CORK PRODUCTS

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of cork stoppers and bottle closures; cork board, cork pipe covering, molded cork fittings, ground cork, cork lagging, and other cork insulation products; cork tiling and flooring; and disks, gaskets, life preservers, mooring buoys, and other cork specialties.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	35	3,842	$4,208,674	$12,602,522	$23,023,329	$10,420,807	14,829
1927	27	3,185	3,560,013	9,395,123	17,368,825	7,973,702	11,683
1925	33	3,297	3,538,263	7,268,711	16,020,309	8,751,598	11,084
1923	39	3,478	3,594,204	8,045,577	15,566,455	7,520,878	10,052
1921	45	2,774	2,672,289	6,773,301	12,967,768	6,194,467	[3]
1919	62	3,545	3,387,114	9,134,950	16,282,239	7,147,289	8,556
1914	52	3,454	1,582,431	4,751,440	7,875,407	3,123,967	5,786
1909	62	3,142	1,098,019	3,434,621	5,939,938	2,505,317	3,671
1904	50	2,895	888,240	2,459,197	4,490,952	2,031,755	2,511
1899	62	2,340	687,796	2,403,829	4,392,364	1,988,535	1,489
	PER CENT INCREASE OR DECREASE (—)						
1927-1929	[4]	20.6	18.2	34.1	32.6	30.7	26.1
1925-1927	[4]	—3.4	0.6	29.3	8.4	—8.9	5.4
1923-1925	[4]	—5.2	—1.6	—0.7	2.9	16.4	10.3
1921-1923	[4]	25.4	34.5	18.8	20.0	21.4	----------
1919-1921	[4]	—21.7	—21.1	—25.9	—20.4	—13.3	----------
1919-1929	[4]	8.4	24.3	38.0	41.4	45.8	83.4
1909-1919	----------	12.8	208.5	166.0	174.1	185.3	133.1
1899-1909	----------	34.3	59.6	42.9	35.2	26.0	146.5

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments. Certain of the "Other States" however, reported larger values of products than some of the States shown separately. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	35	411	3,842	14,829	5,795	9,034	$902,800	$4,208,674	$12,602,522	$12,013,868	$588,654	$23,023,329	$10,420,807
	1927	27	373	3,185	11,683	2,421	9,262	874,273	3,560,013	9,395,123	8,915,910	479,213	17,368,825	7,973,702
	1919	62	486	3,545	[4] 8,556	2,124	[4] 6,432	1,028,039	3,387,114	9,134,950	8,734,295	400,655	16,282,239	7,147,289
Individual States:														
New Jersey	1929	7	117	660	5,820	1,435	4,385	230,511	841,414	3,722,397	3,454,912	267,485	6,338,833	2,616,436
	1927	7	104	631	4,017	466	3,551	222,742	740,107	2,429,633	2,195,086	234,547	3,696,042	1,266,409
	1919	6	74	532	2,317	240	2,077	148,700	601,382	1,859,249	1,719,774	139,475	3,259,262	1,400,013
New York	1929	18	78	863	2,008	815	1,193	167,977	946,465	2,648,463	2,569,518	78,945	5,088,801	2,440,338
	1927	12	66	633	1,102	795	307	126,013	793,307	2,183,896	2,128,285	55,611	4,098,661	1,914,765
	1919	35	205	1,208	1,532	420	1,112	509,232	1,104,036	3,076,863	2,982,706	94,157	5,589,612	2,512,749
Other States	[5] 1929	10	216	2,319	7,861	3,545	4,316	504,312	2,420,795	6,231,662	5,989,438	242,224	11,595,695	5,364,033
	[6] 1927	8	203	1,921	6,564	1,160	5,404	525,518	2,026,599	4,781,594	4,592,539	189,055	9,574,122	4,792,528
	[7] 1919	21	207	1,805	4,834	1,464	3,370	370,107	1,681,696	4,198,838	4,031,815	167,023	7,433,365	3,234,527

[1] Not including proprietors and firm members, as follows: For 1929, 12; 1927, 4; 1919, 30. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 4,265; 1927, 3,562; 1919, 4,061.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.
[5] Delaware, 1 establishment; Illinois, 1; Michigan, 2; Massachusetts, 1; Ohio, 1; Pennsylvania, 4.
[6] Illinois, 1 establishment; Michigan, 2; Ohio, 1; Pennsylvania, 4.
[7] Illinois, 3 establishments; Louisiana, 1; Maryland, 1; Massachusetts, 3; Pennsylvania, 11; Washington, 1; Wisconsin, 1.

TABLE 3.—PRODUCTS, BY KIND AND VALUE, 1923 TO 1929, AND CONSUMPTION OF CRUDE CORK, 1929, FOR THE UNITED STATES

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

	1929	1927	1925	1923
1. Cork-products industry, all products, total value	$23,023,329	$17,368,825	$16,020,309	$15,566,455
2. Cork products	21,974,173	16,993,488	15,798,749	15,106,123
3. Other products (not normally belonging to the industry)	[1] 1,049,156	375,337	221,560	460,332
4. Cork products made as secondary products in other industries	1,681,944	971,768	1,147,252	1,083,433
Cork products, all industries: Total value (sum of 2 and 4)	23,656,117	17,965,256	16,946,001	16,189,556
Cork stoppers and bottle closures	7,194,724	6,294,089	6,738,524	5,200,146
Cork insulation products, including tiling and flooring	9,604,175	5,774,260	5,984,705	5,263,456
Cork specialties and cork products not reported separately	6,857,218	5,896,907	4,222,772	5,725,954
Crude cork consumed: [2]				
Total cost	$7,786,240			
Quantity and cost reported—				
Quantity (pounds)	173,582,332			
Cost	$6,709,195			
Cost only reported	$1,077,045			

[1] Includes receipts for custom and contract work to the amount of $48,767.
[2] The combined value of products reported by the 25 establishments in the industry which reported their consumption of crude cork in the manufacture of cork products amounted to 94.6 per cent of the total value of products for the industry as a whole. The remaining 10 establishments did not report their consumption of crude cork.

