

# TEXAS

TABLE 1.—SUMMARY FOR THE STATE: 1899 TO 1929

[Data for the "Automobile repairing" industry are included in the figures for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
			Total	Prime movers	Electric motors driven by purchased energy		Total <sup>4</sup>	Materials and containers	Fuel and purchased energy		
1920	5,108	134,498	822,860	378,927	443,933	\$151,827,257	\$989,939,628	\$962,750,112	\$27,189,516	\$1,450,246,431	\$460,306,803
1927	4,065	116,763	635,455	334,956	300,499	130,408,661	842,927,286	797,137,948	45,790,338	1,206,579,962	363,652,676
1925	3,606	106,792	572,798	359,343	213,455	116,303,302	845,143,862	( <sup>5</sup> )	( <sup>5</sup> )	1,237,952,469	392,808,607
1923	3,693	102,358	548,299	336,075	212,224	111,461,949	647,451,774	( <sup>5</sup> )	( <sup>5</sup> )	979,192,057	331,740,283
1921	3,566	88,707	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	103,945,662	570,042,547	( <sup>5</sup> )	( <sup>5</sup> )	842,438,135	272,305,588
1919	5,724	107,522	440,894	320,355	120,539	116,403,800	701,170,808	678,278,642	22,892,256	909,995,796	298,824,898
1914	5,084	74,853	335,496	292,553	42,943	44,821,377	253,144,201	242,405,876	10,738,385	361,279,303	108,135,042
1909	4,588	70,230	282,035	267,167	14,868	37,907,272	178,178,515	170,983,406	7,195,109	272,895,635	94,717,120
1904	3,153	49,066	164,578	160,164	4,414	24,468,942	91,603,630	87,723,393	3,875,237	150,528,389	58,924,759
1899	3,107	38,604	115,885	113,496	2,390	16,911,681	64,888,303	( <sup>6</sup> )	( <sup>6</sup> )	92,894,433	38,560,130
PER CENT OF INCREASE OR DECREASE (—)											
1927-1920	27.9	15.2	29.5	13.1	47.7	16.4	17.4	20.8	-40.6	20.1	26.6
1925-1927	12.7	9.3	10.9	-6.8	40.8	12.1	-0.3			-2.5	-7.4
1923-1925	-2.4	4.3	4.5	6.9	0.6	4.4	30.5			26.4	18.4
1921-1923	3.6	15.4				7.2	13.6			16.2	21.8
1919-1921	-37.7	-17.5				-10.7	-18.7			-15.8	-8.8
1910-1929	-9.2	25.1	86.6	18.3	208.3	30.4	41.2	41.9	18.8	45.0	54.0
1909-1919	24.8	53.1	56.3	10.9	710.7	207.1	293.5	296.7	218.2	266.4	215.5
1899-1909	47.7	81.0	143.4	135.4	522.1	124.1	227.6			193.8	146.0

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>4</sup> Not reported separately.  
<sup>5</sup> Not called for on schedule.  
<sup>6</sup> No comparable data.

TABLE 2.—SUMMARY FOR COUNTIES AND CITIES: 1929

COUNTY OR CITY	Population, 1930	Number of establishments	Wage earners (average for the year) <sup>1</sup>	Horsepower <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture
						Total	Materials and containers	Fuel and purchased energy		
The State	5,824,715	5,198	134,498	822,860	\$151,827,257	\$989,939,628	\$962,750,112	\$27,189,516	\$1,450,246,431	\$460,306,803
<i>Counties<sup>3</sup></i>										
Anderson	84,043	39	771	4,123	905,474	1,826,365	1,730,075	96,290	3,372,439	1,546,074
Angellina	27,803	26	2,313	7,610	2,118,609	3,799,148	3,717,820	81,328	8,505,505	4,706,359
Atascosa	15,654	8	72	258	96,844	105,300	95,684	9,616	272,897	167,537
Austin	18,860	11	111	628	133,313	815,151	790,254	24,897	1,201,741	386,590
Bastrop	23,888	19	415	2,383	445,488	809,701	689,734	170,967	1,861,792	992,091
Baylor	7,418	5	27	475	25,003	217,397	209,086	8,311	339,998	122,601
Bee	15,721	8	56	421	60,332	288,866	274,890	13,976	531,701	242,835
Bell	50,030	41	565	3,855	701,740	2,433,762	2,315,446	118,316	4,110,620	1,676,868
Bexar <sup>4</sup>	202,533	412	9,395	40,090	8,046,800	35,736,220	34,415,729	1,320,491	60,804,038	25,067,818
Bosque	15,750	11	74	817	77,903	408,857	395,750	13,107	609,000	200,162
Bowie	48,563	47	1,583	7,231	1,568,560	6,785,049	6,529,070	255,979	11,919,153	5,134,104
Brazoria	23,054	12	156	972	157,929	617,016	583,631	33,385	1,018,958	401,942
Brazos	21,835	10	85	639	87,230	443,563	419,101	24,462	763,192	319,629
Brown	26,382	28	334	2,067	388,726	1,405,227	1,320,287	84,940	2,421,780	1,016,553
Burnet	10,355	3	11	208	10,800	11,307	9,140	2,167	41,930	30,632
Caldwell	31,397	18	111	1,340	113,722	1,217,788	1,211,877	25,911	1,600,025	371,237
Callahan	12,785	5	61	180	91,330	158,089	144,452	13,637	333,737	175,048
Cameron	77,540	56	476	5,012	478,185	1,267,497	1,144,003	122,894	3,125,767	1,858,270
Camp	10,063	7	197	797	143,199	423,520	414,951	8,569	770,346	340,826
Carson	7,745	11	146	1,160	217,027	838,631	284,452	554,179	1,487,591	648,990
Cass	30,030	24	213	1,062	137,900	176,176	168,629	7,547	486,801	310,625
Chambers	5,710	5	18	108	12,704	15,550	15,550		48,000	32,450
Cherokee	43,180	45	669	2,433	513,245	542,902	524,535	18,367	1,573,598	1,030,696
Childress	16,044	10	500	2,832	671,248	1,280,305	1,219,404	60,901	2,224,907	944,602
Clay	14,545	5	9	134	11,538	20,241	17,718	2,523	50,910	30,569
Coleman	23,609	10	89	809	95,596	574,936	535,609	39,327	690,432	415,496
Collin	46,180	21	506	3,289	417,217	3,036,395	2,932,987	103,408	4,218,800	1,182,414
Collingsworth	14,461	6	21	82	30,034	51,872	46,766	5,106	144,589	92,687
Colorado	19,129	17	147	1,084	139,423	1,126,745	1,100,774	25,971	1,446,623	319,878
Comal	11,984	20	595	5,602	493,302	3,203,523	3,031,647	171,876	4,721,279	1,517,756

See footnotes at end of table.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—SUMMARY FOR COUNTIES AND CITIES: 1929—Continued

COUNTY OR CITY	Popula- tion, 1930	Number of estab- lish- ments	Wage earners (average for the year) <sup>1</sup>	Horse- power <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufac- ture
						Total	Materials and containers	Fuel and purchased energy		
<i>Counties<sup>3</sup>—Continued</i>										
Comanche.....	18,430	11	88	603	\$60,195	\$525,172	\$513,262	\$11,910	\$790,552	\$265,380
Cooke.....	24,136	21	314	2,101	403,833	3,525,454	3,739,842	85,612	4,742,901	917,447
Coryell.....	19,999	5	50	324	39,141	239,741	221,853	17,888	356,478	116,737
Cottle.....	9,305	4	12	66	15,545	24,181	20,089	4,092	81,916	57,735
Crosby.....	11,023	7	14	248	11,701	25,760	23,453	2,417	71,548	46,678
Dallam.....	7,830	5	149	503	230,617	152,332	129,178	23,154	517,234	304,002
Dallas.....	325,091	572	13,853	74,210	15,510,789	102,863,069	100,471,091	2,391,978	168,211,802	65,348,738
Dawson.....	13,573	11	40	543	36,143	120,414	109,959	10,455	224,248	103,834
Delta.....	13,138	4	36	319	18,033	277,441	208,974	8,467	354,368	76,027
Denton.....	32,822	22	125	2,216	119,831	695,760	633,973	61,787	1,205,934	510,174
De Witt.....	27,441	26	433	2,533	310,042	2,520,302	2,457,402	71,900	3,449,307	920,065
Dickens.....	8,601	6	15	182	21,389	73,034	67,831	5,203	135,880	62,846
Donley.....	10,202	4	13	16	18,920	15,530	15,548	4,982	61,404	42,374
Eastland.....	34,150	33	133	1,708	170,058	468,591	434,082	32,509	1,445,627	979,036
Ellis.....	53,936	37	875	5,546	830,543	2,802,958	2,598,288	204,570	4,761,652	1,898,694
El Paso.....	131,597	160	6,224	36,217	6,548,115	40,171,571	38,738,006	1,433,565	54,474,189	14,302,618
Erath.....	20,804	16	168	1,570	174,359	791,293	712,164	79,129	1,231,616	440,323
Falls.....	38,771	18	119	885	110,484	1,695,856	1,557,150	38,706	2,055,928	460,072
Fannin.....	41,163	21	310	2,985	232,587	1,130,833	1,078,944	57,889	1,671,840	535,007
Fayette.....	30,708	20	1,467	107,938	121	891,438	869,804	21,634	1,308,300	416,871
Fisher.....	13,563	9	177	2,801	205,412	635,271	554,145	81,126	1,023,088	387,817
Freestone.....	22,589	10	191	778	287,137	560,840	547,469	22,371	1,075,490	506,620
Galveston.....	64,401	97	2,196	18,336	2,695,176	15,679,929	15,242,329	437,600	22,832,304	7,202,375
Gillespie.....	11,020	10	49	423	50,971	119,403	106,697	12,806	248,286	123,793
Goliad.....	10,093	4	15	81	11,170	104,277	101,678	2,599	152,297	48,020
Gonzales.....	23,337	17	220	2,100	165,667	1,167,317	1,123,070	44,247	1,755,928	588,611
Gray.....	22,090	19	275	1,794	421,382	2,654,015	2,251,148	402,867	4,772,751	2,118,736
Grayson.....	65,843	81	2,461	15,483	2,471,844	16,010,300	15,682,678	327,622	23,555,045	7,545,645
Gregg.....	15,778	20	485	1,419	414,783	1,105,302	1,104,107	81,195	2,243,573	1,048,271
Grimes.....	22,642	15	168	1,170	137,538	583,717	569,757	13,960	1,000,020	416,312
Guadalupe.....	28,925	11	170	1,761	177,095	1,438,330	1,373,281	65,049	2,015,561	577,231
Hale.....	20,189	19	125	1,818	119,068	1,735,601	1,688,346	47,255	2,316,650	581,040
Hamilton.....	13,523	9	51	617	58,178	386,802	376,940	9,862	530,192	143,300
Hardeman.....	14,832	8	221	3,485	231,287	1,312,225	1,707,888	104,339	2,521,002	700,677
Hardin.....	13,936	15	1,350	2,911	1,687,046	1,623,072	1,698,756	28,316	3,467,117	1,843,145
Harris.....	359,328	475	22,181	120,055	28,096,678	191,720,349	187,367,151	4,362,198	285,227,185	93,497,836
Harrison.....	48,937	39	2,319	10,473	2,437,164	4,333,838	4,090,379	242,559	9,078,542	4,744,704
Hays.....	14,916	9	53	494	61,349	397,717	380,097	17,620	610,637	212,920
Hemphill.....	4,637	5	19	105	26,744	27,293	23,323	3,970	60,227	62,934
Henderson.....	30,583	12	120	1,028	87,445	448,010	403,767	44,243	737,104	289,004
Hidalgo.....	77,004	52	277	3,309	291,908	572,982	458,595	114,177	1,828,530	1,255,848
Hill.....	43,036	17	474	3,146	357,280	2,664,040	2,558,038	106,062	3,758,230	1,004,130
Hockley.....	9,298	3	10	64	7,900	10,791	10,791	0	36,300	25,515
Hopkins.....	29,410	10	162	841	119,638	1,438,888	1,397,913	40,199	1,857,251	419,109
Houston.....	30,017	21	250	1,369	187,800	493,003	481,580	12,083	1,004,175	600,512
Howard.....	22,888	16	504	2,020	817,235	7,134,602	7,061,200	73,402	9,882,521	2,747,019
Hunt.....	49,016	41	449	5,519	509,567	3,964,888	3,858,347	106,541	5,377,090	1,412,202
Hutchinson.....	14,848	21	528	6,071	848,824	9,483,751	9,285,359	198,392	12,092,535	3,503,834
Jackson.....	10,980	5	15	132	21,458	19,908	16,553	3,355	60,127	40,219
Jasper.....	17,094	22	1,748	4,055	1,515,869	2,671,778	2,659,609	12,169	5,567,634	2,895,856
Jefferson.....	133,391	141	14,380	121,301	19,630,752	235,596,516	231,250,410	4,346,106	297,159,552	61,563,036
Johnson.....	33,317	22	829	5,742	1,239,571	1,164,683	1,063,952	95,731	2,865,682	1,700,999
Jones.....	24,233	10	140	1,839	165,714	1,267,378	1,226,775	40,603	1,705,278	437,000
Karnes.....	23,310	8	54	487	41,259	354,547	344,867	9,680	547,543	192,996
Kaufman.....	40,905	21	135	2,200	131,166	1,634,489	1,588,301	47,688	2,141,531	507,042
Kendall.....	4,970	3	7	205	5,718	24,264	21,426	2,838	45,576	21,312
Kerr.....	10,151	4	16	264	24,046	104,860	103,656	1,204	181,067	76,207
Kleberg.....	12,451	8	333	1,549	539,499	1,443,400	1,390,368	53,032	2,429,040	985,640
Lamar.....	48,520	38	842	4,007	630,465	3,401,849	3,314,840	87,009	5,043,267	2,241,418
Lampasas.....	8,677	7	24	172	27,977	23,702	22,939	5,763	100,049	80,347
Lavaca.....	27,550	23	494	2,003	548,461	1,246,758	1,189,066	57,692	2,163,004	916,246
Liberty.....	10,808	12	398	1,070	392,374	198,138	175,624	22,514	1,004,896	806,768
Limestone.....	39,497	18	216	1,360	178,214	972,375	903,385	68,990	1,745,872	773,497
Llano.....	5,538	8	53	355	59,241	49,744	42,422	7,322	206,844	157,100
Lubbock.....	39,104	40	489	3,151	604,471	4,268,928	4,156,547	107,381	5,760,288	1,492,360
Lynn.....	12,372	6	17	56	17,383	20,542	17,133	3,409	60,113	39,571
McCulloch.....	13,883	10	60	771	70,796	667,747	641,700	25,937	922,694	254,947
McLennan.....	98,682	124	3,186	19,718	3,823,694	12,060,606	11,563,933	496,673	20,501,208	8,440,702
Marion.....	10,371	10	207	725	159,987	345,513	350,513	5,293	637,568	267,055
Matagorda.....	17,678	12	115	631	96,260	1,299,999	1,292,315	7,381	1,793,166	493,470
Maverick.....	6,120	5	62	230	36,515	40,940	32,625	8,315	125,448	84,508
Medina.....	13,989	8	81	584	60,423	68,102	30,975	37,127	173,529	105,427
Menard.....	4,447	6	15	114	14,787	19,139	16,452	2,687	76,507	57,428
Midland.....	8,005	8	43	266	66,226	539,779	523,177	8,002	627,390	90,611
Milam.....	37,915	16	149	895	113,621	1,457,935	1,431,971	25,964	1,913,324	455,389
Montague.....	19,159	23	282	1,089	228,621	774,555	751,063	23,492	1,443,587	669,032
Montgomery.....	14,588	11	784	2,810	656,441	749,800	709,998	42,802	1,874,735	1,124,876
Morris.....	10,028	4	46	158	27,755	35,384	35,099	795	92,047	59,153
Nacogdoches.....	30,260	25	636	2,251	513,598	853,793	828,715	25,078	2,438,988	1,535,166
Navarro.....	60,507	43	738	5,532	700,063	6,273,364	6,106,695	166,709	8,635,596	2,362,232
Newton.....	12,524	13	1,461	5,339	1,207,127	1,440,183	1,427,216	12,967	4,781,900	3,341,777
Nolan.....	19,323	18	351	5,838	533,351	2,370,841	2,233,103	137,738	4,385,844	2,015,003
Nueces.....	51,779	47	442	3,095	466,556	2,862,491	2,772,974	79,517	4,079,152	1,726,661
Orange.....	15,149	25	938	10,108	1,078,453	3,443,857	3,198,628	244,729	5,837,011	2,394,254
Palo Pinto.....	17,576	13	197	1,477	220,720	282,768	146,212	136,556	696,123	413,355
Panola.....	24,093	13	127	726	107,188	113,607	113,607	2,204	341,456	225,449
Parker.....	18,750	16	220	1,727	150,594	671,118	600,425	61,693	1,372,719	701,601
Pecos.....	7,312	4	16	106	25,381	12,801	12,801	0	57,208	44,317
Polk.....	17,555	12	718	2,012	576,841					

TABLE 2.—SUMMARY FOR COUNTIES AND CITIES: 1929—Continued

COUNTY OR CITY	Popula- tion, 1930	Number of estab- lish- ments	Wage earners (average for the year) <sup>1</sup>	Horse- power <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufac- ture
						Total	Materials and containers	Fuel and purchased energy		
<i>Counties</i> —Continued										
Presidio.....	10,154	8	27	213	\$21,937	\$109,845	\$104,045	\$5,200	\$197,717	\$87,872
Randall.....	7,071	3	12	77	12,099	16,912	14,150	2,762	57,853	40,941
Red River.....	30,923	18	118	1,400	80,207	402,180	385,435	16,754	656,982	254,773
Robertson.....	27,240	9	115	1,028	125,099	841,417	700,733	41,684	1,144,238	302,821
Runnels.....	21,821	15	99	1,329	86,256	894,927	855,842	30,085	1,253,212	358,285
Rusk.....	32,484	28	107	1,654	129,650	552,202	545,096	6,506	860,316	308,114
San Augustine.....	12,471	9	316	1,100	277,686	462,674	460,309	2,265	1,064,362	601,788
San Saba.....	10,273	3	6	58	10,602	2,175	1,830	3,129	38,059	34,100
Seurry.....	12,188	7	30	393	26,906	168,183	159,711	8,472	258,495	90,312
Shackelford.....	6,695	6	10	203	18,127	30,856	24,983	5,873	94,205	63,349
Shelby.....	28,627	22	707	2,900	600,296	407,691	403,846	3,845	2,048,458	1,640,767
Smith.....	63,123	46	799	4,132	774,742	2,397,655	2,269,570	130,985	4,209,111	1,811,556
Starr.....	11,409	4	30	160	14,932	22,175	7,011	15,104	59,987	34,812
Stephens.....	16,500	18	190	1,423	270,910	1,220,283	977,063	148,220	2,135,619	1,015,336
Tarrant.....	197,653	240	8,600	50,327	10,607,560	98,155,407	96,077,438	2,077,969	131,330,433	33,181,020
Taylor.....	41,023	47	495	3,414	501,541	3,353,266	3,270,779	82,487	5,083,458	1,730,192
Titus.....	16,003	8	120	422	77,068	91,614	85,721	5,293	238,061	147,947
Tom Green.....	36,033	42	382	2,034	501,122	1,657,792	1,575,910	81,882	3,187,689	1,529,897
Travis.....	77,777	93	958	6,010	1,170,687	3,486,993	3,325,765	160,338	7,490,510	4,013,417
Trinity.....	13,637	8	844	2,649	702,977	417,841	394,381	23,460	1,851,460	1,435,909
Tyler.....	11,448	10	697	2,319	546,546	399,297	381,301	17,996	1,043,863	1,244,856
Upshur.....	22,297	21	182	947	131,012	216,482	206,827	9,655	489,461	272,970
Uvalde.....	12,946	7	24	258	24,011	71,620	62,270	9,350	180,520	108,000
Val Verde.....	14,924	14	97	403	110,670	683,610	666,467	17,163	1,101,620	418,010
Victoria.....	20,018	14	127	838	140,639	594,436	571,382	23,054	1,142,831	548,305
Walker.....	18,528	11	396	2,350	317,657	391,091	372,510	18,581	1,065,135	674,044
Waller.....	10,014	3	12	17	8,820	6,489	6,354	136	20,250	22,761
Ward.....	4,599	8	70	125	95,791	4,047,422	4,028,067	18,456	5,134,380	1,080,958
Washington.....	25,394	23	300	1,742	251,067	1,396,988	1,337,037	59,951	2,032,740	636,652
Webb.....	42,128	36	394	1,944	301,381	1,499,952	1,396,148	103,804	2,630,985	1,131,033
Wharton.....	29,681	16	111	1,180	90,961	1,068,609	1,043,007	25,102	1,514,656	446,076
Wheeler.....	15,556	9	78	753	104,288	63,777	62,000	1,777	1,436,785	592,008
Wichita.....	74,416	101	1,810	13,128	2,676,624	21,808,250	21,196,261	612,989	30,360,194	8,551,914
Wilbarger.....	24,570	13	171	4,420	227,295	2,319,694	2,266,874	62,820	3,148,270	828,715
Williamson.....	44,146	29	347	2,332	297,374	1,820,435	1,740,568	82,877	2,688,751	850,310
Wilson.....	17,006	7	204	1,026	160,601	299,285	187,274	112,011	724,051	424,700
Wise.....	19,178	5	49	854	42,743	100,636	71,117	28,919	240,070	140,034
Wood.....	24,183	24	263	2,024	164,172	514,970	500,000	14,370	1,022,198	507,228
Young.....	20,128	16	68	1,050	93,065	1,512,639	1,496,783	15,786	1,927,073	414,504
All other counties <sup>3</sup> .....	649,853	251	4,522	30,700	5,083,686	38,180,883	37,320,150	860,733	50,349,888	12,160,005
<i>Cities having 10,000 inhabitants or more</i> <sup>4</sup>										
Abilene.....	23,175	42	450	3,277	475,705	3,301,903	3,233,316	68,587	4,950,702	1,657,850
Amarillo.....	43,132	46	695	2,842	1,106,442	2,400,098	2,314,249	185,849	5,442,050	2,082,552
Austin.....	53,120	89	856	5,624	1,074,899	3,286,566	3,193,102	123,463	7,066,287	3,779,722
Beaumont.....	67,732	84	1,770	9,077	2,225,110	5,950,951	5,074,933	270,018	12,330,201	6,379,250
Brownsville.....	22,021	29	178	1,977	181,989	697,405	587,822	40,583	1,295,562	658,167
Corpus Christi.....	27,741	34	334	1,807	370,498	1,503,252	1,502,205	61,047	2,860,993	1,303,711
Corsecania.....	15,202	27	537	4,133	555,632	2,810,159	2,716,885	102,274	4,004,388	2,085,229
Dallas.....	260,475	535	12,048	49,271	13,030,181	83,044,347	82,400,585	1,243,762	142,512,320	58,807,973
Denison.....	13,850	22	576	4,037	551,277	2,491,075	2,427,309	63,766	3,798,010	1,301,944
El Paso.....	102,421	147	5,100	15,051	5,453,570	13,838,074	13,306,370	531,704	24,605,307	10,767,233
Fort Worth.....	163,447	228	6,461	40,281	8,273,505	25,020,261	24,225,042	795,219	113,614,152	27,693,891
Greenville.....	12,407	28	245	2,818	222,842	2,607,605	2,547,189	60,376	3,469,062	861,497
Hartlingen.....	12,124	10	128	2,159	171,217	343,061	298,880	45,081	1,123,557	779,596
Houston.....	292,352	429	10,204	64,011	20,301,484	79,771,174	77,482,070	2,288,204	145,049,659	65,278,485
Marshall.....	16,203	23	1,707	7,120	1,914,723	3,798,159	3,642,087	156,472	7,164,561	3,360,402
Palestine.....	11,445	22	539	3,081	1,571,698	1,502,661	1,502,661	98,937	2,848,862	1,277,264
Port Arthur.....	50,902	29	260	2,141	421,961	1,247,299	1,141,514	105,785	2,558,490	1,311,191
San Antonio.....	231,542	390	8,092	25,415	8,271,292	30,560,740	29,811,798	757,951	53,372,775	22,803,026
San Benito.....	10,753	11	122	630	81,062	192,505	173,651	18,854	488,096	295,591
Sherman.....	15,713	43	721	7,056	839,185	5,057,307	4,939,794	107,513	12,965,794	3,468,487
Temple.....	15,345	32	487	3,095	645,600	2,178,628	2,076,650	101,972	3,690,076	1,518,048
Texarkana, Texas and Arkansas, total.....	27,360	52	1,043	5,180	1,060,344	3,065,730	3,700,829	204,907	6,904,786	2,939,050
Texarkana, Texas.....	16,602	36	844	3,442	887,289	2,362,561	2,232,379	100,162	4,667,681	2,275,140
Texarkana, Arkansas.....	10,758	16	199	1,738	179,055	1,573,165	1,528,450	44,745	2,237,105	663,910
Tyler.....	17,113	28	611	3,351	670,175	2,184,301	2,106,120	78,181	3,751,375	1,567,074
Waco.....	52,848	105	1,808	6,860	1,879,830	7,781,071	7,561,919	219,152	13,602,285	5,821,214
Wichita Falls.....	43,690	73	1,438	9,104	2,008,244	11,655,098	11,255,414	400,584	18,068,469	6,412,461

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.  
<sup>3</sup> Statistics are presented for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing approximations of the data supplied by individual establishments, and combined figures are given for the remaining counties as a single group ("All other counties"). Certain of the counties for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately. In the cases of Clay, Kendall, and San Saba Counties, in each of which fewer than 10 wage earners were employed, statistics are here presented in order that comparison may be made with the corresponding figures for 1927 (published in mimeographed form).  
<sup>4</sup> For statistics by industries for this county, see Table 13.  
<sup>5</sup> Aransas, Archer, Armstrong, Bailey, Bandera, Brewster, Briscoe, Brooks, Burleson, Calhoun, Cochran, Coke, Crane, Crockett, Culberson, Deaf Smith, Dimmit, Ector, Edwards, Floyd, Foard, Fort Bend, Franklin, Frio, Garza, Hall, Hansford, Haskell, Hood, Hudspeth, Jack, Jeff Davis, Jim Hogg, Jim Wells, Kent, Kimble, Kinney, Knox, Lamb, La Salle, Lee, Leon, Live Oak, Madison, Martin, Mason, Mills, Mitchell, Motley, Oehlert, Farmer, Rains, Reagan, Real, Reeves, Refugio, Rockwall, Sabine, San Jacinto, San Patricio, Sherman, Somervell, Stonewall, Sutton, Swisher, Terrell, Terry, Throckmorton, Upton, Van Zandt, Willacy, and Zavala Counties. See footnote 3. No manufacturing was reported from Andrews, Blanco, Borden, Castro, Concho, Duval, Gaines, Glasscock, Hartley, Irion, Kenedy, King, Lipscomb, Loving, McMullen, Moore, Oldham, Roberts, Schleicher, Sterling, Winkler, Yoakum, and Zapata Counties.  
<sup>6</sup> Not including Brownwood, Galveston, Pampa, Big Spring, Cleburne, Paris, Lubbock, Sweetwater, San Angelo, Del Rio, and Laredo, each of which reported more than 10,000 inhabitants at the census of 1930. It is necessary to withhold the figures for these cities from publication to avoid disclosing approximations of the data for individual establishments. In the cases of Brownwood, Galveston, Paris, San Angelo, and Laredo the figures are withheld because their publication would make it possible to calculate (by subtracting them from the figures for the counties within which the cities are located) approximations of the data for establishments located outside the cities but within the counties in which the cities are situated.  
<sup>7</sup> For statistics by industries for this city, see Table 14.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORATIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929 <sup>1</sup>	159,210	138,735	20,475	3,067	2,944	123	2,683	2,563	120	18,962	15,477	3,485	134,498	117,751	16,747
1919 <sup>1,4</sup>	130,911	118,621	12,290	5,393	5,194	199	1,705	1,664	41	16,291	13,539	2,752	107,522	98,224	9,298
1914 <sup>4</sup>	91,114	85,700	5,414	4,787	4,638	149	1,124	1,109	15	10,350	9,406	944	74,853	70,547	4,306
1909	84,575	79,696	4,879	4,490	4,373	123	940	929	11	8,900	8,269	640	70,230	66,125	4,105

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.

<sup>2</sup> Not including employees of central administrative offices, as follows: Principal salaried officers of corporations—total, 265; male, 260; female, 5. Other salaried officers and employees—total, 2,884; male, 2,176; female, 708. The corresponding data for 1919 and earlier years are included in the respective items for those years but were not tabulated separately. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>3</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for Dec. 14. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929 <sup>1</sup>	134,498	<i>123,082</i>	130,497	130,887	132,209	131,616	131,923	133,399	137,830	141,520	141,450	138,322	135,730	90.5
1919 <sup>1</sup>	107,522	104,867	103,446	102,837	<i>101,390</i>	104,578	104,024	107,288	110,155	111,299	112,746	113,218	114,416	88.6
1914 <sup>1</sup>	74,853	76,998	75,559	74,217	73,261	<i>72,219</i>	73,078	75,779	76,587	76,983	75,588	73,654	74,318	93.8
1909 <sup>1</sup>	70,230	68,568	60,485	68,082	67,772	<i>66,079</i>	68,037	69,153	69,192	73,196	75,291	75,648	75,258	87.4

<sup>1</sup> The figures for 1919 and 1914 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment, even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)
All classes	5,198	134,498	45 and over but under 48	90	5,482
Not reported	824	2,624	48	1,040	32,849
Under 40	76	553	Over 48 but under 54	348	13,119
40	62	2,678	54	576	9,629
Over 40 but under 44	15	144	Over 54 but under 60	395	33,841
44 and over but under 46	486	7,367	60 and over	1,286	20,212

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures; and those for 1919 and 1909 include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
All establishments	5,198	5,724	4,588	134,498	107,522	70,230	51 to 100	241	161	117	16,955	11,605	8,689
No wage earners	95	747	479				101 to 250	170	130	108	26,170	20,532	16,809
1 to 5	2,675	3,070	2,440	8,101	7,075	5,852	251 to 500	51	42	25	17,294	14,960	8,190
6 to 20	1,365	1,104	1,089	14,847	12,049	11,999	501 to 1,000	14	17	8	9,062	11,735	4,890
21 to 50	576	444	319	18,145	14,326	9,779	1,001 to 2,500	7		3	10,272		4,122
							2,501 and over	4	9		13,652	15,240	

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	5,198	5,724	4,588	134,498	107,522	70,230	\$1,450,246,431	\$999,995,796	\$272,895,035	\$460,306,803	\$298,824,808	\$94,717,120
Less than \$5,000.....	( <sup>2</sup> )	1,440	1,746	( <sup>2</sup> )	1,001	2,646	( <sup>2</sup> )	3,904,156	4,297,098	( <sup>2</sup> )	2,478,215	2,943,755
\$5,000 to \$19,999.....	1,940	1,936	1,512	5,549	5,415	7,780	22,115,309	20,895,448	15,442,319	14,018,351	11,902,039	9,036,311
\$20,000 to \$99,999.....	1,915	1,301	808	16,989	13,511	15,724	88,534,307	61,570,483	39,117,172	52,778,033	32,400,914	19,593,400
\$20,000 to \$49,999.....	1,212	( <sup>2</sup> )	( <sup>2</sup> )	7,989	( <sup>2</sup> )	( <sup>2</sup> )	39,278,854	( <sup>2</sup> )	( <sup>2</sup> )	24,011,236	( <sup>2</sup> )	( <sup>2</sup> )
\$50,000 to \$99,999.....	703	( <sup>2</sup> )	( <sup>2</sup> )	9,000	( <sup>2</sup> )	( <sup>2</sup> )	49,255,453	( <sup>2</sup> )	( <sup>2</sup> )	28,766,747	( <sup>2</sup> )	( <sup>2</sup> )
\$100,000 to \$499,999.....	901	628		32,338	25,201		205,871,840	143,676,554		93,511,002	60,593,041	
\$100,000 to \$249,999.....	576	( <sup>2</sup> )		16,011	( <sup>2</sup> )		91,310,709	( <sup>2</sup> )		46,948,911	( <sup>2</sup> )	
\$250,000 to \$499,999.....	325	( <sup>2</sup> )	420	16,327	( <sup>2</sup> )	34,804	114,561,131	( <sup>2</sup> )	111,984,740	46,562,091	( <sup>2</sup> )	43,521,809
\$500,000 to \$999,999.....	231	166		21,676	16,026		160,781,010	112,701,377		61,296,443	39,736,851	
\$1,000,000 and over.....	211	163	36	57,946	46,278	9,180	972,943,965	657,181,778	102,054,306	238,702,374	151,623,838	10,021,845
\$1,000,000 to \$2,499,999.....	148	( <sup>2</sup> )	( <sup>2</sup> )	23,154	( <sup>2</sup> )	( <sup>2</sup> )	219,633,181	( <sup>2</sup> )	( <sup>2</sup> )	77,615,320	( <sup>2</sup> )	( <sup>2</sup> )
\$2,500,000 to \$4,999,999.....	37	( <sup>2</sup> )	( <sup>2</sup> )	6,946	( <sup>2</sup> )	( <sup>2</sup> )	125,016,714	( <sup>2</sup> )	( <sup>2</sup> )	34,947,662	( <sup>2</sup> )	( <sup>2</sup> )
\$5,000,000 and over.....	20	( <sup>2</sup> )	( <sup>2</sup> )	27,846	( <sup>2</sup> )	( <sup>2</sup> )	628,294,070	( <sup>2</sup> )	( <sup>2</sup> )	126,130,492	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>2</sup> No data.  
<sup>3</sup> Not tabulated separately.

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
Total.....	5,198	5,724	134,498	107,522	\$1,450,246,431	\$999,995,796	\$460,306,803	\$298,824,808
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	2,474	1,653	116,076	86,638	1,341,760,257	882,136,923	409,760,768	249,797,940
Other forms of ownership or control (individual, partnership, etc.).....	2,724	4,071	18,422	20,884	108,486,174	117,858,873	50,546,035	49,026,958
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	1,006	( <sup>1</sup> )	67,262	( <sup>1</sup> )	921,380,839	( <sup>1</sup> )	246,921,112	( <sup>1</sup> )
Independent (single-unit).....	4,192	( <sup>1</sup> )	67,236	( <sup>1</sup> )	528,865,592	( <sup>1</sup> )	213,385,691	( <sup>1</sup> )

<sup>1</sup> Not tabulated.

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE, 1929, 1927, 1925, 1919, AND 1914, AND FOR IMPORTANT COUNTIES, 1929

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY										ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING			
	Aggregate horsepower	Prime movers								Electric motors driven by purchased energy				
		Total horsepower of prime movers	Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines					
		Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power	
The State:														
1929.....	822,860	378,927	1,821	191,134	192	127,113	530	59,990	8	690	41,499	443,933	6,221	164,732
1927.....	635,455	334,956	1,617	190,448	155	96,446	510	46,351	12	1,711	30,438	300,499	6,177	152,054
1925.....	572,798	359,343	1,723	207,795	147	101,425	552	47,517	17	2,606	20,283	213,455	6,403	126,211
1919 <sup>1</sup> .....	440,894	320,355	2,298	248,653	69	32,718	1,063	36,579	34	2,405	11,483	120,939	3,078	56,014
1914 <sup>1</sup> .....	355,496	262,553	2,541	262,200	( <sup>2</sup> )	( <sup>2</sup> )	1,101	28,300	30	2,053	5,275	42,943	2,038	33,190
Counties in which aggregate horsepower exceeded 25,000: 1929														
Bexar.....	40,090	12,762	36	4,407	1	( <sup>3</sup> )	31	7,355	1	( <sup>3</sup> )	3,189	27,328	160	7,331
Dallas.....	74,210	28,043	81	11,706	11	9,866	32	7,072			5,507	45,567	1,017	13,553
El Paso.....	36,217	20,082	39	5,603	24	14,096	6	383			1,620	16,135	437	11,333
Harris.....	120,055	30,224	104	13,307	51	9,352	47	7,565			7,303	89,831	249	7,481
Jefferson.....	121,301	89,733	118	10,488	23	74,517	33	4,728	1	( <sup>3</sup> )	1,857	31,568	2,060	95,432
Tarrant.....	59,327	15,564	46	10,154	7	363	44	5,047			3,346	43,763	142	2,625

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.  
<sup>2</sup> Reported as "Steam engines and turbines."  
<sup>3</sup> Not reported separately. See footnote 2.  
<sup>4</sup> Items for steam turbines and water wheels and water turbines included with that for steam engines to avoid disclosing data for a single establishment.  
<sup>5</sup> Item for water wheels and water turbines included with that for steam engines to avoid disclosing data for a single establishment.

CENSUS OF MANUFACTURES: 1929

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county for which separate figures are given in Table 2. See footnotes 3 and 5 on that table]

COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>	COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	822,860	378,927	443,933	164,732	Jefferson.....	121,301	89,733	31,568	95,482
Anderson.....	4,123	1,272	2,851	180	Johnson.....	5,742	750	4,992	50
Angelina.....	7,610	6,142	1,468	180	Jones.....	1,839	401	1,438	---
Atascosa.....	258	---	258	---	Karnes.....	487	343	144	---
Austin.....	628	145	483	---	Kaufman.....	2,200	945	1,255	45
Bastrop.....	2,383	900	1,783	---	Kendall.....	205	162	43	---
Baylor.....	475	275	200	---	Kerr.....	204	75	139	---
Bee.....	421	---	421	---	Kleberg.....	1,549	981	568	680
Bell.....	3,855	682	3,173	105	Lamar.....	4,007	1,624	2,383	149
Bexar.....	40,090	12,762	27,328	7,331	Lampasas.....	172	147	25	---
Bosque.....	817	590	227	---	Lavaca.....	2,003	749	1,254	---
Bowie.....	7,231	5,114	2,117	112	Liberty.....	1,070	777	293	60
Brazoria.....	872	263	709	---	Limestone.....	1,300	1,085	275	412
Brazos.....	659	448	191	---	Llano.....	355	60	305	---
Brown.....	2,067	865	1,202	(?)	Lubbock.....	3,151	1,591	1,560	375
Burnet.....	298	50	158	---	Lynn.....	56	---	56	---
Caldwell.....	1,340	901	439	---	McCulloch.....	771	295	476	---
Calahan.....	180	55	125	---	McLennan.....	10,718	8,995	10,723	5,242
Cameron.....	5,012	1,195	3,817	---	Marion.....	725	678	47	---
Camp.....	707	594	203	233	Matagorda.....	631	424	207	---
Carson.....	1,166	---	1,166	---	Maverick.....	230	150	80	---
Cass.....	1,062	975	87	---	Medina.....	584	500	84	60
Chambers.....	108	---	108	---	Menard.....	114	---	114	---
Cherokee.....	2,433	2,050	383	(?)	Midland.....	266	---	266	---
Childress.....	2,832	940	1,892	329	Milam.....	805	225	670	---
Clay.....	134	65	69	---	Montague.....	1,089	330	759	---
Coleman.....	800	530	279	---	Montgomery.....	2,810	2,757	53	47
Collin.....	3,289	1,704	1,585	108	Morris.....	158	105	53	---
Collingsworth.....	82	50	32	---	Nacogdoches.....	2,251	1,934	317	69
Colorado.....	1,084	940	144	12	Navarro.....	5,532	2,122	3,410	180
Comal.....	5,002	546	5,050	---	Newton.....	5,339	5,339	---	---
Comanche.....	603	287	316	---	Nolan.....	5,838	1,905	3,933	1,155
Cooke.....	2,161	1,209	952	219	Nueces.....	3,095	1,375	1,720	---
Corryell.....	324	278	46	---	Orange.....	10,108	5,370	4,738	3,438
Cottle.....	66	60	60	---	Palo Pinto.....	1,477	220	1,257	---
Crosby.....	248	120	128	---	Panola.....	726	611	115	---
Dallam.....	503	75	428	---	Parker.....	1,727	565	1,162	(?)
Dallas.....	74,210	28,643	45,567	13,553	Peecos.....	106	---	106	---
Dawson.....	543	165	378	---	Polk.....	2,012	1,920	92	35
Delta.....	319	215	104	---	Potter.....	7,980	2,487	5,493	447
Denton.....	2,210	1,800	416	223	Presidio.....	213	2	211	---
De Witt.....	2,533	980	1,553	---	Randall.....	77	---	77	---
Dickens.....	182	110	72	---	Red River.....	1,406	645	761	---
Donley.....	16	---	16	---	Robertson.....	1,028	955	73	---
Eastland.....	1,768	652	1,116	---	Runnels.....	1,329	107	1,222	---
Ellis.....	5,540	1,750	3,796	94	Rusk.....	1,654	1,378	276	---
El Paso.....	36,217	20,082	16,135	11,333	San Augustine.....	1,100	1,083	17	---
Erath.....	1,570	750	820	491	San Saba.....	58	---	58	---
Falls.....	885	620	265	---	Scurry.....	393	250	143	---
Fannin.....	2,985	825	2,160	---	Shackelford.....	203	25	178	---
Fayette.....	1,467	1,113	354	158	Shelby.....	2,900	2,742	158	145
Fisher.....	2,801	325	2,476	---	Smith.....	4,132	1,017	3,115	69
Freestone.....	778	408	370	608	Starr.....	160	---	160	---
Galveston.....	18,336	9,783	8,553	4,779	Stephens.....	1,423	1,197	226	29
Gillespie.....	423	36	387	---	Tarrant.....	59,327	15,504	43,763	2,625
Goliad.....	81	---	81	---	Taylor.....	3,414	1,143	2,271	107
Gonzales.....	2,100	906	1,194	---	Titus.....	422	290	132	---
Gray.....	1,794	505	1,289	---	Tom Green.....	2,034	415	1,619	---
Grayson.....	15,483	5,585	9,893	727	Travis.....	6,010	2,863	3,147	40
Gregg.....	1,419	1,077	342	450	Trinity.....	2,649	2,500	59	(?)
Grimes.....	1,170	919	251	---	Tyler.....	2,319	2,313	6	43
Guadalupe.....	1,751	1,325	426	450	Upshur.....	947	812	135	---
Hale.....	1,818	692	1,126	---	Uvalde.....	258	---	258	---
Hamilton.....	617	435	82	---	Val Verde.....	403	---	403	---
Hardeman.....	3,435	1,358	2,077	190	Victoria.....	338	220	618	---
Hardin.....	2,911	2,700	211	155	Walker.....	2,350	2,231	119	---
Harris.....	120,055	30,224	89,831	7,481	Waller.....	17	15	2	---
Harrison.....	10,473	5,206	5,267	1,314	Ward.....	125	100	25	---
Hays.....	494	150	344	---	Washington.....	1,742	15	1,727	---
Hemphill.....	105	75	30	---	Webb.....	1,944	1,249	695	40
Henderson.....	1,028	525	503	---	Wharton.....	1,186	819	367	---
Hidalgo.....	3,309	422	2,887	---	Wheeler.....	753	675	78	---
Hill.....	3,146	405	2,681	---	Wichita.....	13,128	4,984	8,144	360
Hockley.....	64	30	34	---	Willbarger.....	4,420	1,681	2,739	475
Hopkins.....	841	470	371	19	Williamson.....	2,332	1,651	681	66
Houston.....	1,869	1,054	315	185	Wilson.....	1,026	705	321	10
Howard.....	2,020	240	1,780	62	Wise.....	854	355	499	---
Hunt.....	5,519	3,520	1,999	190	Wood.....	2,024	1,646	378	20
Hutchinson.....	5,071	1,720	3,351	(?)	Young.....	1,056	750	306	---
Jackson.....	132	75	57	---	All other counties.....	30,706	15,019	15,687	1,465
Jasper.....	4,055	3,936	119	15					

<sup>1</sup> Horsepower of electric motors driven by energy generated in establishments reporting.  
<sup>2</sup> Included in total for State but not shown separately to avoid disclosing data for a single establishment.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927, 1923, 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures, see Chapter VII, Volume I, Reports of the Census of Manufactures, 1929]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
Fuel:							
Coal, total <sup>2</sup> (tons, 2,000 pounds).....	425,831	\$1,417,458	411,444	638,340	897,463	1,200,130	900,065
Anthracite (tons, 2,240 pounds).....	57,440	250,487	( <sup>3</sup> )	29,274	38,000	8,800	21,104
Bituminous (tons, 2,000 pounds).....	361,488	1,157,071	( <sup>3</sup> )	605,553	854,231	1,286,179	880,201
Coke (tons, 2,000 pounds).....	55,105	531,046	( <sup>4</sup> )	( <sup>4</sup> )	158,903	83,682	86,862
Fuel oils, including crude oils and gas oils (gallons) <sup>5</sup> .....	595,302,002	10,850,755	( <sup>4</sup> )	( <sup>4</sup> )	434,075,032	235,100,010	147,033,516
Gasoline and kerosene (gallons) <sup>5</sup> .....	610,568	01,542	( <sup>4</sup> )	( <sup>4</sup> )	1,273,506		
Gas, natural (M cubic feet).....	08,446,088	11,630,092	( <sup>4</sup> )	( <sup>4</sup> )	4,883,550	0,040,046	714,292
Gas, manufactured (M cubic feet).....	28,325,404	5,414,280	( <sup>4</sup> )	( <sup>4</sup> )			
Other fuels.....		1,755,561	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Electric energy purchased (kilowatt-hours).....	728,000,318	9,793,120	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
Total cost of fuel and purchased energy.....		741,489,800	Cost \$45,780,338	Cost (\$)	Cost \$22,802,256	Cost \$10,738,385	Cost \$7,105,109

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1920.

<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.

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

<sup>4</sup> No data.

<sup>5</sup> For years prior to 1920, reported in barrels; converted on basis of 42 gallons per barrel.

<sup>6</sup> Data incomplete.

<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12 is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.

<sup>8</sup> Not reported separately.

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929

[This table presents separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
All industries, total.....	5,108	21,645	134,408	378,027	443,933	\$40,904,900	\$151,827,257	\$902,750,112	\$27,189,510	\$1,450,246,431	\$460,300,803
Awnings, tents, sails, and canvas covers.....	22	87	305		238	183,409	312,688	1,378,202	14,001	2,328,083	936,420
Bags, other than paper, not made in textile mills.....	13	114	872		047	244,811	546,162	0,870,447	20,310	11,343,293	1,452,530
Baskets and rattan and willow ware, not including furniture.....	14	40	878	1,609	305	101,106	576,085	041,167	4,830	2,067,072	1,421,009
Belting, leather.....	5	11	10		33	14,055	20,969	104,000	514	108,644	63,524
Beverages.....	325	336	1,470	1,342	3,193	711,945	1,790,561	4,573,258	100,104	12,116,043	7,353,281
Bone black, carbon black, and lampblack.....	33	93	842	1,715	2,007	213,388	1,285,911	2,010,221	1,154,093	9,804,128	5,738,014
Bookbinding and blank-book making.....	9	18	49		08	40,292	55,020	54,490	2,000	278,794	231,602
Boots and shoes, other than rubber.....	0	17	151		122	47,472	137,070	250,393	5,852	676,650	414,405
Boxes, paper, not elsewhere classified.....	9	43	326		284	92,424	242,505	081,025	14,602	1,651,047	955,420
Boxes, wooden, except cigar boxes.....	23	91	1,149	2,447	1,771	225,582	944,147	2,802,387	35,278	5,351,687	2,514,022
Bread and other bakery products.....	587	535	6,137	1,303	7,906	1,168,233	5,862,247	16,272,113	625,165	35,881,047	18,983,769
Brooms.....	33	32	252		6	58,888	220,854	480,494	8,104	1,000,010	502,412
Butter.....	01	164	376	133	4,060	342,038	403,301	8,480,444	149,480	11,043,201	2,404,277
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	5	17	315		209	24,125	82,039	255,120	3,403	443,424	184,832
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	46	101	597	331	490	180,383	300,929	1,002,013	32,413	3,202,225	1,297,799
Car and general construction and repairs, electric-railroad repair shops.....	14	55	742		1,195	120,847	911,076	051,565	6,050	1,738,297	1,080,076
Car and general construction and repairs, steam-railroad repair shops.....	103	1,004	14,033	11,751	32,280	2,630,383	21,093,981	17,209,976	1,394,607	43,008,426	24,406,848
Caskets, coffins, burial cases, and other morticians' goods.....	14	53	308	040	517	171,615	347,114	1,010,137	16,517	1,934,176	901,522
Cement.....	9	233	1,484	27,813	21,489	717,285	1,309,175	1,119,737	3,037,156	11,762,429	7,005,536
Cheese.....	7	9	25		105	15,084	25,842	491,859	6,908	590,017	91,760
Chemicals, not elsewhere classified.....	0	59	414	1,000	2,754	142,499	601,720	2,486,558	199,910	4,191,015	1,504,541
Clay products (other than pottery) and non-clay refractories.....	50	229	2,244	4,300	6,066	430,893	1,800,080	381,780	1,266,810	5,810,387	4,167,797
Cleaning and polishing preparations.....	6	11	17		27	24,019	14,254	67,961	535	191,360	122,864
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....	18	31	277		4	77,849	199,070	303,987	6,050	750,151	440,075
Clothing, women's, not elsewhere classified.....	38	143	1,054		748	328,311	1,021,752	2,590,273	28,647	5,310,971	2,680,051
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	36	192	3,890	110	840	402,021	1,770,111	5,298,006	46,517	9,159,341	3,815,084
Coffee and spice, roasting and grinding.....	93	184	370	10	1,065	503,921	364,021	12,413,465	61,805	16,807,165	4,331,895
Compressed and liquefied gases.....	21	178	141	377	4,853	282,142	184,238	456,901	195,052	2,183,154	1,631,201
Concrete products.....	52	100	522	24	1,493	230,419	641,460	624,254	18,879	2,189,351	1,540,218
Confectionery.....	72	183	1,184	420	1,061	400,759	780,093	3,175,908	65,439	6,526,351	3,285,004
Cooperage.....	12	16	145	40	450	44,114	128,513	575,591	6,583	941,067	358,043
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	79	90	544	20	666	218,247	774,655	2,065,151	20,070	4,001,036	1,975,299
Cotton goods.....	27	222	4,649	4,208	15,506	531,149	3,289,506	10,853,544	623,280	18,862,217	7,385,393
Druggists' preparations.....	6	39	61		114	97,859	64,462	238,918	9,034	779,571	530,719
Electrical machinery, apparatus, and supplies.....	17	33	150	120	441	72,610	152,515	451,429	26,557	917,469	439,483
Electroplating.....	5	1	27		77	( <sup>4</sup> )	31,699	11,536	2,627	74,038	59,875
Engraving, steel and copperplate, and plate printing.....	9	51	170		86	133,052	218,186	249,272	7,208	926,082	660,604
Feeds, prepared, for animals and fowls.....	43	167	373	1,291	7,020	380,091	397,533	10,870,150	92,644	13,905,079	2,942,285
Fertilizers.....	13	24	177		1,360	43,573	152,077	1,928,025	19,483	2,920,748	973,230
Flavoring extracts and flavoring sirups.....	15	71	82		205	199,230	164,865	1,740,953	20,153	5,064,120	3,303,014

See footnotes at end of table.

