	1	30	My 37	Ja 23	32	32	.....	.....	.....	210,912
41	Millinery and lace goods, not elsewhere specified.	6	52	9	.....	.....	2	41	.....	.....	47	8	39	.....	.....	45,718
42	Trimmed hats and hat frames.....	3	20	5	.....	.....	.....	15	Ap 18	Ja 13	16	7	9	.....	.....	22,118
43	All other.....	3	32	4	.....	.....	2	26	De 31	Ja 25	31	1	30	.....	.....	23,600
44	Mineral and soda waters.....	6	115	6	6	26	2	75	Je 95	Ja 54	77	76	1	.....	.....	1,320,381
45	Models and patterns, not including paper patterns.	5	28	6	.....	.....	.....	22	Je 28	Ja 16	23	23	.....	.....	.....	22,598
46	Patent medicines and compounds....	10	177	21	22	23	17	94	Oc 122	My 82	87	18	69	.....	.....	1,849,184
47	Photo-engraving.....	4	28	3	2	1	1	21	De 25	Ap 19	21	14	7	.....	.....	21,090
48	Printing and publishing, book and job	79	783	69	76	63	54	521	De 538	Se 480	550	437	106	7	.....	1,824,017
49	Job printing.....	70	718	57	73	46	43	490	De 538	Se 480	527	417	104	6	.....	1,702,554
50	All other.....	9	65	12	3	17	11	22	Fe 23	My 20	23	20	2	1	.....	121,463
51	Printing and publishing, newspapers and periodicals.	58	1,072	33	71	338	164	466	.....	.....	506	479	23	4	.....	1,980,537
52	Printing, publishing, and job printing.	18	938	13	35	310	115	465	De 505	Fe 435	505	479	23	3	.....	1,861,102
53	Publishing without printing.....	40	134	20	36	28	49	1	(*) Jy 1	(*) De 1	1	.....	.....	.....	.....	119,435
54	Saddlery and harness.....	11	193	8	14	15	7	149	Ja 255	No 112	122	117	5	.....	.....	725,257
55	Shipbuilding, wooden, including boat building.	9	1,956	3	39	99	28	1,787	Ja 5,091	No 110	2,300	2,300	.....	.....	.....	5,890,991
56	Signs, other than electric.....	9	28	10	.....	.....	2	16	Oc 20	Ja 12	18	18	.....	.....	.....	13,318
57	Structural ironwork, not made in steel works or rolling mills.	6	1,248	5	26	85	21	1,111	Oc 3,346	Fe 86	1,387	1,387	.....	.....	.....	687,142