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	1,166	*Horsepower* 14,829	806	*Horsepower* 11,683	769	*Horsepower* 11,084	697	*Horsepower* 8,556	198	*Horsepower* 5,786	100.0	100.0
Prime movers, total	20	5,795	16	2,421	20	2,393	27	2,124	36	3,562	39.1	24.8
Steam, total	20	5,795	15	2,415	19	2,387	26	2,099	23	2,500	39.1	24.5
Engines	17	3,715	13	1,985	17	1,987	26	2,099	(1)	(1)	25.1	24.5
Turbines	3	2,080	2	430	2	400			(1)	(1)	14.0	
Internal-combustion engines			1	6	1	6			13	1,002		
Water wheels and water turbines							1	25				0.3
Electric motors driven by purchased energy	1,146	9,034	790	9,262	749	8,691	670	6,432	162	2,224	60.9	75.2
Electric motors, total	1,595	11,065	1,217	12,399	1,096	10,228	880	7,545	373	4,495	100.0	100.0
Driven by purchased energy	1,146	9,034	790	9,262	749	8,691	670	6,432	162	2,224	81.6	85.2
Driven by energy generated in establishments reporting	449	2,031	427	3,137	347	1,537	210	1,113	211	2,271	18.0	14.8
Electric generators	9	*Kilowatts* 3,450	9	*Kilowatts* 1,510	9	*Kilowatts* 1,367	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 13,117,545		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	3,842	3,687	3,713	3,880	3,931	**4,085**	4,003	3,948	3,979	3,894	3,718	3,676	*3,594*	88.0
1925	3,297	*3,039*	3,110	3,318	3,286	3,311	3,289	3,372	**3,382**	3,365	3,378	3,368	3,355	89.9
1919	3,545	**3,706**	3,613	3,533	3,495	3,494	*3,482*	3,501	3,517	3,511	3,493	3,587	3,608	94.0
1914	3,454	3,695	3,716	**3,793**	3,720	3,587	3,557	3,443	3,313	3,436	3,222	2,997	*2,969*	78.3
1909	3,142	*2,756*	2,804	2,841	2,979	3,163	3,279	3,236	3,358	**3,388**	3,322	3,354	3,228	81.3
New Jersey	660	602	618	618	*600*	725	691	687	723	718	647	640	649	82.8
New York	863	*794*	817	846	929	957	902	874	866	866	842	842	821	83.0

EXCELSIOR

Description of the industry.—This industry embraces establishments engaged principally in the manufacture of wood excelsior, wood wool, and excelsior pads and wrappers.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1909 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size. No comparable figures available for years prior to 1909]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	66	1,241	$1,219,144	$2,439,530	$5,008,709	$2,569,239	10,667
1927	64	1,272	1,181,488	2,547,114	4,821,098	2,273,984	10,930
1925	72	1,300	1,179,667	2,573,016	4,901,085	2,328,069	11,993
1923	75	1,285	1,206,204	2,765,841	5,361,830	2,595,989	10,939
1921	79	1,087	978,186	2,754,731	4,213,214	1,458,483	[3]
1919	95	1,242	1,144,503	2,521,967	4,913,450	2,391,483	10,332
1914	99	1,177	558,464	1,402,914	2,515,456	1,112,542	10,715
1909	109	1,003	396,527	816,104	1,665,081	848,977	[4]
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	[5]	—2.4	3.2	—4.2	3.9	13.0	—2.4
1925–1927	[5]	—2.2	0.2	—1.0	—1.6	—2.3	—8.9
1923–1925	[5]	1.2	—2.2	—7.0	—8.6	—10.3	9.6
1921–1923	[5]	18.2	23.3	0.4	27.3	78.0	----------
1919–1921	[5]	—12.5	—14.5	9.2	—14.3	—39.0	----------
1919–1929	[5]	—0.1	6.5	—3.3	1.9	7.4	3.2
1909–1919	—12.8	23.8	188.6	209.0	195.1	181.7	----------

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] No comparable figures available.
[5] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929 AND 1927

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	66	96	1,241	10,667	6,311	4,356	$272,214	$1,219,144	$2,439,530	$2,322,039	$117,491	$5,008,769	$2,569,239
	1927	64	119	1,272	10,930	6,811	4,119	312,588	1,181,488	2,547,114	2,420,998	126,116	4,821,098	2,273,984
	[4] 1919	95	168	1,242	10,332	8,131	2,201	326,041	1,144,503	2,521,967	2,392,759	129,208	4,913,450	2,391,483
Individual States:														
New Hampshire	1929	6	6	77	1,011	806	205	18,492	92,598	209,431	203,995	5,436	431,812	222,381
	1927	6	7	62	1,151	1,026	125	9,159	68,369	186,675	182,208	4,467	301,993	115,318
New York	1929	7	8	62	736	399	337	19,806	57,639	130,940	119,891	11,049	251,604	120,664
	1927	7	7	56	575	180	395	23,217	55,788	137,203	126,404	10,889	257,216	119,923
North Carolina	1929	3	--------	30	247	110	137	----------	28,921	70,805	66,253	4,552	118,817	48,012
Virginia	1929	18	11	168	1,741	1,341	400	16,817	144,086	265,339	255,440	9,899	581,510	316,171
	1927	15	11	206	1,706	1,306	400	22,456	154,642	240,402	234,959	5,443	496,170	255,768
Wisconsin	1929	7	17	324	2,286	1,250	1,036	55,482	338,318	638,546	603,169	35,377	1,353,243	714,697
	1927	8	30	299	2,191	1,250	941	81,857	295,225	736,381	693,631	42,750	1,332,329	595,948
Groups of States:														
Ala., 2 est.; Ky., 1; Miss., 1	1929	4	8	49	350	165	185	12,800	35,884	67,482	60,857	6,625	146,637	79,155
Ark., 2 est.; La., 1; Tenn., 1	1929	4	6	93	867	390	477	23,121	99,447	171,818	165,389	6,429	372,246	200,428
Calif., 1 est.; Oreg., 2; Utah, 1; Wash., 1	1929	5	9	84	434	--------	434	19,920	79,313	137,060	131,025	6,035	276,476	139,416
Ind., 3 est.; Mich., 3; Minn., 1	1929	7	22	222	2,190	1,450	740	80,886	272,173	624,743	602,089	22,654	1,205,496	580,753
Me., 1 est.; Mass., 1; Md., 1; Ga., 2	1929	5	9	132	805	400	405	24,800	70,765	123,366	113,931	9,435	270,928	147,562
States not shown separately	[5] 1927	28	64	649	5,307	3,049	2,258	175,899	607,464	1,246,363	1,183,796	62,567	2,433,390	1,187,027

[1] Not including proprietors and firm members, as follows: For 1929, 54; 1927, 42; 1919, 81. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,391; 1927, 1,433; 1919, 1,491.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] No State figures for 1919 are available.
[5] Alabama, 2 establishments; Arkansas, 2; California, 1; Florida, 1; Georgia, 2; Indiana, 2; Kentucky, 2; Louisiana, 1; Maine, 1; Maryland, 1; Michigan, 4; Minnesota, 1; Mississippi, 1; Missouri, 1; North Carolina, 2; Oregon, 1; Tennessee, 1; Utah, 1; Washington, 1.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products]

KIND	Value
1. Excelsior industry, total value	$5,008,769
2. Excelsior and excelsior pads and wrappers	$4,819,793
3. Other products (not normally belonging to the industry)	$188,976
4. Excelsior and excelsior pads and wrappers made as secondary products in other industries	$133,837
Excelsior and excelsior pads and wrappers, all industries: Total value (sum of 2 and 4)	$4,953,630
Excelsior produced for sale as such: Total value	$2,923,551
Quantity reported— Tons (2,000 pounds)	156,973
Value	$2,799,836
Quantity not reported, value	$123,715
Excelsior pads and wrappers, value	$2,030,079

TABLE 4.—WOOD CONSUMED AND EXCELSIOR PRODUCED, BY STATES: 1929 [1]

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups]