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929—Continued

(See note at head of this table)

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
Flour and other grain-mill products	107	617	1,326	12,102	15,723	\$1,524,227	\$1,631,279	\$41,107,856	\$402,684	\$51,378,284	\$9,868,244
Food preparations, not elsewhere classified	46	69	406	220	564	172,065	283,432	2,372,268	40,838	4,084,783	1,671,677
Foundry and machine-shop products, not elsewhere classified	199	1,285	8,422	1,488	29,297	4,460,465	11,226,370	15,745,213	972,795	49,180,837	32,462,829
Furnishing goods, men's, not elsewhere classified	3	6	60		16	12,045	22,212	99,193	1,243	207,704	107,268
Furniture, including store and office fixtures	44	177	1,512	670	4,127	488,722	1,813,963	2,893,739	80,923	6,739,923	3,765,261
Glass products (except mirrors) made from purchased glass	6	14	51		48	34,756	70,783	190,203	1,468	371,039	180,268
Hand stamps and stencils and brands	7	12	38		12	38,090	44,033	49,899	1,260	210,321	150,153
Hats and caps, except felt and straw, men's	4	10	50		16	47,295	29,802	105,797	1,448	296,293	189,053
House-furnishing goods, not elsewhere classified	6	5	32		7	9,680	18,980	190,199	859	255,016	63,068
Ice cream	126	192	681	412	5,742	421,578	875,091	3,795,132	236,482	7,990,224	3,058,010
Ice, manufactured	439	691	2,946	44,308	53,706	1,268,459	3,368,148	704,279	2,550,452	19,192,105	15,937,374
Ink, printing	3	14	10		153	22,392	10,074	58,853	3,355	130,245	68,032
Jewelry	9	7	43		22	10,211	55,739	66,315	1,333	203,413	135,765
Lime	6	34	413	342	1,842	94,634	347,828	896,444	175,098	1,274,065	703,423
Lithographing	6	62	111		170	177,862	167,099	296,883	6,810	835,630	531,934
Lumber and timber products, not elsewhere classified	325	819	16,387	57,462	725	1,862,422	13,915,100	15,559,567	198,594	44,606,136	28,747,975
Macaroni, spaghetti, vermicelli, and noodles	10	28	97		310	50,613	56,497	270,389	14,236	621,186	236,561
Marble, granite, slate, and other stone products	61	72	467	245	9,400	172,537	692,861	840,078	65,983	2,490,769	1,584,708
Mattresses and bed springs, not elsewhere classified	72	62	443	37	1,479	132,604	422,001	1,375,459	29,075	2,586,592	1,181,158
Meat packing, wholesale	41	805	3,650	8,249	14,959	1,851,717	4,131,724	76,556,456	685,744	88,273,991	12,031,791
Millinery	17	84	397		37	209,501	338,283	843,125	10,378	1,890,170	1,045,607
Mirror and picture frames	3	1	9		8	( <sup>3</sup> )	7,012	38,544	452	59,942	20,946
Mirrors, framed and unframed	0	4	20	5	46	5,034	27,025	39,681	1,095	108,753	67,977
Models and patterns, not including paper patterns	6	1	16		73	( <sup>4</sup> )	21,569	9,269	1,114	71,400	61,017
Motor-vehicle bodies and motor-vehicle parts	16	43	218		1,243	110,127	274,247	382,453	17,783	1,076,008	675,772
Nonferrous-metal alloys and products, not including aluminum products	12	38	150		717	106,235	210,010	1,288,083	33,876	1,987,770	605,811
Oil, cake, and meal, cottonseed	176	661	4,480	40,709	33,759	2,100,237	3,474,890	77,680,210	1,674,497	95,351,193	16,096,491
Paints and varnishes	18	99	173		790	257,412	174,374	1,845,830	24,456	3,118,219	1,247,925
Patent or proprietary medicines and compounds	23	51	77		39	169,552	66,995	500,297	3,249	1,486,427	681,881
Peanuts, walnuts, and other nuts, processed or shelled	23	78	1,835	761	878	145,813	555,594	4,336,860	30,904	6,417,560	2,049,796
Perfumes, cosmetics, and other toilet preparations	12	31	86		23	49,376	56,997	232,120	1,581	686,826	453,125
Petroleum refining	83	2,811	10,434	107,631	75,000	5,782,967	27,286,414	420,755,654	6,649,803	519,005,136	91,599,670
Photo-engraving, not done in printing establishments	16	71	127		147	200,483	316,298	78,142	11,273	943,826	854,411
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills	122	385	2,144	4,874	8,615	1,052,841	2,496,339	5,783,830	132,828	11,372,167	5,455,509
Pottery, including porcelain ware	9	9	70	194	199	23,340	71,124	17,001	17,395	201,998	167,002
Poultry killing, dressing, and packing, wholesale	44	103	653	569	810	214,918	497,299	9,875,045	43,218	11,687,343	1,769,080
Printing and publishing, book and job	321	737	2,375	2	3,246	1,690,564	3,460,087	3,523,512	136,655	13,214,351	9,555,184
Printing and publishing, newspaper and periodical	492	3,863	3,731	451	9,026	7,513,595	6,749,424	8,887,591	382,472	38,423,907	29,153,844
Rice cleaning and polishing	12	107	353	3,524	1,566	288,302	331,178	8,284,960	66,157	10,302,976	1,951,859
Rubber goods other than tires, inner tubes, and boots and shoes	6	27	98		357	42,406	70,417	139,495	6,555	405,004	258,954
Saddlery and harness	20	78	326		331	153,736	350,871	1,489,572	10,300	2,383,887	884,015
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments	7	17	77	200	293	34,411	76,490	1,037,527	9,989	1,371,826	324,310
Ship and boat building, steel and wooden, including repair work	9	49	579	160	3,133	145,268	886,213	568,132	42,635	2,308,035	1,697,268
Shirts	7	10	214	50	25	15,900	147,827	327,588	3,999	623,170	291,589
Shortenings (not including lard) and vegetable cooking oils	8	108	308	2,850	1,140	238,542	359,757	14,836,608	146,398	17,709,031	2,727,030
Signs and advertising novelties	30	68	269		149	193,168	346,339	321,562	9,176	1,409,572	1,078,834
Steel barrels, kegs, and drums	4	37	254	325	516	127,452	342,105	1,822,440	9,998	2,733,805	901,367
Stereotyping and electrotyping, not done in printing establishments	4	2	23		106	( <sup>4</sup> )	37,025	18,103	4,221	102,264	79,930
Stoves and ranges (other than electric) and warm-air furnaces	3		7		8		6,200	16,000		20,065	13,065
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills	32	411	1,460	851	5,575	885,484	1,969,016	6,034,231	101,562	11,369,178	5,173,385
Surgical and orthopedic appliances, including artificial limbs	4	4	16		18	8,580	18,235	13,774	635	81,400	66,991
Trunks, suitcases, and bags	7	27	111		171	65,728	93,581	190,145	3,501	456,535	256,889
Vinegar and cider	4	17	26		75	42,730	26,465	235,979	3,935	517,434	277,520
Wall plaster, wall board, insulating board, and floor composition	7	54	460	1,230	6,530	119,295	655,413	1,542,562	253,398	3,841,367	2,045,407
Window and door screens and weather strip	10	39	100		357	63,025	115,490	231,794	9,018	496,218	255,406
Window shades and fixtures	11	24	74		29	48,921	73,201	801,275	2,124	1,114,122	310,723
Wirework, not elsewhere classified	4	8	35		57	19,266	48,016	93,965	2,219	176,429	80,245
Wood preserving	9	190	1,733	4,244	2,520	320,855	1,879,482	15,967,060	299,184	21,622,654	5,356,410
Wood turned and shaped and other wooden goods, not elsewhere classified	6	8	86	500	3	18,695	61,055	135,584	1,950	260,279	122,745
Other industries	146	967	7,871	22,820	24,262	2,698,098	8,750,708	82,585,372	2,221,304	125,154,250	40,347,514

<sup>1</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>3</sup> Not including data for 3,149 employees of central administrative offices, with salaries aggregating \$8,382,230. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."



TABLE 13.—GENERAL STATISTICS FOR IMPORTANT COUNTIES, BY INDUSTRIES: 1929

[This table presents, for each important industrial county in the State, with certain exceptions, the reasons for which are given in explanatory notes, separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>BEXAR COUNTY</b>											
All industries, total.....	412	1,775	9,395	12,762	27,328	\$3,876,800	\$8,946,800	\$34,415,720	\$1,320,401	\$60,804,038	\$25,067,818
Beverages.....	9	34	144	1,010	221	93,742	180,005	298,702	17,054	914,079	598,203
Bread and other bakery products.....	60	86	565	209	712	188,206	633,833	1,726,804	73,235	3,703,521	1,903,422
Clothing, women's, not elsewhere classified.....	9	50	621	-----	51	95,414	330,158	560,586	0,480	1,440,036	870,020
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	7	22	312	-----	76	48,000	150,075	455,574	4,956	830,208	300,708
Coffee and spice, roasting and grinding.....	8	43	40	-----	178	128,922	43,342	1,564,641	8,810	2,125,678	552,218
Compressed and liquefied gases.....	4	12	16	70	370	20,970	21,312	3,678	18,130	182,476	100,662
Concrete products.....	11	25	141	-----	199	57,310	185,250	127,584	3,700	500,000	308,770
Confectionery.....	11	36	247	14	208	105,015	144,700	630,853	10,120	1,184,596	543,614
Electrical machinery, apparatus, and supplies.....	3	6	48	-----	67	10,940	30,633	93,855	5,500	181,287	81,872
Feeds, prepared, for animals and fowls.....	6	7	23	75	406	12,925	24,642	377,570	8,000	530,771	153,511
Food preparations, not elsewhere classified.....	12	20	201	-----	305	50,500	115,580	780,775	22,110	1,464,835	661,944
Foundry and machine-shop products, not elsewhere classified.....	12	135	590	-----	1,463	349,817	811,907	777,039	30,223	2,292,455	1,479,193
Furniture, including store and office fixtures.....	5	7	45	-----	112	9,276	55,615	50,916	1,725	170,413	123,772
Ice cream.....	6	6	29	-----	281	10,625	41,851	202,802	10,523	458,408	245,088
Ice, manufactured.....	16	28	143	1,625	3,913	68,078	154,094	28,144	187,530	1,024,000	809,286
Marble, granite, slate, and other stone products.....	7	9	45	50	147	22,219	51,114	54,043	4,523	235,240	176,083
Mattresses and bed springs, not elsewhere classified.....	6	13	45	-----	122	20,440	39,125	122,030	1,909	223,526	98,087
Meat packing, wholesale.....	9	74	272	430	712	148,303	283,117	4,660,830	50,457	5,592,070	880,777
Oil, cake, and meal, cottonseed.....	4	24	114	960	871	53,555	93,327	2,941,347	48,493	3,230,526	220,770
Peanuts, walnuts, and other nuts, processed or shelled.....	10	23	1,189	6	47	37,991	233,530	716,958	3,401	1,693,716	873,357
Perfumes, cosmetics, and other toilet preparations.....	3	5	31	-----	8	8,793	19,010	70,015	438	137,867	67,414
Petroleum refining.....	5	30	142	350	570	93,950	190,070	4,985,895	20,561	5,472,211	459,815
Planting-mill products (including general millwork), not made in planing mills connected with sawmills.....	11	50	407	296	1,142	142,320	480,805	693,671	15,093	1,598,522	880,768
Printing and publishing, book and job.....	32	62	295	-----	356	125,843	349,559	424,793	14,052	1,483,711	1,043,711
Printing and publishing, newspaper and periodical.....	16	432	321	-----	863	706,568	624,307	1,066,898	25,101	3,532,554	2,410,555
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.....	3	8	33	-----	158	10,191	23,724	325,899	4,839	445,946	115,238
Signs and advertising novelties.....	4	10	40	-----	23	20,200	41,444	32,121	1,307	120,248	92,820
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	9	87	368	-----	850	217,012	403,061	1,102,497	20,125	2,417,024	1,294,402
Other industries.....	105	432	3,022	7,607	12,897	1,034,632	3,175,980	9,508,323	688,206	17,683,950	7,487,421
<b>DALLAS COUNTY</b>											
All industries, total.....	672	3,142	13,853	28,643	45,567	\$7,998,000	\$15,516,789	\$100,471,091	\$2,391,978	\$168,211,802	\$65,348,733
Beverages.....	9	28	116	18	284	72,613	185,126	480,290	14,886	1,801,311	806,135
Bookbinding and blank-book making.....	4	17	32	-----	50	44,992	34,264	45,869	1,850	213,515	155,895
Boxes, wooden, except cigar boxes.....	3	10	75	200	90	20,850	55,332	146,302	3,092	270,795	130,401
Bread and other bakery products.....	43	144	1,050	700	1,207	294,559	1,032,419	3,279,803	90,989	8,080,607	4,700,816
Brooms.....	4	7	69	-----	22	15,215	67,321	159,289	1,022	289,958	128,747
Canning and preserving: Fruits and vegetables, pickles, jellies, preserves, and sauces.....	6	23	49	-----	72	51,315	37,302	518,400	4,063	874,030	350,916
Car and general construction and repairs, steam-railroad repair shops.....	4	14	171	30	1,312	30,171	265,491	237,336	23,414	562,412	301,602
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....	4	7	125	4	31	10,510	87,383	67,188	3,242	250,070	185,646
Clothing, women's, not elsewhere classified.....	13	55	801	-----	107	154,102	423,633	1,363,386	14,465	2,409,300	1,031,449
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	6	16	389	-----	140	36,340	240,780	577,623	6,371	997,381	413,387
Coffee and spice, roasting and grinding.....	7	25	67	-----	276	75,376	68,708	1,400,169	8,609	1,950,897	539,029
Confectionery.....	17	52	442	315	339	96,159	303,536	1,213,094	21,079	2,449,184	1,215,611
Concrete products.....	7	13	78	-----	619	28,458	117,501	92,479	2,028	317,127	222,020
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	13	8	88	10	214	17,935	136,493	288,758	1,840	619,157	328,559
Engraving, steel and copperplate, and plate printing.....	3	13	41	-----	18	32,800	55,760	28,895	2,954	187,013	155,854
Flavoring extracts and flavoring sirups.....	5	25	29	-----	88	70,554	32,987	1,409,527	4,232	4,103,007	2,600,128
Flour and other grain-mill products.....	5	49	182	1,500	800	129,841	240,392	4,951,055	35,877	6,058,735	1,071,293
Food preparations, not elsewhere classified.....	10	16	52	5	109	31,171	45,130	475,551	4,518	722,681	242,632
Foundry and machine-shop products, not elsewhere classified.....	30	202	1,095	400	3,223	695,495	1,570,761	3,515,830	83,217	9,533,528	5,934,481
Furniture, including store and office fixtures.....	17	76	488	-----	1,471	214,300	559,000	1,072,239	24,063	2,265,969	1,169,062
Ice cream.....	10	25	100	-----	730	75,342	136,250	469,507	30,470	1,076,730	546,750
Ice, manufactured.....	25	34	172	6,730	3,523	139,932	215,551	62,001	220,622	1,456,974	1,174,351
Jewelry.....	4	3	15	-----	9	3,882	27,163	47,587	2,087	103,320	55,052
Mattresses and bed springs, not elsewhere classified.....	7	3	31	-----	129	9,380	34,965	93,743	2,792	162,521	60,056
Nonferrous-metal alloys and products, not including aluminum products.....	3	3	14	-----	43	11,078	20,910	42,787	1,793	97,724	53,144
Oil, cake, and meal, cottonseed.....	0	54	305	1,800	1,385	159,766	285,427	11,079,509	182,711	12,633,979	1,121,699
Paints and varnishes.....	11	41	193	-----	334	142,231	102,368	1,241,900	10,684	2,067,684	749,010
Patent or proprietary medicines and compounds.....	9	22	38	-----	15	83,673	39,175	503,380	1,720	597,262	592,162
Perfumes, cosmetics, and other toilet preparations.....	3	7	21	-----	12	10,023	10,915	62,472	712	211,854	148,670
Photo-engraving, not done in printing establishments.....	3	15	31	-----	29	62,207	89,290	22,955	3,943	247,522	220,624

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

## CENSUS OF MANUFACTURES: 1929

TABLE 13.—GENERAL STATISTICS FOR IMPORTANT COUNTIES, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>DALLAS COUNTY—Continued</b>											
Planing-mill products (including general millwork), not made in planing mills connected with sawmills...	11	55	212	645	544	\$175,522	\$275,211	\$684,934	\$10,636	\$1,307,143	\$611,573
Printing and publishing, book and job.....	72	199	524	400	922	476,488	899,142	925,954	35,963	3,508,993	2,547,086
Printing and publishing, newspaper and periodical.....	30	751	437	400	1,870	1,515,935	903,086	2,894,168	50,900	7,699,463	4,754,387
Signs and advertising novelties.....	12	25	122	84	84	112,672	149,430	144,535	3,573	570,718	422,610
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	6	111	343	86	1,277	233,948	497,432	1,430,202	16,756	2,602,261	1,155,303
Other industries.....	150	994	5,935	15,740	24,189	2,636,899	6,261,226	59,005,685	1,507,490	89,854,480	29,341,305

**EL PASO COUNTY**

All industries, total.....	160	826	6,224	20,082	16,135	\$1,934,670	\$6,548,115	\$38,738,000	\$1,433,505	\$54,474,169	\$14,302,618
Beverages.....	7	12	45	76	76	17,908	42,517	114,792	3,704	271,868	153,372
Bread and other bakery products.....	23	24	259	2	268	48,765	297,755	713,009	38,603	1,520,756	772,544
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	3	1	9	11	5	( <sup>1</sup> )	3,360	30,820	124	50,271	19,327
Car and general construction and repairs, steam-railroad repair shops.....	5	99	1,730	1,053	1,468	251,282	2,638,898	1,669,799	112,287	4,622,266	2,840,180
Coffee and spice, roasting and grinding.....	6	7	20	60	60	17,690	16,213	263,935	2,939	333,037	111,163
Compressed and liquefied gases.....	4	8	9	150	150	15,935	14,885	40,800	13,772	151,713	97,141
Concrete products.....	3	2	13	12	33	( <sup>1</sup> )	10,095	10,370	334	40,945	30,232
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	4	11	33	107	107	29,279	43,604	219,102	1,792	359,537	138,643
Flour and other grain-mill products.....	4	22	47	545	545	55,444	42,551	889,259	12,534	1,058,840	157,047
Ice cream.....	5	2	27	272	( <sup>1</sup> )	34,288	144,206	8,133	297,269	144,930	144,930
Ice, manufactured.....	4	15	90	1,110	1,633	44,701	91,140	32,300	80,465	599,045	489,271
Oil, cake, and meal, cottonseed.....	5	28	128	2,228	2,228	43,725	70,126	1,293,039	41,029	1,801,960	467,901
Printing and publishing, book and job.....	13	46	80	98	98	99,422	96,510	81,439	5,014	403,838	317,385
Printing and publishing, newspaper and periodical.....	11	197	223	436	436	381,784	377,845	251,615	21,766	1,573,224	1,299,853
Other industries.....	64	352	3,511	17,894	8,756	928,836	2,818,322	32,972,963	1,091,019	41,380,611	7,266,629

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.<sup>1</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."**HARRIS COUNTY**

[Because of the amount of manufacturing industry in this county, it had been planned to publish statistics by industries for it. It is found, however, that no figures can be given for the most important industry—namely, "Petroleum refining"—without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report.]

All industries, total.....	475	4,082	22,131	30,224	89,831	\$9,812,094	\$28,096,678	\$187,367,151	\$4,362,193	\$285,227,185	\$93,497,836
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**JEFFERSON COUNTY**

All industries, total.....	141	2,037	14,396	89,733	31,508	\$4,735,209	\$19,630,752	\$231,250,410	\$4,346,106	\$297,159,552	\$61,563,036
Beverages.....	8	15	42	75	75	28,215	54,401	148,617	3,822	379,609	227,170
Bread and other bakery products.....	23	21	171	403	403	35,534	233,312	637,067	27,795	1,308,348	643,486
Coffee and spice, roasting and grinding.....	5	20	14	71	71	35,425	17,400	355,946	5,942	480,855	113,967
Foundry and machine-shop products, not elsewhere classified.....	11	60	509	550	2,073	224,501	727,533	387,973	88,219	2,929,925	1,083,733
Ice cream.....	5	5	33	137	137	20,240	33,737	189,250	7,253	367,358	170,825
Ice, manufactured.....	10	42	120	530	1,915	95,862	163,256	11,803	90,608	581,454	470,143
Lumber and timber products, not elsewhere classified.....	8	41	736	2,890	75	107,245	716,190	1,032,093	2,089	2,627,273	1,693,991
Mattresses and bed springs, not elsewhere classified.....	3	3	17	23	23	16,794	50,862	734	96,708	45,112	45,112
Petroleum refining.....	5	1,360	10,798	82,008	18,114	3,076,908	15,061,738	217,688,126	3,897,782	270,756,281	40,190,373
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.....	3	21	66	317	317	113,728	98,247	194,182	6,755	506,577	305,640
Printing and publishing, book and job.....	10	18	55	69	69	45,138	82,733	66,225	3,371	317,095	246,990
Rice cleaning and polishing.....	3	27	86	750	830	85,542	82,460	2,105,911	42,607	2,622,792	474,274
Other industries.....	47	407	1,739	3,005	7,466	866,871	2,402,861	7,932,325	168,729	14,185,277	6,084,223

**TARRANT COUNTY**

[Because of the amount of manufacturing industry in this county, it had been planned to publish statistics by industries for it. It is found, however, that no figures can be given for the most important industry—namely, "Meat packing, wholesale"—without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report.]

All industries, total.....	246	1,914	8,600	15,564	43,763	\$4,596,309	\$10,607,560	\$96,077,438	\$2,077,969	\$131,336,433	\$33,181,026
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TABLE 14.—GENERAL STATISTICS FOR IMPORTANT CITIES, BY INDUSTRIES: 1929

[This table presents, for each important industrial city in the State, with certain exceptions, the reasons for which are given in explanatory notes, separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						

DALLAS

[Because of the amount of manufacturing industry in this city, it had been planned to publish statistics by industries for it. It is found, however, that no figures can be given for the most important industry—namely, "Motor vehicles, not including motorcycles"—without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report]

All industries, total.....	535	2,828	12,048	17,610	31,761	\$7,192,920	\$13,630,181	\$82,400,685	\$1,243,782	\$142,612,320	\$58,867,973
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EL PASO

All industries, total.....	147	714	5,100	4,382	10,069	\$1,585,427	\$5,453,576	\$13,306,370	\$531,704	\$24,005,307	\$10,767,233
Beverages.....	7	12	45	-----	76	17,906	42,517	114,702	3,704	271,878	153,382
Bread and other bakery products.....	23	24	259	2	268	48,766	297,755	718,009	38,603	1,629,760	772,544
Car and general construction and repairs, steam-railroad repair shops.....	5	99	1,730	1,053	1,468	251,282	2,588,808	1,669,790	112,287	4,622,269	2,840,180
Coffee and spice, roasting and grinding.....	5	7	20	-----	60	17,590	16,213	268,935	2,939	383,037	111,163
Compressed and liquefied gases.....	4	8	0	-----	150	16,930	14,885	40,800	13,772	161,713	97,141
Concrete products.....	3	2	13	12	33	( <sup>1</sup> )	10,005	10,370	334	40,946	30,232
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	4	11	33	-----	107	29,270	43,604	210,102	1,792	359,537	138,643
Flour and other grain-mill products <sup>2</sup> .....	4	22	47	-----	545	55,444	42,551	389,250	12,534	1,058,840	157,047
Ice cream.....	5	2	27	-----	272	( <sup>1</sup> )	34,288	144,266	8,433	267,209	144,930
Ice, manufactured.....	4	15	90	1,110	1,633	44,701	91,148	32,309	80,465	590,045	486,271
Printing and publishing, book and job.....	13	46	80	-----	98	99,422	96,510	81,430	5,014	423,838	317,385
Printing and publishing, newspaper and periodical <sup>2</sup> .....	11	197	223	-----	436	381,784	377,845	251,615	21,756	1,573,224	1,299,835
Other industries <sup>3</sup> .....	50	260	2,584	2,205	5,523	623,318	1,797,209	8,865,126	230,371	13,313,950	4,218,462

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>1</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

<sup>2</sup> The items for each of the 2 industries covered by this footnote include data for 1 establishment located outside the city, to avoid disclosing the figures reported by the establishments in question. Amounts equivalent to the sums of the figures for these establishments have been subtracted from the "Other industries" items, and therefore the totals for the city are not affected by these counterbalancing adjustments.

<sup>3</sup> See footnote 2.

FORT WORTH

[Because of the amount of manufacturing industry in this city, it had been planned to publish statistics by industries for it. It is found, however, that no figures can be given for the most important industry—namely, "Meat packing, wholesale"—without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report]

All industries, total.....	228	1,751	6,461	14,793	31,488	\$4,192,519	\$8,273,505	\$34,095,219	\$1,225,042	\$113,614,152	\$27,693,891
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HOUSTON

All industries, total.....	429	3,101	10,264	12,850	51,155	\$8,215,658	\$20,301,484	\$77,482,970	\$2,288,204	\$145,049,650	\$65,278,485
Bags, other than paper, not made in textile mills.....	7	55	419	-----	603	123,324	306,907	5,220,102	10,868	6,074,198	834,228
Beverages <sup>1</sup> .....	11	20	113	-----	195	58,833	125,809	324,540	5,060	840,080	510,490
Bread and other bakery products.....	46	82	836	325	930	195,537	1,075,840	2,958,145	81,639	6,939,220	3,899,435
Brooms.....	6	5	26	-----	21	7,715	25,987	48,175	569	119,433	70,689
Clothing, women's, not elsewhere classified.....	8	23	389	-----	56	54,770	179,116	434,791	4,584	1,014,705	575,330
Coffee and spice, roasting and grinding.....	7	50	136	-----	534	105,317	121,877	6,868,004	20,102	9,282,747	2,394,641
Concrete products <sup>1</sup> .....	10	32	159	3	249	89,472	178,733	122,712	3,323	515,230	389,195
Confectionery.....	6	8	30	-----	54	16,710	23,990	76,518	1,924	162,379	84,337
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	13	42	139	-----	153	92,165	164,331	893,794	4,256	1,442,707	544,657
Electrical machinery, apparatus, and supplies.....	4	11	35	-----	97	26,967	46,318	108,122	2,425	213,304	102,817
Foundry and machine-shop products, not elsewhere classified <sup>1</sup> .....	41	585	4,242	-----	15,900	2,231,683	5,621,597	5,772,025	483,520	22,216,119	15,960,574
Furniture, including store and office fixtures.....	7	47	522	120	1,233	149,071	745,040	785,974	23,942	2,183,637	1,370,721
Ice cream.....	7	34	121	70	773	91,000	140,037	752,466	63,455	1,499,285	683,334
Ice, manufactured.....	23	47	216	3,700	5,355	114,555	307,041	25,796	261,617	1,697,790	1,230,377
Marble, granite, slate, and other stone products.....	3	17	72	-----	378	49,121	117,486	115,088	8,859	378,479	253,954
Mattresses and bed springs, not elsewhere classified.....	8	23	134	-----	406	46,644	122,720	376,029	11,104	330,130	445,997
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.....	18	79	316	465	871	189,651	411,320	995,022	12,754	1,852,679	844,003
Poultry killing, dressing, and packing, wholesale.....	3	5	18	-----	-----	9,470	15,346	282,800	769	249,052	115,483
Printing and publishing, book and job.....	50	166	417	-----	452	397,011	628,072	685,027	18,850	2,622,070	1,818,183
Printing and publishing, newspaper and periodical.....	11	712	387	-----	1,169	1,433,615	591,414	1,450,238	34,312	6,650,886	5,160,336
Rice cleaning and polishing.....	4	44	128	1,600	637	122,932	122,123	3,772,393	14,764	4,634,779	847,622
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	4	66	307	-----	1,088	139,166	416,281	1,323,009	14,574	2,304,564	966,051
Other industries <sup>2</sup> .....	133	949	7,103	6,573	19,914	2,411,229	8,513,428	44,125,701	1,244,954	71,545,676	26,176,021

<sup>1</sup> The items for each of the 8 industries covered by this footnote include data for 1 establishment located outside the city, to avoid disclosing the figures reported by the establishments in question. Amounts equivalent to the sums of the figures for these establishments have been subtracted from the "Other industries" items, and therefore the totals for the city are not affected by these counterbalancing adjustments.

<sup>2</sup> See footnote 4.

## CENSUS OF MANUFACTURES: 1929

TABLE 14.—GENERAL STATISTICS FOR IMPORTANT CITIES, BY INDUSTRIES: 1929—Continued

(See note at head of this table)

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>SAN ANTONIO</b>											
[The totals for all industries do not include data for a few establishments located outside the city (see footnote 6), and therefore are slightly smaller than the sums of the items for the individual industries]											
All industries, total.....	390	1,643	8,892	6,608	18,807	\$3,546,733	\$8,271,292	\$29,811,708	\$787,951	\$53,372,775	\$22,803,026
Beverages.....	9	34	144	1,010	221	93,742	186,005	298,702	17,654	914,679	598,263
Bread and other bakery products.....	69	86	565	209	712	188,206	633,833	1,720,864	73,235	3,703,521	1,903,422
Clothing, women's, not elsewhere classified.....	9	50	521		51	95,414	330,158	500,536	6,480	1,446,036	879,020
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts, men's).....	7	22	312		76	48,090	150,075	455,574	4,956	830,298	369,768
Coffee and spice, roasting and grinding.....	8	43	40		178	128,922	43,342	1,504,041	8,819	2,125,678	552,218
Compressed and liquefied gases.....	4	12	16	70	370	26,976	21,312	3,078	18,136	182,476	100,082
Concrete products <sup>a</sup> .....	11	25	141		199	57,316	185,250	127,584	3,700	500,090	308,776
Confectionery.....	11	36	247	14	208	105,015	144,760	630,853	10,129	1,184,596	543,614
Electrical machinery, apparatus, and supplies.....	3	5	48		67	10,940	30,633	93,855	5,690	181,287	81,872
Feeds, prepared, for animals and fowls <sup>a</sup> .....	6	7	23	75	406	12,925	24,642	377,570	8,690	539,771	153,511
Food preparations, not elsewhere classified.....	12	20	201		305	59,600	115,580	780,775	22,116	1,404,835	691,944
Foundry and machine-shop products, not elsewhere classified <sup>a</sup> .....	12	135	596		1,463	349,817	811,907	777,039	36,223	2,202,455	1,479,109
Furniture, including store and office fixtures.....	5	7	45		112	9,276	55,615	50,916	1,725	176,413	128,772
Ice cream.....	6	6	20		281	10,625	41,851	202,802	10,523	458,408	245,058
Ice, manufactured <sup>a</sup> .....	16	28	143	1,625	3,913	68,078	154,004	28,144	187,530	1,024,960	809,286
Marble, granite, slate, and other stone products.....	7	9	45	50	147	22,219	51,114	54,043	4,523	235,249	176,683
Mattresses and bed springs, not elsewhere classified.....	6	13	45		122	20,440	39,125	122,930	1,009	223,526	98,687
Meat packing, wholesale.....	9	74	272	430	712	148,303	283,117	4,660,836	50,457	5,592,070	839,777
Oil, cake, and meal, cottonseed.....	4	24	114	960	871	53,555	93,327	2,941,347	48,403	3,236,526	246,776
Peanuts, walnuts, and other nuts, processed or shelled <sup>a</sup> .....	10	23	1,180	6	47	37,991	233,530	716,958	3,401	1,593,716	873,357
Perfumes, cosmetics, and other toilet preparations.....	3	5	31		8	8,793	19,610	70,015	438	137,807	67,414
Planing-mill products (including general millwork), not made in planing mills connected with sawmills <sup>a</sup> .....	11	50	407	206	1,142	142,320	480,805	693,671	15,093	1,508,522	889,758
Printing and publishing, book and job.....	32	62	295		356	125,843	349,559	424,793	14,652	1,483,156	1,043,711
Printing and publishing, newspaper and periodical.....	16	432	321		863	706,568	624,307	1,096,898	25,101	3,532,554	2,410,556
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.....	3	8	33		158	10,191	23,724	325,869	4,830	445,946	115,238
Signs and advertising novelties.....	4	10	40		23	20,200	41,444	32,121	1,307	126,248	92,820
Other industries.....	103	427	2,881	1,938	6,113	1,003,088	3,138,414	11,052,466	180,790	18,304,194	7,070,938

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.<sup>c</sup> The figures for each of the 6 industries covered by this footnote include data for 1 establishment located outside the city, to avoid disclosing the figures reported by the establishments in question.

# UTAH

TABLE 1.—SUMMARY FOR THE STATE: 1899 TO 1929

[Data for the "Automobile repairing" industry are included in the figures for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
			Total	Prime movers	Electric motors driven by purchased energy		Total <sup>4</sup>	Materials and containers	Fuel and purchased energy		
1929	651	15,601	123,737	55,311	98,426	\$19,608,684	\$157,902,021	\$150,715,551	\$7,186,470	\$214,628,855	\$56,720,834
1927	556	13,585	112,233	60,316	61,017	16,688,574	120,567,348	113,587,697	6,979,651	163,118,376	42,551,028
1925	517	15,077	124,735	67,022	57,713	18,190,536	127,543,009	( <sup>5</sup> )	( <sup>5</sup> )	177,224,538	49,681,439
1923	585	14,945	78,733	( <sup>6</sup> )	( <sup>6</sup> )	18,344,336	114,182,714	( <sup>5</sup> )	( <sup>5</sup> )	161,606,595	47,423,881
1921	645	13,310	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	18,392,185	74,872,522	( <sup>5</sup> )	( <sup>5</sup> )	111,055,200	36,182,678
1919	1,160	18,868	92,797	51,522	41,275	21,454,997	110,154,340	103,106,399	7,047,950	156,933,071	46,778,722
1914	1,109	13,894	59,536	37,984	21,552	10,852,332	62,233,180	57,488,374	4,744,806	87,112,360	24,879,180
1909	749	11,785	42,899	32,307	10,592	8,399,034	41,265,661	37,385,702	3,879,959	61,989,277	20,723,616
1904	606	8,052	19,397	16,456	2,941	5,157,400	24,939,827	22,808,925	2,130,902	35,926,404	13,986,637
1899	575	5,413	12,650	11,071	1,588	2,702,522	11,440,250	( <sup>8</sup> )	( <sup>8</sup> )	17,981,648	6,541,398
PER CENT OF INCREASE OR DECREASE (—)											
1927-1929	17.1	14.8	10.3	9.9	10.5	18.0	31.0	32.7	3.0	31.0	33.3
1925-1927	7.5	-9.9	-10.0	-24.9	7.3	-8.3	-5.5			-8.0	-14.4
1923-1925	-11.6	0.9	58.4			-0.8	11.7			9.7	4.8
1921-1923	-0.3	12.3				-0.3	52.5			45.5	31.1
1919-1921	-44.4	-29.5				-14.3	-32.0			-20.2	-22.7
1919-1929	-43.0	-17.3	33.3	7.4	65.8	-8.2	43.3	46.2	2.0	36.8	21.3
1909-1919	54.9	60.1	116.3	69.5	289.7	155.4	166.9	175.8	81.7	153.2	125.7
1899-1909	30.3	117.7	238.9	191.8	567.0	204.1	260.7			244.7	216.8

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>4</sup> Not reported separately.  
<sup>5</sup> Revised.  
<sup>6</sup> Not tabulated separately.  
<sup>7</sup> Not called for on schedule.  
<sup>8</sup> No comparable data.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—SUMMARY FOR COUNTIES AND CITIES: 1929

COUNTY OR CITY	Popula- tion, 1930	Number of estab- lishments	Wage earners (aver- age for the year) <sup>1</sup>	Horse- power <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufac- ture
						Total	Materials and con- tainers	Fuel and purchased energy		
The State.....	507,847	651	15,601	123,737	\$10,698,084	\$157,002,021	\$150,715,551	\$7,186,470	\$214,628,856	\$56,726,834
<i>Counties <sup>3</sup></i>										
Beaver.....	5,136	6	75	215	137,472	342,542	325,761	16,781	529,608	187,066
Box Elder.....	17,810	20	323	5,010	326,595	1,737,550	1,625,681	113,870	2,853,384	1,115,824
Cache.....	27,424	37	634	4,837	711,940	5,378,924	5,254,727	124,197	8,066,760	2,987,330
Carbon.....	17,798	13	35	214	49,925	221,478	191,611	59,867	382,520	101,051
Davis.....	14,021	14	474	3,834	501,988	4,542,774	4,449,139	93,635	6,400,170	1,857,306
Duchesne.....	8,283	5	13	220	12,299	360,867	358,042	2,825	403,043	42,170
Juab.....	8,605	7	30	384	46,717	112,433	105,550	6,883	247,617	135,184
Millard.....	9,945	10	79	211	140,647	362,292	344,153	18,139	545,321	183,020
Morgan.....	2,536	5	153	3,930	196,621	482,030	305,854	176,176	1,182,570	700,549
Salt Lake <sup>4</sup> .....	194,102	290	8,135	59,517	10,599,132	98,003,464	96,351,999	2,251,465	130,661,203	32,057,739
Sanpete.....	16,022	13	139	1,319	132,991	821,393	788,871	32,522	1,472,385	650,902
Sevier.....	11,199	13	52	640	73,347	336,784	321,704	14,900	520,442	189,058
Summit.....	9,527	8	66	79	63,001	202,486	199,079	3,407	350,001	153,515
Uintah.....	9,035	7	16	119	20,461	158,687	154,068	4,619	200,370	47,689
Utah.....	49,021	74	1,460	15,495	1,984,095	8,742,273	8,606,908	3,045,275	15,242,705	6,500,522
Wasatch.....	5,636	6	94	603	134,292	231,564	222,743	8,821	430,020	198,456
Weber.....	32,172	96	2,972	15,300	3,457,489	17,363,482	16,936,492	424,990	25,691,120	8,327,938
All other counties <sup>5</sup> .....	49,595	27	845	11,901	1,408,466	17,900,988	17,112,989	787,999	10,431,502	1,530,514
<i>Cities having 10,000 inhabitants or more</i>										
Ogden.....	40,272	84	2,342	10,665	2,892,006	12,367,037	12,047,800	319,238	19,011,445	6,643,808
Provo.....	14,766	27	514	2,524	607,997	1,203,440	1,149,663	53,777	2,362,025	1,158,685
Salt Lake City <sup>4</sup> .....	140,267	261	5,655	19,627	7,311,140	21,735,787	20,987,482	748,285	42,167,235	20,461,468

<sup>1</sup> Not including salaried employees.<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.<sup>3</sup> Statistics are presented for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing approximations of the data supplied by individual establishments, and combined figures are given for the remaining counties as a single group "All other counties". Certain of the counties for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.<sup>4</sup> Because of the amount of manufacturing industry in Salt Lake County and in Salt Lake City, it had been planned to publish statistics by industries for both the county and the city. It is found, however, that no figures can be given for the most important industries without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given, either for the county or for the city, would be misleading, and therefore no such statistics are included in this report. The leading industry in Salt Lake County was "Smelting and refining, copper"; the most important industries in Salt Lake City were "Car and general construction and repairs, steam-railroad repair shops," as measured by number of wage earners, and "Petroleum refining," as measured by value of products.<sup>5</sup> Emery, Garfield, Grand, Iron, Piute, Rich, San Juan, Tooele, and Washington Counties. (See footnote 3.) No manufacturing was reported from Daggett, Kane, and Wayne Counties.

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORA- TIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929 <sup>1</sup> .....	18,833	15,746	3,087	323	308	15	335	319	16	2,574	2,053	521	15,801	13,066	2,735
1919 <sup>2</sup> .....	23,107	19,883	3,226	1,089	1,030	59	266	259	7	2,884	2,295	589	18,808	16,297	2,511
1914 <sup>3</sup> .....	17,126	15,143	1,983	909	868	31	192	184	8	2,041	1,832	209	13,894	12,159	1,735
1909.....	14,133	12,680	1,453	688	673	15	135	132	3	1,525	1,313	212	11,785	10,562	1,223

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.<sup>2</sup> Not including employees of central administrative offices, as follows: Principal salaried officers of corporations—total, 73; male, 72; female, 1. Other salaried officers and employees—total, 209; male, 148; female, 61. The corresponding data for 1919 and earlier years are included in the respective items for those years but were not tabulated separately. See GENERAL EXPLANATIONS—Persons Engaged.<sup>3</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for December 14. See GENERAL EXPLANATIONS—Persons Engaged.<sup>4</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by italic figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent mini- mum is of maxi- mum
		January	February	March	April	May	June	July	August	Septem- ber	October	Novem- ber	Decem- ber	
1929 <sup>1</sup> .....	15,801	12,809	<i>12,671</i>	13,210	13,593	13,890	14,805	17,768	18,280	19,706	19,341	16,486	14,683	64.3
1919.....	18,868	18,819	17,028	16,280	<i>16,169</i>	16,286	17,400	19,152	19,600	20,412	22,592	21,740	20,911	71.7
1914.....	13,894	13,035	<i>12,882</i>	12,578	13,101	13,386	14,263	15,401	14,693	15,794	15,525	13,334	12,937	78.4
1909.....	11,785	11,412	<i>10,449</i>	10,594	10,839	10,749	11,898	12,436	12,234	13,277	13,070	12,445	12,053	78.7

<sup>1</sup> The figures for 1919 and 1914 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment, even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)
All classes.....	551	15,001	45 and over but under 48.....	26	854
Not reported.....	36	80	48.....	255	6,754
Under 40.....	13	15	Over 48 but under 54.....	20	547
40.....	3	177	54.....	54	901
Over 40 but under 44.....	6	14	Over 54 but under 60.....	61	3,282
44 and over but under 45.....	98	1,005	60 and over.....	73	1,372

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures; and those for 1919 and 1909 include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$6,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
All establishments.....	651	1,100	740	15,001	18,868	11,785	51 to 100.....	41	36	13	2,828	2,070	885
No wage earners.....	32	100	74				101 to 250.....	27	28	15	3,893	4,172	2,314
1 to 5.....	338	654	443	902	1,324	1,007	251 to 500.....	4	5	2	1,453	1,468	656
6 to 20.....	134	166	130	1,472	1,803	1,471	501 to 1,000.....	4	6	4	2,708	3,092	2,408
21 to 50.....	71	68	58	2,345	2,201	1,940	1,001 to 2,500.....		1	1		1,238	1,104

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	651	1,100	740	15,001	18,868	11,785	\$214,628,855	\$156,933,071	\$61,680,277	\$56,726,834	\$46,778,722	\$20,723,616
Less than \$5,000.....	(?)	367	282	(?)	231	300	(?)	905,130	704,008	(?)	605,847	470,371
\$5,000 to \$19,999.....	239	365	220	500	872	870	2,720,000	3,891,712	2,270,058	1,525,780	2,194,830	1,219,958
\$20,000 to \$99,999.....	224	293	170	1,759	2,410	2,244	10,007,713	11,893,055	7,716,935	5,338,907	5,396,300	3,251,752
\$20,000 to \$49,999.....	144	(?)	(?)	849	(?)	(?)	4,724,298	(?)	(?)	2,554,076	(?)	(?)
\$50,000 to \$99,999.....	80	(?)	(?)	910	(?)	(?)	5,833,415	(?)	(?)	2,784,921	(?)	(?)
\$100,000 to \$499,999.....	132	117		4,852	4,751		28,659,640	24,737,801		12,904,900	10,768,130	
\$100,000 to \$249,999.....	90	(?)		2,353	(?)		14,006,330	(?)		6,027,181	(?)	
\$250,000 to \$499,999.....	42	(?)	64	2,494	(?)	5,081	14,593,319		18,107,110	6,877,719		8,107,586
\$500,000 to \$999,999.....	30	20		2,340	1,827		21,205,272	13,979,920		9,430,833	5,401,822	
\$1,000,000 and over.....	26	28	7	6,150	8,777	3,101	151,435,525	101,475,453	33,100,176	27,517,324	22,412,602	7,574,949
\$1,000,000 to \$2,499,999.....	14	(?)	(?)	2,510	(?)	(?)	20,232,063	(?)	(?)	8,588,152	(?)	(?)
\$2,500,000 to \$4,999,999.....	7	(?)	(?)	965	(?)	(?)	22,694,328	(?)	(?)	5,807,220	(?)	(?)
\$5,000,000 and over.....	5	(?)	(?)	2,676	(?)	(?)	108,539,134	(?)	(?)	13,121,952	(?)	(?)

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

(?) No data.  
 ( ) Not tabulated separately.

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$6,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
Total.....	651	1,100	16,601	18,868	\$214,628,855	\$156,933,071	\$56,726,834	\$46,778,722
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	379	453	14,433	17,006	204,828,480	146,593,052	62,809,732	42,021,437
Other forms of ownership or control (individual, partnership, etc.).....	272	707	1,168	1,772	9,800,375	10,340,019	3,827,102	4,757,285
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	145	(?)	9,689	(?)	163,282,455	(?)	34,097,940	(?)
Independent (single-unit).....	506	(?)	6,512	(?)	51,346,370	(?)	22,628,894	(?)

<sup>1</sup> Not tabulated.

## CENSUS OF MANUFACTURES: 1929

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE, 1929, 1927, 1925, 1919, AND 1914, AND FOR SALT LAKE COUNTY, 1929

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY											ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING					
	Aggregate horsepower	Total horsepower of prime movers	Prime movers								Electric motors driven by purchased energy						
			Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines								
			Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower	Number			Horsepower	Number	Horsepower	
The State:																	
1929.....	123,737	55,311	205	34,409	31	17,730	31	718	36	2,454	6,700	68,426	1,063	22,781			
1927.....	112,233	50,316	169	28,608	12	18,396	12	343	40	2,969	5,324	61,917	847	18,710			
1925.....	124,735	67,022	243	39,154	11	25,568	20	433	40	1,877	5,498	57,713	852	16,281			
1919 <sup>1</sup> .....	92,797	51,522	344	37,556	24	9,440	50	968	69	3,558	3,738	41,275	778	17,446			
1914 <sup>1</sup> .....	59,536	37,984	<sup>2</sup> 366	<sup>2</sup> 34,020	( <sup>3</sup> )	( <sup>3</sup> )	50	470	98	3,494	1,821	21,552	517	12,460			
Salt Lake County <sup>4</sup> .....	59,517	28,410	55	15,622	11	9,748	11	168	6	882	3,637	33,107	548	12,792			

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

<sup>2</sup> Reported as "Steam engines and turbines."

<sup>3</sup> Not reported separately. See footnote 2.

<sup>4</sup> This is the only county in Utah in which the aggregate horsepower exceeded 25,000.

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county for which separate figures are given in Table 2. See footnotes 3 and 5 on that table.]

COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>	COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	123,737	55,311	68,426	22,781	Morgan.....	3,930	50	3,880	-----
Beaver.....	215	12	203	-----	Salt Lake.....	59,517	26,410	33,107	12,792
Box Elder.....	5,010	2,636	2,374	-----	Sanpete.....	1,319	841	478	735
Cache.....	4,837	3,607	1,230	1,902	Sevier.....	549	200	259	-----
Carbon.....	214	52	162	-----	Summit.....	79	40	39	-----
Davis.....	3,834	1,785	2,049	20	Uintah.....	119	50	69	-----
Duchesne.....	220	80	140	-----	Utah.....	15,495	11,018	4,477	2,849
Junb.....	394	290	94	96	Wasatch.....	603	61	542	-----
Millard.....	211	112	99	-----	Weber.....	15,300	3,173	12,127	864
					All other counties.....	11,901	4,804	7,097	3,423

<sup>1</sup> Horsepower of electric motors driven by energy generated in establishments reporting.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927, 1923, 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures see Chapter VII, Volume I, Reports of the Census of Manufactures, 1929.]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
Fuel:							
Coal, total <sup>2</sup> (tons, 2,000 lbs.).....	1,013,737	\$3,031,901	946,274	980,800	1,032,190	1,152,520	899,318
Anthracite (tons, 2,240 lbs.).....	8,453	29,673	( <sup>3</sup> )	1,350	1,224	1,585	492
Bituminous (tons, 2,000 lbs.).....	1,004,270	3,002,228	( <sup>3</sup> )	979,238	1,030,819	1,150,745	898,767
Coke (tons, 2,000 lbs.).....	303,089	2,527,457	( <sup>4</sup> )	( <sup>4</sup> )	169,969	204,867	167,097
Fuel oils, including crude oils and gas oils (gallons) <sup>5</sup> .....	21,865,142	517,394	( <sup>4</sup> )	( <sup>4</sup> )	10,832,556	16,436,094	282,282
Gasoline and kerosene (gallons) <sup>6</sup> .....	29,901	6,017	( <sup>4</sup> )	( <sup>4</sup> )	64,974		
Gas, natural (M cu. ft.).....	51,876	14,798	( <sup>4</sup> )	( <sup>4</sup> )			
Gas, manufactured (M cu. ft.).....	2,302,493	176,437	( <sup>4</sup> )	( <sup>4</sup> )	24,675	20,376	9,543
Other fuels.....		54,137	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Electric energy purchased (kilowatt-hours).....	102,606,546	1,327,538	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Total cost of fuel and purchased energy.....		\$7,655,709	Cost \$6,979,651	Cost (\$)	Cost \$7,047,960	Cost \$4,744,806	Cost \$3,379,369

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1929.