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

* Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919—Continued.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent- ²
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars. 4,260,286	Dollars. 3,903,891	Dollars. 38,758,259	Dollars. 828,833	Dollars. 920,314	Dollars. 9,232,908	Dollars. 109,093,953	Dollars. 2,292,626	Dollars. 196,380,146	Dollars. 84,993,567	70,536	20,091	2,117	43	48,255	3,475	1
18,478	1,242	45,286	.....	2,145	842	63,714	1,567	168,163	102,852	36	.....	.....	.....	28	.....	2
1,650	360	65,863	.....	10,703	1,153	109,573	3,395	216,832	112,864	79	.....	.....	.....	79	.....	3
57,718	50,906	486,099	402,720	61,913	5,003	369,981	20,447	1,265,165	874,737	426	.....	.....	.....	426	.....	4
38,040	8,944	124,739	.....	14,958	16,589	298,585	5,554	585,249	281,110	167	50	.....	.....	117	.....	5
159,956	315,903	887,273	475	65,252	159,750	4,394,341	95,011	7,157,084	2,667,732	805	103	.....	10	692	19	6
6,164	999	48,104	.....	6,411	6,812	21,116	.....	103,776	75,848	365	225	.....	.....	140	20	7
19,744	8,653	72,167	.....	4,420	7,143	291,190	3,211	412,060	117,659	103	50	.....	.....	63	.....	8
47,794	66,566	152,307	.....	18,305	11,931	2,169,788	24,247	2,652,847	467,814	725	.....	.....	.....	725	.....	9
1,050	2,432	30,813	.....	1,685	50	18,340	866	71,624	52,418	38	.....	.....	.....	31	.....	10
42,159	36,675	348,455	.....	9,000	26,540	1,322,435	6,587	2,034,335	705,313	224	150	.....	.....	74	50	11
.....	3,530	44,265	.....	5,921	1,088	81,309	1,277	153,695	71,109	11	.....	.....	.....	11	.....	12
.....	.....	13,555	.....	900	784	29,096	466	48,675	18,513	3	.....	.....	.....	3	.....	13
.....	3,530	30,710	.....	5,021	304	51,613	811	105,020	52,596	8	.....	.....	.....	8	.....	14
48,379	88,213	97,524	.....	17,130	49,692	2,964,540	13,557	3,590,207	612,110	420	.....	.....	.....	420	.....	15
30,904	7,895	113,268	.....	1,500	10,857	288,452	1,792	494,442	204,198	144	.....	.....	.....	144	.....	16
109,251	137,860	339,363	.....	19,379	108,135	1,863,642	39,273	2,935,426	1,002,521	768	75	.....	20	673	.....	17
66,658	36,097	267,268	1,800	16,796	16,324	487,870	7,517	1,129,107	633,720	234	.....	.....	.....	234	.....	18
.....	.....	16,222	.....	1,805	41	20,436	74	57,719	37,209	3	.....	.....	.....	3	.....	19
6,916	9,285	20,998	.....	2,782	816	37,241	1,067	103,127	64,819	35	.....	.....	.....	35	.....	20
6,565	4,282	54,818	.....	5,100	521	25,919	2,018	154,837	126,900	72	.....	.....	.....	72	.....	21
1,500	6,920	12,286	.....	3,240	65	141,669	1,207	192,474	49,598	15	.....	.....	.....	15	.....	22
184,116	139,713	553,123	26,603	14,270	124,018	20,024,803	85,094	22,525,761	2,415,864	3,179	.....	.....	.....	3,179	.....	23
69,465	95,447	170,208	.....	12,687	66,297	3,616,096	27,141	4,217,694	874,457	1,729	750	.....	.....	979	.....	24
1,500	3,786	21,887	.....	2,658	1,145	113,607	4,663	164,943	46,673	106	.....	.....	.....	106	.....	25
67,965	91,711	148,321	.....	10,029	65,152	3,502,489	22,478	4,052,751	527,784	1,623	750	.....	.....	873	.....	26
534,922	252,042	5,372,370	7,301	59,300	1,238,280	7,953,938	306,196	19,423,232	11,163,098	6,781	3,175	.....	.....	3,605	1,100	27
152,381	99,162	3,368,115	2,750	15,768	916,031	4,664,559	177,355	11,515,024	6,673,110	4,219	3,075	.....	.....	1,144	1,100	28
273,512	94,193	1,347,337	.....	35,262	185,231	2,229,008	71,613	5,413,529	3,112,908	1,459	100	.....	.....	1,359	.....	29
109,029	58,687	658,918	4,551	8,270	137,018	1,069,371	57,228	2,494,679	1,377,080	1,103	.....	.....	.....	1,103	.....	30
13,625	11,270	63,916	854	17,400	8,490	105,174	1,695	270,445	163,576	34	.....	.....	.....	34	.....	31
107,795	69,527	871,166	.....	9,846	81,932	1,067,015	39,267	2,899,667	1,793,385	2,551	90	617	.....	1,844	.....	32
5,580	2,412	23,006	.....	1,380	250	45,673	471	103,961	57,817	6	.....	.....	.....	6	.....	33
.....	.....	3,600	.....	1,430	58	8,549	397	21,560	12,614	2	.....	.....	.....	2	.....	34
31,882	8,826	83,589	500	5,700	10,932	9,859	48,551	275,088	216,678	957	.....	.....	.....	957	.....	35
1,000	3,875	15,120	.....	2,280	478	36,327	1,602	68,977	31,048	12	.....	.....	.....	12	.....	36
3,101	3,964	14,939	.....	4,322	1,166	38,027	330	91,996	53,639	12	.....	.....	.....	2	.....	37
353,367	181,493	4,769,031	18,124	56,368	746,337	9,073,911	127,078	18,845,793	9,644,804	19,531	12,017	.....	10	7,514	275	38
128,614	85,412	772,479	.....	27,087	56,605	1,389,441	30,438	2,716,868	1,305,989	2,679	855	.....	.....	1,824	.....	39
.....
18,410	17,776	51,018	.....	6,600	1,222	96,210	3,439	241,180	141,531	161	.....	.....	.....	161	.....	40
.....	1,480	26,615	200	6,657	249	30,988	714	91,951	60,249	7	.....	.....	.....	7	.....	41
.....	.....	10,806	200	4,079	120	17,985	564	47,806	29,257	3	.....	.....	.....	3	.....	42
.....	1,480	15,809	.....	2,578	129	13,003	150	44,145	30,992	4	.....	.....	.....	4	.....	43
15,600	45,247	118,731	.....	1,270	60,964	492,377	17,137	795,251	235,737	937	680	.....	.....	277	.....	44
.....	.....	32,410	.....	2,460	156	16,248	937	70,869	53,674	39	.....	.....	.....	39	.....	45
84,306	51,980	84,685	.....	8,157	25,120	517,985	4,195	977,395	455,215	95	40	.....	.....	55	.....	46
2,220	2,630	34,402	.....	2,460	877	16,282	915	106,196	88,999	10	.....	.....	.....	10	.....	47
229,746	142,552	674,648	23,902	66,252	53,078	1,145,407	20,162	3,119,527	1,953,958	700	.....	.....	.....	700	.....	48
224,314	125,970	645,975	22,146	63,810	52,449	1,139,152	18,484	3,012,475	1,854,839	692	.....	.....	.....	692	.....	49
5,432	16,582	28,673	1,758	2,442	629	6,255	1,678	107,052	99,119	8	.....	.....	.....	8	.....	50
239,696	712,089	804,070	272,732	79,576	200,495	1,224,616	27,410	4,630,780	3,378,754	1,055	.....	.....	.....	1,055	.....	51
171,170	612,830	803,666	10,827	65,513	197,368	1,195,773	27,410	3,934,473	2,711,290	1,054	.....	.....	.....	1,054	.....	52
68,526	99,259	404	261,905	14,063	3,127	28,843	.....	696,307	667,464	1	.....	.....	.....	1	.....	53
33,768	28,062	192,004	.....	11,245	45,822	784,122	4,426	1,635,654	847,106	215	.....	.....	.....	215	.....	54
171,779	205,024	2,907,407	57,534	61,357	527,936	5,357,508	51,096	9,881,322	4,472,718	3,658	617	.....	.....	3,141	.....	55
.....	744	23,102	675	4,102	79	22,134	78	77,245	55,033	3	.....	.....	.....	3	.....	56
91,478	50,463	1,704,796	4,672	16,974	10,164	3,814,836	33,290	6,392,273	2,544,147	4,618	.....	.....	.....	4,618	.....	57