STATE	WOOD CONSUMED (CORDS)						Excelsior produced (tons of 2,000 pounds)
	Total	Cottonwood	Yellow pine	Basswood	Yellow poplar	Birch, cedar, maple, red gum, and sycamore	
United States	170,604	98,542	[2]57,074	13,616	613	759	[3]189,480
Individual States:							
New Hampshire	13,559	13,312	-------	217	-------	30	14,308
New York	7,130	3,536	-------	3,594	-------	-------	8,517
North Carolina	2,793	-------	[2] 2,600	-------	193	-------	2,970
Virginia	25,409	-------	25,409	-------	-------	-------	33,247
Wisconsin	45,712	43,951	-------	1,761	-------	-------	47,791
Groups of States:							
Ala., Miss., and Ky	8,811	-------	8,632	25	154	-------	11,243
Ark., La., and Tenn	15,597	1,000	13,667	900	30	-------	17,777
Calif., Oreg., Utah, and Wash	5,539	4,991	-------	548	-------	-------	5,589
Ga., Me., Md., and Mass	7,824	412	6,766	-------	236	410	9,235
Ind., Mich., and Minn	38,230	31,340	-------	6,571	-------	319	38,713

[1] Not including data for excelsior to the value of $133,837 made by establishments engaged primarily in other lines of manufacture.
[2] Includes data for a small quantity reported as white pine.
[3] Includes 32,507 tons of excelsior produced and used in establishments manufacturing excelsior pads, wrappers, etc.

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS, ELECTRIC MOTORS, AND GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY
	Number	Capacity	Number	Capacity	Number	Capacity	1929
Prime movers and electric motors driven by purchased energy, aggregate	262	*Horsepower* 10,667	253	*Horsepower* 10,930	253	*Horsepower* 11,993	100.0
Prime movers, total	48	6,311	48	6,811	64	8,129	59.2
Steam, total	37	5,381	37	5,601	46	6,840	50.4
Engines	37	5,381	37	5,601	42	6,520	50.4
Turbines					4	320	
Internal-combustion engines	2	305			4	200	2.9
Water wheels and water turbines	9	625	11	1,210	14	1,089	5.9
Electric motors driven by purchased energy	214	4,356	205	4,119	189	3,864	40.8
Electric motors, total	221	4,412	209	4,197	190	3,867	100.0
Driven by purchased energy	214	4,356	205	4,119	189	3,864	98.7
Driven by energy generated in establishments reporting	7	56	4	78	1	3	1.3
Electric generators	4	*Kilowatts* 135	5	*Kilowatts* 118	2	*Kilowatts* 52	
Electric energy purchased [1]		*Kilowatt-hours* 3,978,390		[2]		[2]	

[1] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[2] Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929 AND 1925, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	1,241	*1,192*	1,254	1,246	1,279	1,247	1,223	1,207	1,213	1,298	1,276	1,241	1,213	91.8
1925 [1]	1,300	1,328	1,400	1,399	1,327	1,329	1,262	1,272	1,242	1,249	1,255	1,291	*1,240*	88.6
New Hampshire	77	73	77	73	*72*	*72*	73	75	78	79	82	82	85	84.7
New York	62	57	60	58	63	64	62	*54*	63	65	67	65	61	80.6
North Carolina	30	*28*	29	29	34	30	31	31	31	31	29	31	31	82.4
Virginia	168	*163*	170	*163*	170	171	*162*	165	170	170	170	170	169	95.3
Wisconsin	324	314	342	366	354	331	330	316	301	340	321	289	*285*	77.9

[1] No comparable figures available for years prior to 1925.

FURNITURE

Description of the industry.—This industry embraces establishments engaged in the manufacture of furniture of wood, metal, fiber, reed, rattan, and willow. Statistics are presented for four general classes, as follows:

(1) Household furniture.—Furniture commonly used in dwellings, including hammocks and sewing-machine cases and cabinets but not including mattresses, bed springs, and refrigerators.

(2) Furniture and fixtures for offices and stores.—Desks, chairs, lockers, shelving, counters, tables, partitions, window backs, show cases, wall cases, cabinets, and other office and store furniture and fixtures.

(3) Professional, laboratory, hospital, barber, and beauty-parlor chairs, tables, cots, etc.

(4) Furniture for public buildings.—Furniture for schools, theaters, assembly halls, and churches, together with seats for public conveyances.

Comparison with earlier years.—The former industry classification "Show cases," which covered the manufacture of show cases, display cases, wall cases, etc., was discontinued at the census for 1923, and the former industry classification "Hammocks," which included the manufacture of hammock couches and porch swings, was discontinued at the census for 1927, and the statistics for these products have been combined with those for furniture. At the census for 1929 establishments engaged primarily in the manufacture of sewing-machine cases, cabinets, and tables, formerly classified in the sewing-machine industry, were transferred to the furniture industry. These consolidations were made partly because of the similarity between the products of the several industries and partly because of the fact that the commodities in question were made to a considerable extent in the furniture industry. The United States totals for earlier years have been adjusted for comparison with 1929 by adding the figures for the former "Show cases" and "Hammocks" industries, and the figures for sewing-machine cases, cabinets, and tables for 1927 have also been added, but it was impracticable to add them for earlier years. The State figures in Table 2 for 1927 have not been adjusted to include data for sewing-machine cases, etc., and those for 1919 have not been adjusted to include data for either sewing-machine cases, etc., or hammocks.

Detailed statistics on products (Tables 3–13).—Prior to 1923 no detailed production figures were compiled for furniture. A special schedule was used for the industry at the census for 1923, and still greater detail was provided for in the forms for 1925, 1927, and 1929. Because of the changes made in these schedules, the detailed statistics for 1923 are not entirely comparable with those for later years and therefore are not included in any of the tables in this report.

Data on certain classes of products not specifically called for.—The schedule used for collecting data on this industry specified the principal items of furniture and fixtures. It was necessary, however, because of the great variety of such products, to carry under each subdivision a line calling for data on other kinds falling within the same class but not named on the schedule. In the majority of cases the kinds reported under "Other" furniture or fixtures were indicated by the manufacturers, but some of them reported values without specifying kinds.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929 [3]	3,778	193,399	$242,832,096	$426,454,169	$948,116,358	$521,662,189	503,970
1927 [3]	3,228	188,143	238,240,167	392,098,519	885,204,300	493,105,781	455,881
1925	3,239	181,016	225,297,743	384,875,068	868,719,071	483,844,903	402,719
1923	3,047	168,157	204,566,063	342,442,530	776,846,732	434,404,202	344,954
1921	3,038	124,362	144,148,061	253,706,187	550,413,020	296,706,833	(4)
1919	3,279	140,252	143,152,217	265,725,010	579,903,396	314,181,386	265,156
1914	3,338	130,423	73,401,611	124,096,099	271,610,464	147,514,365	239,952
1909	3,188	127,088	65,047,325	107,314,140	236,942,836	129,628,696	(5)
1904	2,637	113,486	51,655,685	76,183,791	176,615,364	100,431,573	163,189
1899	1,929	88,964	36,443,360	56,230,247	128,264,001	72,033,754	111,880
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	17.0	2.8	1.9	8.8	7.1	5.8	10.5
1925–1927	—0.3	3.9	5.7	1.9	1.9	1.9	13.2
1923–1925	6.3	7.6	10.1	12.4	11.8	11.4	16.7
1921–1923	0.3	35.2	41.9	35.0	41.1	46.4	----------
1919–1921	—7.3	—11.3	0.7	—4.5	—5.1	—5.6	----------
1919–1929	15.2	37.9	69.6	60.5	63.5	66.0	90.1
1909–1919	2.9	10.4	120.1	147.6	144.7	142.4	----------
1899–1909	65.3	42.9	78.5	90.8	84.7	80.0	----------