<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.

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

<sup>4</sup> No data.

<sup>5</sup> For years prior to 1929, reported in barrels; converted on basis of 42 gallons per barrel.

<sup>6</sup> Data incomplete.

<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12 is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.

<sup>8</sup> Not reported separately.



TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929

[This table presents separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
All industries, total.....	651	2,909	15,601	55,311	68,426	\$6,407,917	\$19,698,684	\$150,715,551	\$7,186,470	\$214,028,855	\$56,720,834
Awnings, tents, sails, and canvas covers.....	5	5	15	-----	11	7,480	16,442	78,472	491	129,224	50,261
Beverages.....	18	19	66	202	231	43,587	96,137	204,387	17,739	549,756	327,030
Bookbinding and blank-book making.....	3	2	10	-----	24	( <sup>3</sup> )	13,893	16,073	550	58,843	37,220
Bread and other bakery products.....	50	46	665	6	857	130,407	696,091	2,393,282	114,863	5,013,072	2,504,927
Butter.....	27	71	195	421	1,169	135,209	250,773	4,557,137	58,798	5,567,681	951,646
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	38	132	1,850	560	3,688	261,080	1,152,761	5,194,922	127,881	9,160,379	3,837,576
Car and general construction and repairs, steam-railroad repair shops.....	11	160	1,960	1,090	6,413	396,144	3,390,451	2,227,180	194,180	6,207,957	3,786,595
Cheese.....	15	6	30	56	114	0,115	35,281	432,664	8,235	530,833	89,938
Clay products (other than pottery) and nonclay refractories.....	9	47	371	355	2,149	99,403	347,086	130,217	147,963	1,210,646	932,466
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	3	22	292	-----	63	53,275	188,256	509,866	4,068	903,796	389,262
Coffee and spice, roasting and grinding.....	4	14	11	-----	69	23,682	13,103	263,329	2,560	343,749	77,860
Compressed and liquefied gases.....	5	29	20	720	461	59,751	42,310	103,034	32,322	353,497	218,141
Concrete products.....	5	1	10	-----	12	( <sup>3</sup> )	11,718	25,307	1,369	60,386	35,710
Condensed and evaporated milk.....	4	21	188	44	389	45,423	183,059	2,719,067	33,556	3,690,448	937,885
Confectionery.....	17	91	629	237	829	291,967	564,130	1,405,337	47,598	3,190,682	1,737,747
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	11	24	83	-----	546	45,077	118,105	368,912	6,124	691,320	326,284
Flour and other grain-mill products.....	55	135	431	1,097	5,315	213,606	563,528	8,127,111	131,901	9,901,834	1,642,822
Food preparations, not elsewhere classified.....	5	1	17	2	7	( <sup>3</sup> )	20,310	46,543	3,242	86,311	36,520
Foundry and machine-shop products, not elsewhere classified.....	17	73	389	-----	1,550	165,302	538,018	960,762	78,804	2,204,230	1,254,673
Ice cream.....	18	33	125	10	750	49,153	144,747	673,916	35,306	1,334,864	625,642
Ice, manufactured.....	10	17	111	1,295	2,245	39,471	170,950	16,402	75,534	596,408	504,472
Jewelry.....	3	3	15	-----	8	3,300	20,525	18,436	398	62,680	43,846
Knit goods.....	10	74	400	-----	341	129,781	300,697	604,965	10,224	1,185,880	504,691
Lime.....	7	11	81	230	268	19,420	82,588	30,721	22,697	215,343	161,925
Lumber and timber products, not elsewhere classified.....	8	3	69	260	-----	7,751	63,185	12,415	-----	130,105	117,690
Marble, granite, slate, and other stone products.....	6	6	25	27	280	10,200	34,519	49,566	4,435	138,576	84,575
Mattresses and bed springs, not elsewhere classified.....	8	12	69	90	194	28,541	65,084	161,990	5,094	304,494	137,410
Meat packing, wholesale.....	9	77	272	775	2,014	173,601	389,081	7,475,005	50,526	8,935,640	1,404,109
Millinery.....	5	18	102	-----	29	29,678	71,353	136,604	1,666	346,220	207,050
Photo-engraving, not done in printing establishments.....	4	2	20	-----	17	( <sup>3</sup> )	40,246	33,720	2,072	134,496	98,704
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.....	25	25	175	116	1,585	62,779	280,360	413,097	18,340	951,973	520,536
Printing and publishing, book and job.....	50	140	315	-----	413	271,400	438,725	436,266	26,184	1,713,044	1,250,594
Printing and publishing, newspaper and periodical.....	50	517	520	-----	760	927,941	755,637	960,377	49,164	4,256,394	3,246,853
Saddlery and harness.....	5	3	25	-----	11	4,260	39,136	42,426	1,725	99,349	55,198
Smelting and refining, lead.....	3	271	1,468	6,297	15,576	645,255	2,439,840	31,369,360	1,595,815	38,820,392	5,855,217
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	7	25	97	-----	510	97,921	141,383	250,769	13,684	630,874	366,431
Sugar, beet.....	10	120	691	12,167	1,804	235,197	920,383	5,360,047	240,688	9,114,204	3,594,469
Wall plaster, wall board, insulating board, and floor composition.....	3	11	47	495	94	25,922	65,007	32,659	11,116	189,573	145,798
Other industries.....	108	636	3,704	28,680	17,615	1,667,182	4,993,126	72,885,278	3,987,958	95,528,791	18,055,555

<sup>1</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>3</sup> Not including data for 232 employees of central administrative offices, with salaries aggregating \$708,416. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

# VERMONT

TABLE 1.—SUMMARY FOR THE STATE: 1899 TO 1929

[Data for the "Automobile repairing" industry are included in the figures for 1910; but no automobile repair shops were reported in Vermont for 1914, the only other year for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
			Total	Prime movers	Electric motors driven by purchased energy		Total <sup>4</sup>	Materials and containers	Fuel and purchased energy		
1929	927	27,421	163,940	80,508	83,432	\$33,809,987	\$66,262,873	\$62,871,755	\$3,391,118	\$143,522,547	\$77,250,074
1927	880	26,241	172,762	94,174	78,588	32,305,433	60,957,432	60,491,640	3,465,792	134,029,978	64,072,540
1925	951	27,563	178,806	100,038	60,773	32,326,006	74,387,398	(*)	(*)	138,269,861	63,882,403
1923	1,021	30,783	177,212	113,697	63,515	34,096,484	80,775,801	(*)	(*)	149,951,623	60,175,822
1921	1,101	25,767	(*)	(*)	(*)	28,093,026	63,688,543	(*)	(*)	113,904,333	50,215,790
1919	1,790	33,491	184,327	123,237	61,090	34,083,935	95,172,581	91,624,436	3,548,145	168,108,072	72,935,491
1914	1,772	32,704	171,738	144,261	27,477	18,617,075	42,705,720	40,890,894	1,818,826	70,990,074	34,285,264
1909	1,958	33,788	158,806	145,889	12,917	17,271,702	34,822,728	33,354,641	1,468,187	68,309,324	33,487,090
1904	1,699	33,106	139,295	134,746	4,550	15,221,059	32,420,852	31,224,807	1,205,045	63,083,611	30,053,769
1899	1,938	28,179	124,440	122,996	1,444	11,426,548	26,384,812	(*)	(*)	51,616,228	25,130,416
PER CENT OF INCREASE OR DECREASE (—)											
1927-1929	5.3	4.5	-5.1	-14.5	6.2	4.7	-5.3	-5.4	-2.2	7.1	20.0
1925-1927	-7.5	-4.8	-3.4	-13.6	12.6	-0.1	-6.0			-3.1	0.3
1923-1925	-0.9	-10.5	0.9	-4.1	9.0	-8.8	-7.9			-7.8	-7.7
1921-1923	-7.3	19.5				23.6	20.8			31.6	37.8
1919-1921	-38.5	-23.1				-17.7	-33.1			-32.2	-31.2
1919-1919	-48.2	-18.1	-11.1	-34.7	36.6	-0.8	-30.4	-31.4	-4.4	-14.6	5.0
1909-1919	-8.6	-0.9	16.1	-15.5	372.9	97.3	173.3	174.7	141.7	146.1	117.8
1899-1909	1.0	19.9	27.6	18.6	794.5	51.2	32.0			32.6	33.3

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>4</sup> Not reported separately.  
<sup>5</sup> Not called for on schedule.  
<sup>6</sup> No comparable data.

TABLE 2.—SUMMARY FOR COUNTIES AND CITIES: 1929

COUNTY OR CITY	Population, 1930	Number of establishments	Wage earners (average for the year) <sup>1</sup>	Horsepower <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture
						Total	Materials and containers	Fuel and purchased energy		
The State	350,611	927	27,421	163,940	\$33,809,987	\$66,262,873	\$62,871,755	\$3,391,118	\$143,522,547	\$77,250,074
<i>Counties<sup>3</sup></i>										
Addison	17,952	34	538	3,318	501,731	1,607,452	1,556,230	51,218	2,791,565	1,184,113
Bennington	21,655	47	3,187	8,801	3,194,032	6,027,679	5,810,887	216,792	13,247,541	7,210,362
Caledonia	27,253	81	1,721	11,338	2,216,560	4,189,622	3,965,044	224,578	10,129,060	5,939,438
Chittenden	47,471	87	3,465	16,434	3,552,356	10,720,738	10,275,872	444,864	19,814,848	9,094,112
Franklin	29,975	52	1,369	14,458	1,500,448	12,459,580	12,210,270	249,301	17,077,562	4,617,082
Lamolle	10,947	35	460	3,384	407,294	935,080	910,047	25,033	1,963,818	1,028,738
Orange	16,694	40	397	3,083	374,080	1,030,308	987,193	43,115	2,070,339	1,040,031
Orleans	23,036	58	1,147	6,329	1,135,216	2,200,763	2,112,915	87,848	4,700,381	2,499,618
Rutland	48,453	123	4,504	20,318	5,069,858	5,105,800	4,637,036	468,824	16,011,525	10,905,065
Washington	41,733	184	3,326	3,326	5,420,000	6,247,348	5,698,251	559,097	17,454,614	11,207,266
Windham	26,015	75	2,110	13,962	2,305,299	5,415,260	5,074,754	340,515	10,347,436	4,032,167
Windsor	37,410	86	4,027	19,616	6,822,920	7,581,632	7,128,015	453,617	23,625,350	10,047,718
All other counties (Essex and Grand Isle) <sup>4</sup>	11,011	19	590	9,394	710,187	2,741,544	2,515,223	226,321	4,284,508	1,542,064
<i>Cities having 10,000 inhabitants or more</i>										
Barre	11,307	97	1,827	14,555	3,440,650	3,083,193	2,678,577	354,616	10,423,265	7,390,073
Burlington	24,739	50	1,898	8,102	1,892,359	6,189,004	5,935,208	253,796	12,077,671	5,888,667
Rutland	17,315	41	1,561	4,822	1,994,608	2,466,629	2,260,286	206,343	6,550,057	4,083,428

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.  
<sup>3</sup> Statistics are presented for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing approximations of the data supplied by individual establishments, and combined figures are given for the remaining counties as a single group ("All other counties"). Essex County, however, reported a larger number of wage earners and a larger value of products than some of the counties shown separately.

CENSUS OF MANUFACTURES: 1929

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORATIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929	31,189	26,371	4,818	640	631	18	2,496	2,462	234	2,623	2,185	2,772	27,421	23,427	3,994
1919	38,845	32,618	5,927	1,804	1,730	74	574	547	27	2,076	2,028	948	38,401	28,618	4,878
1914	37,217	32,591	4,626	1,787	1,743	44	333	326	7	2,303	1,798	565	32,704	28,724	3,980
1909	38,580	33,305	5,275	2,113	2,053	60	302	293	9	2,377	1,869	508	33,788	29,090	4,698

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.  
<sup>2</sup> Not including employees of central administrative offices, as follows: Principal salaried officers of corporations—total, 40; male, 38; female, 2. Other salaried officers and employees—total, 210; male, 145; female 71. The corresponding data for 1919 and earlier years are included in the respective items for those years but were not tabulated separately. See GENERAL EXPLANATIONS—Persons Engaged.  
<sup>3</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for Dec. 14. See GENERAL EXPLANATIONS—Persons Engaged.  
<sup>4</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919; but no automobile repair shops were reported in Vermont for 1914, the only other year for which this industry was canvassed in connection with the census of manufactures.

TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929	27,421	27,337	28,001	27,937	27,533	27,656	27,886	27,131	27,279	27,716	27,502	26,962	<i>26,115</i>	93.3
1919	33,401	31,239	<i>31,135</i>	31,419	31,757	32,638	33,184	33,385	34,272	34,649	35,621	36,003	36,580	85.1
1914	32,704	33,288	33,273	34,155	34,194	34,125	33,254	31,792	<i>31,213</i>	32,208	31,615	31,571	31,760	91.3
1909	33,788	33,013	33,710	34,257	34,288	34,317	34,134	32,875	33,350	34,098	34,392	34,677	<i>32,342</i>	93.3

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919; but no automobile repair shops were reported in Vermont for 1914, the only other year for which this industry was canvassed in connection with the census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment, even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)
All classes	927	27,421	45 and over but under 48	34	1,407
Not reported	126	535	48	92	4,572
Under 40	12	32	Over 48 but under 54	156	10,044
40	72	1,082	54	230	3,714
Over 40 but under 44	4	309	Over 54 but under 60	51	3,217
44 and over but under 45	91	1,847	60 and over	59	662

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures; and those for 1919 and 1909 include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
All establishments	927	1,790	1,958	27,421	33,401	33,788	51 to 100	51	65	57	3,818	4,560	3,955
No wage earners	11	186	131				101 to 250	48	57	39	6,786	8,498	5,955
1 to 5	398	945	1,100	1,308	1,989	2,346	251 to 500	7	9	16	2,610	3,253	5,897
6 to 20	266	303	414	3,157	4,097	4,677	501 to 1,000	6	9	1	5,426	6,246	794
21 to 50	139	156	198	4,316	4,848	6,388	1,001 to 2,500	1		2			
							2,501 and over						3,776

<sup>1</sup> Combined to avoid disclosing number of wage earners reported by individual establishments.

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	927	1,790	1,958	27,421	33,491	33,788	\$143,522,547	\$168,108,072	\$68,309,824	\$77,259,674	\$72,935,491	\$33,487,096
Less than \$5,000.....	(2)	410	690	(2)	313	1,100	(2)	993,625	1,693,585	(2)	631,784	1,089,581
\$5,000 to \$19,999.....	311	558	644	1,137	1,926	3,844	3,524,522	6,132,192	6,976,450	2,241,289	3,480,519	3,729,572
\$20,000 to \$99,999.....	361	541	493	4,197	6,271	9,491	17,044,116	24,818,115	20,340,258	10,260,294	11,609,388	9,683,436
\$20,000 to \$49,999.....	226	(3)	(3)	1,808	(3)	(3)	7,543,078	(3)	(3)	4,307,541	(3)	(3)
\$50,000 to \$99,999.....	135	(3)	(3)	2,389	(3)	(3)	9,500,438	(3)	(3)	5,958,733	(3)	(3)
\$100,000 to \$499,999.....	197	207		9,066	8,929		41,985,817	43,889,269		23,871,704	18,250,989	
\$100,000 to \$249,999.....	138	(3)		4,759	(3)		21,421,941	(3)		12,503,099	(3)	
\$250,000 to \$499,999.....	59	(3)	127	4,307	(3)	14,466	20,563,876	(3)	32,104,250	11,368,605	(3)	14,813,124
\$500,000 to \$999,999.....	35	47		4,104	5,740		23,116,332	30,860,467		12,322,110	14,092,077	
\$1,000,000 and over.....	23	27	4	8,887	10,312	4,887	57,851,760	61,414,404	7,195,281	28,558,277	24,870,784	4,201,383
\$1,000,000 to \$2,499,999.....	14	(3)	(3)	3,455	(3)	(3)	22,220,828	(3)	(3)	9,685,427	(3)	(3)
\$2,500,000 to \$4,999,999.....	8	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)	(3)
\$5,000,000 and over.....	1	(3)	(3)	15,402	(3)	(3)	35,021,932	(3)	(3)	18,872,850	(3)	(3)

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>2</sup> No data. No corresponding figures were tabulated for 1925 and 1919.

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

<sup>4</sup> Combined to avoid disclosing data for individual establishments.

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
Total.....	927	1,790	27,421	33,491	\$143,522,547	\$168,108,072	\$77,259,674	\$72,935,491
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	425	469	22,428	26,243	121,598,012	130,015,057	65,037,117	56,883,625
Other forms of ownership or control (individual, partnership, etc.).....	502	1,321	4,993	7,248	21,924,535	38,093,015	12,222,557	16,051,866
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	158	(1)	10,879	(1)	57,828,678	(1)	29,682,112	(1)
Independent (single-unit).....	769	(1)	16,542	(1)	85,693,869	(1)	47,577,562	(1)

<sup>1</sup> Not tabulated.

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE, 1929, 1927, 1925, 1919, AND 1914, AND FOR RUTLAND COUNTY, 1929

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY											ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING				
	Aggregate horsepower	Total horsepower of prime movers	Prime movers								Electric motors driven by purchased energy					
			Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines		Number			Horsepower	Number	Horsepower
The State:			Num-ber	Horse-power	Num-ber	Horse-power	Num-ber	Horse-power	Num-ber	Horse-power	Num-ber	Horse-power	Num-ber	Horse-power	Num-ber	Horse-power
1929.....	163,940	80,508	286	30,124	18	9,028	39	2,447	241	38,909	8,602	83,432	4,140	40,950		
1927.....	172,762	94,174	294	32,181	19	8,327	44	1,961	252	51,705	7,209	78,588	3,265	38,353		
1925.....	178,806	109,038	381	37,925	19	10,288	42	1,667	321	56,153	6,010	69,773	2,605	32,730		
1919.....	184,327	123,237	608	46,833	22	4,548	174	2,950	652	68,897	4,478	61,090	759	12,268		
1914 <sup>1</sup> .....	171,738	144,261	<sup>2</sup> 864	<sup>2</sup> 61,500	(3)	(3)	160	2,301	846	80,400	2,080	27,477	940	19,684		
Rutland County <sup>4</sup> .....	29,318	15,082	19	3,675			2	100	15	11,307	1,372	14,236	819	13,020		

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919; but no automobile repair shops were reported in Vermont for 1914, the only other year for which this industry was canvassed in connection with the census of manufactures.

<sup>2</sup> Reported as "Steam engines and turbines."

<sup>3</sup> Not reported separately. See footnote 2.

<sup>4</sup> This is the only county in Vermont in which the aggregate horsepower exceeded 25,000.

## CENSUS OF MANUFACTURES: 1929

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county for which separate figures are given in Table 2. See footnote 3 on that table]

COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>	COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	163,940	80,508	83,432	40,990	Orange.....	8,083	2,200	874	210
Addison.....	3,318	1,655	1,663		Orleans.....	6,329	3,042	2,387	692
Bennington.....	8,801	6,398	2,403	2,898	Rutland.....	20,318	15,082	14,236	13,930
Caledonia.....	11,338	4,187	7,151	163	Washington.....	24,535	4,912	10,623	3,871
Chittenden.....	18,434	8,707	7,727	4,375	Windham.....	13,962	4,396	9,566	106
Franklin.....	14,458	9,700	4,749	7,872	Windsor.....	10,616	7,826	11,790	4,370
Lamolle.....	3,384	2,254	1,130		All other counties (Essex and Grand Isle).....	9,364	9,231	133	2,500

<sup>1</sup> Horsepower of electric motors driven by energy generated in establishments reporting.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927, 1923, 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures, see Chapter VII, Volume I, Reports of the Census of Manufactures, 1929]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
<b>Fuel:</b>							
Coal, total <sup>2</sup> (tons, 2,000 lbs.).....	270,914	\$1,438,534	207,552	301,555	288,739	259,573	206,920
Anthracite (tons, 2,240 lbs.).....	23,885	145,752	( <sup>3</sup> )	29,478	46,627	50,146	23,831
Bituminous (tons, 2,000 lbs.).....	244,103	1,292,782	( <sup>3</sup> )	268,540	250,517	203,409	240,238
Coke (tons, 2,000 lbs.).....	12,548	132,702	( <sup>3</sup> )	( <sup>3</sup> )	13,549	6,824	5,343
Fuel oils, including crude oils and gas oils (gallons) <sup>4</sup> .....	3,290,842	198,564	( <sup>3</sup> )	( <sup>3</sup> )	1,008,252	943,008	779,436
Gasoline and kerosene (gallons) <sup>4</sup> .....	80,898	14,030	( <sup>3</sup> )	( <sup>3</sup> )	209,622		
Gas, natural (M cu. ft.).....			( <sup>3</sup> )	( <sup>3</sup> )			
Gas, manufactured (M cu. ft.).....	32,150	30,491	( <sup>3</sup> )	( <sup>3</sup> )	106,306	7,528	44,395
Other fuels.....		89,837	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Electric energy purchased (kilowatt-hours).....	66,228,459	1,487,734	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Total cost of fuel and purchased energy.....		\$3,391,088	Cost \$3,465,792	Cost ( <sup>3</sup> )	Cost \$3,548,145	Cost \$1,818,826	Cost \$1,408,187

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1929.<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.<sup>3</sup> Not tabulated separately.<sup>4</sup> No data.<sup>5</sup> For years prior to 1929, reported in barrels; converted on basis of 42 gallons per barrel.<sup>6</sup> Data incomplete.<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12, is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.<sup>8</sup> Not reported separately.

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929

[This table presents separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
All industries, total.....	927	3,119	27,421	80,508	83,432	\$8,136,403	\$38,800,987	\$62,871,755	\$9,301,118	\$143,522,547	\$77,260,074
Beverages.....	10	10	23	-----	57	15,195	27,043	55,594	3,360	173,132	114,178
Bread and other bakery products.....	42	54	342	-----	643	114,295	430,168	1,284,917	81,360	2,541,693	1,178,280
Butter.....	40	44	85	424	600	38,158	95,783	2,305,471	34,607	2,718,265	378,697
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	11	21	96	378	280	34,485	64,536	390,661	6,628	647,476	250,187
Car and general construction and repairs, steam-railroad repair shops.....	6	76	820	83	2,614	139,842	1,199,980	723,792	88,791	2,152,405	1,830,822
Cheese.....	7	1	5	-----	4	(*)	6,061	131,732	1,726	153,653	20,005
Clothing, women's, not elsewhere classified.....	5	18	300	-----	08	31,862	208,819	187,238	6,402	585,002	392,217
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	4	10	184	-----	60	51,415	100,095	291,778	2,058	558,893	265,057
Condensed and evaporated milk.....	14	10	111	458	725	26,860	120,821	2,234,329	61,689	2,950,501	660,583
Confectionery.....	5	14	54	100	10	37,251	35,374	91,009	5,162	254,221	157,900
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	5	15	47	-----	42	24,614	64,880	213,351	3,904	460,435	243,180
Feeds, prepared, for animals and fowls.....	13	58	224	1,020	2,847	162,706	200,101	11,039,470	34,741	12,581,724	607,504
Flour and other grain-mill products.....	13	11	41	235	489	26,162	40,094	426,306	9,802	674,523	138,355
Foundry and machine-shop products, not elsewhere classified.....	20	132	877	1,325	1,519	329,088	1,311,176	1,190,039	92,162	3,659,066	2,367,805
Furniture, including store and office fixtures.....	12	120	1,147	2,160	2,083	331,966	1,141,844	1,408,146	61,745	3,622,891	2,153,000
Gas, manufactured, illuminating and heating.....	9	24	97	117	440	47,855	131,968	102,927	201,003	985,638	602,708
Ice cream.....	12	19	60	-----	550	42,894	74,558	484,279	21,230	1,000,110	494,601
Knit goods.....	7	36	1,084	650	605	129,076	1,012,462	2,083,410	54,478	4,606,082	2,468,194
Lime.....	7	11	137	15	1,078	21,226	154,871	79,144	139,501	498,592	279,887
Lumber and timber products, not elsewhere classified.....	174	123	2,371	14,667	4,458	285,001	2,204,065	2,662,877	81,598	7,201,438	4,546,003
Machine-tool accessories and small metal-working tools, not elsewhere classified.....	3	30	141	200	444	50,096	149,036	84,820	13,872	602,080	503,388
Machine tools.....	5	413	2,610	1,015	8,015	1,450,742	4,162,872	2,737,867	107,630	13,971,445	11,035,930
Marble, granite, slate, and other stone products.....	209	529	5,287	14,888	31,374	1,350,235	8,589,718	5,666,046	635,191	23,131,193	16,799,056
Paper.....	11	132	860	20,270	2,290	369,350	995,010	3,970,150	472,811	7,825,657	3,382,666
Pulp (wood and other fiber).....	3	4	84	-----	-----	11,230	119,325	449,368	35,321	728,067	243,438
Patent or proprietary medicines and compounds.....	10	55	123	-----	182	100,298	117,175	406,207	10,801	1,470,990	1,053,931
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills.....	30	51	345	1,546	1,747	100,803	379,004	1,322,267	30,455	2,256,771	904,040
Printing and publishing, book and job.....	29	57	280	-----	314	120,130	351,959	247,772	17,071	967,463	732,020
Printing and publishing, newspaper and periodical.....	34	200	203	-----	586	364,205	461,036	248,652	32,345	1,852,058	1,571,061
Tools, not including edge tools, machine tools, files, or saws.....	5	51	312	665	1,358	114,062	308,839	582,000	43,571	1,442,407	816,866
Toys (not including children's wheel goods, or sleds), games, and playground equipment.....	4	10	179	665	537	22,360	179,670	151,162	10,347	430,106	208,686
Wood turned and shaped and other wooden goods, not elsewhere classified.....	49	98	906	2,099	2,351	229,327	752,640	807,561	40,468	2,647,607	1,790,578
Woolen goods.....	16	103	1,499	5,033	1,056	373,443	1,713,045	3,371,771	181,320	7,101,773	3,638,673
Other industries.....	94	570	6,389	11,070	13,337	1,577,302	6,789,779	14,850,468	618,810	30,940,702	15,471,424

<sup>1</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>3</sup> Not including data for 256 employees of central administrative offices, with salaries aggregating \$715,020. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

# VIRGINIA

TABLE 1.—SUMMARY FOR THE STATE: 1899 TO 1929

[Data for the "Automobile repairing" industry are included in the figures for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
			Total	Primo movers	Electric motors driven by purchased energy		Total <sup>4</sup>	Materials and containers	Fuel and purchased energy		
1929	3,287	120,273	646,251	390,508	255,743	\$118,088,926	\$365,824,341	\$350,109,073	\$15,715,263	\$745,910,075	\$380,085,734
1927	2,432	114,918	503,720	263,030	240,690	110,377,945	346,165,769	330,179,145	15,986,624	671,346,808	325,181,039
1925	2,553	112,135	441,807	256,866	184,911	105,886,599	314,711,268	( <sup>5</sup> )	( <sup>5</sup> )	589,510,865	274,709,597
1923	2,743	111,578	431,237	288,340	142,897	104,680,099	304,492,917	( <sup>5</sup> )	( <sup>5</sup> )	548,153,489	243,080,572
1921	2,570	88,555	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	85,062,570	268,940,466	( <sup>5</sup> )	( <sup>5</sup> )	454,261,467	185,321,001
1919	5,605	119,352	419,738	304,920	114,818	120,000,452	371,540,833	352,059,572	19,481,261	643,511,021	271,970,788
1914	5,508	102,820	337,567	300,425	37,142	44,873,435	155,319,576	147,872,130	7,447,446	264,039,041	108,719,465
1909	5,085	105,676	283,510	270,100	13,356	38,154,566	125,582,057	118,398,442	7,184,245	219,793,858	94,211,171
1904	3,187	80,285	176,616	172,213	4,403	27,943,058	83,649,140	80,107,266	3,541,853	148,856,525	65,207,376
1899	3,186	66,223	135,727	134,905	822	20,273,889	59,369,484	( <sup>5</sup> )	( <sup>5</sup> )	108,644,150	49,284,066
PER CENT OF INCREASE OR DECREASE (—)											
1927-1929	35.2	4.7	28.3	48.5	6.3	7.0	5.7	6.0	-1.7	11.1	16.0
1925-1927	-4.7	2.5	14.0	2.4	30.2	4.2	10.0			13.9	1.3
1923-1925	-0.9	0.5	2.5	-10.9	29.4	1.2	3.4			7.5	12.8
1921-1923	0.7	26.0				23.1	13.2			20.7	31.5
1919-1921	-54.1	-25.8				-29.1	-27.6			-29.4	-31.0
1919-1929	-41.3	0.8	54.0	28.1	122.7	-1.6	-1.5	-0.6	-19.3	15.9	39.8
1909-1919	-1.4	12.0	48.0	12.0	759.7	214.5	195.0	197.4	171.2	192.8	188.7
1899-1909	73.4	59.6	109.9	100.3	1,524.8	88.2	111.6			102.3	91.2

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>4</sup> Not reported separately.  
<sup>5</sup> Not called for on schedule.  
<sup>6</sup> No comparable data.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—SUMMARY FOR COUNTIES AND CITIES: 1929

COUNTY OR CITY	Population, 1930	Number of establishments	Wage earners (average for the year) 1	Horse-power 2	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture
						Total	Materials and containers	Fuel and purchased energy		
The State.....	2,421,851	3,287	120,273	640,251	\$118,088,986	\$365,824,341	\$350,109,073	\$15,715,268	\$745,910,075	\$880,085,734
<i>Counties and cities 3</i>										
Accomac.....	35,854	90	606	1,507	363,172	1,414,036	1,389,074	24,962	2,474,004	1,059,668
Albemarle County and Charlottesville city.....	42,226	61	1,143	4,275	1,099,385	2,844,081	2,704,993	139,088	5,535,005	2,690,114
Alleghany County and Clifton Forge city.....	27,027	32	3,002	54,120	3,777,188	15,307,544	14,465,545	841,999	25,079,970	9,769,426
Amelia.....	8,979	28	189	893	122,904	289,854	285,954	800	520,454	230,000
Amherst.....	10,020	12	93	483	65,594	508,712	503,623	5,089	651,476	142,764
Appomattox.....	8,402	17	65	461	40,057	95,098	94,593	1,405	108,129	102,131
Arlington County and Alexandria city.....	50,764	51	2,490	8,755	3,393,796	3,541,640	3,125,725	415,915	8,898,761	5,327,121
Augusta County and Staunton city.....	50,153	68	2,219	19,874	2,012,074	5,080,147	4,550,064	408,543	9,559,250	4,479,103
Bedford.....	29,091	76	873	3,520	620,556	2,485,919	2,363,544	112,375	4,187,532	1,091,613
Botetourt.....	15,457	29	274	1,698	224,640	496,587	359,105	110,482	1,031,439	531,862
Brunswick.....	20,486	40	490	1,795	395,500	672,431	656,843	15,588	1,349,189	676,758
Buckingham.....	13,315	29	533	1,249	370,223	124,782	108,782	16,000	746,257	425,282
Campbell County and Lynchburg city.....	63,546	99	7,698	25,666	6,263,504	17,894,458	16,957,343	937,115	35,739,170	17,844,652
Caroline.....	15,263	31	217	1,417	154,896	379,245	376,543	2,702	774,258	395,013
Carroll.....	22,141	45	932	2,330	540,223	2,155,484	2,120,827	34,657	3,954,952	1,790,468
Charles City.....	4,881	8	107	680	116,860	107,312	98,711	8,601	328,180	220,877
Charlotte.....	16,061	33	109	1,220	104,241	107,338	189,132	8,206	413,824	210,450
Chesterfield.....	26,049	29	2,085	18,127	1,463,925	3,680,887	3,517,306	163,581	5,889,755	2,208,808
Clarke.....	7,167	9	102	567	82,190	417,436	408,343	9,093	722,700	305,294
Craig.....	3,562	11	45	244	31,114	24,250	24,250	-----	83,090	68,840
Culpeper.....	13,366	18	164	953	200,062	659,896	644,297	15,602	1,214,202	554,303
Cumberland.....	7,535	9	41	230	22,143	45,102	44,852	250	93,282	45,180
Dinwiddie County and Petersburg city.....	47,056	98	4,201	7,314	2,924,221	10,663,452	10,477,418	186,034	18,335,706	7,072,264
Elizabeth City County and Hampton city.....	26,217	14	180	1,312	187,768	328,400	296,562	31,838	810,204	481,864
Essex.....	6,076	20	126	456	61,346	190,162	194,557	1,605	350,930	154,768
Fairfax.....	25,264	14	35	515	36,825	269,872	266,011	2,861	375,811	105,939
Fauquier.....	21,071	11	30	213	29,837	175,389	167,976	7,410	270,180	94,744
Floyd.....	11,098	30	79	534	45,021	94,784	94,784	-----	200,058	106,274
Fluvanna.....	7,466	15	78	283	43,984	39,596	39,596	-----	125,209	85,793
Frederick County and Winchester city.....	24,022	52	1,329	6,732	1,297,553	4,029,445	3,795,186	234,260	7,301,663	3,272,218
Giles.....	12,804	14	196	963	176,324	1,555,021	1,526,843	28,178	1,920,544	355,523
Gloucester.....	11,019	15	68	284	52,984	87,820	83,847	3,982	228,390	140,561
Goochland.....	7,953	9	51	242	20,236	44,750	44,750	-----	97,010	52,260
Grayson.....	20,017	28	815	4,297	464,392	1,790,515	1,776,164	15,351	2,636,078	845,563
Greene.....	5,980	6	24	119	13,080	26,337	26,337	100	57,820	31,483
Greensville.....	13,388	22	625	1,830	427,848	1,250,122	1,240,395	9,727	1,910,740	661,618
Halifax.....	41,283	35	533	2,136	423,012	915,401	842,522	72,879	2,126,062	1,210,591
Hanover.....	17,009	33	204	965	129,677	421,823	417,197	4,626	636,367	294,644
Henrico County 4 and Richmond city 4, 5.....	213,239	321	18,336	62,672	19,879,810	95,394,898	93,300,118	2,094,780	243,029,870	147,935,002
Henry County and Martinsville city.....	27,763	35	3,698	12,797	2,947,402	8,272,511	8,059,320	213,191	15,898,622	7,020,111
Highland.....	4,525	7	25	125	14,820	28,650	28,650	-----	55,700	27,050
Isle of Wight.....	13,409	16	509	3,112	401,320	1,092,255	1,082,107	10,148	2,332,388	1,240,133
James City County and Williamsburg city.....	7,657	17	185	644	159,209	124,750	96,070	28,680	402,432	277,932
King and Queen.....	7,618	13	165	386	105,044	109,241	108,441	800	295,079	189,738
King George.....	5,297	6	25	70	13,904	25,093	24,943	150	20,060	20,060
King William.....	7,929	14	418	4,980	308,283	1,220,755	1,096,877	123,878	2,376,691	1,155,936
Lancaster.....	8,896	21	199	1,523	111,776	347,778	316,893	31,885	582,463	234,675
Loudoun.....	19,852	18	77	872	65,845	467,046	454,899	12,147	656,010	191,264
Louisa.....	14,309	46	193	897	128,920	157,414	156,615	799	369,948	212,534
Lunenburg.....	14,058	13	198	892	259,548	187,904	172,946	14,958	548,823	300,010
Madison.....	8,952	23	90	623	54,117	179,985	178,667	1,318	331,078	151,093
Mathews.....	7,884	9	40	243	25,470	45,684	41,452	4,232	104,527	58,849
Mecklenburg.....	32,622	33	351	2,310	398,392	712,773	699,103	13,670	1,398,770	686,997
Middlesex.....	7,273	11	82	214	43,292	125,047	122,740	2,307	218,828	93,781
Montgomery County and Radford city.....	25,832	35	1,089	6,120	1,051,035	4,418,098	4,216,204	201,894	6,337,979	1,919,891
Nansemond County and Suffolk city.....	32,801	49	2,636	9,221	1,350,080	14,231,422	14,052,706	178,716	17,781,722	3,550,300
Nelson.....	16,345	16	373	2,016	499,287	533,684	490,256	43,428	1,445,501	911,817
New Kent.....	4,300	6	122	250	78,100	55,621	55,621	-----	128,618	173,297
Norfolk County 4 and Norfolk, 4 Portsmouth, and South Norfolk cities.....	213,353	262	12,187	55,362	12,063,775	58,948,187	57,408,267	1,539,920	99,128,061	40,180,794
Northampton.....	18,565	43	639	2,326	592,720	1,256,610	1,206,110	50,500	2,649,577	1,392,967
Northumberland.....	11,081	27	504	5,088	335,773	851,884	751,063	100,821	1,409,084	557,890
Nottoway.....	14,806	26	392	2,939	486,986	525,587	497,009	28,578	1,258,012	732,425
Orange.....	12,070	20	204	992	116,257	470,761	457,666	13,095	853,020	382,259
Page.....	14,852	27	651	3,432	671,559	2,831,407	2,745,731	85,676	4,079,784	1,248,377
Patrick.....	15,787	10	82	400	56,226	114,133	113,293	840	271,136	157,003
Pittsylvania County and Danville city.....	83,671	69	5,870	47,559	4,715,583	10,967,623	10,506,048	461,575	21,360,016	10,392,398
Powhatan.....	6,143	15	98	505	71,097	63,031	62,921	110	183,795	120,164
Prince Edward.....	14,520	14	100	1,033	97,672	237,765	222,267	15,498	505,484	297,710
Prince George County and Hopewell city.....	21,638	25	5,518	82,170	5,849,655	12,003,387	10,593,726	1,415,661	23,791,997	11,752,580
Prince William.....	13,951	15	66	459	52,857	341,406	336,842	4,564	495,438	154,032
Princess Anne.....	16,282	6	53	157	44,086	33,265	17,334	15,931	151,446	118,181
Pulaski.....	20,566	30	1,521	9,328	1,215,870	2,972,299	2,726,192	246,067	5,849,137	2,873,878
Rappahannock.....	7,717	8	24	128	14,620	58,962	58,762	200	96,050	37,098
Richmond.....	6,878	28	140	500	70,783	290,281	287,347	2,034	463,750	178,409
Roanoke County 4 and Roanoke city.....	104,495	103	12,237	40,860	15,428,790	21,271,087	20,349,833	921,204	56,421,281	35,150,194

See footnotes at end of table.



TABLE 2.—SUMMARY FOR COUNTIES AND CITIES: 1929—Continued

COUNTY OR CITY	Popula- tion, 1930	Num- ber of estab- lish- ments	Wage earners (aver- age for the year) <sup>1</sup>	Horse- power <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufac- ture
						Total	Materials and con- tainers	Fuel and purchased energy		
<i>Counties and cities <sup>3</sup>—Continued</i>										
Rockbridge County and Buena Vista city	24,904	44	970	6,372	\$726,409	\$4,670,370	\$4,408,542	\$261,834	\$6,661,901	\$1,991,625
Rockingham County and Harrisonburg city	36,941	83	1,187	4,352	885,256	3,061,677	2,953,291	108,386	5,284,409	2,222,732
Russell	25,057	6	38	243	24,848	62,235	61,704	471	117,426	55,191
Scott	24,181	11	38	180	25,076	42,962	42,962		103,574	60,612
Shenandoah	20,655	42	491	2,528	340,907	1,110,406	1,007,822	102,584	1,810,135	699,720
Smyth	25,125	19	1,379	19,420	1,324,008	3,317,140	2,451,444	865,696	7,630,610	4,813,479
Southampton	26,870	19	319	1,000	168,560	1,068,713	1,066,108	2,605	2,379,249	407,636
Spotsylvania County and Fredericksburg city	16,875	34	950	2,257	756,766	1,732,182	1,670,190	61,992	3,518,678	1,780,496
Stafford	8,050	4	11	74	9,100	18,480	18,000	480	45,373	20,893
Surry	7,096	6	30	147	27,280	69,187	68,408	779	124,263	55,070
Sussex	12,100	24	667	2,114	342,550	906,055	894,395	11,660	1,656,931	750,870
Tazewell	32,477	23	175	1,216	165,427	259,709	232,723	26,986	674,182	414,473
Warren	8,340	17	461	3,012	440,004	1,506,272	1,457,251	49,021	3,091,986	1,585,714
Warwick County and Newport News city	43,246	43	6,935	35,070	9,134,541	12,081,857	11,560,731	521,126	26,166,573	14,084,710
Washington County and Bristol city	42,690	61	2,906	11,961	2,489,548	8,264,649	7,878,749	385,900	14,167,720	5,903,071
Westmoreland	8,497	30	264	934	118,263	582,470	574,784	7,686	914,908	332,438
Wise	51,167	35	576	3,059	534,773	1,377,627	1,338,836	38,791	2,402,698	1,025,071
Wythe	20,704	21	398	1,215	319,856	1,480,525	835,832	644,693	2,601,630	1,120,865
York	7,616	4	23	237	16,085	12,844	10,162	2,682	61,062	48,218
All other counties <sup>6</sup>	101,827	63	1,593	4,257	1,835,319	1,986,374	1,926,177	60,197	6,252,569	4,266,215
<i>Cities having 10,000 inhabitants or more <sup>7</sup></i>										
Alexandria	24,149	24	1,475	5,421	2,141,384	1,843,607	1,665,611	177,996	4,813,271	2,969,664
Bluefield, Virginia and West Virginia, total	23,245	25	1,506	6,230	1,942,590	2,323,479	2,210,731	112,748	5,450,155	3,126,676
Bluefield, Va.	3,906	6	24	71	21,754	65,797	63,831	1,966	126,174	60,377
Bluefield, W. Va.	19,339	19	1,482	6,159	1,920,836	2,257,682	2,146,900	110,782	5,323,981	3,066,299
Bristol, Va. and Tenn., total	20,845	63	2,812	8,313	2,375,218	8,214,168	7,873,531	340,637	13,770,011	5,591,922
Bristol, Va.	8,840	46	2,332	7,614	2,050,045	6,683,255	6,391,069	292,186	10,970,177	4,236,922
Bristol, Tenn.	12,005	17	480	699	316,173	1,530,913	1,482,462	48,451	2,805,834	1,275,001
Charlottesville	15,245	31	809	2,655	801,390	2,172,981	2,054,829	118,152	3,935,282	1,762,301
Danville	22,247	41	2,532	19,923	2,066,090	5,214,713	4,994,618	220,095	9,696,793	4,478,187
Hopewell	11,327	14	5,292	81,938	5,701,731	11,823,269	10,407,673	1,415,596	23,347,015	11,524,646
Lynchburg	40,661	70	6,694	21,802	5,561,090	10,099,367	15,211,378	887,979	31,504,147	15,494,740
Norfolk <sup>4</sup>	129,710	177	6,633	23,994	7,788,277	31,521,915	30,008,658	613,257	57,886,408	26,364,493
Petersburg	28,564	74	3,970	5,857	2,764,725	10,479,484	10,302,700	176,784	17,872,008	7,392,584
Portsmouth	45,704	47	2,433	9,363	2,511,710	6,786,573	6,440,531	346,042	11,616,573	4,830,000
Richmond <sup>4</sup>	182,929	305	17,461	55,110	18,001,958	90,339,422	88,529,887	1,809,535	234,610,094	144,279,672
Staunton	11,990	24	446	1,260	422,279	1,677,169	1,613,915	63,254	2,969,045	1,291,876
Suffolk	10,271	34	2,371	8,013	1,190,200	13,423,832	13,282,646	141,206	16,477,181	3,053,329
Winchester	10,855	33	1,000	3,528	904,391	3,311,632	3,213,056	98,596	5,966,631	2,054,979

<sup>1</sup> Not including salaried employees.

<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.

<sup>3</sup> Statistics are presented for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing approximations of the data supplied by individual establishments, and combined figures are given for the remaining counties as a single group ("All other counties"). Certain of the counties for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately. All cities in Virginia are independent of the counties, but combined figures are given for the cities and the counties within which they are located.

<sup>4</sup> Because of the amount of manufacturing industry in Henrico, Norfolk, and Roanoke Counties and in the cities of Norfolk and Richmond, it had been planned to publish statistics by industries for these counties and cities. It is found, however, that no figures can be given for the most important industries without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries in the respective counties and cities. Under these conditions the publication of statistics for those industries for which separate figures could be given, for any of the counties or either of the cities in question, would be misleading, and therefore no such statistics are included in this report. The leading industry in the area comprising Henrico County and the city of Richmond and also in the city itself, was "Cigars and cigarettes"; in the area comprising Roanoke County and city, "Rayon and allied products"; and in the city of Norfolk, "Motor vehicles, not including motorcycles." The most important industries in the area comprising Norfolk County and city were "Car and general construction and repairs, steam-railroad repair shops," as measured by number of wage earners, and "Motor vehicles, not including motorcycles," as measured by value of products.

<sup>5</sup> Richmond is not located wholly within Henrico County, but is nearly surrounded by it.

<sup>6</sup> Bath, Bland, Buchanan, Dickenson, Franklin, and Lee Counties. See footnote 3.

<sup>7</sup> Not including Roanoke and Newport News, each of which reported more than 10,000 inhabitants at the census of 1930. It is necessary to withhold the figures for these cities from publication to avoid disclosing approximations of the data for individual establishments. In the case of Roanoke, the figures are withheld because their publication would make it possible (by subtracting them from the figures for Roanoke County) to calculate approximations of the data for establishments located outside the city but within the county.

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORATIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929 <sup>1</sup>	133,008	103,961	29,047	2,322	2,299	23	1,500	1,526	64	9,723	7,671	2,052	120,273	92,465	27,808
1919 <sup>1</sup>	139,178	116,820	22,358	5,900	5,785	115	1,766	1,712	54	12,100	9,070	3,030	119,352	90,353	19,999
1914 <sup>1</sup>	118,169	101,882	16,287	6,125	6,026	99	1,174	1,149	25	7,990	6,853	1,137	102,820	87,354	15,466
1909 <sup>1</sup>	120,797	104,662	16,135	6,570	6,469	101	1,130	1,128	11	7,412	6,510	893	105,676	90,540	15,136

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.