¹ Same number reported for one or more other months.² Same number reported throughout the year.

MANUFACTURES—OREGON.

TABLE 31.—DETAILED STATEMENT OF ALL INDUSTRIES

INDUSTRY.	Number of establishments.	PERSONS ENGAGED IN THE INDUSTRY.								WAGE EARNERS DEC. 15, OR NEAREST REPRESENTATIVE DAY.				Capital.	
		Total.	Proprietors and firm members.	Salaried officers, superintendents and managers.	Clerks, etc.		Wage earners.			Total.	16 and over.		Under 16.		
					Male.	Fe- male.	Average number.	Number, 15th day of—			Male.	Fe- male.	Male.		Fe- male.
								Maximum month.	Minimum month.						

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

PORTLAND—Continued.															Dollars.			
1	Tobacco, cigars.....	15	64	16	1	1	.....	46	De	57	Mh*	43	57	47	9	1	275,145
2	Trunks and valises.....	5	77	5	7	4	2	59	No	72	Ja	48	71	39	32	.....	198,076
3	Vinegar and cider.....	3	10	1	2	.....	1	6	De	16	Ap*	1	22	22	.....	.....	43,737
4	Wood, turned and carved.....	3	62	3	1	.....	.....	58	Oc	78	Ja	38	71	48	23	.....	86,825
5	All other industries*.....	166	12,695	108	968	379	254	10,986	12,683	11,554	1,115	9	5	37,498,555

* All other industries embrace—	Brass and bronze products.....	3	Cleansing and polishing preparations.....	2	Gas and electric fixtures.....	2
Artificial limbs.....	Brushes.....	1	Cooperage, hogsheds and barrels..	3	Gas, illuminating and heating.....	2
Awnings, tents, and sails.....	Canning and preserving, fish.....	1	Cordage and twine.....	1	Gas machines.....	1
Babbitt metal and solder.....	Canning and preserving, fruits.....	2	Cordials and flavoring sirups.....	1	Glass, cutting, staining, and ornamenting.....	2
Bags, other than paper, not including bags made in textile mills.....	Carriages and wagons, repair work only.....	1	Dairymen's, poultrymen's, and apiarists' supplies.....	2	Gloves and mittens, leather.....	2
Baskets, and rattan and willow ware.....	Cars and general shop construction and repairs by electric-railroad companies.....	2	Electroplating.....	2	Glucose.....	1
Belting, leather.....	Cars and general shop construction and repairs by steam-railroad companies.....	2	Enameling.....	1	Hair work.....	1
Blacking, stains, and dressings.....	Cars, steam-railroad, not including operations of railroad companies..	1	Engines, steam, gas, and water.....	1	Hand stamps.....	1
Bluing.....	Chemicals.....	1	Fancy articles, paper novelties.....	1	Hardware, builders'.....	1
Bookbinding and blank-book making.....	.....	.....	Fertilizers.....	1	Hardware, saddlery.....	2
Boots and shoes.....	.....	.....	Flags and banners.....	1	Instruments, professional and scientific.....	1
Boxes, cigar.....	.....	.....	Furnishing goods, men's neckwear..	1	Iron and steel, steel works and rolling mills.....	1
Boxes, wooden packing, except cigar boxes.....	.....	.....	Galvanizing.....	1	.....	.....