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] See "Comparison with earlier years," above.
[4] Not called for on schedule.
[5] No comparable data.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products [2]	Value added by manufacture [3]
United States	1929	3,778	24,517	193,399	503,970	189,194	314,776	$70,847,629	$242,832,096	$420,464,169	$415,649,805	$10,804,364	$948,116,358	$521,662,189
	[4] 1927	3,228	22,537	188,142	455,881	205,003	250,878	61,188,728	238,240,167	392,098,519	381,502,777	10,595,742	885,204,300	493,105,781
	[5] 1919	3,279	19,940	140,252	[6] 265,156	175,151	[6] 90,005	44,176,520	143,152,217	265,725,010	259,265,223	6,459,787	579,906,396	314,181,386
Individual States:														
Alabama	1929	10	32	304	604	--------	604	105,128	284,050	570,298	561,228	18,070	1,218,177	638,879
	1927	10	31	284	741	100	641	85,870	257,213	478,695	465,666	13,029	1,085,448	606,753
	1919	5	12	93	173	--------	173	23,840	73,940	186,727	182,041	4,686	356,246	169,519
Arkansas	1929	13	147	1,551	3,356	1,147	2,209	493,518	1,299,112	3,245,754	3,181,800	63,954	6,116,552	2,870,798
	1927	12	141	1,209	2,979	1,375	1,604	461,084	1,015,041	2,889,003	2,772,874	116,129	5,431,166	2,542,163
	1919	16	137	744	1,499	1,137	362	256,456	577,724	1,517,193	1,488,657	28,536	3,199,537	1,682,344
California	1929	339	1,213	7,931	19,178	61	19,117	3,258,611	12,165,336	20,135,828	19,876,784	259,044	44,996,183	24,860,355
	1927	241	1,150	7,589	18,262	85	18,177	2,894,225	11,014,943	18,777,962	18,528,494	249,468	41,181,934	22,403,972
	1919	188	400	2,977	6,150	325	5,825	753,308	3,709,075	6,549,861	6,454,867	94,994	14,073,633	7,523,772
Colorado	1929	13	31	195	292	--------	292	98,306	297,132	651,917	642,769	9,148	1,338,374	686,457
	1927	11	21	116	261	--------	261	70,745	194,272	448,486	443,065	5,421	837,562	389,076
	1919	14	22	133	231	--------	231	39,236	153,445	269,418	264,130	5,288	585,940	316,522
Connecticut	1929	41	178	1,246	1,968	75	1,893	508,125	1,787,739	3,010,784	2,948,972	61,812	6,858,951	3,848,167
	1927	29	149	872	1,320	155	1,165	371,138	1,306,858	1,787,408	1,750,256	37,212	4,466,113	2,678,645
	1919	36	162	581	1,054	525	529	311,573	659,792	1,023,660	988,220	35,440	2,591,551	1,567,891
Florida	1929	15	21	122	539	--------	539	50,085	160,480	178,696	174,096	4,600	444,831	266,135
	1927	6	8	38	187	--------	187	16,311	69,108	131,502	129,883	1,619	282,520	151,018
	1919	3	6	27	46	--------	46	6,880	31,255	31,383	30,379	1,004	98,289	66,906
Georgia	1929	43	199	2,307	6,018	2,032	3,986	523,462	1,824,235	3,816,297	3,714,112	102,185	7,611,219	3,794,922
	1927	31	146	2,148	4,077	1,625	2,452	369,834	1,760,949	3,345,349	3,270,588	74,761	6,970,962	3,625,613
	1919	37	161	1,355	2,871	1,615	1,256	405,129	1,171,964	2,611,645	2,560,037	51,608	5,108,528	2,496,883
Illinois	1929	375	2,639	23,767	50,730	17,598	33,132	8,469,643	32,453,867	58,781,026	57,331,575	1,449,451	130,535,112	71,754,086
	1927	364	2,618	20,010	44,101	18,068	26,033	7,758,549	30,108,914	49,040,371	47,753,909	1,286,462	110,618,359	61,577,988
	1919	295	1,927	12,499	23,822	15,819	8,003	4,828,789	14,386,547	27,842,424	27,234,197	608,227	52,926,715	25,084,291
Indiana	1929	199	2,009	18,700	64,335	27,286	37,049	5,790,903	20,344,735	41,167,483	40,042,063	1,125,420	83,495,716	42,328,233
	1927	210	2,031	17,800	49,708	20,420	29,288	5,103,667	19,136,491	38,487,376	37,358,542	1,128,834	78,649,183	40,161,807
	1919	180	1,666	13,372	28,132	18,054	10,078	3,611,465	11,340,157	27,842,424	27,234,197	608,227	52,926,715	25,084,291
Iowa	1929	30	149	1,552	4,168	1,821	2,347	439,702	1,715,697	4,010,351	3,919,885	90,466	7,241,631	3,231,280
	1927	30	149	1,493	3,914	2,418	1,496	424,965	1,577,293	3,750,192	3,651,192	99,000	7,153,010	3,402,818
	1919	36	151	894	1,802	1,336	466	249,430	934,208	1,639,146	1,598,072	41,074	3,457,059	1,817,913
Kansas	1929	15	51	521	1,866	990	876	100,091	517,476	815,461	787,113	28,348	1,724,714	909,253
	1927	13	45	464	1,650	910	740	94,872	484,243	669,870	644,292	25,578	1,474,073	804,203
	1919	20	50	503	1,158	443	715	85,483	444,142	651,703	619,825	31,878	1,365,009	713,306
Kentucky	1929	39	330	2,890	7,404	2,666	4,738	796,523	2,934,773	5,289,141	5,151,958	137,183	11,524,491	6,235,350
	1927	33	238	2,173	5,746	2,055	3,691	639,139	2,086,745	3,639,244	3,529,382	109,862	7,722,695	4,083,451
	1919	29	160	1,381	3,224	2,072	1,152	342,260	1,049,735	2,262,928	2,193,120	69,808	5,411,673	3,148,745
Louisiana	1929	22	74	942	1,389	465	924	280,555	737,568	1,405,833	1,383,306	22,527	3,040,868	1,635,035
	1927	18	101	640	1,413	385	1,028	331,450	565,657	930,916	912,274	24,642	2,601,959	1,665,043
	1919	17	97	564	696	262	434	129,058	411,062	980,140	967,604	12,536	1,915,893	935,753
Maine	1929	15	38	305	1,287	--------	1,287	109,275	318,273	496,591	479,087	17,504	1,188,462	691,871
	1927	12	41	268	1,117	290	827	63,063	297,770	474,002	457,507	16,495	1,040,176	566,174
	1919	10	77	292	1,346	330	1,016	94,499	263,352	628,258	610,195	18,063	1,288,635	660,377
Maryland	1929	64	334	2,409	6,810	355	6,455	706,792	2,804,551	6,138,614	6,011,633	126,981	12,206,890	6,068,276
	1927	55	358	2,343	6,435	1,211	5,224	726,993	2,729,068	4,373,384	4,254,317	119,067	10,009,988	5,636,604
	1919	47	271	1,645	3,358	2,022	1,336	491,906	1,546,638	2,990,492	2,910,404	80,088	6,827,690	3,837,198
Massachusetts	1929	217	1,169	8,598	20,596	7,567	13,029	3,218,860	11,926,867	19,029,630	18,541,823	487,807	41,921,577	22,891,947
	1927	194	1,009	8,077	17,230	8,273	8,957	2,860,056	11,027,153	16,682,116	16,221,445	460,671	36,796,137	20,114,021
	1919	169	770	6,388	10,589	6,704	3,885	1,504,532	6,696,581	10,845,651	10,486,907	358,744	23,985,795	13,140,144
Michigan	1929	209	2,525	20,941	49,491	33,079	16,412	8,123,852	27,908,837	38,989,939	37,746,841	1,243,098	99,714,641	60,724,702
	1927	174	2,120	21,337	45,483	32,095	13,388	6,695,673	28,612,181	37,154,297	35,955,586	1,198,711	94,220,740	57,066,443
	1919	177	2,248	18,757	29,632	22,203	7,429	6,100,651	19,965,325	28,792,354	27,989,064	803,290	70,655,418	41,863,064
Minnesota	1929	63	317	2,052	3,766	823	2,943	852,048	2,667,700	4,933,114	4,814,629	118,485	10,239,778	5,306,664
	1927	50	257	2,048	3,664	1,260	2,404	667,348	2,308,893	3,982,668	3,867,212	115,456	8,724,185	4,741,517
	1919	64	240	1,658	3,064	1,466	1,598	610,831	1,684,889	3,186,859	3,098,347	88,512	7,093,131	3,906,272
Mississippi	1929	6	33	368	826	343	483	88,118	269,136	600,964	581,453	19,511	1,196,064	595,100
	1927	5	31	303	843	300	543	76,223	251,778	419,928	409,640	10,288	869,582	449,654
Missouri	1929	98	552	3,117	9,225	1,637	7,588	1,568,170	4,134,838	7,265,116	7,055,028	210,088	16,179,054	8,913,938
	1927	89	498	3,083	10,190	2,868	7,322	1,445,127	4,101,908	6,350,298	6,134,233	216,065	15,393,488	9,043,190
	1919	94	701	3,657	7,743	4,537	3,206	1,373,986	3,779,105	8,876,018	8,730,408	145,610	17,331,936	8,456,918
Nebraska	1929	19	71	410	891	--------	891	196,035	483,600	1,231,115	1,215,068	16,047	2,416,724	1,185,609
	1927	12	45	256	758	125	633	130,297	349,638	808,799	795,411	13,388	1,576,663	767,864
	1919	5	11	72	129	60	69	15,376	90,965	103,951	100,854	3,097	260,529	156,578
New Hampshire	1929	27	78	775	3,097	1,208	1,889	193,950	868,215	1,182,476	1,134,495	47,981	2,882,062	1,699,586
	1927	19	68	688	2,376	1,151	1,225	181,881	797,357	1,258,532	1,222,047	36,485	2,647,123	1,388,591
	1919	19	77	627	2,170	1,524	646	168,911	502,553	1,056,711	1,038,560	18,151	2,438,781	1,382,070