<sup>2</sup> Not including employees of central administrative offices, as follows: Principal salaried officers of corporations—total, 225; male, 217; female, 8. Other salaried officers and employees—total, 2,850; male, 2,125; female, 725. The corresponding data for 1919 and earlier years are included in the respective items for those years, but were not tabulated separately. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>3</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for December 14. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Percent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929 <sup>1</sup>	120,273	<i>113,310</i>	116,200	118,446	120,980	119,516	120,406	121,512	124,940	127,905	125,426	120,465	114,147	68.6
1919 <sup>1</sup>	119,352	<i>111,043</i>	112,177	112,455	113,802	112,572	113,536	116,750	125,148	131,680	131,818	125,540	124,687	84.9
1914 <sup>1</sup>	102,820	<i>100,795</i>	101,063	103,802	108,175	105,902	104,916	102,697	103,418	108,500	100,016	96,944	95,522	86.1
1909 <sup>1</sup>	105,676	<i>94,885</i>	97,714	101,750	104,393	104,865	105,036	104,231	110,659	115,998	112,276	109,216	107,092	81.8

<sup>1</sup> The figures for 1919 and 1914 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment, even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK		
			Number of establishments	Wage earners (average for the year)	
All classes.....	3,287	120,273	45 and over but under 48.....	116	12,632
			48.....	376	23,852
Not reported.....	953	3,550	Over 48 but under 54.....	396	22,190
Under 40.....	68	397	54.....	154	4,214
40.....	61	2,425	Over 54 but under 60.....	461	36,640
Over 40 but under 44.....	13	395	60 and over.....	515	11,561
44 and over but under 45.....	174	2,417			

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures; and those for 1919 and 1909 include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
	All establishments.....	3,287	5,603	5,685	120,273	119,352		105,676	51 to 100.....	154	177	102	11,025
No wage earners.....	58	621	270				101 to 250.....	129	157	105	20,899	24,296	16,046
1 to 5.....	1,795	3,197	3,058	6,043	7,014	7,066	251 to 500.....	60	31	33	19,857	10,650	11,066
6 to 20.....	761	1,038	1,631	8,237	10,048	17,825	501 to 1,000.....	21	16	19	13,638	11,193	13,000
21 to 50.....	297	355	370	9,600	11,473	11,834	1,001 to 2,500.....	6	6	7	{ 7,772	31,275	13,903
							2,501 and over.....	6	11	7	{ 23,352		

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909  
[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	3,287	5,603	5,085	120,273	119,352	105,676	\$745,910,075	\$643,511,621	\$219,793,856	\$380,085,734	\$271,970,788	\$94,211,171
Less than \$5,000.....	( <sup>2</sup> )	1,826	2,581	( <sup>2</sup> )	1,976	7,170	( <sup>2</sup> )	4,434,738	5,936,118	( <sup>2</sup> )	2,783,670	3,859,930
\$5,000 to \$19,999.....	1,593	1,874	1,917	5,937	6,989	15,254	15,992,007	19,268,926	19,134,929	8,979,056	11,027,310	11,171,429
\$20,000 to \$99,999.....	976	1,149	805	10,774	12,737	19,134	44,981,217	48,626,945	34,233,401	23,453,040	22,282,512	16,900,075
\$100,000 to \$49,999.....	693	( <sup>3</sup> )	( <sup>3</sup> )	5,206	( <sup>3</sup> )	( <sup>3</sup> )	20,183,062	( <sup>3</sup> )	( <sup>3</sup> )	10,895,526	( <sup>3</sup> )	( <sup>3</sup> )
\$50,000 to \$99,999.....	343	( <sup>3</sup> )	( <sup>3</sup> )	5,568	( <sup>3</sup> )	( <sup>3</sup> )	24,797,555	( <sup>3</sup> )	( <sup>3</sup> )	12,558,114	( <sup>3</sup> )	( <sup>3</sup> )
\$100,000 to \$499,999.....	486	536	( <sup>3</sup> )	22,847	25,943	( <sup>3</sup> )	108,824,884	122,011,365	( <sup>3</sup> )	52,153,238	50,483,391	( <sup>3</sup> )
\$100,000 to \$249,999.....	321	( <sup>3</sup> )	( <sup>3</sup> )	11,144	( <sup>3</sup> )	( <sup>3</sup> )	51,015,291	( <sup>3</sup> )	( <sup>3</sup> )	25,894,071	( <sup>3</sup> )	( <sup>3</sup> )
\$250,000 to \$499,999.....	165	( <sup>3</sup> )	356	11,703	( <sup>3</sup> )	41,497	57,809,593	( <sup>3</sup> )	101,364,437	26,259,167	( <sup>3</sup> )	38,289,549
\$500,000 to \$999,999.....	107	118	( <sup>3</sup> )	14,667	15,985	( <sup>3</sup> )	77,369,350	83,697,368	( <sup>3</sup> )	32,129,736	37,245,534	( <sup>3</sup> )
\$1,000,000 and over.....	125	100	26	60,048	55,722	22,615	498,762,608	365,472,280	59,124,982	263,370,004	148,145,371	23,990,107
\$1,000,000 to \$2,499,999.....	95	( <sup>3</sup> )	( <sup>3</sup> )	27,264	( <sup>3</sup> )	( <sup>3</sup> )	146,412,251	( <sup>3</sup> )	( <sup>3</sup> )	67,650,537	( <sup>3</sup> )	( <sup>3</sup> )
\$2,500,000 to \$4,999,999.....	10	( <sup>3</sup> )	( <sup>3</sup> )	4,191	( <sup>3</sup> )	( <sup>3</sup> )	32,722,661	( <sup>3</sup> )	( <sup>3</sup> )	11,807,029	( <sup>3</sup> )	( <sup>3</sup> )
\$5,000,000 and over.....	20	( <sup>3</sup> )	( <sup>3</sup> )	34,593	( <sup>3</sup> )	( <sup>3</sup> )	319,627,686	( <sup>3</sup> )	( <sup>3</sup> )	183,912,498	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>2</sup> No data.  
<sup>3</sup> Not tabulated separately.

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
Total.....	3,287	5,603	120,273	119,352	\$745,910,075	\$643,511,621	\$380,085,734	\$271,970,788
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	1,301	1,379	107,725	101,457	680,711,023	560,599,658	354,217,898	239,253,525
Other forms of ownership or control (individual, partnership, etc.).....	1,986	4,224	12,548	17,895	59,199,052	82,911,963	25,867,836	32,717,263
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	512	( <sup>1</sup> )	70,164	( <sup>1</sup> )	480,828,647	( <sup>1</sup> )	260,851,269	( <sup>1</sup> )
Independent (single-unit).....	2,775	( <sup>1</sup> )	50,109	( <sup>1</sup> )	265,081,428	( <sup>1</sup> )	119,234,465	( <sup>1</sup> )

<sup>1</sup> Not tabulated.

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE, 1929, 1927, 1925, 1919, AND 1914, AND FOR IMPORTANT COUNTIES, 1929

[This table gives statistics for each county which, together with the city or cities so located as to be nearly or entirely surrounded by the county, reported an aggregate of 25,000 horsepower or more]

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY											ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING					
	Aggregate horsepower	Total horsepower of prime movers	Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines		Electric motors driven by purchased energy						
			Number	Horsepower	Number	Horsepower	Number	Horsepower	Number	Horsepower	Number			Horsepower	Number	Horsepower	
The State:																	
1929.....	646,251	390,508	2,090	150,356	175	194,180	233	9,183	332	36,784	20,676	255,748	24,051	213,264			
1927.....	503,726	263,036	1,433	118,805	84	100,499	209	9,670	300	34,062	21,727	240,690	19,192	148,176			
1925.....	441,807	256,896	1,085	139,401	90	73,768	215	9,657	334	34,070	16,086	184,911	17,123	120,470			
1919.....	419,738	304,920	4,081	211,816	100	44,950	532	9,067	630	39,987	12,773	114,818	3,722	73,637			
1914.....	337,567	300,425	<sup>2</sup> 4,528	<sup>2</sup> 249,044	( <sup>3</sup> )	( <sup>3</sup> )	495	6,650	715	44,722	3,728	37,142	2,853	64,871			
Counties and cities <sup>4</sup>																	
Alleghany County and Clifton Forge city.....	54,120	47,276	47	5,556	32	41,155	1	( <sup>5</sup> )	3	565	775	6,844	1,550	47,826			
Campbell County and Lynchburg city.....	25,666	17,294	42	7,180	4	9,060	8	313	11	741	1,450	8,372	353	8,840			
Henrico County and Richmond city.....	62,672	13,302	62	9,125	10	1,536	10	411	18	2,230	5,925	49,370	159	2,120			
Norfolk County and Norfolk, Portsmouth, and South Norfolk cities.....	55,362	8,498	76	6,211	5	2,055	8	232			3,853	46,804	200	2,057			
Pittsylvania County and Danville city.....	47,559	45,692	24	1,780	9	31,027	4	255	74	12,630	237	1,867	12,759	38,913			
Prince George County and Hopewell city.....	82,170	67,639	29	29,628	45	33,975	8	36	4	4,000	537	14,531	906	28,727			
Roanoke County and Roanoke city.....	40,860	26,188	20	895	12	25,143			4	150	1,324	14,672	2,512	32,023			
Warwick County and Newport News city.....	35,070	4,599	10	2,258	3	2,202	3	139			1,644	30,471	3	2,100			

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.  
<sup>2</sup> Reported as "Steam engines and turbines."  
<sup>3</sup> Not reported separately. See footnote 2.  
<sup>4</sup> All cities in Virginia are independent of the counties, but combined figures are given for the cities and the counties within which they are located.  
<sup>5</sup> Item for internal-combustion engines included with that for steam engines to avoid disclosing data for a single establishment.  
<sup>6</sup> Richmond is not located wholly within Henrico County, but is nearly surrounded by it.

## CENSUS OF MANUFACTURES: 1929

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county and county-city group for which separate figures are given in Table 2. See footnotes 3 and 6 on that table]

COUNTIES AND CITIES <sup>1</sup>	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>2</sup>	COUNTIES AND CITIES <sup>1</sup>	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>2</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	646,251	390,508	255,743	213,264	Louisa.....	897	889	8	.....
Accomac.....	1,507	1,166	341	.....	Lunenburg.....	862	705	67	466
Albemarle County and Charlottesville city.....	4,275	1,855	2,420	34	Madison.....	623	546	77	.....
Alleghany County and Clifton Forge city.....	54,120	47,276	6,844	47,326	Mathews.....	243	211	32	.....
Amelia.....	893	893	( <sup>3</sup> )	.....	Mecklenburg.....	2,310	1,700	610	.....
Amherst.....	483	483	.....	100	Middlesex.....	214	207	7	.....
Appomattox.....	461	361	100	.....	Montgomery County and Radford city.....	6,120	5,155	905	1,509
Arlington County and Alexandria city.....	8,755	1,908	6,847	110	Nansemond County and Suffolk city.....	9,221	2,012	7,209	40
Augusta County and Staunton city.....	19,874	15,806	4,068	10,329	Nelson.....	2,016	1,991	25	2,150
Bedford.....	8,520	7,009	1,511	1,233	New Kent.....	250	250	.....	.....
Botetourt.....	1,698	526	1,172	.....	Norfolk County and Norfolk, Portsmouth, and South Norfolk cities.....	55,362	8,498	46,864	2,057
Brunswick.....	1,705	1,573	222	.....	Northampton.....	2,326	1,760	566	367
Buckingham.....	1,249	1,240	.....	.....	Northumberland.....	5,088	5,088	( <sup>3</sup> )	.....
Campbell County and Lynchburg city.....	25,600	17,294	8,372	8,849	Nottoway.....	2,930	2,109	830	.....
Caroline.....	1,417	1,398	19	( <sup>4</sup> )	Orange.....	992	629	363	.....
Carroll.....	2,330	842	1,488	.....	Page.....	3,432	1,546	1,886	.....
Charles City.....	680	680	.....	.....	Patrick.....	460	458	2	.....
Charlottesville.....	1,220	1,180	31	.....	Pittsylvania County and Danville city.....	47,559	45,692	1,867	38,913
Chesterfield.....	18,127	16,164	1,963	10,479	Powhatan.....	505	505	.....	.....
Clarke.....	607	215	452	.....	Prince Edward.....	1,933	272	761	.....
Craig.....	244	244	( <sup>3</sup> )	.....	Prince George County and Hopewell city.....	82,170	67,639	14,531	28,727
Culpeper.....	963	303	650	.....	Prince William.....	459	436	23	.....
Cumberland.....	230	230	.....	.....	Princess Anne.....	157	70	87	.....
Dinwiddie County and Petersburg city.....	7,314	4,312	3,002	988	Pulaski.....	9,323	5,315	4,013	1,905
Elizabeth City County and Hampton city.....	1,312	385	927	425	Rappahannock.....	123	121	7	.....
Essex.....	456	434	22	.....	Richmond.....	500	500	( <sup>3</sup> )	.....
Fairfax.....	515	219	296	.....	Roanoke County and Roanoke city.....	40,890	26,188	14,672	32,023
Fauquier.....	213	81	132	.....	Rockbridge County and Buena Vista city.....	6,372	2,974	3,398	.....
Floyd.....	534	534	( <sup>3</sup> )	.....	Rockingham County and Harrisonburg city.....	4,352	2,498	1,854	459
Fluvanna.....	283	283	( <sup>3</sup> )	.....	Russell.....	243	200	43	.....
Frederick County and Winchester city.....	6,732	2,314	4,418	026	Scott.....	189	185	4	.....
Giles.....	963	459	504	.....	Shenandoah.....	2,528	1,445	1,083	.....
Gloucester.....	234	234	( <sup>3</sup> )	.....	Smyth.....	19,420	12,628	6,792	3,047
Goochland.....	242	242	.....	.....	Southampton.....	1,000	955	45	25
Grayson.....	4,297	4,248	49	1,217	Spotsylvania County and Fredericksburg city.....	2,257	1,290	967	62
Greene.....	119	119	.....	.....	Stafford.....	74	74	( <sup>3</sup> )	.....
Greensville.....	1,830	1,075	755	735	Surry.....	147	135	12	.....
Halifax.....	2,136	706	1,430	.....	Sussex.....	2,114	2,017	97	27
Hanover.....	965	940	25	14	Tazewell.....	1,216	640	576	.....
Henrico County and Richmond city.....	62,672	13,302	49,370	2,126	Warren.....	3,012	380	2,632	.....
Henry County and Martinsville city.....	12,797	10,042	2,755	5,248	Warwick County and Newport News city.....	35,070	4,599	30,471	2,100
Highland.....	125	125	.....	.....	Washington County and Bristol city.....	11,961	4,889	7,072	2,005
Isle of Wight.....	3,112	2,755	356	2,120	Westmoreland.....	934	858	78	.....
James City County and Williamsburg city.....	644	512	132	.....	Wise.....	3,059	640	2,410	30
King and Queen.....	386	386	.....	.....	Wythe.....	1,215	308	909	.....
King George.....	70	70	.....	.....	York.....	237	40	197	.....
King William.....	4,980	4,980	.....	3,612	All other counties.....	4,257	4,017	240	751
Lancaster.....	1,523	1,376	147	140					
Loudoun.....	872	301	571	.....					

<sup>1</sup> All cities in Virginia are independent of the counties, but combined figures are given for the cities and the counties within which they are located.<sup>2</sup> Horsepower of electric motors driven by energy generated in establishments reporting.<sup>3</sup> Item for electric motors included with that for prime movers to avoid disclosing data for a single establishment.<sup>4</sup> Item for Caroline County included with that for "All other counties" to avoid disclosing data for a single establishment.<sup>5</sup> Richmond is not located wholly within Henrico County but is nearly surrounded by it.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927, 1923, 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures, see Chapter VII, Volume I, Reports of the Census of Manufactures, 1929]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
Fuel:							
Coal, total <sup>2</sup> (tons, 2,000 pounds).....	2, 075, 530	\$8, 208, 710	2, 489, 605	3, 313, 073	3, 258, 680	2, 840, 071	3, 393, 625
Anthracite (tons, 2,240 pounds).....	30, 916	112, 968	( <sup>3</sup> )	53, 457	23, 475	14, 981	26, 085
Bituminous (tons, 2,000 pounds).....	2, 040, 913	8, 185, 752	( <sup>3</sup> )	3, 253, 201	3, 232, 388	2, 823, 202	3, 330, 410
Coke (tons, 2,000 pounds).....	203, 080	1, 244, 900	( <sup>4</sup> )	( <sup>4</sup> )	603, 617	558, 028	705, 874
Fuel oils, including crude oils and gas oils (gal- lons) <sup>5</sup> .....	18, 479, 793	955, 713	( <sup>4</sup> )	( <sup>4</sup> )	12, 294, 492	5, 404, 930	3, 042, 144
Gasoline and kerosene (gallons) <sup>5</sup> .....	514, 901	81, 065	( <sup>4</sup> )	( <sup>4</sup> )	405, 048		
Gas, natural (M cubic feet).....			( <sup>4</sup> )	( <sup>4</sup> )	44, 046	35, 712	17, 993
Gas, manufactured (M cubic feet).....	118, 300	110, 382	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Other fuels.....		65, 012	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Electric energy purchased (kilowatt-hours).....	407, 852, 202	5, 261, 497	( <sup>6</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Total cost of fuel and purchased energy.....		7 16, 018, 170	Cost \$15, 080, 624	Cost ( <sup>8</sup> )	Cost \$19, 481, 261	Cost \$7, 447, 446	Cost \$7, 184, 245

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1929.

<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.

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

<sup>4</sup> No data.

<sup>5</sup> For years prior to 1929, reported in barrels; converted on basis of 42 gallons per barrel.

<sup>6</sup> Data incomplete.

<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12 is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.

<sup>8</sup> Not reported separately.

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929

[This table presents separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
						Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All industries, total.....	3, 287	11, 313	120, 273	300, 508	255, 743	29, 263, 340	118, 088, 986	350, 109, 073	15, 715, 208	745, 910, 076	380, 085, 734
Agricultural implements.....	11	30	162	215	313	68, 367	172, 163	150, 627	11, 536	533, 680	365, 517
Awnings, tents, sails, and canvas covers.....	11	15	04	-----	40	24, 405	70, 824	153, 347	1, 814	368, 833	203, 672
Bags, other than paper, not made in textile mills.....	9	38	300	-----	525	95, 875	262, 737	4, 590, 303	8, 731	5, 207, 118	602, 081
Baskets and rattan and willow ware, not including furniture.....	8	34	1, 260	1, 492	1, 131	106, 204	674, 138	1, 006, 095	20, 258	2, 468, 362	1, 442, 000
Beverages.....	110	128	524	35	1, 130	422, 395	640, 872	2, 013, 601	62, 997	5, 210, 389	3, 133, 891
Bookbinding and blank-book making.....	5	5	52	-----	43	9, 780	50, 097	28, 248	1, 541	120, 209	90, 420
Boxes, paper, not elsewhere classified.....	12	74	569	60	596	167, 120	436, 611	1, 418, 702	23, 103	2, 509, 922	1, 068, 057
Boxes, wooden, except cigar boxes.....	15	79	1, 138	3, 657	1, 442	203, 253	849, 094	3, 170, 817	16, 091	4, 778, 871	1, 591, 063
Bread and other bakery products.....	110	242	1, 709	32	3, 379	484, 098	2, 067, 504	5, 870, 321	233, 468	11, 467, 974	5, 364, 185
Brooms.....	4	-----	29	-----	21	-----	21, 520	51, 493	1, 073	96, 632	44, 066
Butter.....	23	55	123	296	1, 708	110, 809	145, 014	1, 949, 643	51, 882	2, 543, 396	541, 871
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	0	21	139	495	5	19, 069	72, 197	208, 206	16, 361	367, 083	132, 516
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	180	92	1, 712	3, 873	918	138, 210	888, 706	5, 014, 313	78, 648	8, 555, 042	3, 462, 081
Car and general construction and repairs, electric-railroad repair shops.....	12	43	263	-----	877	68, 117	424, 381	168, 332	4, 533	674, 136	501, 271
Car and general construction and repairs, steam-railroad repair shops.....	41	830	12, 134	14, 731	17, 380	2, 313, 286	18, 390, 508	11, 880, 587	681, 544	33, 271, 215	20, 709, 084
Caskets, coffins, burial cases, and other morticians' goods.....	8	20	83	-----	451	62, 120	106, 105	234, 958	6, 159	549, 184	308, 067
Cereal preparations.....	4	3	12	-----	207	4, 220	11, 202	267, 316	1, 762	348, 175	79, 097
Chemicals, not elsewhere classified.....	11	297	2, 446	78, 051	9, 161	1, 429, 854	3, 051, 032	6, 693, 688	2, 283, 814	20, 681, 670	11, 704, 174
Cigars and cigarettes.....	12	268	6, 375	1, 500	3, 958	584, 042	4, 710, 187	45, 586, 659	154, 352	147, 701, 545	101, 960, 534
Clay products (other than pottery) and nonclay refractories.....	43	128	1, 239	3, 257	4, 296	342, 636	1, 108, 082	131, 865	661, 903	2, 945, 282	2, 151, 514
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....	17	158	2, 381	375	410	393, 952	1, 538, 218	4, 599, 505	40, 053	8, 064, 733	3, 425, 175
Clothing, women's, not elsewhere classified.....	6	20	198	-----	36	40, 307	142, 745	484, 423	2, 942	888, 078	350, 713
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	15	83	1, 004	3	506	159, 827	924, 037	3, 148, 670	23, 909	4, 786, 363	1, 593, 784
Coffee and spice, roasting and grinding.....	13	52	113	60	742	177, 642	112, 850	3, 966, 385	28, 472	5, 462, 100	1, 468, 743
Coke, not including gas-house coke.....	7	15	352	-----	1, 552	19, 084	219, 426	50, 399	804, 651	1, 304, 493	448, 943
Compressed and liquefied gases.....	9	69	146	850	1, 634	141, 562	193, 568	265, 452	75, 475	1, 327, 422	986, 495
Concrete products.....	26	48	266	47	639	91, 376	276, 777	499, 379	13, 015	1, 301, 454	789, 060
Confectionery.....	19	101	1, 338	325	3, 796	309, 025	655, 895	8, 737, 177	92, 420	10, 678, 880	1, 849, 283
Cooperage.....	113	59	899	341	188	127, 667	578, 178	2, 695, 631	3, 838	4, 209, 835	1, 510, 366
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	10	39	97	-----	177	87, 934	119, 533	720, 261	5, 001	1, 040, 141	314, 879

See footnotes at end of table.

## CENSUS OF MANUFACTURES: 1929

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
						Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
Cotton goods	9	142	7,672	55,982	2,805	499,755	5,741,225	12,915,830	549,774	25,038,049	11,572,445
Dairymen's supplies; creamery, cheese-factory, and butter-factory equipment; and poultrymen's and apiarists' supplies	10	23	99	170	259	42,117	86,253	139,392	6,989	390,469	253,138
Electrical machinery, apparatus, and supplies	7	9	58		243	12,173	47,920	64,360	4,540	174,445	105,639
Engraving, steel and copperplate, and plate printing	4	3	18		8	6,800	18,787	18,464	854	67,411	48,003
Excelsior	18	11	108	1,341	400	10,817	144,080	255,440	9,800	581,510	316,171
Feeds, prepared, for animals and fowls	10	14	26	176	456	18,472	24,134	490,867	8,198	634,032	134,907
Fertilizers	42	286	2,047	5,597	9,806	594,475	1,551,265	14,130,760	225,327	20,661,918	6,305,820
Flavoring extracts and flavoring sirups	10	66	149		264	134,644	117,098	1,146,736	7,264	2,280,311	1,126,311
Flour and other grain-mill products	321	219	655	12,009	5,977	406,696	677,115	14,501,900	158,071	18,865,489	4,205,512
Food preparations, not elsewhere classified	8	19	114	14	891	55,292	87,179	697,963	17,740	947,677	231,078
Foundry and machine-shop products, not elsewhere classified	62	207	1,069	60	3,620	514,550	1,369,900	1,851,702	137,808	5,145,451	3,155,941
Furniture, including store and office fixtures	54	469	6,285	8,543	7,432	1,319,070	5,309,909	14,066,276	233,225	28,221,133	13,021,682
Gas, manufactured, illuminating and heating	14	148	400	1,444	2,948	274,308	593,639	701,105	876,774	5,366,834	3,818,955
Grease and tallow, not including lubricating greases	4	21	145	525	247	53,013	150,994	989,969	31,256	1,317,881	290,656
Hand stamps and stencils and brands	7	7	33	16	19	10,957	38,029	41,195	1,621	144,894	102,068
Hardware not elsewhere classified	3	7	92		144	39,757	76,025	61,022	6,014	227,025	159,389
Ice cream	38	107	306	404	3,237	237,374	369,406	1,818,887	114,751	3,649,819	1,716,181
Ice, manufactured	111	229	867	5,603	25,639	460,681	927,302	200,215	701,672	4,042,892	3,140,975
Knit goods	24	119	3,125	599	2,007	353,985	1,863,425	5,143,447	98,806	6,381,123	4,137,810
Leather: Tanned, curried, and finished	9	37	816	1,739	2,087	84,499	776,352	7,482,130	146,435	6,500,544	1,871,970
Lime	26	88	728	1,342	5,160	225,113	600,341	597,853	202,032	2,105,645	1,216,700
Lumber and timber products, not elsewhere classified	811	267	8,720	26,848	2,088	676,084	6,512,215	6,042,561	137,458	20,656,537	13,880,518
Marble, granite, slate, and other stone products	22	113	807	2,482	1,166	218,411	855,762	530,057	74,885	2,248,974	1,044,032
Mattresses and bed springs, not elsewhere classified	14	32	165		387	84,707	113,588	543,099	7,491	901,982	441,392
Meat packing, wholesale	26	73	548	635	1,582	107,527	530,540	8,051,036	66,040	9,841,180	1,624,604
Mirrors, framed and unframed	8	24	155	155	196	75,113	145,358	811,881	10,850	1,479,413	650,682
Motor-vehicle bodies and motor-vehicle parts	8	16	111		394	31,610	145,240	165,399	8,758	430,687	256,533
Paints and varnishes	7	24	96	150	336	97,271	77,051	313,272	11,576	611,898	287,020
Paper	10	261	1,935	60,163	17,507	1,023,235	2,277,494	13,194,705	1,143,829	20,967,376	6,628,842
Pulp (wood and other fiber)	7	114	1,563			412,594	1,563,250	7,726,059	784,436	14,203,960	6,743,474
Patent or proprietary medicines and compounds	15	59	83	40	111	158,374	93,522	455,530	9,980	1,773,015	1,307,499
Peanuts, walnuts, and other nuts, processed or shelled	22	93	1,050	2,225	1,028	208,771	400,020	8,768,416	31,603	9,977,967	1,177,048
Photo-engraving, not done in printing establishments	8	22	68		47	50,857	143,911	61,870	4,662	348,061	281,629
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills	119	317	1,847	8,031	6,068	721,908	1,987,003	5,818,549	107,008	10,245,357	4,319,800
Printing and publishing, book and job	135	510	1,830		2,504	1,337,845	2,380,480	2,834,402	85,440	9,965,825	6,985,983
Printing and publishing, newspaper and periodical	123	908	1,058	33	2,734	1,082,377	1,843,491	2,016,233	98,512	10,202,008	8,088,863
Ship and boat building, steel and wooden, including repair work	22	777	6,790	4,382	30,531	2,170,771	9,260,429	10,734,737	447,386	25,292,845	14,110,722
Shirts	7	17	489		78	22,270	242,501	544,643	5,861	903,257	352,753
Silk and rayon manufactures	10	111	2,249	650	2,918	360,509	1,696,460	5,200,577	163,255	9,700,804	4,328,032
Stoves and ranges (other than electric) and warm-air furnaces	5	40	194	80	545	127,406	215,284	106,516	26,402	656,658	463,740
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills	13	114	907		6,035	265,885	1,354,436	3,998,262	96,573	7,602,713	3,507,878
Tanning materials, natural dyestuffs, mordants and assistants, and sizes	0	50	270	2,330	75	150,952	263,667	1,129,096	170,713	1,979,115	679,306
Tobacco: Chewing and smoking, and snuff	0	156	1,507	734	996	746,543	933,858	7,837,768	54,561	17,744,906	9,352,007
Trunks, suitcases, and bags	7	103	1,167	1,190	297	270,284	977,037	3,017,098	10,594	5,782,717	2,740,025
Wood preserving	0	56	388	1,225	748	174,247	524,202	3,507,602	84,760	4,892,830	1,210,408
Wood turned and shaped and other wooden goods, not elsewhere classified	18	55	725	2,766	413	162,690	564,427	739,419	31,512	1,767,607	996,076
Woolen goods	7	52	1,003	722	1,537	126,270	922,861	1,925,104	64,397	3,780,022	1,790,521
Other industries	150	1,505	21,719	67,063	44,120	3,706,845	22,457,086	60,191,162	2,988,351	123,965,849	60,786,846

<sup>1</sup>The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>2</sup>Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>3</sup>Not including data for 3,075 employees of central administrative offices, with salaries aggregating \$7,885,239. See GENERAL EXPLANATIONS—Persons Engaged.

# WASHINGTON

TABLE 1.—SUMMARY FOR THE STATE: 1899 TO 1929

[Data for the "Automobile repairing" industry are included in the figures for 1919 and 1924, the only years for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
			Total	Prime movers	Electric motors driven by purchased energy		Total <sup>4</sup>	Materials and containers	Fuel and purchased energy		
1929	3,672	114,830	814,891	419,732	895,159	\$160,670,891	\$428,413,026	\$415,134,051	\$13,278,975	\$795,561,861	\$367,148,835
1927	3,344	104,468	680,408	346,678	553,730	145,930,930	380,884,508	378,582,802	11,301,736	677,913,570	288,028,981
1925	3,216	105,893	748,110	486,555	261,525	146,224,668	372,765,621	( <sup>5</sup> )	( <sup>5</sup> )	659,359,836	286,681,215
1923	3,029	111,603	593,330	376,120	217,201	156,434,842	372,044,358	( <sup>5</sup> )	( <sup>5</sup> )	678,643,200	306,498,842
1921	2,908	77,518	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	99,191,041	259,685,170	( <sup>5</sup> )	( <sup>5</sup> )	448,164,548	188,479,578
1919	4,918	132,928	688,073	467,152	215,921	104,968,222	443,177,531	431,890,276	11,281,255	809,622,084	368,445,453
1914	3,820	67,205	389,344	304,391	84,953	51,703,052	136,609,369	131,362,710	5,259,599	245,326,456	108,717,147
1909	3,074	69,120	297,759	200,808	30,951	49,709,308	117,867,038	114,423,470	3,464,218	220,740,421	102,888,783
1904	2,751	45,199	167,583	155,933	11,650	30,087,287	66,166,165	64,680,838	1,585,367	128,821,967	62,656,602
1899	1,920	31,528	87,425	84,863	2,562	17,065,140	38,276,944	( <sup>5</sup> )	( <sup>5</sup> )	70,831,345	32,554,401
PER CENT OF INCREASE OR DECREASE (—)											
1927-1929	9.8	9.0	19.8	21.1	18.4	10.1	9.9	9.7	17.5	17.4	27.5
1925-1927	4.0	-1.3	-9.0	-28.8	27.6	-0.2	4.0			2.8	0.5
1923-1925	6.2	-5.2	26.1	20.4	20.4	-6.5	0.2			-2.8	-6.6
1921-1923	4.2	44.0				57.7	43.3			51.4	62.0
1919-1921	-40.9	-41.7				-49.1	-41.4			-44.0	-48.6
1910-1929	-25.3	-13.6	19.3	-10.2	83.0	-17.6	-3.3	-3.9	17.7	-1.7	0.2
1909-1919	33.9	62.3	129.4	75.1	697.6	291.8	275.9	277.5	225.7	266.8	256.3
1899-1909	90.8	119.3	240.6	214.4	1,108.1	101.6	208.0			211.7	216.0

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>4</sup> Not reported separately.  
<sup>5</sup> Not called for on schedule.  
<sup>6</sup> No comparable data.

TABLE 2.—SUMMARY FOR THE SEATTLE-TACOMA INDUSTRIAL AREA AND FOR COUNTIES AND CITIES: 1929

	Population, 1930	Number of establishments	Wage earners (average for the year) <sup>1</sup>	Horsepower <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture
						Total	Materials and containers	Fuel and purchased energy		
The State	1,563,396	3,672	114,830	814,891	\$160,670,891	\$428,413,026	\$415,134,051	\$13,278,975	\$795,561,861	\$367,148,835
Seattle-Tacoma Industrial Area (King and Pierce Counties)	627,350	1,767	47,449	293,088	66,055,354	227,818,030	221,510,088	6,308,542	389,776,019	161,956,389
<i>Counties <sup>3</sup></i>										
Asotin	8,136	8	93	527	101,129	454,741	441,450	13,291	722,069	267,328
Benton	10,952	11	72	549	100,183	761,442	737,053	23,789	1,076,666	315,224
Chelan	31,634	55	904	6,174	1,174,995	2,816,147	2,681,058	134,194	5,626,585	2,810,438
Clallam	20,449	56	2,161	30,222	3,528,269	8,285,632	7,698,005	592,727	17,187,638	8,900,906
Clark	40,316	74	3,455	59,197	4,653,323	16,112,924	15,214,760	898,165	28,205,166	12,152,242
Columbia	5,825	7	32	428	51,139	84,924	76,519	8,405	171,661	86,787
Cowlitz	31,906	54	4,250	67,940	6,120,822	5,441,350	5,210,901	230,449	17,082,707	11,641,357
Ferry	4,292	15	161	1,591	189,580	145,798	144,769	1,037	619,704	478,908
Franklin	6,137	5	278	1,155	441,203	1,051,636	1,009,701	41,935	1,771,468	719,832
Garfield	3,662	4	11	186	13,316	92,659	91,616	1,043	136,550	43,891
Grays Harbor <sup>4</sup>	59,682	149	10,854	68,893	16,867,800	29,834,803	29,399,614	434,980	64,480,750	34,646,147
Jefferson	8,346	20	1,126	20,065	1,629,178	3,427,760	3,194,295	233,495	7,627,834	3,600,074
King <sup>5</sup>	463,517	1,342	29,167	166,544	41,785,532	121,102,995	117,382,303	3,720,632	228,354,787	107,251,792
Kitsap	30,776	40	1,441	6,014	1,992,637	2,758,375	2,679,323	79,052	7,071,392	4,313,017
Kittitas	18,154	27	332	2,287	515,477	708,708	698,251	15,457	1,639,202	930,494

See footnotes at end of table.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—SUMMARY FOR THE SEATTLE-TACOMA INDUSTRIAL AREA AND FOR COUNTIES AND CITIES: 1929—Continued

	Population, 1930	Num- ber of estab- lish- ments	Wage earners (aver- age for the year) <sup>1</sup>	Horse- power <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufac- ture
						Total	Materials and con- tainers	Fuel and purchased energy		
<i>Counties <sup>3</sup>—Continued</i>										
Klickitat.....	9,325	39	716	5,383	\$970,041	\$619,721	\$598,556	\$21,165	\$2,738,320	\$2,118,599
Lewis.....	40,034	130	3,265	23,072	4,560,055	5,877,811	5,725,169	149,642	14,162,890	8,284,879
Lincoln.....	11,876	11	56	520	66,739	435,036	422,758	12,278	713,407	278,371
Mason.....	10,000	54	1,886	7,408	2,726,971	4,203,016	4,031,546	171,470	11,495,688	7,292,672
Okanogan.....	18,519	37	829	3,745	1,208,084	922,492	875,353	47,139	2,892,007	1,969,515
Pacific.....	14,970	61	2,200	9,701	3,008,669	5,245,072	5,223,168	21,904	10,910,591	5,671,519
Pend Oreille.....	7,155	21	942	10,874	1,186,596	927,341	813,411	113,930	4,071,941	3,144,000
Pierce <sup>4</sup> .....	163,842	415	18,282	136,544	24,269,772	106,715,835	104,127,725	2,587,910	161,420,232	64,704,597
San Juan.....	3,097	14	214	485	189,198	686,317	641,711	43,606	1,256,967	571,660
Skagit.....	35,142	76	3,071	21,722	4,310,180	9,205,769	8,676,333	520,436	18,266,791	9,061,022
Skamania.....	2,891	11	306	1,768	398,116	833,861	817,935	15,926	1,618,553	684,032
Snohomish.....	78,861	179	8,779	60,604	11,446,532	25,213,023	24,624,818	588,205	48,161,193	22,948,170
Spokane <sup>4</sup> .....	160,477	310	8,051	45,577	10,632,736	39,346,677	38,085,654	1,261,023	65,153,181	25,800,504
Stevens.....	18,550	43	578	5,444	723,370	1,074,826	787,668	287,158	2,985,574	1,910,748
Thurston.....	31,351	67	3,011	18,531	4,222,928	7,491,492	7,346,172	145,320	16,419,485	8,927,955
Wahkiakum.....	3,862	14	540	863	1,056,555	1,411,761	1,403,310	8,441	3,181,282	1,709,531
Walla Walla.....	28,441	40	351	2,405	495,518	3,419,817	3,326,830	93,987	6,092,854	1,673,837
Whatcom.....	59,128	128	5,073	20,546	7,189,073	13,883,077	13,401,310	481,768	29,583,160	15,700,092
Whitman.....	28,014	36	131	705	198,896	698,792	672,348	26,444	1,158,682	459,800
Yakima.....	77,492	90	2,101	7,645	2,699,287	6,328,251	6,106,241	222,010	12,030,433	5,702,182
All other counties <sup>5</sup> .....	26,315	17	112	477	177,113	793,557	771,904	21,653	1,108,742	315,185
<i>Cities having 10,000 inhabitants or more</i>										
Aberdeen.....	21,723	62	2,763	19,799	4,010,601	9,906,303	9,778,033	127,460	17,252,255	7,345,862
Bellingham.....	30,823	84	3,083	18,933	5,821,019	8,180,005	7,938,925	241,680	20,187,029	12,026,424
Bremerton.....	10,170	14	57	300	104,522	226,621	217,011	9,610	486,401	259,880
Everett.....	30,587	94	4,208	27,828	5,068,849	14,015,344	13,803,772	211,572	23,085,155	9,069,811
Hoquiam.....	12,768	35	2,648	27,626	4,016,473	6,631,036	6,381,419	250,217	17,699,670	8,068,034
Longview.....	10,652	16	528	8,093	710,244	1,090,604	1,817,177	173,427	3,611,828	1,521,224
Olympia.....	11,733	32	1,344	8,855	1,712,741	4,952,600	4,874,484	78,125	8,709,300	3,756,601
Port Angeles.....	10,188	22	1,140	27,408	1,833,177	7,106,562	6,618,331	588,221	11,987,221	4,880,609
Seattle <sup>6</sup> .....	366,583	1,219	23,003	116,280	33,347,697	108,413,425	105,507,442	2,906,983	109,810,372	91,306,947
Spokane <sup>6</sup> .....	115,514	275	5,252	21,276	6,636,020	27,306,085	26,670,858	636,127	45,007,723	18,300,738
Tacoma <sup>6</sup> .....	106,817	329	13,424	80,290	17,839,155	54,724,043	53,448,453	1,276,190	92,774,045	38,049,402
Vancouver.....	15,766	37	1,517	12,589	2,117,230	6,748,476	6,626,837	122,139	13,076,318	6,327,848
Walla Walla.....	15,976	34	285	1,433	409,955	2,439,208	2,365,336	73,872	3,730,644	1,201,436
Wenatchee.....	11,627	26	621	2,692	712,760	1,803,086	1,803,029	100,957	3,504,754	1,600,748
Yakima.....	22,101	52	878	2,880	1,093,344	3,667,360	3,520,238	147,131	6,801,677	3,134,208

<sup>1</sup> Not including salaried employees.<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.<sup>3</sup> Statistics are presented for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing approximations of the data supplied by individual establishments, and combined figures are given for the remaining counties as a single group ("All other counties"). Certain of the counties for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.<sup>4</sup> For statistics by industries for this county, see Table 13.<sup>5</sup> Adams, Douglas, Grant, and Island Counties. (See footnote 3.)<sup>6</sup> For statistics by industries for this city, see Table 14.

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORATIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929 <sup>1</sup> .....	130,878	118,313	12,565	2,138	2,030	108	2,488	2,356	132	11,422	8,644	2,778	114,830	105,283	9,547
1919 <sup>2</sup> .....	150,478	139,977	10,502	4,106	4,034	111	1,584	1,506	78	11,772	8,984	2,788	132,928	125,403	7,525
1914 <sup>2</sup> .....	78,448	73,957	4,491	3,155	3,028	127	1,063	1,038	25	7,025	6,005	1,020	67,205	63,836	3,319
1909.....	80,118	76,342	3,776	3,204	3,178	80	1,094	1,078	16	6,640	5,825	815	69,120	66,261	2,859

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.<sup>2</sup> Not including employees of central administrative offices, as follows: Principal salaried officers of corporations—total, 55; male, 49; female, 6. Other salaried officers and employees—total, 520; male, 332; female, 188. The corresponding data for 1919 and earlier years are included in the respective items for those years but were not tabulated separately. See GENERAL EXPLANATIONS—Persons Engaged.<sup>3</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for Dec. 14. See GENERAL EXPLANATIONS—Persons Engaged.<sup>4</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.



TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY											Per cent minimum is of maximum	
		January	February	March	April	May	June	July	August	September	October	November		December
1929 <sup>1</sup>	114,830	<i>98,865</i>	<b>99,844</b>	112,066	115,813	119,615	119,985	110,329	123,359	124,392	125,520	116,402	102,770	78.8
1919 <sup>1</sup>	132,928	128,313	<i>89,914</i>	122,770	137,395	141,028	141,474	141,701	146,135	148,872	142,083	138,821	123,630	61.2
1914 <sup>1</sup>	67,205	58,748	<i>62,691</i>	69,411	73,351	74,789	75,182	72,996	73,757	70,227	64,047	58,243	<i>53,071</i>	70.6
1909 <sup>1</sup>	69,120	<i>54,719</i>	60,419	60,778	71,091	72,717	72,159	70,744	72,990	73,617	73,949	72,614	67,645	74.0

<sup>1</sup> The figures for 1919 and 1914 include data for the "Automobile repairing" industry, which was not canvassed in either the 1920 or the 1909 census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)
All classes.....	3,672	114,830	45 and over but under 48.....	94	3,878
Not reported.....	352	855	48.....	1,729	77,346
Under 40.....	57	304	Over 48 but under 54.....	45	1,533
40.....	91	4,748	54.....	189	2,459
Over 40 but under 44.....	24	97	Over 54 but under 60.....	90	3,613
44 and over but under 45.....	816	16,256	60 and over.....	185	3,651

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1920 or the 1909 census of manufactures; and those for 1919 and 1909 include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
All establishments.....	3,672	4,918	3,674	114,830	132,928	69,120	51 to 100.....	172	175	149	12,447	12,657	10,969
No wage earners.....	109	651	322				101 to 250.....	170	190	123	20,929	30,839	10,009
1 to 5.....	1,772	2,474	1,604	4,795	5,345	4,108	251 to 500.....	72	44	30	23,424	14,822	9,922
6 to 20.....	947	959	1,019	10,204	10,924	11,750	501 to 1,000.....	2	20	2	15,259	14,392	1,425
21 to 50.....	403	397	334	13,097	12,744	10,852	1,001 to 2,500.....	5	1	1	8,615	31,145	1,085
							2,501 and over.....	8					

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1920 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	3,672	4,918	3,674	114,830	132,928	69,120	\$795,551,861	\$800,622,984	\$220,740,421	\$367,148,835	\$360,446,453	\$102,358,733
Less than \$5,000.....	(?)	1,100	902	(?)	530	963	(?)	2,884,381	2,397,468	(?)	1,953,854	1,639,474
\$5,000 to \$19,999.....	1,347	1,517	1,276	3,310	3,606	5,918	14,910,465	16,171,987	13,824,059	9,626,008	10,282,117	8,598,987
\$20,000 to \$99,999.....	1,268	1,330	1,073	10,402	12,810	18,071	58,083,130	61,124,524	47,224,421	33,478,789	33,852,870	26,287,103
\$20,000 to \$49,999.....	706	(?)	(?)	4,774	(?)	(?)	25,466,581	(?)	(?)	15,347,288	(?)	(?)
\$50,000 to \$99,999.....	472	(?)	(?)	5,718	(?)	(?)	33,210,555	(?)	(?)	18,131,501	(?)	(?)
\$100,000 to \$499,999.....	716	673		25,998	20,962		155,735,071	148,750,560		76,605,896	71,145,504	
\$100,000 to \$249,999.....	495	(?)		13,231	(?)		77,834,848	(?)		39,471,172	(?)	
\$250,000 to \$499,999.....	221	(?)	403	12,767	(?)	37,553	77,900,223	(?)	114,920,746	37,135,724	(?)	55,916,259
\$500,000 to \$999,999.....	169	163		17,502	21,908		114,149,150	112,442,853		52,768,775	58,925,988	
\$1,000,000 and over.....	182	135	20	57,408	67,112	6,015	452,078,039	468,248,689	42,379,727	194,668,367	190,285,150	10,416,910
\$1,000,000 to \$2,499,999.....	141	(?)	(?)	32,520	(?)	(?)	200,463,514	(?)	(?)	101,741,207	(?)	(?)
\$2,500,000 to \$4,999,999.....	28	(?)	(?)	15,366	(?)	(?)	97,178,219	(?)	(?)	52,210,728	(?)	(?)
\$5,000,000 and over.....	13	(?)	(?)	9,582	(?)	(?)	148,436,306	(?)	(?)	40,716,432	(?)	(?)

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>2</sup> No data.

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

## CENSUS OF MANUFACTURES: 1929

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
	Total.....	3,672	4,918	114,830	132,928	\$705,561,861	\$800,622,084	\$307,148,835
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	1,872	1,913	104,816	120,361	740,908,431	730,639,897	337,316,026	320,471,376
Other forms of ownership or control (individual, partnership, etc.).....	1,800	3,005	10,014	12,567	54,653,430	69,983,087	29,831,909	36,974,077
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	377	( <sup>1</sup> )	33,165	( <sup>1</sup> )	336,355,208	( <sup>1</sup> )	118,789,322	( <sup>1</sup> )
Independent (single-unit).....	3,295	( <sup>1</sup> )	81,665	( <sup>1</sup> )	469,206,653	( <sup>1</sup> )	248,359,513	( <sup>1</sup> )

<sup>1</sup> Not tabulated.

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE, 1929, 1927, 1925, 1919, AND 1914, AND FOR THE SEATTLE-TACOMA INDUSTRIAL AREA AND IMPORTANT COUNTIES, 1929

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY											ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING					
	Aggregate horsepower	Total horsepower of prime movers	Prime movers								Electric motors driven by purchased energy						
			Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines		Number			Horse-power			
			Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power							
The State:																	
1929.....	814,891	419,732	1,302	193,560	188	200,758	150	4,397	50	15,017	30,822	305,159	13,498	276,286			
1927.....	680,408	346,678	1,300	165,241	132	166,800	177	4,476	38	10,101	23,623	333,730	8,700	166,951			
1925.....	748,110	486,585	2,410	326,865	120	143,143	241	6,414	54	10,163	18,634	261,525	7,489	250,017			
1919 <sup>1</sup> .....	683,073	487,152	3,543	402,007	86	51,299	536	6,123	87	7,723	13,944	215,021	3,052	62,234			
1914 <sup>1</sup> .....	389,344	304,391	2,890	291,923	( <sup>2</sup> )	( <sup>3</sup> )	200	3,162	116	9,306	6,005	84,953	1,339	27,532			
Seattle-Tacoma Industrial Area (King and Pierce Counties).....	293,088	87,539	380	40,049	56	45,644	30	1,578	2	268	17,954	205,540	2,700	47,744			
Counties in which aggregate horsepower exceeded 25,000; 1929																	
Clallam.....	30,222	22,745	33	8,635	5	8,800	6	70	11	5,240	331	7,477	716	36,795			
Clark.....	59,197	11,512	34	5,517	3	4,195	1	( <sup>4</sup> )	4	1,800	1,939	47,685	123	3,400			
Cowlitz.....	67,940	62,340	22	26,855	18	35,330	4	155	-----	-----	280	5,600	3,262	73,407			
Grays Harbor.....	68,893	60,212	149	31,412	23	28,761	6	39	-----	-----	885	8,681	1,840	36,809			
King.....	156,544	47,600	234	17,662	30	28,474	24	1,464	-----	-----	12,098	103,944	1,423	29,005			
Pierce.....	136,544	39,939	140	22,387	26	17,170	6	114	2	268	5,856	96,605	1,286	18,739			
Snohomish.....	60,604	43,873	113	19,968	28	23,549	22	350	-----	-----	1,336	16,731	2,375	28,540			
Spokane.....	45,577	8,168	70	6,511	3	1,580	6	77	1	( <sup>5</sup> )	2,990	37,409	60	1,116			
Whatcom.....	29,546	15,061	64	6,343	7	8,655	5	63	-----	-----	933	14,485	483	2,650			

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

<sup>2</sup> Reported as "Steam engines and turbines."

<sup>3</sup> Not reported separately. See footnote 2.

<sup>4</sup> Item for internal-combustion engines included with that for steam engines to avoid disclosing data for a single establishment.

<sup>5</sup> Item for water wheels and water turbines included with that for steam engines to avoid disclosing data for a single establishment.

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county for which separate figures are given in Table 2. See footnotes 3 and 5 on that table]

COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>	COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	814,801	419,732	305,159	276,286	Lincoln.....	520	240	280	.....
Asotin.....	527	100	427	.....	Mason.....	7,408	1,765	5,643	5,414
Benton.....	549	110	439	.....	Okanogan.....	3,745	1,805	1,940	520
Chelan.....	6,174	2,944	3,230	1,254	Pacific.....	9,701	8,999	702	2,760
Challan.....	30,222	22,745	7,477	36,795	Pend Oreille.....	10,874	7,603	3,271	1,022
Clark.....	59,197	11,512	47,685	3,400	Pierce.....	136,544	39,039	96,605	18,789
Columbia.....	428	263	165	.....	San Juan.....	485	454	31	15
Cowlitz.....	67,940	62,340	5,600	73,407	Skagit.....	21,722	15,761	5,961	9,255
Ferry.....	1,591	1,561	30	20	Skamania.....	1,768	1,355	413	.....
Franklin.....	1,155	42	1,113	.....	Snohomish.....	60,604	43,873	16,731	28,540
Garfield.....	186	01	05	.....	Spokane.....	45,577	8,168	37,409	1,116
Grays Harbor.....	68,893	60,212	8,681	36,809	Stevens.....	5,444	2,901	2,543	120
Jefferson.....	20,065	19,977	88	1,880	Thurston.....	18,581	7,486	11,045	4,667
King.....	156,544	47,600	108,944	29,005	Wahkiakum.....	363	363	( <sup>2</sup> )	5
Kitsap.....	6,014	4,800	1,124	5,480	Walla Walla.....	2,405	305	2,100	.....
Kittitas.....	2,287	1,948	339	.....	Whatcom.....	29,546	15,001	14,485	2,650
Klickitat.....	5,383	4,861	522	3,258	Whitman.....	705	120	685	.....
Lewis.....	28,672	10,370	4,296	9,550	Yakima.....	7,645	2,852	4,793	.....
					All other counties.....	477	110	367	6

<sup>1</sup> Horsepower of electric motors driven by energy generated in establishments reporting.  
<sup>2</sup> Item for electric motors included with that for prime movers to avoid disclosing data for a single establishment.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927, 1923, 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures, see Chapter VII, Volume I, Reports of the Census of Manufactures, 1929]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
Fuel:							
Coal, total <sup>2</sup> (tons, 2,000 pounds).....	677,524	\$2,004,083	666,451	430,700	647,907	495,860	424,486
Anthracite (tons, 2,240 pounds).....	2,350	24,369	( <sup>3</sup> )	14,611	4,502	4,525	6,268
Bituminous (tons, 2,000 pounds).....	674,892	2,879,694	( <sup>3</sup> )	464,336	642,865	490,801	417,466
Coke (tons, 2,000 pounds).....	43,964	447,083	( <sup>4</sup> )	( <sup>4</sup> )	68,205	69,355	47,420
Fuel oils, including crude oils and gas oils (gallons) <sup>5</sup> .....	71,199,227	2,184,024	( <sup>4</sup> )	( <sup>4</sup> )	72,775,500	62,872,194	28,347,984
Gasoline and kerosene (gallons) <sup>5</sup> .....	410,820	66,638	( <sup>4</sup> )	( <sup>4</sup> )	1,526,154	.....	.....
Gas, natural (M cubic feet).....	3,658	2,977	( <sup>4</sup> )	( <sup>4</sup> )	215,511	88,491	90,115
Gas, manufactured (M cubic feet).....	213,321	106,758	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Other fuels.....	.....	1,451,110	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Electric energy purchased (kilowatt-hours).....	782,921,745	6,055,431	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
Total cost of fuel and purchased energy.....	.....	\$13,278,054	Cost \$11,301,736	Cost ( <sup>8</sup> )	Cost \$11,281,255	Cost \$5,256,599	Cost \$5,464,218

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1929.  
<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.  
<sup>3</sup> Not tabulated separately.  
<sup>4</sup> No data.  
<sup>5</sup> For years prior to 1929, reported in barrels; converted on basis of 42 gallons per barrel.  
<sup>6</sup> Data incomplete.  
<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12 is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.  
<sup>8</sup> Not reported separately.