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

1 ASTORIA.....	78	1,641	61	74	49	53	1,404	Ja	1,871	De	1,027	2,200	1,988	212	.....	11,881,102
2 EUGENE.....	52	661	52	49	13	13	534	Au	793	Ja*	354	777	413	364	.....	1,706,894
3 SALEM.....	84	1,341	83	62	59	57	1,080	Se	1,525	Fe	705	1,600	1,024	563	1	5,636,770

* Includes water wheels and turbines (irrespective of ownership of water supply), and water motors (operated by water from city mains).

* Chiefly electric motors operated by rented (or purchased) current; other power included (chiefly shaft-belt or transmitted power from neighboring power plants).

COMBINED AND SPECIFIED INDUSTRIES: 1919.

EXPENSES.								Value of products.	Value added by manufacture.	POWER.						
Salaries and wages.			For contract work.	Rent and taxes.		For materials.				Primary horsepower.					Electric horsepower generated in establishments reporting.	
Officials.	Clerks, etc.	Wage earners.		Rent of factory.	Taxes, Federal, state, county, and local.	Principal materials.	Fuel and rent of power.			Total.	Owned.					Rent- ed. ²
											Steam engines (not turbines).	Steam turbines.	Internal-combustion engines.	Water power. ¹		

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

Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.	Dollars.						
317	2,000	48,243	.....	3,875	18,550	77,016	717	167,201	89,468	3	.....	.....	.....	3	.....	1
24,881	20,085	70,021	.....	7,170	3,710	176,658	1,605	399,350	221,027	32	.....	.....	.....	32	.....	2
3,856	1,196	8,393	.....	3,300	2,670	40,018	2,914	62,207	19,335	107	.....	.....	.....	107	.....	3
5,200	100	40,369	.....	2,520	406	55,129	2,650	139,574	81,795	293	.....	.....	.....	293	.....	4
1,242,556	980,219	15,991,710	10,741	168,235	5,522,997	36,898,771	1,202,838	72,652,900	34,551,291	10,460	1,327	1,500	3	13,630	2,011	5

Iron and steel, bolts, nuts, washers, and rivets, not made in rolling mills.....	1	Mirrors, framed and unframed, not elsewhere specified.....	1	Roofing materials.....	2	Stoves and hot-air furnaces.....	4
Iron and steel, cut nails and spikes, not made in steel works or rolling mills.....	1	Musical instruments and materials, not specified.....	1	Rubber tires, tubes, and rubber goods, not elsewhere specified.....	2	Surgical appliances.....	1
Iron and steel, welding.....	1	Oil, linseed.....	1	Sausage, not made in slaughtering and meat-packing establishments..	1	Tinware, not elsewhere specified.....	3
Jewelry.....	5	Optical goods.....	3	Saws.....	3	Tools, not elsewhere specified.....	2
Knit goods.....	1	Paints.....	2	Shipbuilding, steel, new vessels....	3	Toys and games.....	1
Lamps.....	2	Peanuts, grading, roasting, cleaning, and shelling.....	1	Shirts.....	1	Typewriter supplies, carbon paper..	2
Lapidary work.....	1	Perfumery and cosmetics.....	2	Slaughtering and meat packing....	2	Varnishes.....	2
Leather, tanned, curried, and finished.....	1	Photographs and graphophones.....	2	Soap.....	4	Waste, cotton.....	1
Liquors, malt.....	1	Photographic materials.....	2	Sporting and athletic goods.....	1	Window shades and fixtures.....	2
Mattresses and spring beds, not elsewhere specified.....	4	Pickles, preserves, and sauces.....	6	Springs, steel, automobile.....	1	Wirework, not elsewhere specified..	2
		Pottery, earthen and stone ware....	1	Statuary and art goods.....	1	Wooden goods, not elsewhere speci- fied.....	2
		Pulp goods, wall board.....	1	Steam packing.....	1	Wool pulling.....	1
		Pumps, power, other than steam....	1	Stencils and brands.....	2	Wool scouring.....	1
				Stereotyping and electrotyping.....	1	Woolen goods.....	1
						Worsted goods.....	1

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

248,154	126,487	2,072,076	171,481	27,507	176,461	9,106,322	164,252	13,398,627	4,128,053	6,832	2,646	.....	8	.....	4,178	57	1
100,437	20,195	474,147	3,280	13,680	22,009	1,407,454	64,775	2,489,647	1,017,418	2,133	295	40	.....	260	1,538	20	2
169,170	155,509	1,179,334	7,866	21,000	264,770	6,617,449	123,359	9,435,070	2,694,262	3,324	1,551	.....	6	170	1,597	62	3

* Same number reported for one or more other months.