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
New Jersey	1929	82	418	2,568	5,481	214	5,267	$1,286,482	$4,000,902	$5,970,187	$5,799,850	$170,337	$14,439,179	$8,468,992
	1927	67	401	2,439	4,470	380	4,090	1,271,115	3,832,983	5,437,785	5,258,260	179,525	13,371,389	7,933,604
	1919	78	377	2,136	3,344	2,199	1,145	967,851	2,690,997	5,256,441	5,142,528	113,913	10,750,870	5,494,429
New York	1929	772	4,353	25,220	61,093	15,838	45,255	13,899,534	41,538,136	67,973,232	66,430,444	1,542,788	159,771,994	91,798,762
	1927	586	4,233	26,985	54,384	18,685	35,699	11,278,194	41,368,866	63,881,047	62,301,357	1,579,690	157,446,548	93,565,501
	1919	706	3,995	22,255	36,998	22,934	14,064	8,700,789	25,369,652	46,127,742	45,099,307	1,028,435	101,629,435	55,501,693
North Carolina	1929	146	1,039	15,609	38,165	17,543	20,619	2,816,257	12,822,796	29,724,803	29,070,295	654,573	56,737,489	27,012,621
	1927	143	831	14,821	36,948	19,612	17,336	2,371,122	12,417,590	27,702,378	27,128,871	573,507	53,551,220	25,848,842
	1919	112	745	7,922	13,505	10,426	3,079	1,552,714	6,067,026	14,269,593	14,044,487	225,106	29,768,623	15,499,030
Ohio	1929	211	2,037	10,707	30,109	9,730	20,379	5,201,970	14,067,942	26,268,180	25,590,598	677,582	60,576,681	34,308,501
	1927	174	1,568	10,322	26,374	9,342	17,032	4,230,512	13,910,491	21,457,748	20,767,752	689,996	51,821,451	30,363,703
	1919	175	1,337	8,619	17,674	11,631	6,043	2,674,414	8,796,391	15,136,672	14,743,628	393,044	36,401,436	21,264,764
Oklahoma	1929	6	25	117	106	--------	106	62,437	165,706	367,342	364,700	2,642	633,294	265,952
	1927	(7)	(7)	(7)	(7)	--------	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
	1919	7	6	26	162	--------	162	8,800	46,148	83,984	82,339	1,645	170,405	86,421
Oregon	1929	47	184	2,095	5,952	1,271	4,681	507,599	2,639,149	4,199,552	4,113,092	86,460	8,923,022	4,723,470
	1927	35	171	1,410	4,285	1,005	3,280	475,464	1,885,452	2,297,590	2,239,081	58,509	6,236,122	3,938,532
	1919	23	95	895	2,832	709	2,123	208,745	978,203	1,221,020	1,172,976	48,044	3,182,718	1,961,698
Pennsylvania	1929	265	1,554	12,159	37,087	15,138	21,949	4,218,396	15,622,933	24,746,416	23,938,160	808,256	55,511,926	30,765,510
	1927	269	1,488	12,474	33,252	14,308	18,944	3,670,726	15,578,267	23,831,286	23,064,498	766,788	53,771,084	29,939,798
	1919	335	1,306	10,954	23,509	17,036	6,563	2,815,476	11,078,701	19,779,315	19,242,986	536,329	42,343,850	22,564,535
Rhode Island	1929	13	37	175	180	30	150	95,535	223,072	591,997	584,688	7,309	1,052,755	460,758
	1927	7	28	96	99	--------	99	52,376	138,704	317,594	313,417	4,177	602,339	284,745
	1919	13	15	90	88	6	82	25,395	119,596	112,013	109,207	2,806	370,199	258,186
South Carolina	1929	8	16	77	498	107	391	41,127	59,230	293,841	285,417	8,424	553,724	259,883
	1927	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
	1919	6	10	33	67	67	--------	21,521	29,593	100,239	97,392	2,847	202,793	102,554
Tennessee	1929	50	272	3,410	9,230	4,262	4,968	723,228	2,723,445	4,673,591	4,507,132	166,459	10,164,720	5,491,129
	1927	45	266	3,514	8,191	3,562	4,629	691,740	2,722,392	5,368,986	5,209,578	159,408	11,156,331	5,787,345
	1919	50	266	3,522	6,243	3,343	2,900	719,354	2,408,379	4,768,652	4,652,005	116,647	9,793,221	5,024,569
Texas	1929	44	177	1,512	4,797	670	4,127	488,722	1,813,963	2,974,662	2,893,739	80,923	6,739,923	3,765,261
	1927	22	127	1,001	3,129	470	2,659	316,409	1,157,328	2,084,619	2,029,565	55,054	4,102,693	2,018,074
	1919	26	102	784	2,059	672	1,387	232,494	763,192	2,430,589	2,396,448	34,141	4,717,564	2,286,975
Vermont	1929	12	120	1,147	4,243	2,160	2,083	331,966	1,141,844	1,469,891	1,408,146	61,745	3,622,891	2,153,000
	1927	12	100	1,183	3,475	2,260	1,215	289,785	1,319,108	1,382,657	1,298,403	84,254	3,507,902	2,125,245
	1919	16	81	1,022	3,492	3,014	478	205,262	849,930	1,326,935	1,286,933	40,002	3,242,332	1,915,397
Virginia	1929	54	469	6,285	15,975	8,543	7,432	1,319,970	5,309,099	14,299,501	14,066,276	233,225	28,221,183	13,921,682
	1927	48	324	5,399	12,996	8,578	4,418	883,084	4,306,839	10,649,296	10,459,526	189,770	23,909,756	13,260,460
	1919	38	186	1,296	2,438	1,616	822	337,043	1,105,266	2,548,296	2,494,862	53,434	5,042,925	2,494,629
Washington	1929	65	186	1,632	5,146	520	4,626	461,773	1,915,670	2,942,204	2,882,415	59,789	6,637,074	3,694,870
	1927	59	201	1,364	4,054	565	3,489	485,433	1,692,052	2,848,955	2,792,117	56,838	5,869,212	3,020,257
	1919	59	77	787	2,077	930	1,147	171,519	898,863	1,052,849	1,016,069	36,780	2,776,615	1,723,766
West Virginia	1929	11	82	826	2,948	846	2,102	236,843	849,183	1,602,505	1,561,401	41,104	3,258,797	1,656,292
	1927	11	67	772	2,838	820	2,018	177,748	1,053,030	2,129,941	2,081,803	48,138	4,279,112	2,149,171
	1919	16	112	741	2,093	1,475	618	298,057	652,064	1,580,911	1,554,770	26,141	3,220,099	1,639,188
Wisconsin [8]	1929	111	1,330	8,714	24,744	13,166	11,578	3,115,990	9,836,433	15,153,368	14,616,874	536,494	36,639,762	21,486,394
	1927	116	1,326	11,103	27,586	19,692	7,894	3,187,900	14,345,703	23,564,902	22,862,897	702,005	49,150,009	25,585,107
	1919	107	1,816	10,463	20,431	18,051	2,380	3,734,035	11,331,721	18,210,443	17,612,375	598,068	41,500,756	23,290,313
Groups of States: Ariz., 2 est.; N. Mex., 1; Utah, 2	1929	5	16	82	129	--------	129	26,298	87,576	121,112	117,753	3,359	259,683	138,571
Del., 1 est.; D. C., 1; Mont., 2	1929	4	12	61	251	--------	251	41,750	100,900	126,292	123,107	3,185	280,190	153,898
States not shown separately	[9]1927	10	40	180	643	65	578	81,806	266,911	548,353	540,895	7,458	1,178,072	629,719
	[10]1919	45	54	424	1,135	558	577	92,734	453,800	842,322	821,114	21,208	1,767,197	924,875