## CENSUS OF MANUFACTURES: 1929

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929

[This table presents separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
						Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All industries, total.....	3,672	13,910	114,830	419,732	395,159	35,904,583	100,670,891	416,134,051	13,278,975	795,501,861	367,148,935
Agricultural implements.....	4	6	21		65	19,711	24,002	96,375	1,558	270,464	172,531
Awnings, tents, sails, and canvas covers.....	13	31	82		72	61,540	108,089	419,806	3,161	812,779	389,812
Belting, leather.....	6	3	11		48	2,396	19,031	87,253	900	189,222	51,073
Beverages.....	49	57	161	33	1,117	104,779	244,595	568,711	40,779	1,881,747	772,257
Bookbinding and blank-book making.....	16	16	90		153	34,391	99,894	124,025	5,335	480,035	356,675
Boots and shoes, other than rubber.....	10	10	87		108	63,911	115,970	311,499	4,472	589,439	273,408
Boxes, paper, not elsewhere classified.....	14	56	257		278	187,440	246,500	723,678	10,006	1,374,441	640,757
Boxes, wooden, except cigar boxes.....	22	43	451	1,586	1,820	128,083	440,053	1,372,793	28,934	2,190,940	795,219
Bread and other bakery products.....	370	348	2,607	32	4,084	723,722	8,861,830	9,080,088	421,612	20,490,217	10,382,517
Brooms.....	5	4	32		41	6,980	36,384	74,099	690	155,853	81,004
Brushes, other than rubber.....	5	15	59		74	38,950	48,638	115,478	1,945	272,047	155,224
Butter.....	84	195	535	1,858	3,300	428,550	783,408	11,705,640	200,035	14,063,079	3,057,335
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	03	153	1,122	924	1,605	383,285	948,029	8,714,313	58,270	12,202,094	3,429,511
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	72	297	3,720	458	2,925	638,405	2,967,861	13,000,067	200,624	22,233,749	8,132,458
Car and general construction and repairs, electric-railroad repair shops.....	10	30	379		1,648	65,272	635,283	441,236	20,523	1,160,383	704,024
Car and general construction and repairs, steam-railroad repair shops.....	36	331	4,990	1,407	13,859	859,544	8,036,310	7,582,309	342,621	16,840,373	8,021,443
Caskets, coffins, burial cases, and other morticians' goods.....	7	20	123		1,809	71,282	148,513	286,537	8,032	644,366	349,717
Cereal preparations.....	5	9	21		53	19,480	20,043	142,972	1,502	312,954	168,450
Cheese.....	14	25	56	100	165	47,319	89,211	1,015,519	15,924	1,378,003	346,560
Chemicals, not elsewhere classified.....	6	51	120	225	4,785	195,625	195,625	482,721	138,733	1,308,760	687,306
Cigars and cigarettes.....	5	1	15		(*)	(*)	13,528	19,223	60	49,220	29,937
Clay products (other than pottery) and nonclay refractories.....	25	93	1,066	2,305	0,008	220,640	1,351,935	467,100	653,001	3,638,597	2,518,406
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....	9	20	119		30	39,423	106,782	243,687	3,981	572,212	324,594
Clothing, women's, not elsewhere classified.....	39	120	1,213		333	365,759	936,213	2,342,926	13,110	4,741,107	2,385,071
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	7	69	662		197	152,797	551,516	1,028,153	11,970	2,973,885	1,333,762
Coffee and spice, roasting and grinding.....	24	104	195		550	342,890	255,394	4,224,903	27,293	6,053,437	1,801,151
Compressed and liquefied gases.....	8	50	47		754	94,374	79,162	186,914	41,794	688,174	459,466
Concrete products.....	40	64	300	76	1,253	152,419	413,127	474,909	21,600	1,387,790	891,221
Condensed and evaporated milk.....	11	58	255	637	1,206	127,438	239,960	5,038,511	90,875	6,166,254	1,027,868
Confectionery.....	52	183	754		1,270	369,698	694,934	2,274,677	48,391	4,790,181	2,473,113
Cooperage.....	5	23	510	1,325	1,259	85,826	645,337	1,140,563	14,077	2,088,938	934,298
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	80	126	615	90	594	365,300	1,014,226	1,541,455	15,692	3,743,932	2,186,785
Electrical machinery, apparatus, and supplies.....	20	89	294	10	456	221,802	350,209	912,771	15,833	1,813,071	884,467
Electroplating.....	8	7	36		101	20,291	59,365	21,418	3,163	133,415	108,834
Engraving, steel and copperplate, and plate printing.....	4	16	39		31	32,014	64,071	69,683	1,696	191,703	130,324
Fancy and miscellaneous articles, not elsewhere classified.....	4	4	23		6	3,529	17,636	41,016	488	122,069	81,665
Feeds, prepared, for animals and fowls.....	37	123	410		5,074	242,071	531,807	12,912,586	87,905	15,333,076	2,332,585
Fertilizers.....	3	13	24	75	115	34,330	23,645	227,357	3,613	402,704	171,734
Flavoring extracts and flavoring sirups.....	3	8	26		50	18,688	36,823	277,106	993	426,825	148,726
Flour and other grain-mill products.....	47	385	1,024	910	14,073	790,660	1,413,290	38,908,809	290,180	45,563,866	6,364,811
Food preparations, not elsewhere classified.....	20	46	85	10	339	86,744	94,233	926,065	15,033	1,331,404	389,766
Forgings, iron and steel, not made in plants operated in connection with rolling mills.....	4	27	121		1,251	62,626	173,369	342,371	28,311	764,821	304,139
Foundry and machine-shop products, not elsewhere classified.....	206	621	3,255	768	14,905	1,847,578	5,266,637	6,719,386	406,480	18,428,298	11,302,432
Fur goods.....	21	34	198		79	95,932	252,717	492,338	5,518	1,158,511	690,655
Furniture, including store and office fixtures.....	65	186	1,632	520	4,626	461,773	1,915,070	2,882,415	59,789	6,637,074	3,694,370
Gas and electric fixtures; lamps, lanterns, and reflectors.....	11	61	184		94	157,201	285,839	317,857	5,761	898,253	574,635
Gas, manufactured, illuminating and heating.....	10	257	532	5,668	695	375,479	696,784	822,139	913,206	4,627,322	2,891,977
Glass products (except mirrors) made from purchased glass.....	3	1	12		10	(*)	15,109	24,010	509	62,956	38,437
Hand stamps and stemcills and brands.....	8	29	37		62	37,598	58,440	97,095	2,577	246,285	146,613
Hardware not elsewhere classified.....	4	20	55		121	37,451	48,428	69,619	3,507	221,802	148,676
House-furnishing goods, not elsewhere classified.....	10	16	55		59	24,846	64,488	170,141	1,428	347,307	166,798
Ice cream.....	54	66	403	35	2,167	168,950	671,411	2,170,888	106,149	4,517,128	2,240,091
Iron and steel: Steel works and rolling mills.....	88	72	276	1,158	7,181	165,981	400,213	1,801,843	204,579	1,590,488	1,284,066
Jewelry.....	13	16	66		26	128,667	97,197	128,667	1,412	355,802	225,723
Knit goods.....	8	22	180		81	37,194	156,067	295,877	5,825	583,145	281,443
Lime.....	4	20	171	220	166	53,777	167,336	115,006	66,367	467,084	285,711
Lithographing.....	7	42	163		250	148,121	277,708	468,798	8,484	1,247,638	775,856
Lumber and timber products, not elsewhere classified.....	772	3,032	58,570	321,744	71,690	9,259,238	83,753,402	97,093,035	1,274,731	262,621,468	164,253,702
Macaroni, spaghetti, vermicelli, and noodles.....	11	23	35		340	45,842	37,970	236,337	11,930	449,168	200,901
Machine-tool accessories and small metal-working tools, not elsewhere classified.....	4	2	18		39	(*)	23,654	10,726	405	55,823	44,697
Marble, granite, slate, and other stone products.....	16	35	201	150	2,423	90,837	320,968	274,982	21,222	822,286	526,082
Mattresses and bed springs, not elsewhere classified.....	9	11	90		584	28,104	124,886	359,041	7,545	689,033	322,447
Meat packing, wholesale.....	34	331	1,283	398	4,805	788,708	1,750,187	29,338,427	204,974	34,412,937	4,869,536
Millinery.....	9	39	268		25	91,692	250,834	415,759	3,031	882,802	464,012
Mirror and picture frames.....	3	2	14		16	(*)	20,416	6,878	654	43,083	35,651
Mirrors, framed and unframed.....	8	26	70		104	73,201	138,544	171,215	5,213	449,308	272,880
Models and patterns, not including paper patterns.....	13	5	42		190	7,920	80,266	36,697	2,600	122,986	170,789
Motor-vehicle bodies and motor-vehicle parts.....	18	50	229		5,082	100,349	328,920	706,655	14,269	1,425,663	704,739
Nonferrous-metal alloys and products, not including aluminum products.....	19	43	173		791	124,221	283,391	818,651	20,042	1,582,785	744,032

See footnotes at end of table.

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
Paints and varnishes.....	11	50	127		683	Dollars 125,190	Dollars 168,811	Dollars 865,265	Dollars 12,219	Dollars 1,703,274	Dollars 831,700
Paper.....	15	297	2,774	59,008	82,534	911,147	3,667,255	13,774,140	2,104,270	28,429,104	12,550,632
Pulp (wood and other fiber).....	15	188	2,394			498,972	3,645,001	9,844,401	3,064,992	911,657	18,064,992
Patent or proprietary medicines and compounds.....	10	35	50	100	126	67,686	53,246	325,109	6,788	653,155	320,288
Photo-engraving, not done in printing establishments.....	10	38	92		111	108,984	214,413	81,127	7,176	623,563	535,201
Planing-mill products (including general millwork), not made in planing mills connected with saw-mills.....	129	461	3,600	4,021	20,049	1,237,881	4,472,017	14,209,731	200,104	23,463,304	8,003,409
Pottery, including porcelain ware.....	4	3	13		37	4,200	14,167	3,845	1,789	47,180	41,540
Poultry killing, dressing, and packing, wholesale.....	13	10	113		35	13,023	131,515	1,469,075	1,886	1,829,799	358,238
Printing and publishing, book and job.....	199	389	1,061		1,727	966,780	1,853,636	1,821,158	71,831	6,789,319	4,896,330
Printing and publishing, newspaper and periodical.....	213	2,131	1,748	10	3,470	4,729,560	3,480,638	3,862,277	143,196	21,093,525	17,088,052
Pumps (hand and power) and pumping equipment.....	5	9	35		69	20,084	48,949	63,302	1,019	210,351	121,430
Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment.....	6	3	19		70	3,520	25,419	30,550	585	113,819	82,084
Rubber goods other than tires, inner tubes, and boots and shoes.....	4	6	23		166	12,075	28,510	13,889	1,013	103,004	88,402
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.....	10	11	31		170	30,900	61,697	524,000	6,051	600,752	150,792
Ship and boat building, steel and wooden, including repair work.....	53	129	1,404	787	7,163	335,574	2,491,509	1,942,402	67,615	5,474,762	3,404,745
Signs and advertising novelties.....	25	47	151		44	132,977	277,235	224,325	5,236	1,445,821	1,210,261
Soap.....	4	14	36	80	264	33,730	47,792	412,560	2,940	500,941	154,420
Sporting and athletic goods, not including firearms or ammunition.....	8	12	43		45	22,620	49,670	145,211	1,451	316,515	169,853
Stationery goods, not elsewhere classified.....	3	9	22		22	23,360	29,032	75,085	1,080	153,078	70,913
Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified.....	3	6	18		38	14,840	26,531	48,519	2,757	110,700	65,433
Stereotyping and electrotyping, not done in printing establishments.....	4	9	21		168	21,262	62,850	15,047	2,905	141,451	123,490
Stoves and ranges (other than electric) and warm-air furnaces.....	17	73	320		469	158,583	426,484	507,698	18,747	1,494,417	967,672
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	18	78	429	60	5,105	230,944	653,025	960,650	33,778	2,393,940	1,399,512
Surgical and orthopedic appliances, including artificial limbs.....	4		14		12		17,345	15,052	262	60,322	45,008
Tin cans and other tinware, not elsewhere classified.....	6	50	453		1,984	93,077	540,497	6,013,549	59,991	8,213,500	2,140,050
Tools, not including edge tools, machine tools, files, or saws.....	6	26	39		90	67,006	38,520	60,093	2,290	255,636	192,703
Toys (not including children's wheel goods or sleds), games, and playground equipment.....	3	4	32		47	7,700	22,700	27,518	943	73,784	45,323
Trunks, suitcases, and bags.....	7	15	90		42	41,017	124,129	160,079	2,687	458,272	289,506
Vinegar and cider.....	9	12	39	25	554	22,140	37,764	203,453	12,011	408,325	192,261
Wall plaster, wall board, insulating board, and floor composition.....	7	30	108		831	103,156	134,070	374,577	17,733	929,445	537,135
Window shades and fixtures.....	8	6	31		216	5,438	30,064	97,604	989	188,024	89,431
Wood preserving.....	12	59	519	1,820	1,529	183,366	734,911	5,330,472	78,986	8,074,312	2,658,854
Wood turned and shaped and other wooden goods, not elsewhere classified.....	9	17	128		200	66,015	164,774	318,380	8,272	700,715	374,003
Other industries.....	160	1,126	7,677	10,740	62,543	3,075,854	9,812,760	72,989,102	2,737,098	106,760,198	31,033,098

<sup>1</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>3</sup> Not including data for 575 employees of central administrative offices, with salaries aggregating \$2,035,950. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

## CENSUS OF MANUFACTURES: 1929

TABLE 13.—GENERAL STATISTICS FOR THE SEATTLE-TACOMA INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929

[This table presents, for the Seattle-Tacoma Industrial Area (see GENERAL EXPLANATIONS—Industrial Area) and for each important industrial county, separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						

## SEATTLE-TACOMA INDUSTRIAL AREA

[This area comprises King and Pierce Counties. The totals for all industries do not include data for a few establishments located outside the industrial area (see footnotes 1 and 3), and therefore are slightly smaller than the sums of the items for the individual industries.]

All industries, total.....	1,757	7,635	47,440	87,539	205,549	\$10,756,280	\$60,055,354	\$221,510,088	\$6,308,542	\$380,775,019	\$161,050,380
Awnings, tents, sails, and canvas covers.....	10	23	63	44	44	46,106	83,699	288,822	1,736	590,899	300,341
Beverages.....	17	23	60	15	275	38,137	97,246	195,274	11,054	478,473	272,145
Bookbinding and blank-book making.....	11	6	34	40	40	10,180	42,444	37,094	1,581	108,241	120,506
Boxes, wooden, except cigar boxes.....	7	17	216	1,091	184	60,258	188,330	410,170	2,548	784,210	362,486
Bread and other bakery products.....	101	212	1,644	28	2,389	400,025	2,370,671	5,731,215	227,469	12,426,930	6,468,246
Brushes, other than rubber <sup>1</sup> .....	5	15	59	74	74	38,050	48,638	115,478	1,945	272,647	165,224
Butter.....	10	28	50	65	740	55,434	78,271	1,495,572	13,660	1,718,862	209,021
Canning and preserving: Fish, crabs, shrimps, oysters, and clams <sup>1</sup> .....	13	21	96	505	60,706	120,772	1,190,898	15,235	1,599,734	381,001	
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	25	130	1,173	1,022	207,541	928,373	5,320,120	58,534	8,313,008	2,924,854	
Caskets, coffins, burial cases, and other morticians' goods.....	3	8	42	1,545	17,898	49,506	87,960	2,595	140,684	50,000	
Chemicals, not elsewhere classified.....	6	51	120	225	4,785	104,250	195,625	482,721	138,733	1,308,760	687,306
Clay products (other than pottery) and nonclay refractories.....	8	32	495	494	2,851	73,495	650,300	173,057	271,264	1,518,300	1,073,388
Clothing, women's, not elsewhere classified.....	35	109	1,034	290	290	329,537	866,242	2,110,467	10,948	4,103,791	2,066,376
Coffee and spice, roasting and grinding.....	17	92	176	470	470	315,694	232,312	3,567,588	23,995	6,580,374	1,688,791
Concrete products.....	23	28	203	10	609	88,875	280,905	275,945	9,727	830,111	544,439
Confectionery.....	36	136	558	1,005	305,861	525,784	1,774,058	31,091	3,700,410	1,894,061	
Cooperage.....	3	10	338	825	1,206	60,226	437,931	893,781	14,077	1,566,358	658,660
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	53	92	465	90	480	203,120	749,271	1,095,544	11,354	2,699,747	1,592,849
Engraving, steel and copperplate, and plate printing.....	4	16	39	31	32,014	64,071	59,683	1,606	191,703	130,321	
Feeds, prepared, for animals and fowls.....	18	37	302	3,775	187,120	395,232	9,202,002	51,241	10,930,884	1,686,141	
Fertilizers.....	3	13	24	75	115	34,330	23,045	227,357	3,613	402,704	171,734
Flavoring extracts and flavoring sirups.....	3	8	26	50	18,688	36,823	277,106	993	426,825	148,726	
Flour and other grain-mill products.....	11	263	670	0,902	460,974	930,846	26,696,283	146,426	30,003,941	4,060,632	
Food preparations, not elsewhere classified.....	14	37	67	10	216	63,054	72,956	710,070	8,788	1,003,110	284,252
Foundry and machine-shop products, not elsewhere classified.....	135	445	2,267	538	10,770	1,310,311	3,820,000	5,080,174	282,407	13,772,709	8,404,128
Fur goods.....	10	23	125	49	49	74,521	168,755	305,551	2,761	791,412	483,100
Furniture, including store and office fixtures.....	54	165	1,506	520	4,275	427,870	1,772,201	2,641,678	52,440	6,103,715	3,409,697
Glass products (except mirrors) made from purchased glass.....	3	1	12	10	(?)	15,109	24,010	509	62,956	38,437	
Hand stamps and stencils and brands.....	4	28	30	48	36,601	51,453	87,703	2,094	202,387	112,590	
House-furnishing goods, not elsewhere classified.....	10	16	55	50	24,840	64,488	179,141	1,428	847,367	166,798	
Ice cream.....	18	29	258	35	1,285	85,149	424,795	1,288,778	56,412	2,709,618	1,304,328
Ice, manufactured.....	12	28	90	543	2,370	65,749	143,872	30,537	694,740	403,831	
Lithographing <sup>1</sup> .....	7	42	163	250	148,121	277,708	463,798	8,484	1,247,638	775,356	
Lumber and timber products, not elsewhere classified.....	130	830	14,831	60,853	35,508	2,516,018	19,948,095	22,266,863	599,496	62,019,032	39,152,073
Marble, granite, slate, and other stone products.....	8	18	147	1,907	55,157	236,651	231,900	12,702	602,164	357,502	
Mattresses and bed springs, not elsewhere classified.....	6	7	67	450	450	87,778	251,785	5,161	510,803	253,857	
Meat packing, wholesale.....	11	193	727	290	1,975	488,094	678,569	18,288,350	91,149	21,110,204	2,741,675
Millinery.....	9	30	268	25	25	91,662	250,334	415,759	3,031	882,862	404,012
Mirror and picture frames.....	3	2	14	16	(?)	20,416	6,878	554	43,083	25,651	
Mirrors, framed and unframed.....	8	26	70	104	75,201	198,544	171,215	5,213	449,308	272,880	
Motor-vehicle bodies and motor-vehicle parts.....	15	43	206	5,009	32,321	291,001	660,430	12,361	1,298,834	626,043	
Nonferrous-metal alloys and products, not including aluminum products.....	19	43	173	791	124,221	283,391	818,051	20,042	1,582,785	744,092	
Patent or proprietary medicines and compounds.....	9	24	26	35	50,106	29,352	122,126	1,215	322,051	198,710	
Photo-engraving, not done in printing establishments.....	11	33	72	81	97,135	170,803	69,465	5,973	533,464	458,026	
Planing-mill products (including general millwork), not made in planing mills connected with saw-mills.....	62	213	1,539	1,205	10,151	608,526	2,153,400	5,582,332	114,243	9,847,047	4,150,472
Pottery, including porcelain ware.....	4	8	13	87	87	4,200	14,157	3,845	1,789	47,180	41,546
Printing and publishing, book and job.....	127	281	736	1,250	724,898	1,300,866	1,268,241	47,083	4,878,607	3,563,213	
Printing and publishing, newspaper and periodical.....	81	1,153	900	1,399	2,841,439	1,979,051	2,700,089	50,885	12,642,909	9,885,935	
Pulp (wood and other fiber).....	3	23	378	41,880	49,173	57,926	335,683	879,895	110,215	2,198,647	1,292,537
Rubber goods, other than tires, inner tubes, and boots and shoes.....	4	6	28	166	166	12,075	28,510	13,889	1,613	103,904	88,402
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.....	5	8	21	119	119	24,400	44,965	372,675	3,993	485,260	108,592
Ship and boat building, steel and wooden, including repair work.....	40	111	1,284	371	6,619	298,878	2,144,127	1,714,618	56,366	4,861,328	3,080,344
Signs and advertising novelties.....	19	45	132	37	37	129,777	249,379	197,129	5,285	1,301,073	1,098,709
Sporting and athletic goods, not including firearms or ammunition <sup>1</sup> .....	8	12	43	45	45	22,620	49,670	145,211	1,451	310,516	189,853
Stationery goods, not elsewhere classified.....	3	9	22	22	22	23,390	29,062	75,085	1,080	153,078	76,913
Stoves and ranges (other than electric) and warm-air furnaces.....	14	66	282	381	381	139,788	366,655	450,010	14,973	1,318,868	853,885
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	14	69	379	60	5,046	214,844	564,960	886,501	30,918	2,154,854	1,237,435

See footnotes at end of this section, p. 547.

TABLE 13.—GENERAL STATISTICS FOR THE SEATTLE-TACOMA INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>SEATTLE-TACOMA INDUSTRIAL AREA—Continued</b>											
Toys (not including children's wheel goods or sleds), games, and playground equipment.....	3	4	32		47	\$7,700	\$22,760	\$27,518	\$943	\$73,784	\$45,323
Trunks, suitcases, and bags.....	7	15	90		42	41,017	124,129	166,079	2,087	458,272	280,506
Wall plaster, wall board, insulating board, and floor composition.....	7	30	108		831	103,156	134,070	374,577	17,733	929,445	537,135
Window shades and fixtures.....	8	6	31		216	5,438	39,094	97,604	989	188,024	89,431
Wood turned and shaped and other wooden goods, not elsewhere classified.....	6	16	100	200	775	64,615	134,069	301,128	4,510	632,635	326,988
Other industries.....	331	2,069	12,364	9,616	71,521	5,212,254	17,704,216	90,174,476	3,536,237	140,383,269	46,072,556

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>1</sup> The items for each of the 6 industries covered by this footnote include data for 1 establishment located outside the area, to avoid disclosing the figures reported by the establishments in question.

<sup>2</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

<sup>3</sup> The figures for 2 establishments located outside the area have been included in the items for the "Mirrors, framed and unframed" industry to avoid disclosing the data reported by these establishments.

<sup>4</sup> Includes item for "Paper" industry. All figures for that industry except those for power are included in the "Other industries" items to avoid disclosing the figures reported by an individual establishment.

**GRAYS HARBOR COUNTY**

All industries, total.....	149	639	10,854	60,212	8,681	\$2,276,551	\$16,867,809	\$20,309,614	\$434,939	\$64,480,750	\$34,646,147
Beverages.....	3	2	7		6	( <sup>2</sup> )	11,544	16,115	1,937	40,540	22,488
Bread and other bakery products.....	14	10	97		141	22,014	144,270	305,804	12,526	629,627	311,237
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	10	20	119	97	68	20,087	87,971	339,071	3,603	500,772	217,498
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	5	4	23		7	8,804	42,059	62,033	875	148,036	66,378
Foundry and machine-shop products, not elsewhere classified.....	10	29	92		704	70,374	186,302	120,237	21,316	432,532	290,979
Lumber and timber products, not elsewhere classified.....	58	378	9,165	49,147	3,748	1,599,461	14,535,242	24,092,282	117,401	53,343,490	29,133,807
Planing-mill products (including general millwork), not made in planing mills connected with sawmills.....	11	20	319	545	1,524	87,483	419,667	1,464,465	32,652	2,266,980	769,863
Printing and publishing, book and job.....	3	3	8		9	10,320	10,890	11,151	751	47,360	35,458
Printing and publishing, newspaper and periodical.....	8	55	67		163	149,694	126,427	61,678	7,709	505,411	499,024
Other industries.....	27	109	967	10,423	2,300	292,215	1,333,437	2,935,218	236,719	6,442,352	3,270,415

<sup>2</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

**KING COUNTY**

[The totals for all industries do not include data for a few establishments located outside the county (see footnotes 6 and 8), and therefore are slightly smaller than the sums of the items for the individual industries]

All industries, total.....	1,342	5,691	29,167	47,600	108,944	\$14,823,047	\$11,785,682	\$117,382,363	\$3,720,632	\$228,354,787	\$107,251,792
Beverages.....	13	12	31		100	17,844	52,216	104,101	5,097	255,851	146,653
Bookbinding and blank-book making.....	11	6	34		40	10,186	42,444	37,094	1,581	168,241	129,566
Boots and shoes, other than rubber.....	6	11	45		54	52,335	55,304	175,803	2,018	338,222	160,841
Boxes, paper, not elsewhere classified.....	10	47	207		205	138,790	206,649	643,958	7,560	1,179,808	528,290
Bread and other bakery products.....	146	176	1,210	28	1,741	411,463	1,923,819	4,736,293	183,888	10,417,523	5,407,342
Butter.....	5	14	27	25	613	34,624	38,902	967,314	8,844	1,032,964	100,806
Canning and preserving: Fish, crabs, shrimps, oysters, and clams.....	13	21	96		505	60,706	120,772	1,199,898	15,235	1,596,734	381,001
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	18	63	506		292	162,791	429,417	2,407,142	27,833	3,722,709	1,287,734
Clay products (other than pottery) and nonclay refractories.....	8	32	495	494	2,861	73,495	656,300	173,057	271,264	1,518,309	1,073,388
Coffee and spice, roasting and grinding.....	12	81	154		392	278,036	205,084	3,392,678	20,827	4,931,872	1,518,860
Concrete products.....	14	19	108		415	44,955	240,328	215,770	7,203	645,165	422,192
Confectionery.....	30	110	440		794	226,240	420,868	1,511,002	24,288	3,049,110	1,613,829
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	39	74	375	90	337	258,760	598,066	886,887	9,306	2,177,432	1,281,230
Electrical machinery, apparatus, and supplies.....	14	32	272		421	206,300	330,103	871,848	14,186	1,703,523	817,469
Engraving, steel and copperplate, and plate printing.....	4	18	39		31	32,014	64,071	59,683	1,694	191,793	130,324
Feeds, prepared, for animals and fowls.....	10	52	230		2,078	102,623	288,411	6,660,591	37,696	7,869,689	1,271,102
Fertilizers.....	3	13	24	75	115	34,330	23,645	227,357	3,613	402,704	171,734
Flavoring extracts and flavoring sirups.....	3	8	20		60	18,088	36,823	277,106	993	420,825	148,726
Food preparations, not elsewhere classified.....	11	29	48	10	169	41,355	51,463	614,667	6,863	730,049	208,919
Foundry and machine-shop products, not elsewhere classified.....	112	348	1,845	433	8,594	1,081,389	3,088,457	3,992,856	198,968	11,094,680	6,902,916
Fur goods.....	10	23	125		49	74,521	168,755	805,651	2,761	791,412	483,100
Furniture, including store and office fixtures.....	38	92	700		2,222	231,891	955,418	1,282,306	28,975	3,034,261	1,722,480
Glass products (except mirrors) made from purchased glass.....	3	1	12		10	( <sup>7</sup> )	15,109	24,010	509	62,966	38,437
House-furnishing goods, not elsewhere classified.....	10	16	55		69	24,846	64,488	179,141	1,428	347,307	166,798

See footnotes at end of this section, p. 548.

CENSUS OF MANUFACTURES: 1929

TABLE 13.—GENERAL STATISTICS FOR THE SEATTLE-TACOMA INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>KING COUNTY—Continued</b>											
Ice cream.....	12	21	219	35	942	\$67, 113	\$362, 930	\$1, 096, 250	\$47, 745	\$2, 218, 317	\$1, 074, 310
Ice, manufactured.....	8	19	70	543	1, 620	43, 825	114, 118	19, 414	57, 334	456, 730	370, 982
Jewelry.....	9	14	54	-----	21	20, 872	81, 982	114, 000	966	310, 714	194, 830
Lumber and timber products, not elsewhere classified.....	71	391	6, 611	37, 108	12, 420	1, 049, 432	9, 171, 539	10, 955, 067	194, 412	28, 415, 685	17, 266, 200
Marble, granite, slate, and other stone products.....	4	11	44	-----	437	27, 679	74, 702	99, 724	3, 328	240, 606	146, 554
Millinery.....	9	39	268	-----	25	91, 692	250, 834	415, 759	3, 031	882, 802	464, 012
Mirror and picture frames.....	3	2	14	-----	16	(?)	20, 416	6, 878	554	43, 083	35, 051
Nonferrous-metal alloys and products, not including aluminum products.....	16	40	165	-----	769	117, 939	265, 772	770, 169	18, 875	1, 501, 410	712, 366
Patent or proprietary medicines and compounds <sup>c</sup> .....	9	24	26	-----	35	50, 196	29, 352	122, 126	1, 215	322, 051	198, 710
Planing-mill products (including general millwork, not made in planing mills connected with sawmills.....)	35	80	573	280	3, 093	297, 544	861, 595	2, 347, 819	41, 309	4, 074, 523	1, 685, 395
Pottery, including porcelain ware.....	4	3	13	-----	37	4, 200	14, 157	8, 845	1, 789	47, 180	41, 546
Printing and publishing, book and job.....	102	226	616	-----	1, 032	604, 143	1, 120, 093	1, 055, 559	38, 769	4, 180, 538	3, 086, 210
Printing and publishing, newspaper and periodical.....	65	956	710	-----	1, 072	2, 436, 093	1, 550, 238	2, 302, 597	43, 807	10, 018, 690	8, 272, 286
Rubber goods other than tires, inner tubes, and boots and shoes.....	4	6	28	-----	166	12, 075	28, 510	13, 889	1, 613	103, 904	88, 402
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.....	5	8	21	-----	110	24, 400	44, 965	372, 675	3, 993	485, 260	108, 592
Ship and boat building, steel and wooden, including repair work.....	30	98	1, 144	365	5, 644	274, 031	1, 919, 664	1, 372, 200	53, 171	4, 134, 246	2, 708, 815
Sporting and athletic goods, not including firearms or ammunition <sup>d</sup> .....	8	12	43	-----	45	22, 020	49, 670	145, 211	1, 451	316, 515	169, 853
Trunks, suitcases, and bags.....	7	15	90	-----	42	41, 017	124, 129	160, 079	2, 687	458, 272	289, 506
Wall plaster, wall board, insulating board, and floor composition.....	7	30	108	-----	831	103, 156	134, 970	374, 577	17, 733	929, 445	537, 135
Other industries.....	398	2, 343	11, 213	8, 334	58, 419	5, 913, 635	15, 531, 607	64, 893, 883	2, 311, 668	110, 998, 782	43, 793, 231

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>c</sup> The items for each of the five industries covered by this footnote include data for 1 establishment located outside the county, to avoid disclosing the figures reported by the establishments in question.  
<sup>d</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."  
<sup>e</sup> The figures for 2 establishments located outside the county have been included in the items for the "Sporting and athletic goods, not including firearms or ammunition" industry to avoid disclosing the data reported by these establishments.

PIERCE COUNTY

All Industries, total.....	415	1, 044	18, 282	30, 930	96, 005	\$4, 932, 633	\$24, 269, 772	\$104, 127, 725	\$2, 537, 910	\$161, 420, 232	\$54, 704, 597
Beverages.....	4	11	29	15	115	20, 293	45, 030	91, 173	5, 957	222, 622	125, 492
Bread and other bakery products.....	45	36	334	648	648	49, 162	446, 352	994, 922	43, 581	2, 000, 407	970, 004
Butter.....	5	14	23	40	127	20, 810	39, 369	528, 258	4, 825	635, 898	102, 815
Canning and preserving; Fruits and vegetables; pickles, jellies, preserves and sauces.....	7	67	667	730	730	134, 750	498, 956	2, 912, 978	30, 701	4, 590, 290	1, 646, 620
Coffee and spice, roasting and grinding.....	5	11	22	87	87	37, 658	26, 628	474, 912	3, 168	648, 502	170, 422
Concrete products.....	9	9	35	10	284	23, 920	46, 578	60, 175	2, 524	184, 946	122, 447
Confectionery.....	6	26	109	211	211	79, 621	98, 916	263, 656	6, 803	651, 291	380, 832
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	14	18	90	143	143	34, 360	151, 205	208, 657	2, 048	522, 315	311, 610
Feeds, prepared, for animals and fowls.....	8	35	72	1, 697	1, 697	84, 497	106, 821	2, 641, 111	13, 545	3, 069, 695	416, 039
Food preparations, not elsewhere classified.....	3	8	19	47	47	21, 700	21, 503	195, 503	2, 225	273, 061	75, 333
Foundry and machine-shop products, not elsewhere classified.....	23	97	452	105	2, 176	228, 022	731, 543	1, 093, 318	33, 499	2, 678, 029	1, 501, 212
Furniture, including store and office fixtures.....	16	73	806	520	2, 053	195, 979	816, 783	1, 358, 772	23, 465	3, 069, 454	1, 687, 217
Ice cream.....	6	8	39	343	343	18, 036	61, 865	192, 528	8, 664	491, 201	290, 069
Ice, manufactured.....	4	9	20	747	747	21, 921	29, 754	11, 123	13, 038	138, 010	113, 349
Lumber and timber products, not elsewhere classified.....	68	439	8, 220	32, 745	23, 082	1, 466, 586	10, 776, 556	11, 311, 796	405, 084	33, 603, 347	21, 886, 467
Marble, granite, slate, and other stone products.....	4	7	103	1, 470	1, 470	27, 478	161, 349	132, 176	9, 434	352, 558	210, 948
Nonferrous-metal alloys and products, not including aluminum products.....	3	3	8	22	22	6, 282	17, 619	48, 482	1, 167	81, 875	81, 726
Planing-mill products (including general millwork, not made in planing mills connected with sawmills.....)	27	124	966	925	7, 083	305, 932	1, 291, 445	3, 234, 513	72, 934	5, 772, 524	2, 465, 977
Printing and publishing, book and job.....	25	55	120	218	218	120, 843	180, 773	212, 682	8, 284	697, 969	477, 003
Printing and publishing, newspaper and periodical.....	16	197	190	327	327	405, 346	428, 513	397, 492	13, 078	2, 024, 219	1, 613, 649
Pulp (wood and other fiber).....	3	23	378	1, 380	9, 173	57, 926	335, 683	879, 395	116, 215	2, 198, 647	1, 202, 537
Ship and boat building, steel and wooden, including repair work.....	10	13	140	6	975	23, 047	224, 463	342, 358	3, 195	727, 032	381, 529
Other industries.....	104	661	5, 440	4, 193	44, 842	1, 546, 614	7, 730, 708	76, 541, 245	1, 714, 476	96, 777, 781	18, 522, 060

<sup>a</sup> Includes item for "Paper" industry. All figures for that industry except those for power are included in the "Other industries" items to avoid disclosing the figures reported by an individual establishment.



TABLE 13.—GENERAL STATISTICS FOR THE SEATTLE-TACOMA INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>SPOKANE COUNTY</b>											
All industries, total.....	316	1,032	8,051	8,168	37,409	\$3,677,652	\$10,632,736	\$38,085,054	\$1,261,023	\$65,153,181	\$25,806,504
Beverages.....	7	6	29	18	351	13,250	43,905	137,089	6,708	336,381	191,684
Boxes, wooden, except cigar boxes.....	4	13	114	100	809	44,695	123,566	467,169	12,419	681,917	202,309
Bread and other bakery products.....	35	70	377	3	533	140,280	520,350	1,517,072	74,555	3,409,240	1,814,818
Butter.....	9	47	84	80	445	90,447	109,100	1,974,957	24,515	2,529,739	590,267
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	4	19	20	-----	74	40,680	41,532	263,945	4,101	458,833	200,787
Clay products (other than pottery) and nonclay refractories.....	6	22	202	1,206	150	50,710	225,033	40,753	78,079	502,129	374,297
Concrete products.....	4	7	26	51	129	12,406	30,300	45,095	2,883	121,877	78,890
Confectionery.....	7	28	141	-----	213	65,300	127,322	364,301	12,391	754,603	377,911
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	9	23	64	-----	56	57,250	109,300	242,101	1,787	546,722	302,834
Electrical machinery, apparatus, and supplies.....	3	4	9	-----	27	11,055	11,434	24,023	1,037	58,148	33,088
Flour and other grain-mill products.....	4	52	168	-----	1,849	125,932	229,140	6,436,230	55,849	7,444,561	952,482
Foundry and machine-shop products, not elsewhere classified.....	14	64	349	-----	1,350	238,784	488,569	706,966	38,153	1,825,956	990,837
Fur goods.....	7	10	60	-----	20	19,411	69,132	131,452	1,839	300,660	167,359
Furniture, including store and office fixtures.....	7	14	60	-----	79	23,655	75,185	182,766	1,831	357,560	172,963
Ice cream.....	7	9	65	-----	212	20,993	106,754	357,851	15,686	643,625	270,088
Ice, manufactured.....	4	4	40	-----	930	11,856	56,840	6,226	27,826	193,000	158,948
Lumber and timber products, not elsewhere classified.....	13	105	1,311	3,563	3,533	285,592	1,637,957	1,083,321	39,168	5,496,889	3,524,400
Marble, granite, slate, and other stone products.....	4	11	10	-----	174	21,200	27,227	23,479	3,368	85,056	58,209
Planing-mill products (including general millwork), not made in planing mills connected with saw-mills.....	19	90	1,151	1,800	5,905	252,472	1,179,270	5,186,001	87,625	7,615,386	2,341,760
Printing and publishing, book and job.....	20	58	160	-----	225	111,828	202,371	255,847	10,272	890,058	629,939
Printing and publishing, newspaper and periodical.....	12	513	241	-----	707	867,077	465,698	550,190	21,065	3,865,615	3,298,460
Wood preserving.....	3	16	185	125	634	44,655	263,717	2,342,680	18,089	2,968,389	607,620
Other industries.....	105	443	3,161	1,132	18,904	1,128,118	4,425,980	14,806,220	721,077	24,063,857	8,536,560

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

## CENSUS OF MANUFACTURES: 1929

TABLE 14.—GENERAL STATISTICS FOR IMPORTANT CITIES, BY INDUSTRIES: 1929

[This table presents, for each important industrial city in the State, separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>SEATTLE</b>											
[The totals for all industries do not include data for a few establishments located outside the city (see footnotes 1, 2, and 4), and therefore are slightly smaller than the sums of the items for the individual industries.]											
All industries, total.....	1,219	5,199	23,003	25,271	01,009	\$13,591,062	\$33,347,697	\$105,507,442	\$2,905,983	\$190,810,372	\$01,306,947
Beverages <sup>1</sup> .....	13	12	31	100	17,844	52,216	104,101	5,097	255,861	146,053	
Bookbinding and blank-book making <sup>2</sup> .....	11	6	34	40	16,185	42,444	37,094	1,581	168,241	129,566	
Boots and shoes, other than rubber.....	6	11	45	54	52,335	55,804	175,863	2,018	338,222	160,341	
Boxes, paper, not elsewhere classified.....	10	47	207	205	135,790	200,540	643,958	7,560	1,170,808	523,290	
Bread and other bakery products.....	137	175	1,187	28	1,694	410,423	1,801,793	4,644,071	179,093	10,234,376	5,410,312
Butter <sup>3</sup> .....	5	14	27	25	613	34,024	38,902	907,314	8,844	1,082,064	106,806
Canning and preserving: Fish, crabs, shrimp, oysters, and clams <sup>4</sup> .....	13	21	96	505	60,700	120,772	1,199,898	15,235	1,596,734	381,601	
Coffee and spice, roasting and grinding.....	12	81	154	392	278,036	205,084	3,392,676	20,827	4,931,872	1,518,369	
Confectionery <sup>2</sup> .....	30	110	449	794	226,240	426,868	1,511,002	24,288	3,049,110	1,513,829	
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	39	74	375	90	337	253,780	598,060	886,887	9,306	2,177,432	1,231,239
Electrical machinery, apparatus, and supplies.....	14	82	272	421	206,809	330,108	871,848	14,136	1,703,523	817,489	
Engraving, steel and copperplate, and plate printing <sup>1</sup> .....	4	16	39	31	32,014	64,071	59,683	1,096	101,703	130,324	
Feeds, prepared, for animals and fowls <sup>1</sup> .....	10	52	230	2,073	102,523	288,411	6,560,891	37,696	7,860,089	1,271,102	
Flavoring extracts and flavoring shirups.....	3	8	26	50	18,688	36,823	277,106	903	426,825	148,726	
Food preparations, not elsewhere classified.....	11	29	48	10	169	41,355	51,453	514,567	6,563	730,049	208,919
Foundry and machine-shop products, not elsewhere classified <sup>1</sup> .....	112	348	1,845	433	8,694	1,081,389	3,088,457	3,992,850	198,903	11,004,080	6,002,916
Fur goods.....	10	23	125	49	74,521	168,755	305,551	2,761	791,412	483,100	
Furniture, including store and office fixtures.....	38	92	700	2,222	231,891	955,418	1,282,806	28,975	3,034,261	1,722,480	
Glass products (except mirrors) made from purchased glass.....	3	1	12	10	( <sup>5</sup> )	15,109	24,010	509	62,956	38,437	
House-furnishing goods, not elsewhere classified.....	10	16	55	50	24,846	64,488	179,141	1,428	347,367	160,798	
Ice cream <sup>1</sup> .....	12	21	219	35	642	87,113	362,930	1,066,250	47,748	2,218,317	1,074,319
Ice, manufactured.....	8	19	70	543	1,629	43,825	114,118	19,414	57,334	456,730	379,982
Jewelry.....	9	14	54	21	20,872	81,982	114,900	966	310,714	194,839	
Lumber and timber products, not elsewhere classified.....	22	151	2,346	15,907	8,576	453,498	3,355,646	7,556,478	97,660	13,887,420	6,233,282
Marble, granite, slate, and other stone products.....	4	11	44	437	27,679	74,702	305,551	3,328	249,006	146,554	
Millinery.....	9	39	208	25	91,692	250,834	415,759	3,031	882,802	404,012	
Mirror and picture frames.....	3	2	14	16	( <sup>5</sup> )	20,416	6,878	554	43,083	35,051	
Nonferrous-metal alloys and products, not including aluminum products.....	16	40	165	769	117,939	265,772	770,169	18,875	1,501,410	712,366	
Patent or proprietary medicines and compounds <sup>1</sup> .....	9	24	26	35	50,196	29,352	122,120	1,215	322,051	198,710	
Planing-mill products (including general millwork), not made in planing mills connected with sawmills <sup>1</sup> .....	35	89	573	250	3,063	297,544	561,595	2,347,819	41,309	4,074,523	1,685,395
Pottery, including porcelain ware <sup>1</sup> .....	4	3	13	37	4,200	14,157	3,845	1,789	47,180	41,546	
Printing and publishing, book and job.....	99	226	613	1,021	604,143	1,115,369	1,044,162	38,132	4,130,573	3,048,279	
Printing and publishing, newspaper and periodical.....	50	946	686	1,031	2,420,776	1,513,719	2,285,350	41,402	10,497,471	8,170,719	
Rubber goods, other than tires, inner tubes, and boots and shoes.....	4	6	28	166	12,075	28,510	13,880	1,613	103,904	88,402	
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments.....	5	8	21	110	24,400	44,965	372,675	3,993	485,260	108,592	
Trunks, suitcases, and bags.....	7	15	90	42	41,017	124,129	166,079	2,687	458,272	230,506	
Wall plaster, wall board, insulating board, and floor composition.....	7	30	105	831	103,156	134,070	374,577	17,733	929,445	537,135	
Other industries.....	438	2,354	11,776	7,920	54,202	5,941,418	16,344,822	61,694,935	1,968,795	108,852,346	45,188,616

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>1</sup> The items for each of the five industries covered by this footnote include data for 2 establishments located outside the city, to avoid disclosing the figures reported by the establishments in question.

<sup>2</sup> The items for each of the 6 industries covered by this footnote include data for 1 establishment located outside the city, to avoid disclosing the figures reported by the establishments in question.

<sup>3</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

<sup>4</sup> The figures for 3 establishments located outside the city have been included in the items for the "Planing-mill products (including general millwork), not made in planing mills connected with sawmills" industry to avoid disclosing the data reported by these establishments.

TABLE 14.—GENERAL STATISTICS FOR IMPORTANT CITIES, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>b</sup>	Value added by manufacture <sup>c</sup>
				Prime movers	Electric motors driven by purchased energy						

SPOKANE

[The totals for all industries do not include data for a few establishments located outside the city (see footnote 5), and therefore are slightly smaller than the sums of the items for the individual industries]

All industries, total.....	275	1,427	5,252	2,024	19,252	\$3,093,956	\$6,630,020	\$26,670,858	\$636,127	\$45,607,723	\$18,300,738
Beverages.....	7	6	29	18	351	13,250	43,905	137,959	6,708	336,381	191,684
Boxes, wooden, except cigar boxes <sup>d</sup> .....	4	13	114	100	809	44,095	123,506	467,189	12,419	681,917	202,309
Bread and other bakery products <sup>d</sup> .....	35	70	377	3	533	140,280	526,350	1,517,072	74,355	3,406,240	1,814,813
Butter <sup>d</sup> .....	9	47	84	80	445	90,447	109,100	1,074,957	24,615	2,529,739	530,267
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	4	19	29	-----	74	40,680	41,532	253,945	4,101	458,833	200,787
Concrete products.....	4	7	26	51	129	12,406	30,300	45,095	2,883	121,877	73,899
Confectionery.....	7	28	141	-----	213	65,300	127,322	364,301	12,391	784,603	377,011
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	9	23	64	-----	56	57,250	109,399	242,101	1,787	546,722	302,534
Electrical machinery, apparatus, and supplies.....	3	4	9	-----	27	11,055	11,434	24,023	1,037	58,148	33,088
Foundry and machine-shop products, not elsewhere classified <sup>d</sup> .....	14	64	349	-----	1,350	238,784	488,569	706,906	38,153	1,325,956	900,837
Fur goods.....	7	10	60	-----	20	19,411	69,132	131,452	1,830	300,650	167,359
Furniture, including store and office fixtures.....	7	14	60	-----	79	23,655	75,185	182,766	1,831	367,550	172,953
Ice cream.....	7	9	65	-----	212	20,993	106,764	357,851	15,086	643,625	270,088
Lumber and timber products, not elsewhere classified.....	3	78	704	500	3,533	202,017	734,778	1,450,119	39,168	3,455,327	1,966,040
Planing-mill products (including general millwork), not made in planing mills connected with saw-mills.....	16	89	912	875	3,696	226,196	975,207	2,557,257	62,057	4,178,045	1,558,731
Printing and publishing, book and job.....	29	53	100	-----	225	111,828	262,371	255,847	10,272	806,053	629,939
Printing and publishing, newspaper and periodical.....	9	510	236	-----	697	862,909	458,845	543,909	20,938	3,827,290	3,262,443
Other industries.....	105	389	1,847	497	6,783	914,897	2,359,641	15,456,572	308,057	21,356,713	5,591,018

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>c</sup> The items for each of the four industries covered by this footnote include data for 1 establishment located outside the city, to avoid disclosing the figures reported by the establishments in question.