[1] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 219,799; proprietors and firm members, 1,883. For 1927, total, 212,256; proprietors and firm members, 1,576. For 1919, total, 162,660; proprietors and firm members, 2,468.

[2] The figures for 1929 refer to manufacturers' sales (shipments or deliveries); those for earlier years, to production. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Includes data for sewing-machine cabinets, cases, and tables, not distributed by States. (See "Comparison with earlier years," p. 503.)

[5] Includes data for hammocks, not distributed by States. (See "Comparison with earlier years," p. 503.)

[6] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in United States totals.

[7] Statistics can not be given without disclosing data for individual establishments.

[8] Figures for 1927 and 1919 are not comparable with those for 1929 because of the transfer of an important establishment from the furniture industry to another industry.

[9] District of Columbia, 3 establishments; Idaho, 1; Oklahoma, 1; South Carolina, 3; South Dakota, 1; Utah, 1.

[10] Alabama, 2 establishments; Colorado, 1; District of Columbia, 4; Georgia, 2; Idaho, 3; Iowa, 2; Kansas, 1; Louisiana, 1; Maryland, 2; Mississippi, 5; Montana, 1; New Hampshire, 1; New Mexico, 1; Oklahoma, 1; Pennsylvania, 2; South Dakota, 3; Tennessee, 2; Utah, 6; Virginia, 1; Washington, 1; Wisconsin, 3.

TABLE 3.—PRODUCTS, BY CLASS AND VALUE, FOR THE UNITED STATES: 1929, 1927, AND 1925

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products. See also "Comparison with earlier years," p. 503]

CLASS	VALUE			CLASS	VALUE		
	1929	1927	1925		1929	1927	1925
"Furniture, including store and office fixtures" industry, all products, total value	$948,116,358	$885,204,300	$868,719,971	Furniture, including store and office fixtures, made in the furniture industry, total value	$912,942,006	$849,193,888	$823,737,493
Furniture, including store and office fixtures, made in the industry	912,942,006	849,193,888	823,737,493	Household furniture	659,023,309	639,501,116	631,886,965
Amount received for contract, custom, and repair work	5,544,361	4,927,325	4,307,829	Furniture and fixtures for offices and stores	193,358,849	159,270,209	140,467,508
Other products, not normally belonging to the industry	29,629,991	31,083,087	40,674,649	Furniture for public buildings (schools, theaters, assembly halls, and churches) and seats for public conveyances	41,043,744	30,577,941	32,935,261
Furniture, including store and office fixtures, made as secondary products by establishments classified in other industries (not reported by class)	32,530,649	26,170,112	24,685,967	Professional, laboratory, hospital, barber, and beauty-parlor chairs, tables, cots, etc	14,283,174	15,203,791	13,138,756
				Lockers	5,232,930	4,640,831	5,309,003