TACOMA

[The totals for all industries do not include data for a few establishments located outside the city (see footnotes 6 and 7), and therefore are slightly smaller than the sums of the items for the individual industries]

All industries, total.....	329	1,689	13,424	20,417	62,873	\$4,008,505	\$17,839,155	\$53,448,453	\$1,276,190	\$92,774,045	\$38,049,402
Beverages <sup>e</sup> .....	4	11	29	15	115	20,293	46,030	91,173	5,957	222,622	126,492
Bread and other bakery products.....	41	36	317	-----	601	49,162	426,504	914,164	38,193	1,866,649	914,382
Butter <sup>e</sup> .....	6	14	23	40	127	20,810	39,369	528,238	4,825	635,898	102,815
Coffee and spice, roasting and grinding.....	5	11	22	-----	57	37,658	26,628	474,012	3,168	648,502	170,422
Confectionery.....	6	26	109	-----	211	79,621	98,016	263,656	6,803	651,291	380,832
Feeds, prepared, for animals and fowls <sup>e</sup> .....	8	35	72	-----	1,097	84,407	106,821	2,641,111	13,545	3,069,695	415,039
Food preparations, not elsewhere classified.....	3	8	19	-----	47	21,700	21,503	195,503	2,225	273,031	75,333
Foundry and machine-shop products, not elsewhere classified <sup>e</sup> .....	23	97	452	105	2,176	228,022	731,543	1,093,318	83,409	2,678,029	1,501,212
Furniture, including store and office fixtures <sup>e</sup> .....	10	73	808	520	2,953	195,070	316,783	1,368,772	23,465	3,069,454	1,687,217
Ice cream <sup>7</sup> .....	6	8	39	-----	343	18,036	61,865	192,528	8,604	491,201	290,009
Lumber and timber products, not elsewhere classified.....	29	333	5,549	22,210	21,662	1,127,206	7,132,081	9,815,889	350,291	25,186,405	5,020,225
Marble, granite, slate, and other stone products.....	4	7	103	-----	1,470	27,478	161,849	132,176	0,434	382,558	210,948
Nonferrous-metal alloys and products, not including aluminum products.....	3	3	8	-----	22	6,282	17,610	48,482	1,167	81,375	31,726
Planing-mill products (including general millwork), not made in planing mills connected with saw-mills <sup>7</sup> .....	27	124	966	925	7,088	305,982	1,201,445	3,234,513	72,934	5,772,524	2,465,077
Printing and publishing, book and job <sup>e</sup> .....	25	55	120	-----	218	120,843	180,773	212,682	8,284	697,969	477,003
Other industries.....	134	759	4,865	2,602	25,485	1,692,526	6,781,816	32,604,649	661,220	47,680,005	14,424,236

<sup>e</sup> The items for each of the six industries covered by this footnote include data for 1 establishment located outside the city, to avoid disclosing the figures reported by the establishments in question.

<sup>7</sup> The items for each of the two industries covered by this footnote include data for 2 establishments located outside the city, to avoid disclosing the figures reported by the establishments in question.

# WEST VIRGINIA

TABLE 1.—SUMMARY FOR THE STATE: 1899 TO 1929

[Data for the "Automobile repairing" industry are included in the figures for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>4</sup>
			Total	Prime movers	Electric motors driven by purchased energy		Total <sup>3</sup>	Materials and containers <sup>3</sup>	Fuel and purchased energy		
1920-----	1,488	85,326	650,199	379,226	270,973	\$115,294,705	\$261,397,786	\$232,084,404	\$28,413,382	\$513,012,300	\$251,014,514
1927-----	1,313	77,630	546,440	364,667	181,773	103,431,224	252,884,424	225,043,623	27,840,801	455,216,551	202,832,127
1925-----	1,395	80,700	495,051	342,150	152,892	105,892,102	280,880,407	(6)	(5)	470,821,582	209,941,176
1923-----	1,487	85,661	371,699	257,096	113,703	109,936,819	259,151,186	(6)	(5)	479,510,169	220,368,933
1921-----	1,560	60,536	(6)	(6)	(6)	78,549,260	170,876,327	(6)	(6)	310,422,830	130,546,503
1919-----	2,785	83,036	328,455	265,538	62,917	101,840,420	270,940,596	250,192,027	20,747,069	471,970,877	201,030,281
1914-----	2,749	71,078	278,219	251,007	27,152	43,784,096	110,033,165	102,827,781	7,205,384	193,511,782	83,478,617
1909-----	2,586	63,893	217,243	211,913	5,390	33,000,355	92,877,988	84,084,652	8,793,336	161,949,526	69,071,538
1904-----	2,109	43,768	138,484	137,708	776	21,153,042	54,419,206	51,650,017	2,768,589	99,040,676	44,621,470
1899-----	1,824	33,080	91,596	91,509	27	12,639,856	37,228,253	(7)	(7)	67,006,823	20,778,509
PER CENT OF INCREASE OR DECREASE (—)											
1927-1929-----	13.8	9.9	19.0	4.0	49.1	11.5	3.4	3.5	2.1	12.7	24.4
1925-1927-----	-5.9	-3.8	10.4	6.6	18.9	-2.3	-3.1			-3.3	-3.0
1923-1925-----	-0.2	-5.8	33.2	32.6	34.5	-3.7	0.7			-1.8	-4.7
1921-1923-----	-4.1	41.5				40.0	51.7			54.5	57.9
1919-1921-----	-44.3	-27.1				-22.9	-30.9			-34.2	-30.6
1919-1929-----	-46.6	2.8	98.0	42.8	330.7	13.2	-3.5	-0.9	36.9	8.7	25.2
1909-1919-----	7.7	30.0	51.2	25.3	1,030.4	208.6	191.7	197.5	130.0	191.4	191.0
1899-1909-----	41.8	93.1	137.2	131.4	(9)	161.1	149.5			141.7	132.0

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>3</sup> Includes cost of foundry supplies for 1927 and earlier years but not for 1929. See GENERAL EXPLANATIONS—Comparableness with Preceding Years—Schedule Changes—Mill or Shop Supplies.  
<sup>4</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>5</sup> Not reported separately.  
<sup>6</sup> Not called for on schedule.  
<sup>7</sup> No comparable data.  
<sup>8</sup> Per cent not computed where base is less than 100.

## CENSUS OF MANUFACTURES: 1929

TABLE 2.—SUMMARY FOR THE WHEELING INDUSTRIAL AREA AND FOR COUNTIES AND CITIES: 1929

	Popula- tion, 1930	Number of estab- lish- ments	Wage earners (average for the year) <sup>1</sup>	Horse- power <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manu- facture
						Total	Materials and con- tainers	Fuel and purchased energy		
The State.....	1,720,205	1,488	85,326	650,199	\$115,294,705	\$261,397,786	\$232,084,404	\$28,413,382	\$513,012,300	\$251,614,514
Wheeling Industrial Area <sup>3</sup> .....	394,761	537	45,906	446,001	70,728,962	179,306,489	158,883,221	20,483,268	319,433,328	140,066,839
Portion in West Virginia.....	125,251	186	22,417	170,089	35,457,516	87,429,771	76,914,247	10,515,524	160,659,623	73,229,852
Portion in Ohio.....	269,510	351	23,489	269,912	35,271,446	91,936,718	81,968,974	9,967,744	158,773,705	66,836,987
<i>Counties in West Virginia <sup>4</sup></i>										
Barbour.....	18,628	19	102	580	84,721	209,791	205,798	3,993	443,808	234,017
Berkeley.....	28,030	46	3,740	12,641	3,507,065	7,526,938	6,807,692	719,290	14,317,154	6,790,166
Boone.....	24,586	8	302	1,115	355,218	260,564	252,395	8,559	996,206	735,252
Braxton.....	22,679	12	342	1,032	447,952	392,698	351,449	41,240	1,123,577	730,879
Brooke.....	24,063	23	3,380	27,618	5,470,114	13,090,114	9,902,142	3,187,972	24,183,793	11,093,670
Cabell.....	90,786	100	8,479	47,070	11,200,846	26,708,415	25,097,766	1,610,649	53,768,167	27,059,752
Clay.....	13,125	14	179	708	246,916	92,916	89,691	3,225	492,080	309,164
Doddridge.....	10,488	5	21	69	22,784	32,565	32,330	235	78,046	46,481
Fayette.....	72,050	31	1,006	11,228	1,183,417	2,081,009	1,110,044	961,965	4,574,131	2,493,122
Gillmer.....	10,641	7	73	314	90,444	24,680	17,615	7,065	143,386	118,706
Greenbrier.....	35,878	20	698	2,766	890,295	610,340	590,021	20,319	2,894,185	2,274,845
Hancock.....	28,511	45	11,204	116,130	19,559,051	39,900,137	33,811,707	6,178,340	75,219,211	35,229,071
Hardy.....	9,816	16	187	953	179,398	628,536	619,539	8,997	1,050,591	422,055
Harrison.....	78,567	74	4,299	17,213	5,849,527	11,791,946	10,414,123	1,377,823	23,446,045	11,054,099
Jackson.....	16,124	12	84	543	67,170	117,515	111,309	6,206	260,743	143,228
Jefferson.....	15,780	28	553	8,017	548,025	1,730,087	1,364,997	365,090	3,095,155	1,365,068
Kanawha.....	157,667	133	7,944	142,609	10,543,039	31,233,096	26,335,569	4,897,527	59,997,624	28,764,528
Lewis.....	21,794	23	929	1,898	1,248,012	1,225,983	1,053,451	172,532	3,235,560	2,009,577
Lincoln.....	19,156	6	20	82	15,090	6,162	5,850	312	36,050	20,888
Logan.....	58,534	10	599	1,880	860,026	595,115	547,552	47,563	2,035,590	1,440,475
McDowell.....	90,479	30	554	3,880	769,868	988,749	773,093	215,656	2,691,111	1,702,362
Marion.....	66,655	45	2,557	17,108	3,514,294	7,117,504	5,210,749	1,906,755	16,193,495	9,075,991
Marshall.....	39,831	40	3,920	17,731	5,738,846	16,064,720	14,584,682	1,480,038	28,671,133	12,606,413
Mason.....	20,788	19	557	2,411	501,435	958,647	868,150	90,497	2,037,402	1,078,755
Mercer.....	61,323	35	2,364	75,480	3,090,893	3,638,353	3,270,094	368,259	8,359,800	4,721,447
Mingo.....	38,319	23	929	3,146	1,270,379	887,864	813,608	74,256	2,894,076	1,096,212
Monongalia.....	50,083	40	1,733	7,441	2,543,314	3,450,490	3,039,471	411,019	8,038,792	4,583,302
Monroe.....	11,949	18	30	1,048	32,129	133,197	115,100	18,097	249,066	115,860
Morgan.....	8,406	14	328	726	226,243	1,638,480	1,015,340	23,149	2,179,612	541,123
Nicholas.....	20,686	16	1,795	11,156	2,112,973	5,117,695	4,880,193	237,502	10,598,088	5,480,993
Ohio.....	72,077	118	7,764	32,941	10,428,351	34,349,520	33,200,308	1,140,122	61,256,619	26,907,090
Pocahontas.....	0,660	11	57	235	47,767	44,901	44,650	245	137,522	92,621
Preston.....	14,555	17	1,036	4,043	1,211,384	4,310,740	4,202,354	48,386	6,640,034	2,329,204
Raleigh.....	20,043	33	808	7,844	910,992	648,212	410,014	229,198	2,416,726	1,768,514
Randolph.....	68,072	30	940	3,213	1,217,780	850,267	802,551	56,716	3,079,447	2,220,180
Randolph.....	25,049	32	1,374	4,545	1,526,203	3,171,797	3,117,909	53,888	5,854,517	2,682,720
Ritchie.....	15,594	14	89	417	57,094	50,704	55,040	3,764	106,150	136,446
Roane.....	19,478	8	29	217	36,557	112,814	109,549	3,265	231,555	118,741
Taylor.....	19,114	15	941	3,271	1,342,000	1,997,637	1,770,202	221,435	4,382,884	2,335,247
Tyler.....	12,785	16	291	1,028	361,948	475,200	376,048	99,152	1,288,095	812,895
Upshur.....	17,944	12	366	1,011	420,133	602,247	628,709	33,538	1,365,132	702,885
Wayne.....	31,206	26	799	6,290	988,388	2,862,568	2,479,737	382,826	5,574,896	2,712,323
Webster.....	14,216	9	737	2,367	686,650	408,552	399,901	8,651	2,102,033	1,753,481
Wetzel.....	22,334	28	919	2,627	948,156	1,091,332	851,822	230,510	2,875,106	1,783,804
Wood.....	56,521	75	6,408	20,782	7,733,608	16,788,638	15,787,774	950,864	38,961,092	22,222,454
Wyoming.....	20,926	14	636	3,050	890,102	633,924	606,742	27,182	2,038,351	1,454,427
All other counties <sup>5</sup> .....	114,709	103	3,206	12,626	4,293,332	14,616,983	14,164,578	452,405	21,207,784	6,590,801
<i>Cities having 10,000 inhabitants or more <sup>6</sup></i>										
Bluefield, W. Va. and Va., total.....	23,245	25	1,506	6,230	1,942,500	2,323,470	2,210,731	112,748	5,450,155	3,126,676
Bluefield, W. Va.....	19,339	19	1,482	6,159	1,920,836	2,257,682	2,146,900	110,782	5,323,981	3,066,299
Bluefield, Va.....	3,906	6	24	71	21,754	65,788	63,831	1,966	120,174	60,377
Charleston.....	60,408	88	2,353	11,339	2,977,542	7,336,271	6,824,001	512,270	16,263,409	8,927,138
Clarksburg.....	28,806	40	2,933	12,805	3,956,705	7,342,481	6,595,270	747,211	16,194,843	8,852,362
Fairmont.....	23,159	31	2,152	13,029	2,890,633	5,565,326	4,674,418	890,908	12,821,423	7,256,097
Martinsburg.....	14,867	27	3,080	4,299	2,709,894	5,843,962	5,643,639	200,273	10,584,730	4,740,768
Morgantown.....	16,186	31	654	2,808	1,288,199	1,029,195	788,708	240,487	3,458,060	2,428,865
Moundsville.....	14,411	21	1,461	3,433	1,957,879	4,299,420	3,967,032	332,388	8,978,264	4,678,844
Parkersburg.....	20,623	55	1,861	9,197	2,615,420	9,773,133	9,461,554	316,579	16,366,160	6,588,027
Wheeling.....	61,659	112	7,748	32,505	10,407,173	34,245,648	33,104,009	1,141,639	61,096,190	26,850,542

<sup>1</sup> Not including salaried employees.<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.<sup>3</sup> The Wheeling Industrial Area comprises Brooke, Hancock, and Ohio Counties, W. Va., and Belmont, Columbiana, and Jefferson Counties, Ohio.<sup>4</sup> Statistics are presented for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing approximations of the data supplied by individual establishments, and combined figures are given for the remaining counties as a single group ("All other counties"). Certain of the counties for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.<sup>5</sup> Calhoun, Grant, Hampshire, Mineral, Pleasants, Putnam, Summers, and Tucker Counties.<sup>6</sup> Not including Huntington, which reported more than 10,000 inhabitants at the census of 1930. It is necessary to withhold the figures for this city from publication to avoid disclosing an approximation of the data for an individual establishment. See footnote 4. No manufacturing was reported from Wirt County.

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORATIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929 <sup>1</sup>	94,369	81,208	13,161	794	768	26	887	844	43	7,352	5,950	1,402	85,320	73,640	11,680
1919 <sup>1,4</sup>	93,688	83,795	9,893	2,524	2,433	91	907	975	22	7,131	5,703	1,428	83,036	74,684	8,352
1914 <sup>4</sup>	79,353	72,711	6,642	2,559	2,485	74	652	639	13	5,064	4,388	676	71,078	65,199	5,879
1909	71,403	66,121	5,342	2,509	2,527	72	568	562	6	4,403	3,839	564	63,893	59,193	4,700

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.

<sup>2</sup> Not including employees of central administrative offices, as follows: Principal salaried officers of corporations—total, 128, male. Other salaried officers and employees—total, 1,541; male, 1,044; female, 497. The corresponding data for 1919 and earlier years are included in the respective items for those years but were not tabulated separately. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>3</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for December 14. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929 <sup>1</sup>	85,320	83,313	84,539	85,721	86,202	86,143	86,861	85,593	86,774	86,694	86,323	84,023	81,726	94.1
1919 <sup>1</sup>	83,036	80,721	81,101	81,170	80,719	79,617	79,901	81,129	87,105	89,041	84,209	84,392	87,357	80.4
1914 <sup>1</sup>	71,078	71,642	71,608	74,064	76,877	76,205	73,332	69,880	71,044	71,064	69,773	63,875	62,572	81.6
1909 <sup>1</sup>	63,893	66,191	67,393	60,499	62,456	62,655	65,467	62,187	65,651	68,290	69,202	68,647	68,056	81.2

<sup>1</sup> The figures for 1919 and 1914 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment, even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)
All classes	1,488	85,320	45 and over but under 48	38	2,896
Not reported	271	933	48	317	22,547
Under 40	28	237	Over 48 but under 54	143	10,734
40	18	858	54	160	4,243
Over 40 but under 44	7	498	Over 54 but under 60	150	22,982
44 and over but under 45	88	4,090	60 and over	278	15,278

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures; and these for 1919 and 1909 include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
All establishments	1,488	2,785	2,586	85,320	83,036	63,893	51 to 100	88	109	114	6,573	8,141	8,140
No wage earners	32	392	200				101 to 250	108	121	93	17,924	19,222	14,899
1 to 5	695	1,425	1,417	2,105	3,085	3,266	251 to 500	46	48	32	15,175	14,743	11,208
6 to 20	307	484	503	3,387	5,377	5,460	501 to 1,000	22	21	10	14,531	13,999	11,095
21 to 50	181	182	209	5,959	6,028	7,043	1,001 to 2,500	8	8	2	19,665	12,461	2,598
							2,501 and over	1					

<sup>1</sup> Combined to avoid disclosing number of wage earners reported for an individual establishment.

## CENSUS OF MANUFACTURES: 1929

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	1,488	2,785	2,588	85,326	83,036	63,893	\$513,012,300	\$471,970,877	\$161,949,626	\$251,614,514	\$201,030,281	\$69,071,538
Less than \$5,000.....	( <sup>2</sup> )	755	1,082	( <sup>2</sup> )	569	1,988	( <sup>2</sup> )	1,815,928	2,548,624	( <sup>2</sup> )	1,178,507	1,734,907
\$5,000 to \$19,999.....	596	869	759	1,810	2,449	4,240	6,254,641	9,372,762	7,566,470	3,930,326	5,117,787	4,352,873
\$20,000 to \$99,999.....	418	649	462	4,401	6,350	10,384	19,385,704	28,916,989	21,017,729	11,697,879	13,812,499	10,417,810
\$20,000 to \$49,999.....	256	( <sup>3</sup> )	( <sup>3</sup> )	1,860	( <sup>3</sup> )	( <sup>3</sup> )	7,929,099	( <sup>3</sup> )	( <sup>3</sup> )	4,750,175	( <sup>3</sup> )	( <sup>3</sup> )
\$50,000 to \$99,999.....	162	( <sup>3</sup> )	( <sup>3</sup> )	2,541	( <sup>3</sup> )	( <sup>3</sup> )	11,456,605	( <sup>3</sup> )	( <sup>3</sup> )	6,908,704	( <sup>3</sup> )	( <sup>3</sup> )
\$100,000 to \$499,999.....	290	340	250	15,233	20,239	32,563	67,378,800	81,611,784	68,334,808	39,054,814	43,908,546	33,764,126
\$100,000 to \$249,999.....	182	( <sup>3</sup> )		6,796	( <sup>3</sup> )		20,236,228	( <sup>3</sup> )		16,742,010	( <sup>3</sup> )	
\$250,000 to \$499,999.....	108	( <sup>3</sup> )		8,437	( <sup>3</sup> )		38,142,572	( <sup>3</sup> )		22,311,904	( <sup>3</sup> )	
\$500,000 to \$999,999.....	85	78		13,526	11,440		59,215,066	54,130,850		32,808,961	27,409,742	
\$1,000,000 and over.....	99	94	33	50,356	41,489	14,728	360,778,089	296,122,564	62,481,805	164,152,534	109,603,200	18,801,813
\$1,000,000 to \$2,499,999.....	52	( <sup>3</sup> )	( <sup>3</sup> )	14,306	( <sup>3</sup> )	( <sup>3</sup> )	88,240,016	( <sup>3</sup> )	( <sup>3</sup> )	39,296,610	( <sup>3</sup> )	( <sup>3</sup> )
\$2,500,000 to \$4,999,999.....	32	( <sup>3</sup> )	( <sup>3</sup> )	14,423	( <sup>3</sup> )	( <sup>3</sup> )	106,272,634	( <sup>3</sup> )	( <sup>3</sup> )	44,074,130	( <sup>3</sup> )	( <sup>3</sup> )
\$5,000,000 and over.....	15	( <sup>3</sup> )	( <sup>3</sup> )	21,537	( <sup>3</sup> )	( <sup>3</sup> )	166,256,439	( <sup>3</sup> )	( <sup>3</sup> )	80,782,785	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.<sup>2</sup> No data.<sup>3</sup> Not tabulated separately.

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
Total.....	1,488	2,785	85,326	83,036	\$513,012,300	\$471,970,877	\$251,614,514	\$201,030,281
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	819	1,021	80,489	75,883	493,007,110	428,213,176	240,059,708	184,062,230
Other forms of ownership or control (individual partnership, etc.).....	669	1,764	4,837	7,153	19,915,190	43,757,701	11,554,806	16,968,051
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	335	( <sup>1</sup> )	56,544	( <sup>1</sup> )	357,793,134	( <sup>1</sup> )	168,374,346	( <sup>1</sup> )
Independent (single-unit).....	1,153	( <sup>1</sup> )	28,782	( <sup>1</sup> )	155,219,166	( <sup>1</sup> )	83,240,168	( <sup>1</sup> )

<sup>1</sup> Not tabulated.

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE, 1929, 1927, 1925, 1919, AND 1914, AND FOR THE WHEELING INDUSTRIAL AREA AND IMPORTANT COUNTIES, 1929

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY										ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING			
	Aggregate horse-power	Total horse-power of prime movers	Prime movers				Electric motors driven by purchased energy							
			Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines				Number	Horse-power
The State:			Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power
1929.....	650,199	370,226	830	118,864	242	224,769	195	20,851	20	8,742	17,247	270,978	9,818	249,726
1927.....	546,440	364,667	663	136,140	105	188,502	279	31,279	42	8,740	13,435	181,773	8,052	200,374
1925.....	495,051	342,159	901	188,766	68	112,924	324	32,174	38	8,295	11,401	152,892	6,461	150,339
1919 <sup>1</sup> .....	328,455	265,538	1,808	172,113	70	45,042	779	38,072	348	9,411	6,140	62,917	5,106	62,307
1914 <sup>1</sup> .....	278,219	251,067	2,369	216,976	( <sup>2</sup> )	( <sup>2</sup> )	779	28,537	140	6,554	2,044	27,152	2,634	39,524
Wheeling Industrial Area, total.....	446,601	265,965	312	162,231	52	96,600	71	7,044			9,927	180,636	6,408	231,005
Portion in West Virginia (Brooke, Hancock, and Ohio Counties).....	176,689	125,068	70	41,851	24	79,920	32	3,297			4,107	51,621	3,551	152,026
Portion in Ohio (Belmont, Columbiana, and Jefferson Counties).....	269,912	140,897	236	120,380	28	16,770	39	3,747			5,820	129,015	2,857	78,979
Counties in West Virginia in which aggregate horsepower exceeded \$5,000: 1929														
Brooke.....	27,618	3,595	7	2,615	1	( <sup>4</sup> )	5	980			890	24,023	65	429
Cabell.....	47,079	8,078	20	4,173	3	2,000	11	1,905			2,640	39,001	897	15,778
Hancock.....	116,130	109,330	37	29,883	15	79,265	3	182			1,281	6,800	2,697	145,578
Kanawha.....	142,609	65,945	57	6,225	166	50,707	30	9,013			1,666	76,664	1,847	32,589
Mercer.....	75,480	65,085	10	1,640	7	63,445					468	10,395	59	1,135
Ohio.....	32,941	12,143	32	9,368	8	6,640	24	2,135			1,936	20,798	789	6,019
Wood.....	29,782	16,411	22	4,716	3	10,765	8	930			1,425	13,371	792	7,885

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.<sup>2</sup> Reported as "Steam engines and turbines."<sup>3</sup> Not reported separately. See footnote 2.<sup>4</sup> Item for steam turbines included with that for steam engines to avoid disclosing data for a single establishment.

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county for which separate figures are given in Table 2. See footnote 4 on that table]

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>		PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	650,199	379,226	270,973	249,726	Mason.....	2,411	1,502	609	263
Barbour.....	580	463	117	100	Mercer.....	75,480	65,085	10,895	1,135
Berkeley.....	12,641	1,115	11,526	576	Mingo.....	3,146	1,165	1,081	.....
Boone.....	1,115	1,095	20	.....	Monongalia.....	7,441	4,429	3,012	1,718
Braxton.....	1,032	979	53	646	Monroe.....	1,048	420	628	.....
Brooke.....	27,618	3,595	24,023	429	Morgan.....	728	628	98	22
Cabell.....	47,079	8,078	39,001	15,778	Nicholas.....	11,150	11,125	31	5,188
Clay.....	798	796	2	.....	Ohio.....	32,941	12,143	20,798	6,019
Doddridge.....	69	65	4	.....	Pendleton.....	235	231	4	.....
Fayette.....	11,228	8,306	2,922	610	Pocahontas.....	4,043	4,023	20	1,824
Gilmer.....	314	168	146	.....	Preston.....	7,844	7,692	152	3,437
Greenbrier.....	2,766	1,943	823	1,334	Raleigh.....	3,213	2,314	890	175
Hancock.....	116,130	109,330	6,800	145,578	Randolph.....	4,545	3,473	1,072	460
Hardy.....	953	920	33	165	Ritchie.....	417	372	45	(?)
Harrison.....	17,213	11,507	5,706	8,078	Roane.....	217	198	49	5
Jackson.....	543	441	102	.....	Taylor.....	3,271	2,315	456	1,769
Jefferson.....	8,017	3,455	4,562	694	Tyler.....	1,028	301	637	.....
Kanawha.....	142,609	65,945	76,664	32,589	Upshur.....	1,011	874	137	413
Lewis.....	1,893	890	1,038	98	Wayne.....	6,200	780	5,510	.....
Lincoln.....	82	70	12	.....	Webster.....	2,367	2,367	.....	.....
Logan.....	1,880	501	1,319	.....	Wetzel.....	2,627	918	1,711	270
McDowell.....	3,880	505	3,375	.....	Wood.....	29,782	16,411	13,371	7,885
Marion.....	17,108	4,704	12,404	3,605	Wyoming.....	3,050	1,632	2,018	.....
Marshall.....	17,731	5,212	12,519	4,109	All other counties <sup>2</sup> .....	12,626	8,757	3,869	24,754

<sup>1</sup> Horsepower of electric motors driven by energy generated in establishments reporting.  
<sup>2</sup> Item for Ritchie County included with that for "All other counties" to avoid disclosing data for an individual establishment.  
<sup>3</sup> Calhoun, Grant, Hampshire, Mineral, Pleasants, Putnam, Summers, and Tucker Counties. No manufacturing was reported from Wirt County.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927, 1923, 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures, see Chapter VII, Volume I, Reports of the Census of Manufactures, 1929]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
Fuel:							
Coal, total <sup>2</sup> (tons, 2,000 lbs.).....	5,841,096	\$12,800,505	5,950,798	5,552,313	4,032,175	3,634,965	7,282,455
Anthracite (tons, 2,240 lbs.).....	32,096	123,430	( <sup>3</sup> )	60,341	66,588	63,006	6,580
Bituminous (tons, 2,000 lbs.).....	5,805,118	12,672,075	( <sup>3</sup> )	5,484,728	4,007,630	3,564,398	7,275,075
Coke (tons, 2,000 lbs.).....	742,217	1,884,693	( <sup>4</sup> )	( <sup>4</sup> )	341,030	208,374	325,738
Fuel oils, including crude oils and gas oils (gallons) <sup>4</sup> .....	19,058,549	297,823	( <sup>4</sup> )	( <sup>4</sup> )	1,455,090	765,282	1,218,420
Gasoline and kerosene (gallons) <sup>5</sup> .....	301,716	60,917	( <sup>4</sup> )	( <sup>4</sup> )	256,452	.....	.....
Gas, natural (M cu. ft.).....	25,474,793	0,744,957	( <sup>4</sup> )	( <sup>4</sup> )	48,247,748	51,808,850	30,894,329
Gas, manufactured (M cu. ft.).....	14,323,404	1,553,697	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Other fuels.....	.....	569,185	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Electric energy purchased (kilowatt-hours).....	575,932,120	5,463,684	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )	( <sup>6</sup> )
Total cost of fuel and purchased energy.....	.....	729,374,831	Cost \$27,840,801	Cost ( <sup>6</sup> )	Cost \$20,747,909	Cost \$7,205,384	Cost \$3,793,336

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1929.  
<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.  
<sup>3</sup> Not tabulated separately.  
<sup>4</sup> No data.  
<sup>5</sup> For years prior to 1929, reported in barrels; converted on basis of 42 gallons per barrel.  
<sup>6</sup> Data incomplete.  
<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12 is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.  
<sup>8</sup> Not reported separately.



## CENSUS OF MANUFACTURES: 1929

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929

[This table presents separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
All industries, total.....	1,488	8,239	85,326	879,226	270,973	\$20,996,351	\$115,294,705	\$232,984,404	\$28,413,382	\$513,012,800	\$251,614,514
Awnings, tents, sails, and canvas covers.....	5	13	24	.....	22	25,236	26,933	61,261	1,012	162,877	100,604
Beverages.....	33	90	330	118	1,506	186,590	385,426	1,032,792	44,658	2,751,518	1,074,068
Boxes, paper, not elsewhere classified.....	7	47	365	.....	887	112,074	368,068	2,151,277	25,652	3,320,637	1,143,708
Boxes, wooden, except cigar boxes.....	8	27	170	180	1,408	59,745	171,275	414,343	20,349	761,268	326,876
Bread and other bakery products.....	124	164	1,449	176	3,288	464,314	1,997,649	5,257,581	204,511	11,005,555	5,843,563
Butter.....	5	4	8	5	77	6,140	7,160	146,352	2,249	183,675	34,074
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	11	9	207	395	94	14,896	122,157	631,394	13,507	867,509	222,698
Car and general construction and repairs, electric-railroad repair shops.....	7	20	155	.....	440	42,410	238,159	108,837	1,335	390,741	280,569
Car and general construction and repairs, steam-railroad repair shops.....	46	703	9,935	63,471	24,085	1,891,252	15,631,025	15,267,237	828,950	33,518,553	17,422,366
Caskets, coffins, burial cases, and other morticians' goods.....	3	14	56	70	43	24,000	64,077	169,003	2,743	338,628	166,882
Chemicals, not elsewhere classified.....	14	490	1,968	50,715	70,214	1,254,171	2,947,589	8,877,521	2,615,013	22,858,635	11,366,101
Clay products (other than pottery) and nonclay refractories.....	23	146	1,693	4,050	5,719	467,355	1,840,759	520,396	899,029	5,260,238	3,840,263
Clothing, women's, not elsewhere classified.....	6	24	703	.....	148	49,593	493,980	1,211,540	10,188	2,361,038	1,139,310
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	5	22	464	.....	133	45,535	228,643	990,069	5,399	1,432,506	437,038
Coffee and spice, roasting and grinding.....	5	14	37	.....	70	41,101	36,624	700,158	3,608	1,001,798	298,632
Coke, not including gas-house coke.....	16	92	899	6,337	10,588	186,411	1,497,149	745,657	6,122,868	9,952,334	3,083,809
Compressed and liquefied gases.....	6	34	58	93	355	58,610	85,841	271,663	32,217	825,049	522,669
Concrete products.....	25	28	122	118	722	66,529	142,150	212,964	10,542	589,471	365,965
Confectionery.....	7	5	38	10	82	6,454	30,010	105,824	2,176	192,809	84,809
Cooperage.....	29	10	96	.....	33	17,365	132,361	488,022	830	752,877	264,625
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	11	118	1,140	550	3,024	261,711	1,447,927	3,558,741	54,830	5,598,350	1,984,773
Electrical machinery, apparatus, and supplies.....	8	112	482	1,770	968	297,914	576,900	1,761,049	144,872	8,423,821	1,527,900
Explosives.....	5	8	61	817	.....	18,936	75,311	186,078	8,324	684,066	493,664
Feeds, prepared, for animals and fowls.....	5	13	24	65	299	22,876	28,444	308,801	4,241	409,974	96,932
Flour and other grain-mill products.....	66	105	237	2,081	2,533	213,350	275,237	3,779,462	54,508	5,094,029	1,260,059
Foundry and machine-shop products, not elsewhere classified.....	66	298	1,747	1,160	8,539	946,685	2,377,351	4,827,650	194,473	9,930,173	4,008,050
Furniture, including store and office fixtures.....	11	32	826	846	2,102	236,843	849,183	1,561,401	41,104	3,258,797	1,656,292
Glass.....	48	770	11,123	17,945	14,007	1,965,577	14,468,102	12,305,860	4,717,796	48,384,942	31,361,296
Glass products (except mirrors) made from purchased glass.....	5	8	122	.....	49	10,100	107,410	292,606	4,311	518,198	221,281
Ice cream.....	38	122	310	617	3,151	251,891	448,138	1,476,594	118,072	3,460,023	1,665,957
Ice, manufactured.....	59	109	408	5,009	6,365	227,651	539,172	112,035	319,288	1,995,884	1,564,661
Iron and steel: Steel works and rolling mills.....	16	855	12,936	125,575	93,255	2,255,237	23,773,082	46,068,956	4,422,778	93,869,519	43,377,785
Leather: Tanned, curried, and finished.....	9	44	1,107	5,023	501	131,659	1,131,695	11,445,558	167,843	14,364,329	2,740,928
Lime.....	8	29	382	20	7,752	67,499	488,022	619,001	509,585	2,303,878	1,176,202
Lumber and timber products, not elsewhere classified.....	245	388	7,955	24,519	868	999,432	9,126,999	4,978,174	114,170	23,325,903	18,283,550
Marble, granite, slate, and other stone products.....	6	12	28	46	264	33,521	33,608	54,800	3,803	191,925	133,322
Mattresses and bed springs, not elsewhere classified.....	4	10	42	.....	207	27,550	55,014	180,360	4,691	360,260	169,209
Paints and varnishes.....	6	50	232	160	2,374	235,369	297,512	2,629,810	100,779	3,726,014	995,425
Paper.....	6	71	732	13,340	2,099	233,600	910,718	4,010,305	256,210	6,826,291	2,660,776
Patent or proprietary medicines and compounds.....	6	18	17	.....	32	26,195	17,226	89,561	463	244,079	154,055
Petroleum refining.....	5	96	581	1,416	2,207	268,952	772,010	14,316,123	434,697	17,268,590	2,617,770
Photo-engraving, not done in printing establishments.....	3	3	12	.....	9	10,192	20,927	7,337	936	50,212	41,939
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills.....	49	126	686	4,182	3,717	357,168	780,086	2,602,970	76,227	4,509,286	1,830,089
Pottery, including porcelain ware.....	22	265	5,683	2,817	5,428	841,266	7,135,282	3,193,029	1,068,558	15,707,704	11,536,117
Printing and publishing, book and job.....	61	101	370	.....	584	257,515	602,191	494,240	19,239	1,822,922	1,339,443
Printing and publishing, newspaper and periodical.....	113	806	975	273	1,615	1,385,969	1,575,959	1,154,897	72,443	6,943,987	5,716,047
Salt.....	4	15	105	615	.....	23,232	105,138	60,449	109,378	347,658	177,831
Signs and advertising novelties.....	7	8	41	.....	35	24,240	58,909	70,066	5,664	259,972	184,248
Stamped ware, enameled ware, and metal stamping, enameling, japanning, and lacquering.....	5	93	1,346	500	3,487	236,398	1,489,150	3,736,054	136,092	6,985,289	3,113,143
Stoves and ranges (other than electric) and warm-air furnaces.....	4	15	129	60	146	53,931	145,623	162,069	7,408	443,007	273,530
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	8	106	267	.....	2,136	276,880	350,673	1,582,501	14,813	3,610,044	2,012,730
Woolen goods.....	7	56	779	1,115	459	191,417	790,260	1,718,884	54,489	3,501,822	1,728,449
Other industries.....	134	1,371	15,666	35,827	37,799	3,582,104	18,093,691	64,390,108	4,324,855	125,113,596	56,398,633

<sup>1</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>3</sup> Not including data for 1,669 employees of central administrative offices, with salaries aggregating \$4,853,230. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Includes item for the "Iron and steel: Blast furnaces" industry. All data for that industry except those for power are included in the "Other industries" items to avoid disclosing the figures reported by an individual establishment.

<sup>5</sup> Includes item for the "Pulp (wood and other fiber)" industry. All data for that industry except those for power are included in the "Other industries" items to avoid disclosing the figures reported by an individual establishment.

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TABLE 13.—GENERAL STATISTICS BY INDUSTRIES FOR THE WHEELING INDUSTRIAL AREA AND GENERAL STATISTICS COMBINED FOR ALL INDUSTRIES FOR IMPORTANT COUNTIES: 1929

[This table presents, for the Wheeling Industrial Area (See GENERAL EXPLANATIONS—Industrial Area), separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately. Brooke, Cabell, Hancock, and Ohio Counties are also industrially important, and it had been planned to publish statistics by industries for them. It is found, however, that no figures can be given for the leading industries in these counties without disclosing, exactly or approximately, the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total numbers of wage earners employed in all industries in the respective counties. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report.]

INDUSTRY	Number of establishments	Sal- aried officers and em- ploy- ees	Wage earners (aver- age for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIP- MENT		Salaries	Wages	Cost of ma- terials and containers for products <sup>a</sup>	Cost of fuel and pur- chased electric energy	Value of products <sup>b</sup>	Value added by manufac- ture <sup>c</sup>
				Prime movers	Electric motors (driven by pur- chased energy)						

WHEELING INDUSTRIAL AREA

[This area comprises Brooke, Hancock, and Ohio Counties, W. Va., and Belmont, Columbiana, and Jefferson Counties, Ohio]

All industries, total.....	537	4,480	45,906	265,965	180,636	\$11,596,284	\$70,728,962	\$158,883,221	\$20,483,268	\$319,433,328	\$140,066,839
Beverages.....	19	24	92	355	355	41,564	118,373	273,950	23,761	651,136	353,425
Boxes, paper, not elsewhere classified.....	3	10	66	148	148	19,464	65,307	333,440	4,481	563,218	215,297
Boxes, wooden, except cigar boxes.....	4	12	68	360	420	24,580	67,391	271,527	8,280	432,059	152,262
Bread and other bakery products.....	60	38	539	112	1,217	70,522	707,197	2,015,030	90,454	4,092,749	1,987,295
Butter.....	6	1	5	44	12	(0)	7,500	134,423	1,777	170,471	34,271
Chemicals, not elsewhere classified.....	4	15	65	100	690	35,087	107,182	1,603,303	58,768	2,835,186	1,173,115
Clay products (other than pottery) and nonclay refractories.....	29	217	2,789	6,473	0,500	657,885	3,529,344	852,765	1,240,832	8,558,205	6,464,608
Concrete products.....	6	2	13	15	38	(0)	16,507	24,226	623	58,246	33,398
Confectionery.....	4	3	34	10	50	6,500	25,136	90,543	2,174	104,254	71,537
Cookery.....	11	8	49	15	15	9,405	83,865	247,456	545	412,252	164,221
Flour and other grain-mill products.....	8	10	23	320	363	16,600	30,038	271,630	8,839	376,172	96,803
Foundry and machine-shop products, not else- where classified.....	32	246	1,451	1,425	6,690	647,825	2,192,214	2,093,672	179,385	8,008,280	4,835,223
Furniture, including store and office fixtures.....	8	29	259	65	363	88,833	318,811	724,205	10,170	1,430,809	696,428
Glass.....	7	81	1,193	1,444	871	221,456	1,470,320	473,973	326,254	3,290,896	2,450,669
Glass products (except mirrors) made from pur- chased glass.....	3	12	121	25	25	27,396	123,280	282,410	5,805	554,169	265,954
Ice, manufactured.....	18	44	113	290	1,235	85,846	172,411	576,975	44,066	1,237,372	618,331
Ice, manufactured.....	19	27	104	1,025	2,328	62,728	163,146	42,495	116,512	619,271	460,264
Iron and steel: Blast furnaces.....	6	93	758	235,151	112,056	240,482	1,375,959	15,871,650	4,935,950	24,383,635	3,576,036
Iron and steel: Steel works and rolling mills.....	18	1,314	18,032	235,151	112,056	3,486,152	33,679,249	73,676,806	6,335,058	140,357,807	60,345,943
Lumber and timber products, not elsewhere clas- sified.....	7	4	44	270	155	5,500	46,160	35,550	2,950	135,675	97,175
Nonferrous-metal alloys and products, not includ- ing aluminum products.....	5	39	187	1,380	637	141,576	281,337	1,844,768	51,803	2,740,771	844,200
Planing-mill products (including general mill- work), not made in planing mills connected with sawmills.....	10	35	117	1,018	1,018	72,050	144,199	253,866	12,976	562,876	296,035
Pottery, including porcelain ware.....	39	401	8,096	3,923	9,663	1,344,075	10,122,253	4,740,235	1,564,388	22,612,309	16,397,636
Printing and publishing, book and job.....	25	40	163	277	277	85,050	231,811	200,640	9,769	814,084	603,655
Printing and publishing, newspaper and periodi- cal.....	29	385	367	149	632	491,555	581,606	477,198	32,658	2,795,888	2,256,032
Stamped ware, enameled ware, and metal stamp- ing, enameling, japanning, and lacquering.....	5	98	962	3,318	3,318	175,754	1,197,171	3,231,680	82,813	6,114,529	2,800,030
Stoves and ranges (other than electric) and warm- air furnaces.....	5	37	302	100	475	86,123	418,787	647,250	22,713	1,527,809	857,846
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills.....	4	95	257	1,877	1,877	231,550	348,292	1,644,018	17,955	3,768,861	2,106,888
Tools, not including edge tools, machine tools, files, or saws.....	3	15	89	50	310	34,452	109,201	171,189	20,149	443,184	251,846
Other industries.....	131	1,145	9,545	13,259	28,549	3,186,175	12,988,906	44,876,419	5,271,365	79,731,155	29,583,371

BROOKE COUNTY

[The most important industry in this county in 1929 was "Iron and steel: Steel works and rolling mills." (See headnote)]

All industries, total.....	23	361	3,389	3,595	24,023	\$997,659	\$5,470,114	\$9,902,142	\$3,187,972	\$24,183,793	\$11,093,679
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CABELL COUNTY

[The most important industries in this county in 1929 were "Car and general construction and repairs, steam-railroad repair shops," as measured by number of wage earners, and "Nonferrous-metal alloys and products," as measured by value of products. (See headnote)]

All industries, total.....	100	887	8,479	8,078	39,001	\$2,271,345	\$11,200,846	\$25,097,766	\$1,610,649	\$53,768,167	\$27,059,752
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HANCOCK COUNTY

[The most important industry in this county in 1929 was "Iron and steel: Steel works and rolling mills." (See headnote)]

All industries, total.....	45	535	11,264	109,330	6,800	\$1,571,788	\$19,559,061	\$33,811,707	\$6,178,430	\$75,219,211	\$35,229,074
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OHIO COUNTY

[The most important industries in this county in 1929 were "Iron and steel: Steel works and rolling mills," as measured by number of wage earners, and "Meat pack-  
ing, wholesale," as measured by value of products. (See headnote)]

All industries, total.....	118	1,137	7,764	12,143	20,798	\$2,769,428	\$10,428,351	\$33,200,398	\$1,149,122	\$61,258,619	\$26,907,009
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<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>c</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in items for "Other industries."

# WISCONSIN

## TABLE 1.—SUMMARY FOR THE STATE: 1899 TO 1929

[Data for the "Automobile repairing" industry are included in the figures for 1919 and 1924, the only years for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
			Total	Prime movers	Electric motors driven by purchased energy		Total	Materials and containers	Fuel and purchased energy		
1929	7,431	264,745	1,230,394	618,032	620,462	\$352,400,893	\$1,203,840,087	\$1,161,664,893	\$45,175,194	\$2,156,681,769	\$949,841,682
1927	7,473	247,722	1,048,223	598,311	449,917	322,697,105	1,153,327,398	1,110,321,536	43,000,000	1,973,053,261	820,325,363
1925	7,262	247,341	1,009,015	630,203	378,812	314,883,011	1,084,747,430	( <sup>4</sup> )	( <sup>4</sup> )	1,859,243,930	774,496,450
1923	7,832	247,851	929,889	602,837	327,052	297,160,064	1,091,501,870	( <sup>4</sup> )	( <sup>4</sup> )	1,720,198,349	718,696,479
1921	7,291	191,770	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	214,140,684	727,940,842	( <sup>4</sup> )	( <sup>4</sup> )	1,214,860,521	486,919,679
1919	10,303	263,040	874,320	664,850	209,470	290,440,561	1,127,274,061	1,084,868,060	42,406,892	1,846,684,307	710,700,346
1914	9,104	194,310	676,848	596,864	79,984	112,103,103	417,415,074	401,237,307	16,177,767	695,172,002	277,756,928
1909	9,721	182,683	562,800	527,431	25,469	93,004,808	340,356,583	333,208,004	13,147,679	590,305,638	243,948,955
1904	8,558	151,391	438,368	429,810	8,568	71,471,805	227,255,092	219,152,120	8,102,972	411,139,681	183,884,689
1899	7,841	137,625	362,968	360,542	2,426	55,695,816	185,695,303	( <sup>6</sup> )	( <sup>6</sup> )	326,752,878	141,657,485
PER CENT OF INCREASE OR DECREASE (—)											
1927-1929	-0.6	6.9	18.2	3.4	37.0	9.2	4.6	4.6	5.0	9.3	15.8
1925-1927	2.0	0.2	3.9	-5.1	18.8	2.5	6.3			0.2	5.9
1923-1925	-7.3	-0.2	8.5	4.5	15.8	6.0	8.3			8.1	7.8
1921-1923	7.4	29.2				38.8	37.6			41.6	47.6
1919-1921	-27.8	-27.3				-26.3	-35.4			-34.2	-32.3
1919-1929	-28.5	0.3	41.8	-6.9	190.2	21.4	7.1	7.1	6.5	16.8	32.0
1909-1919	6.9	44.6	58.1	26.1	722.8	209.3	225.5	225.6	222.5	212.9	195.0
1899-1909	24.0	32.8	52.3	46.3	940.4	68.6	86.5			80.7	72.9

<sup>1</sup> Not including salaried employees.

<sup>2</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

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

<sup>5</sup> Not called for on schedule.

<sup>6</sup> No comparable data.

## TABLE 2.—SUMMARY FOR THE MILWAUKEE INDUSTRIAL AREA AND FOR COUNTIES AND CITIES: 1929

	Population, 1930	Number of establishments	Wage earners (average for the year) <sup>1</sup>	Horsepower <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture
						Total	Materials and containers	Fuel and purchased energy		
The State	2,930,006	7,431	264,745	1,230,394	\$352,400,893	\$1,203,840,087	\$1,161,664,893	\$45,175,194	\$2,156,681,769	\$949,841,682
Milwaukee Industrial Area <sup>3</sup>	878,757	2,218	144,760	524,947	211,345,067	616,224,699	594,201,445	22,023,254	1,166,493,760	550,289,070
<i>Counties<sup>4</sup></i>										
Adams	8,003	7	117	226	191,904	260,800	241,830	19,057	493,857	232,961
Ashland	21,054	40	1,180	7,704	1,348,492	2,174,001	2,016,480	157,512	4,888,530	2,714,579
Barron	34,301	90	735	4,958	722,400	5,361,840	5,242,821	119,025	7,844,363	2,482,517
Bayfield	16,000	21	738	6,040	843,740	2,203,998	2,075,183	128,815	4,827,839	2,623,841
Brown	70,249	171	4,809	38,745	6,334,508	22,643,106	21,276,933	1,366,173	39,680,433	17,037,307
Buffalo	15,330	24	86	608	98,221	1,941,613	1,910,463	22,160	2,258,347	316,734
Burnett	10,233	17	48	387	49,437	862,287	857,367	4,920	986,124	123,837
Calumet	16,848	68	540	2,910	589,586	4,205,001	4,040,411	164,590	6,073,823	1,868,822
Chippewa	37,342	84	1,209	21,463	1,323,507	7,564,410	7,313,806	250,604	11,404,970	3,840,560
Clark	34,165	129	647	3,839	600,400	6,112,606	5,985,100	127,506	8,252,622	2,140,010
Columbia	30,593	70	933	3,611	865,932	5,773,693	5,598,904	174,789	8,561,192	2,787,499
Crawford	16,781	51	397	1,430	384,985	1,992,863	1,949,522	43,271	2,923,300	930,955
Dane	112,737	255	4,220	14,401	6,038,260	28,633,890	27,996,470	637,420	46,934,075	18,390,185
Dodge	52,092	210	3,417	10,630	3,879,500	15,741,472	16,136,990	604,482	28,210,250	12,468,778
Door	18,182	35	377	1,810	429,278	4,104,277	4,040,277	64,000	5,232,201	1,127,024
Douglas	46,583	61	1,741	15,167	2,435,582	15,619,275	13,597,866	2,111,409	21,989,090	6,370,715
Dunn	27,037	44	302	2,566	340,855	4,153,823	4,057,518	96,305	5,020,470	866,656
Eau Claire	41,087	98	3,650	24,540	4,164,148	16,439,843	16,301,419	638,424	24,044,151	8,454,308
Fond du Lac	59,883	162	4,324	12,514	5,142,745	18,718,018	18,081,225	636,793	31,908,684	13,190,666
Forest	11,118	19	1,187	3,618	1,106,603	1,056,127	1,028,974	27,153	3,732,818	2,676,191
Grant	38,469	95	281	1,271	307,000	3,680,451	3,610,794	69,657	4,684,364	1,093,913
Green	21,870	151	304	1,793	398,133	5,179,215	5,054,169	125,046	6,903,833	1,724,618
Iron	13,913	29	390	1,043	395,096	3,113,776	3,034,426	79,350	4,668,947	1,555,171
Iowa	20,039	140	263	2,314	303,101	3,478,047	3,334,524	143,523	4,611,890	1,133,843
Iron	9,933	11	173	391	197,301	402,046	397,362	4,684	897,330	495,293
Jackson	16,468	27	150	1,437	155,477	1,543,835	1,510,465	24,370	1,864,199	320,364
Jefferson	36,786	102	2,868	8,955	3,181,490	13,793,509	13,396,045	397,464	23,834,706	10,131,197
Juneau	17,264	25	123	741	169,413	1,475,840	1,447,800	28,040	1,866,714	390,874
Kenosha	63,277	62	11,544	46,423	18,410,702	60,378,265	58,681,832	1,696,433	97,582,456	37,204,191
Kewaunee	16,037	76	862	3,225	913,908	3,612,731	3,523,777	88,954	6,077,313	2,464,582

See footnotes at end of table.