TABLE 4.—PRODUCTS, BY CLASS, MATERIAL, AND VALUE: 1929, 1927, AND 1925

[This table does not include the value of furniture and store and office fixtures made as secondary products by establishments classified in other industries. See Table 3. See also "Comparison with earlier years," p. 503]

CLASS	1929				1927				1925			
	Total	Wood	Metal	Fiber, rattan, reed, and willow	Total	Wood	Metal	Fiber, rattan, reed, and willow	Total	Wood	Metal	Fiber, rattan, reed, and willow
Aggregate value	$912,942,006	$781,195,409	$113,360,036	$18,386,561	$849,193,888	[1] $719,129,781	$107,523,539	[1] $22,540,568	$823,737,493	$700,721,038	$96,502,463	$26,513,992
Household, total	659,023,309	611,680,810	30,443,464	16,899,035	639,501,116	577,986,437	40,390,229	21,124,450	631,886,965	562,279,162	44,262,287	25,345,516
Living room and library	341,120,359	325,246,345	3,350,128	12,523,886	290,835,290	270,771,313	4,482,263	15,581,714	278,820,294	254,669,146	3,588,811	20,562,337
Bedroom	157,150,546	139,774,965	17,344,113	31,468	174,741,174	145,621,124	29,060,205	59,845	187,518,233	149,979,152	36,725,232	813,849
Dining room	88,683,719	88,551,571	74,725	57,423	104,895,784	104,781,945	----------	113,839	106,526,427	106,203,420	40,693	282,314
Kitchen	23,545,374	21,123,016	2,421,908	450	24,988,549	23,382,234	1,606,315	----------	27,396,146	26,534,315	861,831	----------
Porch	9,301,797	3,878,449	2,347,303	3,076,045	6,522,368	3,499,909	1,069,159	1,953,300	11,024,509	7,860,052	871,724	2,892,733
Camp	3,842,955	3,335,878	507,077	----------	4,156,231	3,452,301	703,870	----------	4,063,786	3,185,697	878,089	----------
Hall	1,410,161	1,390,460	18,751	950	1,946,223	1,718,806	226,889	828	2,378,219	2,358,036	8,882	11,301
Other	33,968,398	28,380,126	4,379,459	1,208,813	31,415,497	24,759,045	3,241,528	3,414,924	13,559,351	11,489,344	1,287,025	782,982
Furniture and fixtures for offices and stores	193,358,849	[2] 135,848,543	57,510,306	[3]	159,270,209	[1] 109,315,093	49,955,116	[3]	140,467,508	100,230,847	40,210,572	26,089
Furniture for public buildings (schools, theaters, assembly halls, and churches) and seats for public conveyances [4]	41,043,744	[2] 28,691,233	12,352,511	[3]	30,577,941	[2] 25,795,405	4,782,536	[3]	32,935,261	29,690,971	2,102,146	1,142,144
Professional, laboratory, hospital, barber, and beauty-parlor chairs, tables, cots, etc	14,283,174	[2] 6,454,070	7,829,104	[3]	15,203,791	7,366,124	7,837,667	----------	13,138,756	8,104,207	5,034,306	243
Lockers	5,232,930	8,279	5,224,651	----------	4,640,831	82,840	4,557,991	----------	5,309,003	415,851	4,893,152	----------

[1] Revised.
[2] Includes value of "Fiber, rattan, reed, and willow."
[3] Included with "Wood" to avoid disclosing production of individual establishments.
[4] Value of "Seats for public conveyances" not shown separately, to avoid disclosing production of individual establishments.

TABLE 5.—WOOD HOUSEHOLD FURNITURE—PRODUCTION, BY KIND AND VALUE, FOR LEADING STATES: 1929

[To avoid disclosing the production of individual establishments, certain items are included with others and are not shown separately by States, as explained in the footnotes. See headnote, Table 4]

KIND	UNITED STATES	New York	Illinois	Indiana	Michigan	North Carolina
Aggregate value	$611,680,810	$87,330,036	$83,161,773	$69,392,210	$56,781,710	$53,414,111
Living room and library, total	325,246,345	57,744,144	62,252,664	31,280,034	28,659,187	9,244,988
Suites, upholstered	130,938,517	26,852,875	20,622,377	4,547,811	5,891,043	3,556,153
Suites, davenports, sofas, day beds, etc., not upholstered	6,782,364	3,579,856	1,124,807	(1)	399,218	60,469
Davenports, sofas, day beds, etc., upholstered	25,378,594	5,769,628	6,077,038	2,280,449	1,567,073	(1)
Chairs and rockers—						
Upholstered	30,235,987	6,748,678	2,150,713	1,927,742	3,739,599	1,651,624
Not upholstered	5,679,433	750,729	(1)	72,507	209,492	684,188
Cabinets—						
Radio	69,551,079	5,362,112	(1)	13,387,382	7,195,154	(1)
Other and not specified	[2] 9,876,256	527,074	1,597,971	(1)	281,456	(1)
Tables	21,994,918	3,375,911	2,024,011	2,428,514	3,585,909	109,132
Desks	7,122,952	1,382,092	1,089,525	261,905	1,572,418	(1)
Book cases	2,377,270	526,219	307,382	(1)	587,068	(1)
Other living-room and library furniture and such furniture not reported in detail	[3] 15,308,975	2,868,970	27,257,940	6,373,724	3,630,757	3,183,422
Bedroom, total	139,774,965	13,949,091	7,844,645	14,934,747	17,262,922	27,702,092
Suites	75,498,637	6,016,113	3,218,376	7,532,880	11,057,527	15,854,344
Beds	13,356,179	2,303,745	308,814	906,876	2,366,575	2,152,539
Dressers, vanity dressers, and dressing tables	18,344,961	2,499,315	297,569	1,779,414	2,049,051	4,096,713
Chiffoniers, chifforobes, wardrobes, and chifforettes	12,522,507	1,156,858	375,814	2,560,312	1,020,559	2,372,409
Cedar chests	7,358,647	(4)	(4)	(4)		
Chairs and benches	6,099,339	803,965	(4)	615,126	572,736	1,789,013
Other bedroom furniture and such furniture not reported in detail	[5] 6,594,695	1,169,095	3,644,072	1,540,139	196,474	1,437,074
Dining room, total	88,551,571	8,412,069	7,852,165	8,041,017	9,114,727	13,736,485
Suites	43,502,391	3,525,793	5,045,196	3,947,080	4,968,850	9,043,656
Chairs	15,932,399	1,975,775	763,019	1,148,108	996,639	3,780,493
Breakfast sets (enameled or unfinished)	10,638,570	1,401,587	696,243	986,316	371,172	(6)
Buffets, china closets, and servers	9,557,781	753,359	1,002,896	1,192,835	1,616,213	372,391
Tables	7,720,397	567,806	303,590	680,699	1,029,248	175,651
Other dining-room furniture and such furniture not reported in detail	[7] 1,200,033	187,749	41,221	85,973	132,605	364,294
Kitchen, total	21,123,016	1,362,374	363,195	11,303,484	338,934	1,434,284
Cabinets	10,658,641	73,222	339,201	8,467,754	(5)	(5)
Chairs and stools	5,609,813	631,539	(5)	(5)	(5)	480,864
Tables	[8] 3,885,678	640,377	(5)	1,366,476	(5)	(5)
Other kitchen furniture and such furniture not reported in detail	968,884	17,236	23,994	1,469,254	338,934	953,420
Porch	3,878,449	(9)	(9)	1,002,707	(9)	646,578
Camp	3,335,878	833,724	(9)	635,376	(9)	
Hall	1,390,460	308,542	32,730	91,995	218,524	36,892
Miscellaneous and not specified	[10] 28,380,126	4,720,092	4,816,374	2,102,850	1,187,416	612,792