CENSUS OF MANUFACTURES: 1929

TABLE 2.—SUMMARY FOR THE MILWAUKEE INDUSTRIAL AREA AND FOR COUNTIES AND CITIES: 1929—Con.

	Popula- tion, 1930	Num- ber of estab- lish- ments	Wage earners (average for the year) <sup>1</sup>	Horse- power <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufac- ture
						Total	Materials and containers	Fuel and purchased energy		
<i>Counties—Continued</i>										
La Crosse	54,455	117	5,742	12,095	\$6,131,467	\$12,900,440	\$12,416,006	\$573,840	\$27,704,325	\$14,713,879
Lafayette	18,649	110	184	2,104	272,305	3,500,006	3,309,146	100,860	4,623,340	1,023,334
Langlade	21,544	34	937	2,487	1,009,895	1,900,735	1,810,300	90,435	4,374,188	2,473,453
Lincoln	21,072	65	1,807	24,024	1,719,706	5,635,176	5,357,246	277,930	10,184,427	4,640,251
Manitowoc	58,674	194	7,050	33,067	8,570,578	28,129,787	26,907,142	1,222,045	40,861,501	21,731,714
Marathon	70,629	211	4,861	30,838	5,274,860	20,316,304	19,401,430	854,874	34,720,594	14,404,290
Marinette	33,580	72	2,901	30,127	3,098,237	12,070,563	11,574,208	496,355	19,688,550	7,567,987
Marquette	9,388	13	123	577	163,830	635,463	626,271	9,192	912,601	277,138
Milwaukee <sup>3</sup>	726,263	1,939	117,658	421,681	170,962,354	478,173,932	460,428,014	17,745,018	912,201,503	434,087,571
Monroe	28,739	30	182	1,066	166,323	3,819,093	3,759,165	59,928	4,812,817	993,724
Oconto	26,386	84	1,580	9,003	1,473,135	5,324,897	5,095,242	229,655	8,554,344	3,229,447
Oneida	15,899	27	1,802	17,409	1,887,358	4,597,783	4,311,011	286,772	8,301,018	4,203,235
Outagamie	62,790	167	5,400	84,166	6,585,707	26,977,454	24,898,523	2,078,931	44,296,210	17,318,765
Ozaukee	17,394	73	1,374	4,816	1,430,802	3,947,630	3,784,012	163,618	7,855,386	3,907,756
Pepin	7,450	10	94	373	87,700	1,722,356	1,704,170	18,186	1,073,799	251,443
Pierce	21,043	26	136	446	156,567	2,198,080	2,172,283	26,377	2,565,952	367,292
Polk	26,507	59	279	1,128	265,789	3,886,489	3,833,415	53,070	4,264,557	977,571
Portage	33,827	52	1,553	20,409	1,679,901	6,771,615	6,396,884	374,731	12,048,858	5,277,243
Priec	17,284	47	1,586	13,456	1,639,211	3,568,842	3,323,806	244,946	6,957,059	3,383,217
Racine <sup>4</sup>	90,217	217	15,558	56,843	21,972,011	77,672,502	75,080,699	2,591,803	156,649,810	78,977,308
Richland	19,525	83	1,192	1,465	218,955	3,462,166	3,393,780	68,386	4,396,529	934,303
Rock	74,296	119	9,585	27,117	14,430,363	84,089,708	82,859,711	1,230,007	147,300,223	63,210,515
Rusk	16,081	28	617	11,916	577,066	2,835,245	2,735,943	99,297	4,596,821	1,761,576
St. Croix	25,455	49	544	3,312	717,087	4,770,635	4,677,393	93,270	6,139,094	3,368,461
Sauk	32,030	74	615	3,164	570,091	4,539,524	4,421,244	118,310	6,030,480	1,490,926
Shawano	33,516	136	1,201	5,947	1,243,169	5,480,621	5,329,760	150,861	8,365,478	2,884,857
Sheboygan <sup>5</sup>	71,235	243	10,000	29,860	12,478,285	29,342,855	28,027,622	1,315,233	55,548,246	26,205,391
Taylor	17,635	39	651	2,932	566,170	2,630,927	2,614,907	24,060	3,554,814	1,214,887
Trempealeau	23,910	31	134	1,461	135,720	3,831,525	3,781,428	50,097	4,431,006	600,081
Vernon	28,537	45	122	1,214	127,753	3,577,179	3,514,009	63,270	4,625,490	943,311
Vilas	7,294	8	409	1,741	431,507	687,220	677,268	9,952	1,422,092	734,872
Walworth	31,053	42	799	2,305	753,970	3,818,904	3,701,613	117,291	6,375,793	2,559,839
Washington	11,103	12	110	265	162,325	913,455	854,928	25,527	873,583	280,428
Washington	28,551	73	2,053	6,994	2,142,974	9,801,858	9,510,478	292,380	17,069,167	7,207,309
Waukesha	52,353	96	4,241	14,773	5,713,652	18,357,897	17,733,187	624,710	37,152,320	18,794,423
Waupaca	33,513	89	1,471	5,554	1,300,349	9,241,532	9,059,590	181,942	12,947,618	3,700,086
Waushara	14,427	19	73	1,132	95,426	954,378	913,933	20,445	1,220,940	235,608
Winnebago <sup>6</sup>	76,632	214	10,491	50,079	11,438,928	35,333,140	33,735,973	1,597,173	63,244,585	27,911,739
Wood	37,835	102	2,537	52,504	3,942,211	16,804,044	15,212,558	1,591,486	29,617,333	9,812,689
All other counties (Florence and Sawyer) <sup>7</sup>	12,646	18	363	764	293,200	667,160	633,463	23,697	1,840,656	1,189,496
<i>Cities having 10,000 inhabitants or more<sup>1</sup></i>										
Appleton	25,297	74	2,798	25,555	3,219,042	11,378,707	10,465,025	913,682	10,622,502	8,243,795
Ashland	10,622	20	643	4,624	801,778	1,245,932	1,097,764	148,168	2,793,510	1,547,587
Beloit	23,611	36	4,443	17,160	7,493,598	12,399,988	11,706,568	693,420	28,006,987	15,606,699
Eau Claire	26,237	79	3,452	23,300	3,931,441	14,990,242	14,401,076	589,166	22,056,255	7,966,013
Fond du Lac	26,449	65	3,002	9,024	3,800,784	10,953,367	10,499,246	454,121	20,260,061	9,307,294
Green Bay	37,415	94	3,814	26,522	5,122,939	16,210,160	15,116,465	1,093,695	29,103,273	12,893,113
Janesville	21,628	49	4,255	5,416	5,002,134	67,551,627	67,137,317	414,310	112,418,150	44,866,623
Kenosha	50,262	57	11,478	45,737	18,329,920	60,184,831	58,505,633	1,679,198	97,051,248	36,886,417
La Crosse	30,614	97	5,523	10,929	5,935,569	11,004,325	10,469,034	535,291	25,045,094	14,041,360
Madison	67,899	110	3,488	10,990	5,159,464	22,474,373	21,930,429	493,944	38,104,240	15,029,867
Manitowoc	22,963	67	3,798	19,998	4,694,614	17,445,604	16,648,380	797,224	29,063,912	11,618,248
Marinette	13,734	29	1,739	14,828	1,608,165	6,409,645	6,091,778	317,867	10,335,271	3,925,626
Milwaukee <sup>3</sup>	578,249	1,769	94,873	333,830	136,775,336	361,052,449	347,403,841	13,648,608	700,760,456	339,708,007
Oshkosh	40,108	119	6,572	18,760	6,982,626	15,506,399	15,008,596	497,803	31,961,015	15,454,616
Racine	67,542	184	12,893	48,096	18,618,893	67,025,296	64,793,196	2,232,100	132,739,830	65,714,540
Sheboygan	39,251	107	6,191	15,987	6,660,873	14,712,705	14,056,655	656,110	20,690,191	14,877,426
South Milwaukee	10,706	21	2,076	9,939	2,626,048	6,037,492	5,629,533	407,959	14,984,731	8,947,239
Stevens Point	13,623	29	1,021	7,414	1,075,251	2,636,406	2,786,672	149,734	5,932,914	2,990,508
Superior	36,113	57	1,484	14,822	2,018,715	15,209,019	13,119,703	2,089,316	21,093,710	5,884,691
Watertown	10,618	37	1,190	4,395	1,220,540	6,331,763	6,137,586	144,177	9,756,048	3,424,385
Waukesha	17,176	56	3,536	10,150	4,932,315	12,216,841	11,725,321	491,520	28,534,032	16,317,791
Wausau	23,768	63	2,696	10,149	2,726,811	6,772,656	6,548,442	224,214	13,600,790	6,734,134
Wauwatosa	21,194	19	397	549,238	549,238	905,338	868,106	47,232	2,095,072	1,189,734
West Allis	34,671	62	10,146	27,137	15,905,894	31,054,635	29,699,031	1,355,604	68,808,937	37,754,302

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.  
<sup>3</sup> The Milwaukee Industrial Area comprises Kenosha, Milwaukee, and Racine Counties. For statistics by industries for the area and for Milwaukee County, see Table 13.  
<sup>4</sup> Statistics are presented for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing approximations of the data supplied by individual establishments, and combined figures are given for the remaining counties (Florence and Sawyer). Sawyer County, however, reported a larger number of wage earners and a larger value of products than some of those shown separately.  
<sup>5</sup> For statistics by industries for this county, see Table 13.  
<sup>6</sup> See footnote 4.  
<sup>7</sup> Not including Cudahy, Shorewood, and Two Rivers, each of which reported more than 10,000 inhabitants at the census of 1930. It is necessary to withhold the figures for these cities from publication to avoid disclosing approximations of the data for individual establishments.  
<sup>8</sup> Because of the amount of manufacturing industry in this city, it had been planned to publish statistics by industries for it. It is found, however, that no figures can be given for the leading industries—namely, "Motor-vehicle bodies and motor-vehicle parts" and "Motor vehicles, not including motorcycles"—without rendering it possible to calculate (by subtracting the figures for these industries in Milwaukee from the corresponding ones for Milwaukee County) the figures for the same industries in Milwaukee County outside the city, the publication of which would disclose close approximations of the data for individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report.

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORATIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929 <sup>1</sup>	313,139	261,312	51,827	3,742	3,585	157	5,665	5,410	255	38,987	27,450	11,537	204,745	224,867	39,878
1919 <sup>1,2</sup>	317,899	295,652	22,247	7,961	7,732	219	4,637	4,466	171	41,362	20,816	11,546	203,949	223,638	40,311
1914 <sup>1,3</sup>	230,273	199,232	31,041	7,425	7,144	281	3,127	3,039	88	25,411	20,518	4,893	194,310	168,531	25,779
1909 <sup>1,4</sup>	213,420	186,350	27,076	8,556	8,327	229	2,351	2,269	82	19,936	16,623	3,313	182,583	160,101	23,482

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.  
<sup>2</sup> Not including employees of central administrative offices, as follows: Principal salaried officers of corporations—total, 235; male, 231; female, 4.<sup>3</sup> Other salaried officers and employees—total, 5,629; male, 3,570; female, 2,059. The corresponding data for 1919 and earlier years are included in the respective items for those years but were not tabulated separately. See GENERAL EXPLANATIONS—Persons Engaged.  
<sup>3</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for December 14. See GENERAL EXPLANATIONS—Persons Engaged.  
<sup>4</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929 <sup>1</sup>	284,745	255,781	262,681	265,049	265,054	267,213	266,788	266,753	271,000	268,637	270,229	250,018	246,777	87.9
1919 <sup>1</sup>	283,949	259,127	257,090	255,117	250,475	250,122	256,340	268,411	266,025	267,343	274,142	279,177	284,119	88.0
1914 <sup>1</sup>	194,810	197,347	203,166	205,512	199,210	196,041	196,523	198,170	193,475	190,652	187,342	182,227	182,056	88.6
1909 <sup>1</sup>	182,583	174,937	178,001	179,007	173,591	170,625	180,691	184,200	185,556	185,592	188,604	191,447	192,527	90.1

<sup>1</sup> The figures for 1919 and 1914 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment, even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)
All classes.....	7,431	264,745	45 and over but under 48.....	211	8,044
Not reported.....	280	706	48.....	993	39,022
Under 40.....	76	568	Over 48 but under 54.....	1,081	102,916
40.....	75	3,959	54.....	495	11,054
Over 40 but under 44.....	63	1,006	Over 54 but under 60.....	1,120	57,546
44 and over but under 45.....	620	14,089	60 and over.....	2,447	24,655

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures; and those for 1919 and 1909 include data for all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
All establishments.....	7,431	10,303	9,721	264,745	268,949	182,583	51 to 100.....	339	855	314	24,330	24,073	22,337
No wage earners.....	654	1,635	1,343				101 to 250.....	309	306	232	49,725	45,211	36,767
1 to 5.....	3,934	5,854	5,818	7,935	9,720	10,201	251 to 500.....	126	120	100	44,036	41,301	33,705
6 to 20.....	1,279	1,377	1,327	14,140	14,869	14,806	501 to 1,000.....	46	67	37	31,529	45,213	24,553
21 to 50.....	706	652	538	22,303	20,935	17,422	1,001 to 2,500.....	50			40,179	58,727	22,732
							2,501 and over.....	8	27	12	30,268		

CENSUS OF MANUFACTURES: 1929

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909  
 [The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	7,431	10,303	9,721	264,745	263,949	182,583	\$2,156,681,769	\$1,846,984,307	\$590,305,538	\$949,841,082	\$719,709,346	\$243,948,955
Less than \$5,000.....	(2)	2,034	3,071	(2)	1,142	3,458	(2)	5,180,694	7,615,812	(2)	3,077,464	4,457,314
\$5,000 to \$19,999.....	2,211	2,719	3,707	4,095	6,092	11,417	26,618,327	30,217,974	39,712,619	12,346,410	13,805,439	13,837,408
\$20,000 to \$99,999.....	3,186	3,778	2,064	15,637	18,946	26,995	138,687,954	171,478,121	86,957,666	51,967,566	43,998,107	32,235,366
\$20,000 to \$49,999.....	2,221	(3)	(3)	6,847	(3)	(3)	71,485,066	(3)	(3)	23,870,415	(3)	(3)
\$50,000 to \$99,999.....	965	(3)	(3)	8,790	(3)	(3)	67,201,888	(3)	(3)	28,088,151	(3)	(3)
\$100,000 to \$499,999.....	1,370	1,274	(3)	47,222	49,743	(3)	309,488,353	270,722,672	(3)	145,804,909	111,670,026	(3)
\$100,000 to \$249,999.....	912	(3)	(3)	22,133	(3)	(3)	146,173,902	(3)	(3)	66,163,314	(3)	(3)
\$250,000 to \$499,999.....	458	(3)	793	25,089	(3)	88,003	163,309,451	(3)	227,934,734	79,641,595	(3)	102,700,393
\$500,000 to \$999,999.....	308	272	(3)	33,082	36,452	(3)	216,080,294	188,577,770	(3)	101,494,667	85,071,930	(3)
\$1,000,000 and over.....	356	316	86	164,109	151,574	52,740	1,465,811,841	1,180,807,067	228,084,707	638,228,130	461,996,380	90,718,414
\$1,000,000 to \$2,499,999.....	220	(3)	(3)	49,437	(3)	(3)	345,164,087	(3)	(3)	158,101,186	(3)	(3)
\$2,500,000 to \$4,999,999.....	71	(3)	(3)	29,347	(3)	(3)	241,149,359	(3)	(3)	113,612,518	(3)	(3)
\$5,000,000 and over.....	65	(3)	(3)	85,325	(3)	(3)	879,498,395	(3)	(3)	366,514,426	(3)	(3)

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>2</sup> No data.  
<sup>3</sup> Not tabulated separately.

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
Total.....	7,431	10,303	264,745	263,949	\$2,156,681,769	\$1,846,984,307	\$949,841,082	\$719,709,346
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	3,704	3,047	250,082	244,454	2,029,319,820	1,614,831,541	906,134,138	669,430,146
Other forms of ownership or control (individual, partnership, etc.).....	3,727	7,346	14,663	19,495	127,361,949	232,152,766	43,707,544	50,279,200
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	828	(1)	109,454	(1)	1,053,117,062	(1)	432,551,401	(1)
Independent (single-unit).....	6,603	(1)	155,291	(1)	1,103,564,707	(1)	517,290,221	(1)

<sup>1</sup> Not tabulated.

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE, 1929, 1927, 1925, 1919, AND 1914, AND FOR THE MILWAUKEE INDUSTRIAL AREA AND IMPORTANT COUNTIES, 1929

	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY										ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING			
	Aggregate horsepower	Total horsepower of prime movers	Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines				Electric motors driven by purchased energy	
			Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power			Number	Horse-power
The State:														
1929.....	1,239,394	618,932	3,056	303,480	332	144,359	484	9,877	496	161,210	70,715	620,402	38,352	427,209
1927.....	1,048,228	598,311	2,999	297,915	286	121,455	666	11,933	509	166,958	60,155	449,917	36,265	419,528
1925.....	1,009,015	630,203	3,442	348,320	182	89,753	908	12,643	649	179,487	48,332	378,812	36,253	300,058
1919 <sup>1</sup> .....	874,320	664,850	4,111	394,710	330	72,814	1,612	16,706	897	180,620	27,214	209,470	21,590	263,714
1914 <sup>1</sup> .....	676,848	596,864	2,052	420,065	(3)	(3)	1,564	28,004	993	148,705	10,979	79,984	12,941	175,684
Milwaukee Industrial Area.....	524,947	170,696	449	112,511	62	54,314	22	3,758	4	113	39,846	354,251	22,683	201,358
Counties in which aggregate horsepower exceeded \$5,000: 1929														
Brown.....	38,745	15,520	71	7,316	19	3,444	2	10	36	4,750	1,988	23,225	505	5,828
Kenosha.....	46,423	17,895	10	4,495	7	13,400					2,012	28,528	3,577	28,550
Manitowoc.....	33,067	13,996	90	8,584	5	5,197	12	216	1	(4)	3,006	19,071	753	12,380
Marathon.....	36,838	27,328	120	7,785	17	6,911	15	97	20	12,535	1,244	9,510	958	23,433
Marinette.....	30,127	24,112	38	6,158	6	1,476	10	26	19	16,452	536	6,015	290	8,372
Milwaukee.....	421,681	130,000	377	89,674	51	36,664	19	3,722			31,676	291,621	17,769	157,329
Outagamie.....	84,166	57,823	74	11,315	15	20,179	6	26	115	26,303	2,031	26,343	1,524	20,052
Racine.....	56,843	22,741	62	18,342	4	4,260	3	36	4	113	5,057	34,102	1,337	15,479
Rock.....	27,117	6,502	37	4,530	6	38	15	1,171	12	763	3,403	20,615	698	4,932
Sheboygan.....	20,800	16,532	132	15,589	10	411	40	432	2	200	1,823	10,228	2,005	13,366
Winnebago.....	50,079	33,766	101	15,423	24	10,650	7	107	33	1,580	2,684	16,313	2,340	21,802
Wood.....	52,504	38,208	50	4,110	8	13,936	9	46	23	20,116	1,027	14,296	895	25,474

<sup>1</sup> Date for the "Automobile repairing industry" are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.  
<sup>2</sup> Reported as "Steam engines and turbines."  
<sup>3</sup> Not reported separately. See footnote 2.  
<sup>4</sup> Item for water wheels and water turbines included with that for steam engines to avoid disclosing data for a single establishment.

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county for which separate figures are given in Table 2. See footnote 4 on that table]

COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>	COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	1,289,394	618,982	620,462	427,209	Marathon.....	86,838	27,328	9,510	23,433
Adams.....	226	213	13	230	Marinette.....	30,127	24,112	6,015	8,372
Ashland.....	7,704	4,902	2,802	1,809	Marquette.....	577	453	124	779
Barron.....	4,958	3,108	1,850	868	Milwaukee.....	421,081	130,060	201,621	157,329
Bayfield.....	6,040	4,358	1,682	95	Monroe.....	1,068	632	434	100
Brown.....	38,745	16,820	23,225	5,828	Oconto.....	9,003	8,385	618	3,352
Buffalo.....	608	463	145	-----	Oneida.....	17,409	16,055	1,354	8,555
Burnett.....	367	264	103	-----	Outagamie.....	84,163	57,823	26,343	29,952
Calumet.....	2,910	1,095	1,815	300	Ozaukee.....	4,816	3,061	1,755	1,106
Chippewa.....	21,463	19,930	1,533	5,389	Pepin.....	373	159	214	-----
Clark.....	3,839	2,518	1,321	306	Pierce.....	446	235	211	-----
Columbia.....	3,611	1,370	2,241	-----	Polk.....	2,128	1,113	1,015	-----
Crawford.....	1,430	1,141	280	270	Portage.....	20,409	17,713	2,696	5,206
Dane.....	14,401	3,832	10,569	1,203	Price.....	18,456	10,883	2,573	5,224
Dodge.....	10,630	4,925	5,705	1,825	Racine.....	56,843	22,741	34,102	15,479
Door.....	1,810	624	1,186	-----	Richland.....	1,465	1,121	344	110
Douglas.....	15,167	4,707	10,460	682	Rock.....	27,117	6,502	20,615	4,932
Dunn.....	2,566	605	1,961	173	Rusk.....	11,916	11,193	723	488
Eau Claire.....	24,540	14,830	9,710	9,270	St. Croix.....	3,312	638	2,374	-----
Fond du Lac.....	12,514	7,298	5,216	6,218	Sauk.....	3,164	1,677	1,487	1,445
Forest.....	3,618	2,758	800	20	Shawano.....	5,947	4,820	1,127	2,981
Grant.....	1,271	800	471	( <sup>2</sup> )	Sheboygan.....	26,800	16,632	10,228	13,355
Green.....	1,793	1,236	557	279	Taylor.....	2,432	2,528	404	186
Green Lake.....	1,043	491	552	172	Trempealeau.....	1,461	723	738	-----
Iowa.....	2,314	1,050	394	767	Vernon.....	1,214	988	226	88
Iron.....	391	280	111	-----	Vilas.....	1,741	1,723	18	503
Jackson.....	1,437	520	917	-----	Walworth.....	2,305	1,084	1,221	513
Jefferson.....	8,955	3,487	5,468	1,688	Washburn.....	265	25	240	-----
Juneau.....	741	393	348	-----	Washington.....	0,994	3,645	3,440	2,042
Kenosha.....	46,423	17,895	28,529	28,550	Waukesha.....	14,773	3,784	10,989	1,756
Kewaunee.....	3,225	1,296	1,929	97	Waupaca.....	5,554	2,618	2,936	432
La Crosse.....	12,095	4,366	7,729	3,540	Waushara.....	1,182	143	1,039	( <sup>3</sup> )
Lafayette.....	2,104	942	1,162	-----	Winnebago.....	60,079	33,768	16,313	21,302
Langlade.....	2,487	1,492	995	( <sup>4</sup> )	Wood.....	52,504	33,208	14,206	25,474
Lincoln.....	24,024	21,840	2,184	10,826	All other counties (Florence and Sawyer).....	754	716	38	221
Manitowoc.....	33,067	13,090	19,071	12,380					

<sup>1</sup> Horsepower of electric motors driven by energy generated in establishments reporting.  
<sup>2</sup> Included in total for State but not shown separately to avoid disclosing data for individual establishments.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927,<sup>1</sup> 1923,<sup>1</sup> 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures, see Chapter VII, Volume I, Reports of the Census of Manufactures, 1929]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
Fuel:							
Coal, total <sup>2</sup> (tons, 2,000 lbs.).....	5,794,275	\$25,592,023	5,130,814	5,447,071	5,387,834	3,647,314	3,141,321
Anthracite (tons, 2,240 lbs.).....	226,484	965,818	( <sup>3</sup> )	69,476	103,525	98,831	92,469
Bituminous (tons, 2,000 lbs.).....	5,567,791	24,626,205	( <sup>3</sup> )	5,377,595	5,284,309	3,548,483	3,048,852
Coke (tons, 2,000 lbs.).....	272,010	2,006,908	( <sup>4</sup> )	( <sup>4</sup> )	542,938	340,400	450,412
Fuel oils, including crude oils and gas oils (gallons) <sup>5</sup> .....	68,412,609	3,181,977	( <sup>4</sup> )	( <sup>4</sup> )	25,905,558	9,914,310	9,675,162
Gasoline and kerosene (gallons) <sup>5</sup> .....	3,701,613	447,500	( <sup>4</sup> )	( <sup>4</sup> )	9,003,454		
Gas, natural (M cu. ft.).....			( <sup>4</sup> )	( <sup>4</sup> )			
Gas, manufactured (M cu. ft.).....	8,016,028	2,014,127	( <sup>4</sup> )	( <sup>4</sup> )	1,270,309	383,916	299,400
Other fuels.....		879,100	( <sup>4</sup> )	( <sup>4</sup> )		( <sup>4</sup> )	( <sup>4</sup> )
Electric energy purchased (kilowatt-hours).....	934,843,936	12,422,930	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Total cost of fuel and purchased energy.....		\$40,545,165	Cost \$43,000,000	Cost ( <sup>4</sup> )	Cost \$42,406,892	Cost \$16,177,767	Cost \$18,147,679

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1929.  
<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.  
<sup>3</sup> Not tabulated separately.  
<sup>4</sup> No data.  
<sup>5</sup> For years prior to 1929, reported in barrels; converted on basis of 42 gallons per barrel.  
<sup>6</sup> Data incomplete.  
<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12 is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.  
<sup>8</sup> Not reported separately.

TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929

[This table presents separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
						Dollars	Dollars	Dollars	Dollars	Dollars	Dollars
All industries, total.....	7,431	344,652	264,745	618,932	620,462	\$115,033,424	\$52,490,893	\$1,161,664,893	\$45,175,194	\$2,156,681,709	\$40,841,682
Agricultural implements.....	21	568	2,413	4,753	2,596	1,888,996	3,653,103	8,316,954	278,404	27,513,660	18,918,311
Aluminum manufactures.....	15	309	3,021	2,471	12,179	905,426	4,634,035	9,688,457	351,145	21,931,117	11,881,485
Awnings, tents, sails, and canvas covers.....	22	49	125		77	97,698	144,847	388,291	6,347	866,240	471,611
Belting, leather.....	4	6	24		47	14,977	31,868	188,439	1,402	294,433	94,592
Beverages.....	170	294	1,039	5,200	2,839	686,692	1,382,496	4,923,727	280,036	13,630,561	8,435,798
Blacking, stains, and dressings.....	4	20	29		121	81,022	43,809	209,043	4,063	449,870	230,760
Bookbinding and blank-book making.....	21	185	508		364	278,202	608,269	734,685	18,614	2,180,971	1,436,372
Boot and shoe findings, not made in boot and shoe factories.....	7	39	276	275	181	103,915	269,309	1,202,030	22,072	1,788,030	563,937
Boots and shoes, other than rubber.....	57	1,400	10,756	1,825	5,382	3,038,218	11,376,099	30,053,392	287,242	55,384,784	25,044,150
Boxes, paper, not elsewhere classified.....	30	310	1,855	480	2,004	878,195	1,889,438	6,695,769	106,047	10,995,936	4,204,120
Boxes, wooden, except cigar boxes.....	63	179	2,027	5,369	4,284	615,586	1,884,821	3,559,198	96,787	7,050,603	3,400,618
Bread and other bakery products.....	711	513	4,768	994	5,776	1,265,784	6,215,213	15,614,504	795,106	34,205,838	17,795,728
Brooms.....	10	10	64		42	12,201	67,675	110,802	2,090	320,604	210,108
Brushes, other than rubber.....	9	37	144		302	74,402	146,281	258,981	7,943	569,328	302,404
Butter.....	420	604	1,938	6,138	9,901	807,932	2,547,282	61,144,467	736,457	71,722,873	9,841,069
Canning and preserving: Fish, crabs, shrimps, oysters and clams.....	4	11	33		30	9,038	17,789	74,132	2,687	119,607	42,848
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	171	772	5,200	11,965	11,093	1,779,408	3,756,274	20,101,220	439,659	35,008,403	14,437,624
Car and general construction and repairs, electric-railroad repair shops.....	10	97	687		2,171	187,267	1,163,641	1,751,305	48,991	3,151,204	1,350,008
Car and general construction and repairs, steam-railroad repair shops.....	48	960	8,473	5,442	5,004	2,106,110	12,900,323	8,753,946	650,610	24,590,243	15,185,678
Carrriages and sleds, children's.....	7	53	587	575	275	153,950	621,890	893,666	18,079	1,976,843	1,066,098
Caskets, coffins, burial cases, and other morticians' goods.....	10	72	368	715	408	172,813	435,610	837,348	34,965	2,242,875	1,370,502
Cheese.....	1,063	467	1,680	11,418	2,301	152,426	2,288,040	64,541,605	840,312	64,970,802	6,582,825
Chocolate and cocoa products, not including confectionery.....	3	32	103	1,050	618	99,928	95,094	1,588,607	22,283	2,381,760	770,870
Cigars and cigarettes.....	97	50	530		50	105,308	612,589	717,160	8,277	1,843,944	1,118,507
Clay products (other than pottery) and nonclay refractories.....	29	54	337	783	2,043	106,430	401,167	69,331	221,798	1,038,811	747,682
Cleaning and polishing preparations.....	6	22	34		137	53,823	40,843	190,736	3,425	517,320	323,159
Clothing (except work clothing, men's, youths', and boys', not elsewhere classified.....)	37	215	2,467	415	666	750,071	2,503,056	6,809,849	68,546	12,028,645	5,150,260
Clothing, women's, not elsewhere classified.....	30	183	1,464		287	402,613	1,085,082	2,906,119	28,063	5,577,319	2,642,537
Clothing, work (including sheep-lined and blanket-lined work coats but not including shirts), men's.....	13	67	657		199	174,575	605,114	1,704,926	17,882	3,210,172	1,427,367
Coffee and spice, roasting and grinding.....	16	48	99	240	301	130,967	103,260	3,214,124	26,087	4,200,438	1,059,204
Compressed and liquefied gases.....	7	82	73	1,758		166,138	98,187	281,492	99,484	1,403,440	1,022,514
Concrete products.....	92	166	522	188	2,283	376,100	681,265	1,178,168	66,565	3,364,988	2,120,205
Condensed and evaporated milk.....	107	341	1,789	10,681	7,800	740,381	2,215,247	51,987,457	1,196,454	66,646,329	13,461,418
Confectionery.....	57	311	1,920	2,050	2,644	678,936	1,529,520	5,605,605	116,386	6,523,612	5,243,112
Cooperage.....	11	70	678	2,735	641	157,707	677,657	2,640,632	37,852	3,870,755	1,192,271
Copper, tin, and sheet-iron work, including galvanized-iron work, not elsewhere classified.....	67	452	1,063	797	688	994,586	1,487,587	7,117,875	55,847	11,804,020	4,630,208
Cutlery (not including silver and plated cutlery) and edge tools.....	8	45	216		414	127,639	294,672	210,474	21,637	631,365	600,264
Dairymen's supplies; creamery, cheese-factory, and butter-factory equipment; and poultrymen's and apiarists' supplies.....	20	277	800	605	1,716	603,935	1,083,402	2,270,985	86,177	6,332,049	3,974,387
Druggists' preparations.....	4	26	48	60	26	68,544	47,064	111,431	4,697	366,584	250,456
Dyeing and finishing textiles.....	4	7	43		95	27,947	54,027	76,948	10,467	204,930	111,625
Electrical machinery, apparatus, and supplies.....	62	2,104	7,652	1,500	9,824	5,078,950	9,703,972	16,288,249	494,289	48,532,600	31,750,112
Electroplating.....	12	23	147	12	669	75,472	262,519	72,522	255,765	594,020	405,743
Engines, turbines, tractors, and water wheels.....	21	1,070	12,519	14,185	21,921	4,623,046	21,436,541	47,012,148	1,080,778	96,392,493	47,099,567
Engraving, steel and copperplate, and plate printing.....	4	12	56		22	42,462	52,706	56,763	1,120	270,867	212,964
Excelsior.....	7	17	324	1,250	1,036	55,482	338,318	603,109	35,377	1,363,243	714,097
Fancy and miscellaneous articles, not elsewhere classified.....	11	49	349		381	135,418	271,110	580,914	13,567	1,294,938	694,457
Feeds, prepared, for animals and fowls.....	18	87	123	306	2,156	193,000	166,152	3,306,527	48,779	4,610,425	1,164,719
Flavoring extracts and flavoring sirups.....	37	184	473	3,656	1,892	530,059	710,411	2,268,956	220,187	5,280,240	2,791,097
Flour and other grain-mill products.....	79	154	500	8,106	5,278	818,801	638,442	12,100,492	193,726	14,504,212	2,149,904
Food preparations, not elsewhere classified.....	20	325	821	5,765	676	812,158	1,128,544	11,607,207	232,537	18,813,799	6,974,055
Forgings, iron and steel, not made in plants operated in connection with rolling mills.....	6	76	628	75	8,214	207,637	1,131,108	1,715,918	241,322	4,975,099	3,017,969
Foundry and machine-shop products, not elsewhere classified.....	294	5,520	24,207	23,981	40,295	14,404,625	36,667,087	57,645,541	3,296,610	149,058,715	88,110,555
Fur goods.....	41	91	313		172	232,536	383,372	1,267,528	21,051	2,388,415	1,090,386
Furniture, including store and office fixtures.....	111	1,380	8,714	13,166	11,578	3,115,990	9,836,433	14,616,874	536,494	36,630,762	21,480,894
Gas and electric fixtures; lamps, lanterns, and reflectors.....	17	124	368		337	343,930	500,332	860,565	32,383	2,195,434	1,302,486
Gas, manufactured, illuminating and heating.....	31	667	1,671	9,887	7,656	1,163,482	2,362,111	3,087,445	3,061,405	16,059,530	9,910,689
Glass products (except mirrors) made from purchased glass.....	12	18	77		78	45,241	134,338	133,715	4,524	408,586	270,947
Gloves and mittens, leather.....	22	163	1,520	100	365	458,518	1,293,480	3,602,257	31,227	6,337,541	2,703,757
Grease and tallow, not including lubricating greases.....	11	17	70	168	782	31,792	98,409	557,237	30,726	882,278	288,815
Hardware not elsewhere classified.....	10	293	1,781	203	2,662	1,073,658	2,265,609	2,502,040	132,447	9,185,205	6,550,218
Hats and caps, except felt and straw, men's.....	10	28	81		34	90,786	114,041	196,302	3,818	474,545	274,425
Horse blankets, fly nets, and related products.....	5	27	132	125	80	58,822	167,152	620,955	15,292	853,040	317,899
House-furnishing goods, not elsewhere classified.....	11	28	168	150	101	168,745	107,348	523,661	9,021	991,668	450,046
Ice cream.....	67	233	600	467	5,627	532,008	975,261	4,323,231	215,310	8,747,668	4,209,121
Ice, manufactured.....	11	74	104		4,371	244,998	161,592	49,219	145,217	1,186,862	992,366
Ink, printing.....	4	12	12		75	65,017	13,142	68,017	1,698	161,745	102,800
Iron and steel: Steel works and rolling mills.....	17	633	5,248	17,740	31,484	1,868,314	9,428,007	11,124,999	1,690,231	30,269,020	17,453,820
Jewelry.....	6	4	54		22	4,452	73,811	35,322	1,380	157,207	120,575
Knit goods.....	62	1,123	11,118	4,335	4,100	3,786,296	12,200,263	20,882,992	408,898	51,549,464	30,267,604
Leather goods, not elsewhere classified.....	6	14	54	100	41	38,561	62,256	181,101	8,496	351,089	161,492
Leather: Tanned, curried, and finished.....	18	598	3,791	16,510	3,395	1,532,345	4,648,467	19,247,901	514,262	30,015,331	10,253,168

See footnotes at end of table.



TABLE 12.—GENERAL STATISTICS FOR THE STATE, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaries of officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
Lime	15	20	208	78	2,339	Dollars 62,065	Dollars 245,141	Dollars 199,259	Dollars 356,702	Dollars 1,107,232	Dollars 551,271
Lithographing	11	150	621		831	513,570	963,349	1,329,226	36,618	3,951,742	2,585,893
Lumber and timber products, not elsewhere classified	139	801	14,489	48,125	7,237	2,278,060	13,007,820	14,371,907	364,415	44,894,159	30,157,837
Machine-tool accessories and small metal-working tools, not elsewhere classified	31	71	304		237	244,155	687,103	251,481	35,906	1,842,505	1,555,088
Machine tools	18	522	2,330	2,785	3,791	1,539,452	3,724,881	3,071,098	170,801	12,002,918	8,754,919
Malt	10	73	204	5,011	936	315,865	420,525	8,402,193	303,441	10,006,476	1,840,842
Marble, granite, slate, and other stone products	51	178	832	894	7,307	610,202	1,447,723	1,484,439	119,423	4,790,193	3,130,281
Meat packing, wholesale	22	606	2,893	3,131	5,407	1,602,404	4,121,345	80,421,066	513,927	93,312,909	12,377,916
Millinery	9	77	952	110	402	308,203	1,916,128	28,538	28,538	3,787,013	1,842,347
Mirrors, framed and unframed	8	22	92	75	124	72,260	141,157	301,783	8,982	600,211	280,446
Models and patterns, not including paper patterns	42	82	510		770	247,641	1,041,548	298,304	27,000	2,058,611	1,732,341
Motor-vehicle bodies and motor-vehicle parts	30	1,345	13,344	2,700	94,707	4,102,530	22,550,000	54,404,977	1,251,273	95,295,332	39,040,077
Motor vehicles, not including motorcycles	15	1,008	10,241	3,850	22,502	3,772,703	16,183,014	139,787,213	1,880,154	210,192,960	78,010,583
Musical instrument parts and materials: Piano and organ	3	8	14		40	17,493	16,933	33,558	942	89,195	54,066
Musical instruments:											
Organs	4	15	118		287	67,701	168,043	147,270	6,846	470,713	310,508
Pianos	3	17	70	215	525	62,604	109,750	197,232	12,371	405,020	190,317
Paints and varnishes	18	738	622	888	1,451	1,002,654	921,019	8,454,088	90,023	13,555,554	5,005,438
Paper	48	1,078	9,741	204,431	50,004	3,387,312	12,370,105	51,920,207	5,270,021	93,400,631	30,102,403
Pulp (wood and other fiber)	31	278	3,446		662,971	662,971	4,365,021	20,571,034	1,974,905	30,068,140	13,511,607
Paper goods, not elsewhere classified	20	212	935	802	1,150	517,308	952,955	5,278,163	65,262	8,188,460	2,815,036
Patent or proprietary medicines and compounds	28	150	120	40	101	328,085	118,743	545,076	7,129	1,702,519	1,150,314
Paving materials: Asphalt, tar, crushed slag, and mixtures	3	5	12	105		12,688	18,512	34,901	1,045	70,877	34,931
Perfumes, cosmetics, and other toilet preparations	6	27	37		33	54,112	36,856	148,860	2,493	308,350	157,046
Photographs	3	39	103	250	132	127,987	212,000	903,647	12,886	1,524,742	608,200
Photo-engraving, not done in printing establishments	10	115	317		179	304,874	750,056	203,467	19,020	1,712,184	1,480,088
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills	143	897	5,283	13,021	10,372	2,507,861	6,584,357	12,057,400	342,912	26,544,943	13,544,532
Plumbers' supplies, not including pipe or vitreous-china sanitary ware	12	212	3,524	5,150	2,091	500,813	5,717,554	4,014,740	505,041	14,673,705	9,104,008
Poultry killing, dressing, and packing, wholesale	6	12	72		179	20,748	68,123	305,105	10,026	1,214,317	200,096
Printing and publishing, book and job	278	818	3,105	9	5,021	2,084,404	4,661,752	6,424,338	221,564	18,002,033	12,047,031
Printing and publishing, newspaper and periodical	320	2,955	2,694	15	6,485	6,431,115	4,936,070	5,014,055	328,670	28,021,724	22,078,000
Pulp goods	4	17	127	40	474	50,734	126,265	107,476	20,431	378,247	160,340
Pumps (hand and power) and pumping equipment	6	103	342		863	227,287	492,780	703,398	36,632	1,022,180	1,182,150
Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment	13	118	743	1,230	1,488	303,822	805,048	1,779,877	59,141	3,812,543	1,073,525
Rubber goods other than tires, inner tubes, and boots and shoes	6	60	478	400	1,895	172,081	454,692	905,504	57,460	2,230,608	1,177,554
Rubber tires and inner tubes	5	634	3,022	5,085	19,735	1,181,001	5,235,704	22,181,017	544,437	41,244,345	18,510,861
Saddlery and harness	10	56	95		347	113,584	126,065	542,682	5,265	1,012,126	404,170
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments	35	97	415	311	1,028	333,408	640,833	4,013,044	82,360	6,703,117	1,797,713
Screw-machine products and wood screws	6	26	122	25	687	65,987	224,564	266,847	23,233	885,570	515,499
Ship and boat building, steel and wooden, including repair work	10	157	1,297	2,581	5,265	490,251	1,881,133	3,217,475	117,840	6,617,795	3,282,471
Shirts	8	61	389	131	119	125,644	309,892	763,530	12,126	1,032,090	857,034
Signs and advertising novelties	33	87	592		365	237,442	631,610	804,305	16,841	2,329,597	1,608,421
Sporting and athletic goods, not including firearms or ammunition	8	25	224		112	55,905	150,818	183,901	6,760	586,312	305,651
Stamped ware, enameled ware, and metal stamping, enameling, japanning, and lacquering	20	576	2,802	3,245	2,044	1,332,357	3,370,631	4,990,404	273,880	13,527,684	8,257,450
Stationary goods, not elsewhere classified	4	38	103		115	125,067	131,193	457,005	6,403	1,035,086	572,278
Statuary and art goods, factory product	6	30	123		173	77,232	219,607	91,795	8,266	519,148	410,087
Steam fittings and steam and hot-water heating apparatus	4	143	567		1,063	439,828	739,148	1,889,137	41,216	4,423,150	2,992,800
Stereotyping and electrotyping, not done in printing establishments	6	24	72		268	105,130	131,096	55,673	11,348	444,722	377,801
Stoves and ranges (other than electric) and warm-air furnaces	16	477	2,449	1,515	4,630	1,210,559	2,935,578	4,685,983	268,220	13,877,718	8,923,510
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills	30	383	1,570	1,355	3,068	1,129,905	2,399,136	5,325,731	137,709	11,530,495	6,067,055
Suspenders, garters, and other elastic woven goods, made from purchased webbing	4	2	5		4	( <sup>3</sup> )	5,045	23,346	276	49,924	29,302
Tobacco: Chewing and smoking, and snuff	4	4	24		15	11,780	19,637	58,163	547	126,290	67,580
Tools, not including edge tools, machine tools, files, or saws	11	151	538		928	536,554	752,469	1,020,505	41,784	4,162,031	3,080,742
Toys (not including children's wheel goods or sleds), games, and playground equipment	9	66	179	100	342	122,520	168,257	304,548	12,581	818,284	501,158
Trunks, suitcases, and bags	18	186	1,059	680	510	687,592	1,118,505	2,550,535	36,440	6,024,933	3,437,655
Wall plaster, wall board, insulating board, and floor composition	4	19	39		486	51,236	51,454	260,304	11,297	681,387	409,786
Waste	4	15	145	150	544	29,755	140,266	889,414	18,754	1,131,580	223,671
Windmills and windmill towers	3	20	196	571	370	40,582	312,004	306,488	11,415	804,959	487,058
Window shades and fixtures	10	28	94		152	77,600	106,610	410,680	8,718	955,859	537,456
Wirework, not elsewhere classified	16	54	391	250	416	176,843	487,683	630,993	24,761	1,785,071	1,132,377
Wood turned and shaped and other wooden goods, not elsewhere classified	16	35	201	184	1,229	68,089	185,017	337,353	27,627	877,130	512,156
Wooden goods	20	91	852	1,921	1,169	232,059	834,828	1,705,683	91,013	3,516,426	1,659,125
Other industries	284	3,054	23,416	46,905	76,935	8,581,747	31,867,989	117,646,237	9,019,508	217,623,211	90,003,466

<sup>1</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>3</sup> Not including data for 5,894 employees of central administrative offices, with salaries aggregating \$15,879,843. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>4</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other Industries."

CENSUS OF MANUFACTURES: 1929

TABLE 13.—GENERAL STATISTICS FOR THE MILWAUKEE INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929

[This table presents, for the Milwaukee Industrial Area (see GENERAL EXPLANATIONS—Industrial Area) and for each important industrial county in the State, with certain exceptions, the reasons for which are given in explanatory notes, separate figures for each industry for which it is possible to publish such figures without disclosing, exactly or approximately, the data supplied by individual establishments, and gives combined statistics for the remaining industries as a group ("Other industries"). Certain of the industries for which combined figures are given, however, reported larger numbers of wage earners or larger values of products than some of those shown separately.]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						

MILWAUKEE INDUSTRIAL AREA

[This area comprises Kenosha, Milwaukee, and Racine Counties. The totals for all industries do not include data for a few establishments located outside the industrial area (see footnotes 1 and 2), and therefore are slightly smaller than the sums of the items for the individual industries.]

All industries, total.....	2,218	27,571	144,760	170,696	354,251	Dollars 73,820,710	Dollars 211,345,067	Dollars 594,201,445	Dollars 22,023,254	Dollars 1,166,493,769	Dollars 550,260,070
Awnings, tents, sails, and canvas covers.....	9	24	71	-----	19	38,022	82,562	100,051	2,976	430,834	237,807
Belting, leather.....	4	6	24	-----	77	14,977	31,868	198,439	1,402	294,433	94,592
Beverages.....	32	133	405	2,304	317	349,882	612,562	2,154,256	109,550	5,547,117	3,283,311
Blacking, stains, and dressings.....	4	20	29	-----	121	61,022	43,809	206,048	4,003	449,870	239,759
Bookbinding and blank-book making.....	16	126	488	-----	343	263,433	577,061	699,968	17,172	2,083,545	1,366,405
Boot and shoe findings, not made in boot and shoe factories.....	7	39	276	-----	275	103,915	260,309	1,202,030	22,072	1,788,039	563,937
Boots and shoes, other than rubber.....	30	1,018	7,281	1,675	3,450	2,235,122	8,043,826	19,677,730	164,878	36,808,423	17,055,815
Boxes, paper, not elsewhere classified.....	10	238	1,195	380	1,092	703,402	1,278,920	4,431,084	65,040	7,363,925	2,857,801
Boxes, wooden, except cigar boxes.....	10	70	508	1,744	1,004	205,935	562,956	1,179,392	30,239	2,165,298	965,607
Bread and other bakery products.....	419	358	3,146	950	3,596	905,465	4,087,982	10,002,817	473,242	23,357,165	12,881,106
Brooms.....	6	5	19	-----	14	7,221	28,720	34,617	885	124,064	88,562
Brushes, other than rubber.....	9	37	144	-----	302	74,492	146,231	258,981	7,943	509,328	302,404
Butter.....	12	57	260	1,208	1,640	132,643	455,378	3,136,379	31,276	4,528,042	1,360,987
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	9	44	325	340	235	115,614	284,134	1,329,155	21,985	2,281,076	930,836
Caskets, coffins, burial cases, and other morticians' goods.....	3	24	87	125	322	65,974	122,370	213,766	8,310	685,813	413,728
Chocolate and cocoa products, not including confectionery.....	3	32	103	1,050	618	99,928	95,094	1,588,607	22,283	2,381,760	770,870
Cigars and cigarettes.....	45	34	379	-----	20	84,872	379,982	491,445	4,300	1,283,444	787,099
Clay products (other than pottery) and nonclay refractories.....	6	20	106	70	963	48,992	152,451	41,800	86,018	441,452	313,634
Cleaning and polishing preparations.....	6	22	34	-----	137	53,323	40,843	190,736	3,425	517,320	323,159
Clothing (except work clothing), men's, youths', and boys', not elsewhere classified.....	28	165	1,972	265	563	620,488	2,036,116	5,662,378	53,181	9,009,906	4,194,347
Clothing, women's, not elsewhere classified.....	24	139	830	-----	164	282,149	619,100	1,602,145	16,325	3,235,188	1,616,718
Coffee and spice, roasting and grinding.....	10	35	73	150	283	94,579	83,275	2,514,988	18,397	3,415,979	882,594
Concrete products.....	38	102	282	50	1,198	222,981	404,808	772,735	36,505	2,210,894	1,398,654
Confectionery.....	27	222	1,503	1,735	1,362	502,750	1,190,967	4,699,834	81,070	9,223,848	4,442,944
Dairymen's supplies; creamery, cheese-factory, and butter-factory equipment; and poultrymen's and apiarists' supplies.....	5	41	129	-----	381	130,000	208,537	387,309	15,330	1,218,598	815,959
Electrical machinery, apparatus, and supplies.....	10	1,735	6,021	1,200	7,498	4,226,349	7,975,717	11,604,540	349,207	37,866,761	25,913,014
Electroplating.....	12	23	147	12	669	75,472	262,519	72,622	25,755	504,020	495,743
Engines, turbines, tractors, and water wheels.....	12	917	8,560	12,535	7,803	2,287,391	14,341,973	34,469,603	1,088,495	68,326,376	32,768,278
Engraving, steel and copperplate, and plate printing.....	4	12	56	-----	22	42,452	52,706	56,763	1,120	270,867	212,984
Fancy and miscellaneous articles, not elsewhere classified.....	6	14	100	-----	7	43,467	64,828	159,130	1,694	341,875	181,051
Feeds, prepared, for animals and fowls.....	6	56	70	-----	874	129,186	103,041	1,994,976	31,445	8,988,972	962,551
Flavoring extracts and flavoring sirups.....	17	146	372	3,118	1,718	421,302	566,751	1,450,253	139,193	3,764,507	2,165,061
Food preparations, not elsewhere classified.....	15	259	609	5,765	1,335	618,760	857,226	5,460,261	193,838	10,529,585	4,808,051
Foundry and machine-shop products, not elsewhere classified.....	147	4,291	17,736	21,620	30,250	11,047,499	27,606,905	43,718,178	2,388,444	111,372,841	65,206,219
Fur goods.....	25	63	202	-----	134	190,765	267,031	707,479	14,900	1,445,824	723,385
Furniture, including store and office fixtures.....	44	312	2,079	2,229	2,108	827,209	2,842,997	4,877,925	119,536	10,202,181	5,704,670
Gas and electric fixtures; lamps, lanterns, and reflectors.....	17	124	368	-----	337	343,930	500,332	860,565	32,383	2,105,434	1,302,486
Glass products (except mirrors) made from purchased glass.....	12	18	77	-----	73	45,241	134,338	133,715	4,524	408,556	270,347
Gloves and mittens, leather.....	9	88	728	100	179	302,378	621,661	1,575,297	13,754	3,054,045	1,465,894
Grease and tallow, not including lubricating greases.....	3	7	34	-----	323	18,499	48,300	313,913	14,874	494,619	165,832
Hardware not elsewhere classified.....	12	271	1,653	100	2,423	1,036,162	2,174,542	2,376,366	123,901	8,806,168	6,305,901
Hats and caps, except felt and straw, men's.....	10	28	81	-----	34	90,786	114,041	196,302	3,818	474,545	274,425
House-furnishing goods, not elsewhere classified.....	11	28	168	150	101	158,745	107,348	623,601	9,021	991,668	459,046
Ice cream.....	9	98	361	300	3,138	210,187	523,376	2,269,811	97,519	4,750,832	2,383,502
Ice, manufactured.....	7	64	63	-----	3,829	224,645	113,161	29,446	134,239	1,014,066	860,381
Ink, printing.....	4	12	12	-----	75	53,017	13,142	68,017	1,698	161,745	102,030
Iron and steel: Steel works and rolling mills.....	17	633	5,248	17,740	31,484	1,898,314	9,428,007	11,124,969	1,690,231	30,269,920	17,453,820
Knit goods.....	25	837	8,238	3,640	3,237	2,801,906	8,955,157	15,721,850	302,469	40,025,649	24,601,330
Leather: Tanned, curried, and finished.....	14	368	2,619	11,002	3,340	1,136,500	3,301,598	13,110,584	372,329	20,262,844	6,779,931
Lithography.....	11	150	621	-----	831	513,570	903,349	1,329,226	36,018	3,951,742	2,585,898
Machine-tool accessories and small metal-working tools, not elsewhere classified.....	31	71	364	-----	937	244,155	687,103	251,481	35,996	1,842,565	1,555,088
Machine tools.....	10	273	1,237	1,050	1,753	791,604	1,973,542	1,835,847	66,187	6,569,506	4,067,532
Malt.....	4	38	107	2,680	-----	216,355	180,907	4,771,789	154,546	6,034,682	1,108,347
Marble, granite, slate, and other stone products.....	18	79	341	375	2,117	271,179	639,519	767,341	41,860	2,015,662	1,206,471
Meat packing, wholesale.....	15	635	2,385	2,851	4,131	1,317,061	3,340,814	64,811,789	422,077	74,436,797	9,202,931
Millinery.....	9	77	952	110	462	308,208	945,999	1,916,128	28,538	3,787,013	1,742,347
Models and patterns, not including paper patterns.....	35	72	475	-----	651	228,398	968,137	273,601	24,972	1,894,586	1,595,923
Motor-vehicle bodies and motor-vehicle parts.....	27	1,222	11,934	2,075	91,748	3,849,100	10,190,196	39,894,697	1,147,853	74,242,048	33,090,498
Motor vehicles, not including motorcycles.....	8	557	8,022	2,800	18,511	2,653,551	13,187,725	85,402,539	1,070,837	128,726,918	42,253,542
Paints and varnishes.....	13	720	590	888	1,323	1,641,211	888,541	8,269,990	91,192	13,215,218	4,854,036

See footnotes at end of this section, p. 569.

TABLE 13.—GENERAL STATISTICS FOR THE MILWAUKEE INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>MILWAUKEE INDUSTRIAL AREA—Continued</b>											
Paper goods, not elsewhere classified	7	91	336	152	508	Dollars 241,301	Dollars 336,446	Dollars 1,177,942	Dollars 28,373	Dollars 2,003,118	Dollars 1,396,803
Patent or proprietary medicines and compounds	15	47	54	40	44	94,847	40,572	290,448	2,974	624,644	331,122
Photo-engraving, not done in printing establishments	13	89	210	-----	123	259,237	530,846	149,489	11,600	1,150,233	989,138
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills	50	345	1,717	2,050	3,437	1,109,736	2,516,134	3,781,637	85,888	9,090,760	5,223,237
Printing and publishing, book and job	100	579	2,234	-----	3,792	1,489,416	3,810,534	5,103,149	150,703	14,000,736	8,746,834
Printing and publishing, newspaper and periodical	52	1,814	1,161	-----	2,979	4,197,797	2,579,339	3,770,321	143,135	17,894,965	13,481,509
Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment	4	25	83	-----	171	90,976	155,829	188,570	5,209	570,915	377,136
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments	20	74	322	305	1,229	238,552	507,355	3,822,673	62,075	5,252,970	1,368,222
Screw-machine products and wood screws	6	26	122	25	687	65,987	220,594	206,847	23,233	835,579	515,499
Signs and advertising novelties	24	69	459	-----	308	200,017	507,558	646,768	14,652	1,747,136	1,185,726
Stamped ware, enameled ware, and metal stamping, enameling, japanning, and lacquering	13	401	1,941	2,745	851	932,150	2,392,591	4,114,450	140,974	10,178,825	5,917,401
Stereotyping and electrotyping, not done in printing establishments <sup>1</sup>	6	24	72	-----	268	105,130	131,696	55,573	11,348	444,722	377,801
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills	24	342	1,438	1,355	2,797	981,078	2,241,902	4,607,678	120,364	10,320,188	5,501,046
Suspenders, garters, and other elastic woven goods, made from purchased webbing	4	2	5	-----	4	( <sup>2</sup> )	5,045	23,846	276	49,924	26,302
Tools, not including edge tools, machine tools, files, or saws <sup>2</sup>	11	151	538	-----	928	536,554	752,469	1,029,505	41,784	4,102,031	3,000,742
Toys (not including children's wheel goods or sleds), games, and playground equipment	5	39	74	-----	150	82,830	85,696	184,322	7,073	410,957	275,462
Trunks, suitcases, and bags	11	141	622	555	432	496,373	711,058	1,089,331	25,343	4,032,224	2,323,550
Wall plaster, wall board, insulating board, and floor composition	4	19	30	-----	486	51,236	51,454	260,304	11,207	681,337	400,786
Wirework, not elsewhere classified	7	23	154	-----	104	49,823	140,593	196,394	7,225	455,289	252,670
Other industries	363	5,987	31,891	53,202	94,292	14,903,119	47,416,547	138,848,432	9,573,336	282,733,313	134,311,545 <sup>3</sup>

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

The figures for a few establishments located outside the Milwaukee Industrial Area have been included with those for the area, as specified in footnotes 1 and 2, to avoid disclosing data for the establishments in question.  
<sup>1</sup> Includes data for 1 establishment located outside the Milwaukee Industrial Area.  
<sup>2</sup> Includes data for 2 establishments located outside the Milwaukee Industrial Area.

<sup>3</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

**KENOSHA COUNTY**

[Because of the amount of manufacturing industry in this county, it had been planned to publish statistics by industries for it. It is found, however, that no figures can be given for the most important industry—namely, "Motor vehicles, not including motorcycles"—without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report]

All industries, total	62	847	11,544	17,895	23,523	Dollars 3,600,998	Dollars 13,410,702	Dollars 53,091,832	Dollars 1,036,433	Dollars 97,582,456	Dollars 37,204,191
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**MILWAUKEE COUNTY**

[The totals for all industries do not include data for a few establishments located outside the county (see footnotes 4 and 5), and therefore are slightly smaller than the sums of the items for the individual industries]

All industries, total	1,939	23,410	117,658	130,060	201,621	Dollars 62,237,600	Dollars 170,962,354	Dollars 400,423,914	Dollars 17,745,018	Dollars 912,261,503	Dollars 434,037,571
Belting, leather	4	6	24	-----	77	14,977	31,868	198,439	1,402	294,433	94,592
Beverages	25	120	372	2,304	241	337,214	563,497	2,076,110	104,001	5,313,063	3,134,541
Blacking, stains, and dressings	4	20	29	-----	121	61,022	43,809	206,048	4,063	449,870	239,759
Bookbinding and blank-book making	10	120	488	-----	343	263,433	577,061	699,908	17,172	2,083,545	1,360,405
Boot and shoe findings, not made in boot and shoe factories	7	39	276	275	181	103,915	260,309	1,202,030	22,072	1,788,030	563,937
Boxes, paper, not elsewhere classified	10	238	1,195	380	1,092	703,402	1,278,920	4,431,034	65,040	7,353,925	2,837,801
Boxes, wooden, except cigar boxes	10	70	508	1,744	1,004	205,935	562,950	1,170,392	30,239	2,165,293	955,697
Bread and other bakery products	370	343	2,921	950	3,265	867,862	3,765,148	9,323,212	438,001	21,914,051	12,157,338
Brooms	6	5	19	-----	14	7,221	23,729	34,617	835	124,064	83,562
Brushes, other than rubber <sup>4</sup>	9	37	144	-----	302	74,462	146,231	268,031	7,943	569,323	302,404
Butter	8	52	249	1,208	1,467	127,037	434,831	2,916,742	25,672	4,243,524	1,301,110
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces	4	19	178	135	131	41,089	177,190	797,470	9,385	1,294,222	487,381
Caskets, coffins, burial cases, and other morticians' goods	3	24	87	125	322	65,974	122,370	213,766	8,319	635,313	413,728

See footnotes at end of this section, p. 570.

CENSUS OF MANUFACTURES: 1929

TABLE 13.—GENERAL STATISTICS FOR THE MILWAUKEE INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929—Continued

(See note at head of this table)

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY OF POWER EQUIPMENT)		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>a</sup>	Value added by manufacture <sup>b</sup>
				Prime movers	Electric motors driven by purchased energy						
<b>MILWAUKEE COUNTY—Continued</b>											
Chocolate and cocoa products, not including confectionery.....	3	32	103	1,050	618	Dollars 99,928	Dollars 95,094	Dollars 1,588,607	Dollars 22,283	Dollars 2,381,760	Dollars 770,870
Cigars and cigarettes.....	40	32	365		20	82,232	367,408	471,144	4,060	1,238,319	723,115
Cleaning and polishing preparations <sup>c</sup> .....	6	22	34		187	53,323	40,843	190,738	3,425	517,320	828,169
Clothing, (except work clothing), men's, youths', and boys', not elsewhere classified.....	28	165	1,072	205	503	620,488	2,036,116	5,662,378	53,181	9,000,906	4,194,347
Clothing, women's, not elsewhere classified <sup>c</sup> .....	24	139	830		164	282,149	619,100	1,602,145	16,325	3,235,188	1,016,718
Coffee and spice, roasting and grinding.....	10	35	73	150	283	94,579	83,275	2,514,938	18,397	3,415,979	882,594
Concrete products <sup>c</sup> .....	38	102	282	50	1,198	222,081	404,808	772,735	30,505	2,210,894	1,398,654
Confectionery.....	27	222	1,503	1,735	1,362	502,750	1,109,967	4,699,834	81,070	9,238,848	4,442,944
Cooperage.....	6	11	45		128	34,007	70,449	215,579	5,768	383,398	162,051
Cutlery (not including silver and plated cutlery) and edge tools.....	4	5	32		49	25,428	47,934	17,619	3,052	189,052	118,381
Electrical machinery, apparatus, and supplies.....	31	1,424	4,074	750	6,429	3,405,433	6,655,649	9,248,486	292,662	31,462,751	21,021,603
Electroplating.....	7	15	108		450	50,480	134,480	30,100	14,043	333,895	280,032
Engraving, steel and copperplate, and plate finishing.....	4	12	56		22	42,452	52,700	56,763	1,120	270,867	212,984
Fancy and miscellaneous articles, not elsewhere classified.....	6	14	100		7	43,467	64,823	150,130	1,694	341,875	181,051
Flavoring extracts and flavoring syrups <sup>c</sup> .....	17	146	372	3,118	1,718	421,302	505,751	1,450,253	139,183	3,754,507	2,165,061
Foundry and machine-shop products, not elsewhere classified.....	121	3,895	15,040	20,595	23,530	9,865,156	23,300,617	39,240,436	1,023,209	68,142,134	50,978,489
Fur goods.....	25	63	202		134	190,765	287,031	707,479	14,960	1,445,824	723,385
Furniture, including store and office fixtures.....	38	248	1,560	1,269	1,423	636,140	2,051,137	3,054,355	92,320	7,486,213	4,338,538
Gas and electric fixtures; lamps, lanterns, and reflectors <sup>c</sup> .....	17	124	368		337	343,930	500,322	860,565	32,333	2,105,434	1,302,486
Glass products (except mirrors) made from purchased glass.....	12	18	77		73	45,241	134,338	133,715	4,524	408,586	270,347
Gloves and mittens, leather.....	9	88	728	100	179	302,378	621,661	1,575,297	13,754	3,054,945	1,465,894
Grease and tallow, not including lubricating greases.....	3	7	34		323	18,499	48,300	313,913	14,874	404,619	165,832
Hats and caps, except felt and straw, men's.....	10	28	81		34	90,780	114,041	190,302	3,818	474,545	274,425
House-furnishing goods, not elsewhere classified <sup>c</sup> .....	11	28	168	150	101	168,745	107,348	523,601	9,021	991,608	459,046
Ice cream.....	5	78	313	225	2,865	173,307	486,652	1,955,551	82,213	4,181,819	2,144,032
Ink, printing <sup>c</sup> .....	4	12	12		75	53,017	13,142	55,017	1,098	181,749	102,030
Iron and steel: Steel works and rolling mills.....	14	613	4,935	17,740	28,694	1,838,093	3,942,783	10,521,861	1,592,510	28,507,101	16,392,820
Leather: Tanned, curried, and finished <sup>c</sup> .....	14	368	2,619	11,602	3,340	1,136,500	3,301,598	13,110,584	372,329	20,202,844	6,770,631
Lithographing.....	11	150	621		831	993,349	993,349	1,329,226	36,618	2,951,742	2,556,898
Machine-tool accessories and small metal-working tools, not elsewhere classified.....	20	53	255		740	103,757	483,627	180,382	24,761	1,340,781	1,135,638
Machine tools.....	7	238	1,108	1,050	1,336	630,635	1,752,195	1,571,111	54,462	5,600,822	4,041,249
Malt.....	4	38	107	2,680		216,355	180,007	4,771,739	154,546	6,034,682	1,108,347
Marble, granite, slate, and other stone products.....	15	75	324	375	1,983	260,134	602,715	713,771	39,228	1,335,813	1,132,814
Meat packing, wholesale <sup>c</sup> .....	15	635	2,385	2,851	4,131	1,317,061	3,840,814	64,811,789	422,077	74,436,787	9,202,931
Millinery.....	9	77	952	110	462	308,208	945,996	1,916,128	25,533	3,787,013	1,842,347
Models and patterns, not including paper patterns.....	23	63	366		548	204,125	716,172	221,609	20,129	1,488,455	1,240,720
Motor-vehicle bodies and motor-vehicle parts.....	19	1,082	10,440	2,075	91,132	3,551,698	18,275,046	35,927,509	1,128,780	69,716,770	31,662,472
Motor vehicles, not including motorcycles.....	5	335	2,778		9,916	855,323	4,077,125	34,177,930	225,631	54,719,679	20,310,083
Paper goods, not elsewhere classified.....	7	91	336	152	508	241,301	396,446	1,177,942	28,373	2,605,118	1,396,803
Patent or proprietary medicines and compounds.....	15	47	54	40	44	94,847	40,672	290,448	2,074	624,544	381,122
Photo-engraving, not done in printing establishments <sup>c</sup> .....	13	89	210		123	250,237	539,846	140,489	11,600	1,150,233	989,138
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills.....	44	336	1,687	2,025	3,061	1,082,026	2,472,599	3,659,053	78,706	8,846,904	5,109,055
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.....	8	113	324	150	1,687	316,518	1,323,227	1,254,793	172,468	3,752,287	2,325,026
Printing and publishing, newspaper and periodical.....	44	1,600	1,012		2,630	3,708,118	2,281,954	3,474,943	120,611	15,524,660	11,926,106
Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment.....	4	25	83		171	90,976	155,820	188,570	5,209	570,915	377,136
Sausage, meat puddings, headcheese, etc., and sausage casings, not made in meat-packing establishments <sup>c</sup> .....	20	74	322	305	1,229	238,552	507,355	3,322,673	62,075	5,252,970	1,368,222
Signs and advertising novelties.....	19	67	451		297	194,059	496,995	611,635	14,133	1,654,293	1,128,420
Stamped ware, enameled ware, and metal stamping, enameling, japanning, and lacquering <sup>c</sup> .....	13	401	1,041	2,745	851	932,150	2,892,591	4,114,450	146,974	10,178,825	5,917,401
Stereotyping and electrotyping, not done in printing establishments <sup>c</sup> .....	6	24	72		208	105,130	131,696	55,573	11,348	444,722	377,801
Stoves and ranges (other than electric) and warm-air furnaces.....	9	325	1,677	765	4,063	783,994	1,985,530	3,177,356	180,582	3,961,023	5,603,090
Structural and ornamental iron and steel work, not made in plants operated in connection with rolling mills <sup>c</sup> .....	24	342	1,438	1,355	2,797	931,073	2,241,902	4,607,078	126,304	10,326,188	5,591,646
Suspenders, garters, and other elastic woven goods, made from purchased webbing.....	4	2	5		4	( <sup>e</sup> )	5,045	23,340	276	49,924	26,302
Toys (not including children's wheel goods or sleds), games, and playground equipment.....	5	30	74		150	82,830	85,696	134,322	7,073	416,857	275,462
Wall plaster, wall board, insulating board, and floor composition.....	4	19	39		486	51,236	51,454	260,304	11,297	681,387	409,786
Other industries.....	575	3,094	45,028	47,837	80,338	21,499,002	64,811,990	163,413,422	9,100,597	335,841,353	163,327,834

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

The figures for a few establishments located outside the county have been included with those for the county, as specified in footnotes 4 and 5, to avoid disclosing data for the establishments in question.

<sup>c</sup> Includes data for 1 establishment located outside Milwaukee County.

<sup>d</sup> Includes data for 2 establishments located outside Milwaukee County.

<sup>e</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

TABLE 13.—GENERAL STATISTICS FOR THE MILWAUKEE INDUSTRIAL AREA AND FOR SELECTED COUNTIES, BY INDUSTRIES: 1929—Continued

[See note at head of this table]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY OF POWER EQUIPMENT)		Salaries	Wages	Cost of materials and containers for products <sup>a</sup>	Cost of fuel and purchased electric energy	Value of products <sup>b</sup>	Value added by manufacture <sup>c</sup>
				Prime movers	Electric motors driven by purchased energy						

RACINE COUNTY

[Because of the amount of manufacturing industry in this county, it had been planned to publish statistics by industries for it. It is found, however, that no figures can be given for the leading industries—"Foundry and machine-shop products, not elsewhere classified," as measured by number of wage earners, and "Motor vehicles, not including motorcycles," as measured by value of products—without disclosing the data reported by individual establishments; and those industries for which it would be possible to publish separate figures without disclosing data for individual establishments reported less than 50 per cent of the total number of wage earners employed in all industries. Under these conditions the publication of statistics for those industries for which separate figures could be given would be misleading, and therefore no such statistics are included in this report.]

All industries, total.....	217	3, 314	15, 558	22, 741	34, 102	Dollars 7, 922, 053	Dollars 21, 972, 011	Dollars 75, 080, 600	Dollars 2, 591, 803	Dollars 150, 040, 810	Dollars 78, 977, 308
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SHEBOYGAN COUNTY

All industries, total.....	248	1, 180	10, 000	16, 632	10, 228	Dollars 2, 754, 476	Dollars 12, 478, 255	Dollars 28, 027, 622	Dollars 1, 316, 233	Dollars 55, 548, 246	Dollars 26, 205, 391
Beverages.....	8	12	71	413	237	23, 497	98, 561	271, 000	20, 778	770, 353	481, 506
Boots and shoes, other than rubber.....	4	40	448	279	279	92, 611	402, 213	1, 015, 081	15, 799	2, 517, 875	885, 095
Bread and other bakery products.....	8	16	77	130	130	36, 225	114, 481	272, 011	15, 687	510, 470	222, 781
Butter.....	4	17	57	411	411	28, 920	72, 190	1, 198, 838	25, 236	1, 402, 887	238, 813
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	10	39	240	655	452	71, 101	196, 062	810, 618	20, 506	1, 511, 413	671, 294
Cheese.....	87	9	52	408	147	1, 065	64, 548	2, 660, 717	37, 704	2, 002, 937	355, 456
Cigars and cigarettes.....	6	13	13	8	8	11, 895	22, 713	499	00, 872	37, 600	37, 600
Concrete products.....	6	9	15	2	67	11, 784	14, 362	19, 552	1, 453	67, 034	46, 020
Foundry and machine-shop products, not elsewhere classified.....	12	51	240	835	835	116, 964	327, 748	260, 394	23, 825	1, 253, 700	904, 530
Furniture, including store and office fixtures.....	25	385	2, 616	4, 284	2, 012	895, 581	2, 648, 369	4, 003, 427	135, 680	9, 900, 142	5, 851, 035
Printing and publishing, book and job.....	9	17	54	69	69	39, 587	64, 323	105, 721	3, 221	284, 003	175, 061
Other industries.....	69	579	6, 117	10, 870	5, 686	1, 437, 141	8, 403, 524	16, 830, 980	1, 003, 785	34, 147, 952	16, 274, 181

WINNEBAGO COUNTY

All industries, total.....	214	1, 483	10, 401	33, 766	16, 313	Dollars 3, 704, 451	Dollars 11, 438, 928	Dollars 33, 785, 973	Dollars 1, 547, 173	Dollars 63, 244, 885	Dollars 27, 911, 730
Beverages.....	6	5	18	170	44	8, 537	26, 063	33, 465	6, 025	104, 013	64, 523
Bread and other bakery products.....	13	11	81	123	123	22, 869	104, 755	281, 155	15, 246	605, 127	208, 726
Butter.....	8	7	28	55	95	15, 074	51, 840	1, 106, 918	21, 710	1, 352, 268	133, 640
Canning and preserving: Fruits and vegetables; pickles, jellies, preserves, and sauces.....	3	14	55	166	368	26, 500	43, 496	269, 664	6, 693	471, 702	195, 475
Cheese.....	31	2	13	130	38	(7)	16, 751	794, 932	11, 562	908, 301	131, 807
Cigars and cigarettes.....	5	5	15	1	1	7, 460	14, 040	29, 672	676	67, 387	37, 040
Confectionery.....	7	6	45	60	60	10, 092	44, 117	100, 000	6, 000	189, 322	82, 063
Foundry and machine-shop products, not elsewhere classified.....	14	77	405	75	1, 149	256, 657	554, 586	786, 826	50, 771	2, 329, 455	1, 491, 858
Fur goods.....	8	5	30	5	5	8, 257	35, 678	44, 713	1, 746	120, 205	82, 746
Furniture, including store and office fixtures.....	4	46	330	235	1, 075	100, 884	340, 446	504, 835	34, 001	1, 200, 868	661, 132
Paper.....	9	207	1, 333	17, 736	4, 604	630, 310	2, 209, 341	8, 763, 432	839, 210	16, 595, 020	6, 792, 978
Planing-mill products (including general mill-work), not made in planing mills connected with sawmills.....	10	135	1, 333	4, 405	931	550, 683	1, 440, 013	3, 055, 061	74, 039	5, 950, 055	2, 320, 015
Other industries.....	101	913	6, 205	10, 700	7, 814	2, 061, 120	6, 554, 302	17, 958, 850	477, 066	33, 041, 562	15, 209, 746

<sup>a</sup> See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.

<sup>b</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.

<sup>c</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."

# WYOMING

## TABLE 1.—SUMMARY FOR THE STATE: 1899 to 1929

[Data for the "Automobile repairing" industry are included in the figures for 1919 and 1921, the only years for which this industry was canvassed in connection with the census of manufactures. The figures for 1919 and prior years cover all establishments with products valued at \$500 or more, whereas the corresponding limit for 1921 and subsequent years was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year) <sup>1</sup>	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products <sup>2</sup>	Value added by manufacture <sup>3</sup>
			Total	Prime movers	Motors driven by purchased energy		Total <sup>4</sup>	Materials and containers	Fuel and purchased energy		
1929	248	6,258	46,677	28,715	17,962	\$10,255,395	\$62,720,084	\$60,033,573	\$2,686,511	\$96,348,076	\$33,627,992
1927	229	5,577	40,191	29,373	10,818	9,006,022	63,741,234	60,846,173	2,895,061	85,368,360	21,627,126
1925	224	6,333	28,721	19,044	9,677	10,526,253	76,073,349	(4)	(4)	107,984,752	31,911,403
1923	246	7,510	23,959	16,040	7,919	12,501,584	60,694,623	(4)	(4)	110,631,659	40,937,036
1921	254	7,254	(5)	(9)	(5)	13,890,314	48,320,446	(4)	(4)	80,246,919	31,926,473
1919	576	6,634	17,864	10,364	7,500	11,188,979	42,250,528	40,510,297	1,740,231	81,445,304	39,194,866
1914	337	2,989	10,004	8,823	1,176	2,311,754	5,559,887	5,207,921	351,466	11,223,415	5,664,028
1909	203	2,897	7,628	7,114	514	2,080,763	2,608,189	2,420,903	187,286	6,249,078	3,640,889
1904	169	1,834	3,604	3,558	46	1,261,122	1,300,773	1,227,073	73,700	3,523,260	2,222,487
1899	139	2,000	3,820	3,813	7	1,209,123	1,369,730	(6)	(6)	3,268,555	1,898,825
PER CENT OF INCREASE OR DECREASE (—)											
1927-1929	8.3	12.2	16.1	-2.2	66.0	13.1	-1.0	-1.3	-7.2	12.9	55.5
1925-1927	2.2	-11.9	39.0	54.2	11.8	-13.9	-16.2			-20.9	-32.2
1923-1925	-8.9	-15.7	19.9	18.7	22.2	-15.8	9.2			-2.4	-23.0
1921-1923	-3.1	3.5				-10.0	44.2			37.0	28.2
1919-1921	-55.9	9.3				24.1	14.4			-1.5	-18.5
1910-1920	-56.9	-5.7	161.3	177.1	139.5	-8.3	48.4	48.2	54.4	18.3	-14.2
1909-1919	114.9	131.4	134.2	45.7	1,359.1	437.7	1,519.9	1,573.4	829.2	1,203.3	976.5
1899-1909	92.8	39.2	99.7	86.6	(7)	72.1	90.4			91.2	91.7

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> The aggregates for cost of materials, etc.; and value of products, include considerable amounts of duplication due to the use of the products of certain industries as materials in others. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.  
<sup>3</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>4</sup> Not reported separately.  
<sup>5</sup> Not called for on schedule.  
<sup>6</sup> No comparable data.  
<sup>7</sup> Per cent not computed where base is less than 100.

## TABLE 2.—SUMMARY FOR COUNTIES: 1929

[This table gives statistics for each county in which 10 wage earners or more were employed and for which it is possible to publish separate figures without disclosing an approximation of the data supplied by individual establishments. Certain of the other counties, however, reported larger numbers of wage earners or larger values of products than some of the counties shown separately. It is the practice of the Bureau of the Census to publish summary statistics of manufactures for all cities having 10,000 inhabitants or more. Two such cities, namely, Caspar and Cheyenne, are located in Wyoming; but it has been necessary to withhold from publication the figures for these cities in order to avoid disclosing an approximation of the data reported by individual establishments.]

COUNTY	Population, 1930	Number of establishments	Wage earners (average for the year) <sup>1</sup>	Horsepower <sup>2</sup>	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture
						Total	Materials and containers	Fuel and purchased energy		
The State	225,565	248	6,258	46,677	\$10,255,395	\$62,720,084	\$60,033,573	\$2,686,511	\$96,348,076	\$33,627,992
Albany	12,041	26	770	6,525	1,316,606	3,107,219	2,855,717	251,502	5,641,686	2,534,467
Big Horn	11,222	12	312	3,523	498,946	3,993,206	3,814,211	178,995	6,078,403	2,985,197
Carbon	11,391	14	280	2,972	537,144	2,381,901	2,278,273	103,628	4,317,687	1,935,185
Converse	7,145	7	90	684	152,750	1,664,830	1,514,495	150,335	2,890,832	1,196,002
Crook	5,333	7	91	444	111,475	67,548	67,163	385	237,269	169,661
Fremont	10,490	12	253	480	320,069	617,242	603,390	13,852	1,015,504	398,322
Hot Springs	5,476	5	12	62	10,657	35,611	34,651	960	92,156	56,545
Johnson	4,816	3	57	128	77,675	34,280	33,076	1,204	136,536	102,556
Laramie	26,845	22	1,073	4,498	1,545,368	1,937,605	1,777,541	160,064	4,279,765	2,842,163
Lincoln	10,894	10	32	165	40,286	352,207	339,795	12,412	435,651	83,444
Park	8,207	9	49	659	78,612	394,940	381,833	13,104	564,975	170,035
Platte	9,695	7	25	84	27,871	27,100	25,665	1,435	84,436	57,336
Sheridan	16,875	30	569	2,503	837,270	3,305,463	3,236,243	129,220	4,926,739	1,561,276
Sublette	1,944	5	113	242	98,191	69,264	65,669	3,595	286,800	217,536
Sweetwater	18,165	11	343	847	731,544	563,247	553,983	9,264	1,390,045	826,788
Uinta	6,572	7	244	738	367,850	583,822	552,402	31,420	1,016,631	462,809
Weston	4,673	8	20	535	21,837	199,353	193,849	5,504	290,100	99,747
All other counties <sup>3</sup>	53,781	53	1,916	21,588	3,476,214	43,325,216	41,705,614	1,619,602	61,754,158	18,428,912

<sup>1</sup> Not including salaried employees.  
<sup>2</sup> Rated capacity of prime movers plus rated capacity of electric motors driven by purchased energy.  
<sup>3</sup> Campbell, Goshen, Natrona, Niobrara, Teton, and Washakie Counties. (See headnote.)

## CENSUS OF MANUFACTURES: 1929

TABLE 3.—PERSONS ENGAGED IN MANUFACTURING INDUSTRIES, BY SEX: 1929, 1919, 1914, AND 1909

CENSUS YEAR	ALL CLASSES			PROPRIETORS AND FIRM MEMBERS			PRINCIPAL SALARIED OFFICERS OF CORPORATIONS			OTHER SALARIED OFFICERS AND EMPLOYEES			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1929 <sup>1</sup>	7,281	7,093	188	127	120	7	71	67	4	325	715	110	6,258	6,191	67
1919 <sup>1, 2</sup>	8,065	7,787	308	567	551	16	40	39	1	854	652	202	6,634	6,545	89
1914 <sup>3</sup>	3,696	3,578	118	293	278	15	31	31	-----	383	336	47	2,989	2,933	56
1909	3,393	3,313	80	293	257	6	19	19	-----	244	210	28	2,867	2,821	46

<sup>1</sup> No data in regard to sex of persons engaged in manufacturing industries were collected for any year between 1919 and 1929.

<sup>2</sup> Computed by the use of ratios between numbers of male and of female wage earners reported for December 14. See GENERAL EXPLANATIONS—Persons Engaged.

<sup>3</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.

TABLE 4.—WAGE EARNERS, BY MONTHS: 1929, 1919, 1914, AND 1909

[Statistics for wage earners by months for individual industries, by States, are given in the industry reports as published separately and in Volume II. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

CENSUS YEAR	Average number employed during year	NUMBER EMPLOYED ON 15TH DAY OF MONTH OR NEAREST REPRESENTATIVE DAY												Per cent minimum is of maximum
		January	February	March	April	May	June	July	August	September	October	November	December	
1929 <sup>1</sup>	6,258	5,997	5,820	5,804	5,957	6,050	6,231	6,473	6,406	6,427	7,000	6,837	6,094	82.9
1919	6,634	5,870	5,804	5,853	5,939	5,908	6,409	6,885	7,216	7,127	7,509	7,560	7,434	76.8
1914	2,989	2,663	2,641	2,815	2,736	2,646	2,882	3,230	3,352	3,347	3,270	3,207	3,070	78.8
1909	2,867	2,496	2,481	2,642	2,642	2,788	2,983	2,957	3,042	3,132	3,031	3,137	3,065	79.1

<sup>1</sup> The figures for 1919 and 1914 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures.

TABLE 5.—ESTABLISHMENTS CLASSIFIED ACCORDING TO PREVAILING HOURS OF LABOR PER WEEK FOR WAGE EARNERS: 1929

[The data for each establishment are classified as a total according to the customary hours of labor in that establishment, even though a few employees may have worked a larger or a smaller number of hours]

PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)	PREVAILING HOURS OF LABOR PER WEEK	Number of establishments	Wage earners (average for the year)
All classes.....	248	6,258	45 and over but under 48.....	5	940
Not reported.....	41	81	48.....	76	2,350
Under 40.....	14	18	Over 48 but under 54.....	12	195
40.....			54.....	22	425
Over 40 but under 44.....			Over 54 but under 60.....	31	1,371
44 and over but under 45.....			60 and over.....	37	729

<sup>1</sup> Combined to avoid disclosing an approximation of the data for individual establishments.

TABLE 6.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY NUMBER OF WAGE EARNERS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures; and those for 1919 and 1909 include data for all establishments with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			CLASS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)		
	1929	1919	1909	1929	1919	1909		1929	1919	1909	1929	1919	1909
All establishments.....	248	576	268	6,258	6,634	2,867	51 to 100.....	12	7	2	853	468	130
No wage earners.....	10	112	40	-----	-----	-----	101 to 250.....	13	6	8	2,071	1,170	1,347
1 to 5.....	152	377	191	378	688	364	251 to 500.....	14	3	1	2,081	1,260	753
6 to 20.....	44	63	25	468	650	239	501 to 1,000.....						
21 to 50.....	13	6	1	417	186	34	1,001 to 2,500.....	-----	-----	-----	-----	-----	-----

<sup>1</sup> Combined to avoid disclosing approximations of the data for individual establishments.

TABLE 7.—ESTABLISHMENTS CLASSIFIED AS TO SIZE BY VALUE OF PRODUCTS: 1929, 1919, AND 1909

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in either the 1929 or the 1909 census of manufactures]

VALUE OF PRODUCTS	NUMBER OF ESTABLISHMENTS			WAGE EARNERS (AVERAGE FOR THE YEAR)			VALUE OF PRODUCTS			VALUE ADDED BY MANUFACTURE <sup>1</sup>		
	1929	1919	1909	1929	1919	1909	1929	1919	1909	1929	1919	1909
All establishments.....	248	576	268	6,258	6,634	2,867	\$96,348,070	\$81,445,394	\$6,249,078	\$33,627,992	\$39,194,866	\$3,640,880
Less than \$5,000.....	( <sup>2</sup> )	195	141	( <sup>2</sup> )	103	161	( <sup>2</sup> )	406,813	343,444	( <sup>2</sup> )	317,442	242,207
\$5,000 to \$19,999.....	101	235	86	208	447	231	1,069,273	2,446,419	771,778	712,405	1,455,856	480,792
\$20,000 to \$99,999.....	90	108	24	615	660	260	4,067,523	4,368,998	913,075	2,048,067	2,094,695	494,471
\$100,000 to \$249,999.....	60	( <sup>3</sup> )	( <sup>3</sup> )	307	( <sup>3</sup> )	( <sup>3</sup> )	2,024,751	( <sup>3</sup> )	( <sup>3</sup> )	1,047,130	( <sup>3</sup> )	( <sup>3</sup> )
\$250,000 to \$499,999.....	30	( <sup>3</sup> )	( <sup>3</sup> )	308	( <sup>3</sup> )	( <sup>3</sup> )	2,042,772	( <sup>3</sup> )	( <sup>3</sup> )	1,001,537	( <sup>3</sup> )	( <sup>3</sup> )
\$500,000 to \$999,999.....	36	38		1,285	5,424		8,309,020	74,133,104		4,410,202	85,326,873	
\$1,000,000 and over.....	21	( <sup>3</sup> )		559	( <sup>3</sup> )		3,361,975	( <sup>3</sup> )	( <sup>3</sup> )	1,783,630	( <sup>3</sup> )	( <sup>3</sup> )
\$1,000,000 to \$2,499,999.....	15	( <sup>3</sup> )	17	720	( <sup>3</sup> )	2,215	4,947,045	( <sup>3</sup> )	4,220,781	2,626,032	( <sup>3</sup> )	2,414,329
\$250,000 to \$499,999.....	7			924			5,106,872			1,947,297		
\$500,000 to \$999,999.....	14			3,226			77,705,388			24,569,361		
\$1,000,000 and over.....	6	( <sup>3</sup> )	( <sup>3</sup> )	643	( <sup>3</sup> )	( <sup>3</sup> )	0,261,276	( <sup>3</sup> )	( <sup>3</sup> )	3,260,035	( <sup>3</sup> )	( <sup>3</sup> )
\$1,000,000 to \$2,499,999.....	4	( <sup>3</sup> )	( <sup>3</sup> )	1,423	( <sup>3</sup> )	( <sup>3</sup> )	12,304,492	( <sup>3</sup> )	( <sup>3</sup> )	4,793,114	( <sup>3</sup> )	( <sup>3</sup> )
\$2,500,000 to \$4,999,999.....	4	( <sup>3</sup> )	( <sup>3</sup> )	1,160	( <sup>3</sup> )	( <sup>3</sup> )	56,139,620	( <sup>3</sup> )	( <sup>3</sup> )	16,466,209	( <sup>3</sup> )	( <sup>3</sup> )
\$5,000,000 and over.....	4	( <sup>3</sup> )	( <sup>3</sup> )		( <sup>3</sup> )	( <sup>3</sup> )					( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.  
<sup>2</sup> No data.  
<sup>3</sup> Not tabulated separately.

TABLE 8.—ESTABLISHMENTS CLASSIFIED AS UNDER CORPORATE OR OTHER FORM OF OWNERSHIP (OR CONTROL) AND AS UNDER CENTRAL-ADMINISTRATIVE-OFFICE OR INDEPENDENT OPERATION: 1929 AND 1919

[The figures for 1919 include data for the "Automobile repairing" industry, which was not canvassed in the 1929 census of manufactures; and they cover all establishments, in all industries, with products valued at \$500 or more, whereas the corresponding limit for 1929 was \$5,000. See GENERAL EXPLANATIONS—Establishments Covered—Size]

TYPE OF OWNERSHIP OR CONTROL, AND OF OPERATION	NUMBER OF ESTABLISHMENTS		WAGE EARNERS (AVERAGE FOR THE YEAR)		VALUE OF PRODUCTS		VALUE ADDED BY MANUFACTURE	
	1929	1919	1929	1919	1929	1919	1929	1919
Total.....	248	576	6,258	6,634	\$96,348,070	\$81,445,394	\$33,627,992	\$39,194,866
TYPE OF OWNERSHIP OR CONTROL								
Corporate ownership or control.....	121	165	5,872	6,014	93,625,661	77,333,678	32,216,851	37,047,616
Other forms of ownership or control (individual, partnership, etc.).....	127	411	386	620	2,722,415	4,111,716	1,411,141	2,147,250
TYPE OF OPERATION								
Central-administrative-office (plural-unit).....	57	( <sup>1</sup> )	5,023	( <sup>1</sup> )	87,789,085	( <sup>1</sup> )	29,346,074	( <sup>1</sup> )
Independent (single-unit).....	191	( <sup>1</sup> )	1,235	( <sup>1</sup> )	8,558,901	( <sup>1</sup> )	4,281,918	( <sup>1</sup> )

<sup>1</sup> Not tabulated.

TABLE 9.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, FOR THE STATE: 1929, 1927, 1925, 1919, AND 1914

CENSUS YEAR	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY											ELECTRIC MOTORS DRIVEN BY ENERGY GENERATED IN ESTABLISHMENTS REPORTING		
	Aggregate horse-power	Total horse-power of prime movers	Prime movers								Electric motors driven by purchased energy			
			Steam engines		Steam turbines		Internal-combustion engines		Water wheels and water turbines					
			Number	Horse-power	Number	Horse-power	Number	Horse-power	Number	Horse-power				Number
1929.....	46,677	28,715	127	10,374	107	15,396	43	2,782	4	163	1,740	17,962	1,017	14,277
1927.....	40,191	29,373	123	11,868	84	14,689	62	2,623	5	193	1,162	10,818	945	12,957
1925.....	28,721	19,044	93	9,357	20	7,653	54	1,927	4	107	1,067	9,677	374	6,773
1919 <sup>1</sup> .....	17,864	10,364	132	7,030	16	1,225	129	1,718	15	301	898	7,500	137	1,740
1914 <sup>1</sup> .....	10,004	8,828	<sup>2</sup> 156	<sup>2</sup> 6,925	( <sup>3</sup> )	( <sup>3</sup> )	73	1,366	22	537	212	1,176	52	515

<sup>1</sup> Data for the "Automobile repairing" industry are included in the statistics for 1919 and 1914, the only years for which this industry was canvassed in connection with the census of manufactures.  
<sup>2</sup> Reported as "Steam engines and turbines."  
<sup>3</sup> Not reported separately. See footnote 2.



## CENSUS OF MANUFACTURES: 1929

TABLE 10.—HORSEPOWER OF PRIME MOVERS AND OF ELECTRIC MOTORS, BY COUNTIES: 1929

[This table presents statistics for each county for which separate figures are given in Table 2. See headnote on that table]

COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>	COUNTY	PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY			Electric motors—plant energy <sup>1</sup>
	Aggregate	Prime movers	Electric motors			Aggregate	Prime movers	Electric motors	
The State.....	46,677	28,715	17,962	14,277	<i>Counties—Continued</i>				
<i>Counties</i>					Laramie.....	4,498	112	4,386	227
Albany.....	6,525	1,044	5,481	453	Lincoln.....	165	145	20	
Big Horn.....	3,523	3,261	262	769	Park.....	659	85	574	
Carbon.....	2,972	2,640	326	1,769	Platte.....	84		84	
Converse.....	684	402	282		Sheridan.....	2,503	1,041	1,462	377
Crook.....	444	428	16		Subletta.....	242	242		
Fremont.....	480	60	420		Sweetwater.....	847	150	697	40
Hot Springs.....	62	25	37		Uinta.....	738	14	724	
Johnson.....	128	110	18		Weston.....	535	465	70	
					All other counties <sup>2</sup> .....	21,588	18,485	3,103	10,633

<sup>1</sup> Horsepower of electric motors driven by energy generated in establishments reporting. <sup>2</sup> Campbell, Goshen, Natrona, Niobrara, Teton, and Washakie Counties.

TABLE 11.—FUEL AND ELECTRIC ENERGY CONSUMED, BY QUANTITY AND COST: 1929, 1927, 1923, 1919, 1914, AND 1909

[The figures given in this table cover the consumption of fuel and purchased electric energy for all purposes—power, heat, light, etc. For county figures, see Chapter VII Volume I, Reports of the Census of Manufactures, 1920]

KIND	1929		1927 <sup>1</sup>	1923 <sup>1</sup>	1919 <sup>1</sup>	1914 <sup>1</sup>	1909 <sup>1</sup>
	Quantity	Cost	Quantity	Quantity	Quantity	Quantity	Quantity
<b>Fuel:</b>							
Coal, total <sup>2</sup> (tons, 2,000 pounds).....	156,521	\$487,164	115,580	122,428	116,035	102,725	591,611
Anthracite (tons, 2,240 pounds).....	134	1,303	( <sup>3</sup> )	374	70	102	621
Bituminous (tons, 2,000 pounds).....	156,371	485,861	( <sup>3</sup> )	122,000	115,957	102,611	590,915
Coke (tons, 2,000 pounds).....	4,057	49,726	( <sup>4</sup> )	( <sup>4</sup> )	2,660	638	307
Fuel oils, including crude oils and gas oils (gallons) <sup>5</sup> .....	29,838,434	511,965	( <sup>4</sup> )	( <sup>4</sup> )	53,825,520	10,911,852	56,952
Gasoline and kerosene (gallons) <sup>6</sup> .....	21,413	3,254	( <sup>4</sup> )	( <sup>4</sup> )	89,544		
Gas, natural (M cubic feet).....	14,711,263	1,699,002	( <sup>4</sup> )	( <sup>4</sup> )			
Gas, manufactured (M cubic feet).....	3,813,304	547,670	( <sup>4</sup> )	( <sup>4</sup> )	4,793,519	4,562	100
Other fuels.....		105,247	( <sup>4</sup> )	( <sup>4</sup> )			
Electric energy purchased (kilowatt-hours).....	22,509,402	385,145	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )	( <sup>7</sup> )
<b>Total cost of fuel and purchased energy.....</b>		\$ 3,729,173	\$2,895,061	\$2,895,061	\$1,740,231	\$351,406	\$187,286

<sup>1</sup> No data on cost of fuel, by kinds, were collected for years prior to 1929.<sup>2</sup> Calculated by adding the number of tons of bituminous coal and the number of tons of anthracite reduced to a 2,000-pound basis.<sup>3</sup> Not tabulated separately.<sup>4</sup> No data.<sup>5</sup> For years prior to 1929, reported in barrels; converted on basis of 42 gallons per barrel.<sup>6</sup> Data incomplete.<sup>7</sup> The difference between this total and the corresponding one given in Tables 1, 2, and 12 is due to the inclusion here of the cost of fuel produced and consumed in the same establishments.<sup>8</sup> Not reported separately.

TABLE 12.—GENERAL STATISTICS, BY INDUSTRIES: 1929

[This table presents statistics for all industries for which separate figures can be given without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other industries," however, reported larger numbers of wage earners or larger values of products than some of those shown separately]

INDUSTRY	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT		Salaries	Wages	Cost of materials and containers for products <sup>1</sup>	Cost of fuel and purchased electric energy	Value of products <sup>1</sup>	Value added by manufacture <sup>2</sup>
				Prime movers	Electric motors driven by purchased energy						
All industries, total.....	248	896	6,258	28,715	17,962	\$2,288,632	\$10,255,365	\$60,033,573	\$2,686,511	\$96,348,076	\$33,627,992
Beverages.....	8	4	14	5	45	8,418	19,921	41,291	2,866	119,945	75,788
Bread and other bakery products.....	37	10	152		230	29,000	215,781	597,467	35,911	1,198,983	565,605
Butter.....	17	23	43	46	305	48,332	59,027	1,055,131	20,408	1,369,218	293,670
Car and general construction and repairs, steam-railroad repair shops.....	13	181	2,213	302	6,524	544,928	3,602,698	3,200,049	288,966	7,636,683	4,147,668
Cheese.....	7	3	25	43	5	2,185	30,091	395,213	14,424	475,181	65,544
Clay products (other than pottery) and non-clay refractories.....	5	13	50	300	387	20,653	78,107	11,996	22,553	163,643	129,094
Concrete products.....	3	2	17	10	44	( <sup>3</sup> )	21,640	53,895	760	103,871	49,216
Flour and other grain-mill products.....	10	24	38	528	167	42,965	50,606	562,584	12,599	830,336	255,153
Ice, manufactured.....	7	9	28	420	340	27,518	38,973	10,826	26,537	152,733	115,370
Lumber and timber products, not elsewhere classified.....	24	31	793	1,121	300	96,573	1,037,286	210,700	3,151	1,391,259	1,177,408
Meat packing, wholesale.....	4	13	52	166	197	55,493	83,916	964,677	10,379	1,277,166	312,110
Petroleum refining.....	17	269	1,079	20,251	2,989	738,912	3,226,217	45,541,228	1,072,166	68,846,821	21,633,427
Planing-mill products (including general mill-work, not made in planing mills connected with sawmills).....	4	3	23		104	6,860	37,409	57,500	1,726	133,766	74,540
Printing and publishing, book and job.....	10	10	46		112	41,381	93,442	70,164	5,252	265,163	189,747
Printing and publishing, newspaper and periodical.....	46	118	174	6	439	244,491	351,430	189,700	20,587	1,292,189	1,081,902
Wood preserving.....	8	17	144		464	33,887	200,211	2,046,955	27,605	2,308,668	234,098
Other industries.....	33	170	767	5,427	5,241	346,136	1,105,610	5,034,197	520,621	8,782,461	3,227,643

<sup>1</sup> The aggregates for cost of materials, etc., and value of products include considerable amounts of duplication due to the use of the products of certain industries as materials in others. As a rule, however, little or no duplication is included in the corresponding items for individual industries. See GENERAL EXPLANATIONS—Duplication in Cost of Materials and Value of Products.<sup>2</sup> Value of products less cost of materials, containers for products, fuel, and purchased electric energy. This item does not represent manufacturers' profits. See GENERAL EXPLANATIONS—Profits and Production Costs.<sup>3</sup> Withheld to avoid disclosing compensation of individual officers or employees; included in item for "Other industries."