KIND	Pennsylvania	California	Ohio	Virginia	Massachusetts	Wisconsin
Aggregate value	$38,661,000	$27,043,783	$26,156,151	$25,520,697	$25,196,612	$20,127,722
Living room and library, total	18,929,070	18,572,377	20,707,738	1,069,091	14,114,510	11,133,425
Suites, upholstered	7,182,542	10,150,497	9,401,142	(1)	7,623,701	2,494,168
Suites, davenports, sofas, day beds, etc., not upholstered	476,710	551,289	66,806	(1)	131,786	(1)
Davenports, sofas, day beds, etc., upholstered	1,167,775	2,060,392	1,108,932	(1)	919,840	762,036
Chairs and rockers—						
Upholstered	793,545	2,023,110	2,572,740	(1)	1,589,920	2,266,728
Not upholstered	849,712	129,985	(1)	(1)	846,926	488,757
Cabinets—						
Radio	6,194,543	1,700,691	1,888,983		(1)	1,790,613
Other and not specified	(1)	64,350	111,073		103,013	486,643
Tables	1,032,911	1,075,857	3,031,284	487,023	688,919	2,331,606
Desks	250,402	165,590	917,369	(1)	143,367	(1)
Bookcases	(1)	90,448	(1)	(1)	17,744	(1)
Other living-room and library furniture and such furniture not reported in detail	980,930	560,168	1,609,409	581,468	2,049,294	512,879
Bedroom, total	10,764,669	4,324,653	1,629,863	14,779,985	2,446,610	2,732,567
Suites	7,205,243	1,300,401	859,270	10,208,695	440,626	2,390,044
Beds	754,456	903,128	192,431	697,933	463,833	(4)
Dressers, vanity dressers, and dressing tables	621,609	1,223,298	252,505	(4)	370,055	(4)
Chiffoniers, chifforobes, wardrobes, and chifforettes	1,008,340	501,912	200,996	743,074	232,537	(4)
Cedar chests	(4)	(4)	(4)	(4)	(4)	(4)
Chairs and benches	423,017	245,007	18,207	(4)	378,163	37,824
Other bedroom furniture and such furniture not reported in detail	752,004	150,907	106,454	3,130,283	561,396	304,699
Dining room, total	6,752,773	2,281,340	1,972,927	9,140,345	3,010,382	2,566,981
Suites	1,878,291	935,865	1,160,595	7,837,223	453,588	911,223
Chairs	1,307,182	269,831	163,175	85,734	1,365,062	183,996
Breakfast sets (enameled or unfinished)	1,196,689	436,413	119,302	(6)	593,701	1,172,169
Buffets, china closets, and servers	1,308,969	168,497	292,350	(6)	129,098	(6)
Tables	878,758	449,505	170,223	(6)	376,863	67,604
Other dining-room furniture and such furniture not reported in detail	182,884	21,229	67,282	1,217,388	92,070	231,929
Kitchen, total	697,484	472,907	487,770	(9)	1,218,467	731,954
Cabinets	(5)	(5)	(5)	(9)	(5)	(5)
Chairs and stools	236,192	42,977	(5)		1,105,680	234,393
Tables	153,335	109,818	129,821		105,187	302,304
Other kitchen furniture and such furniture not reported in detail	307,957	320,112	357,949		7,600	195,197
Porch	76,805	20,630	(9)		193,383	(9)
Camp	(9)	(9)	(9)		(9)	663,213
Hall	60,838	127,485	18,272	(9)	129,717	(9)
Miscellaneous and not specified	1,379,361	1,244,391	1,339,581	531,276	4,083,543	2,299,582

[1] Included in figure for "Other living-room and library furniture," to avoid disclosing production of individual establishments.
[2] Sewing-machine cabinets, $6,491,423; other and not specified, $3,384,833.
[3] Piano benches and stools, $974,546; unfinished frames for suites, chairs, etc., $7,354,763; other and not specified, $5,979,666.
[4] Included in figure for "Other bedroom furniture," to avoid disclosing production of individual establishments.
[5] Cribs, $2,206,290; other and not specified, $4,388,405.
[6] Included in figure for "Other dining-room furniture," to avoid disclosing production of individual establishments.
[7] Tea wagons, $269,572; other and not specified, $930,461.
[8] Included in figure for "Other kitchen furniture," to avoid disclosing production of individual establishments.
[9] Included in figure for "Miscellaneous and not specified," to avoid disclosing production of individual establishments.
[10] Includes data for household furniture belonging in above classes but not separately reported by manufacturers.

TABLE 6.—WOOD HOUSEHOLD FURNITURE—PRODUCTION, BY STATES: 1929 AND 1927

[This table presents statistics for all States for which separate figures can be given without disclosing the production of individual establishments, and for the remaining States in groups. See headnote, Table 4]

STATE	1929	1927
United States	$611,680,810	[1] $577,986,437
Individual States:		
New York	87,330,036	90,876,983
Illinois	83,161,773	69,151,356
Indiana	69,392,210	66,373,672
Michigan	56,781,710	57,568,584
North Carolina	53,414,111	50,996,065
Pennsylvania	38,661,000	42,194,071
California	27,043,783	21,797,476
Ohio	26,156,151	23,540,407
Virginia	25,520,697	22,967,045
Massachusetts	25,196,612	20,161,968
Wisconsin	20,127,722	21,172,040
Maryland	9,300,859	7,169,899
Kentucky	9,173,271	6,499,116
Tennessee	9,068,208	9,679,605
Minnesota	7,680,051	7,134,251
Oregon	6,175,717	4,493,370
New Jersey	6,018,188	5,458,036
Arkansas	5,913,440	5,176,273
Georgia	5,762,303	4,942,151
Missouri	5,588,561	6,090,466
Individual States—Continued.		
Iowa	$5,374,515	$4,833,374
Washington	5,063,549	4,694,192
Texas	3,582,484	2,459,944
Connecticut	3,024,544	2,055,700
Vermont	2,961,043	2,767,573
West Virginia	2,924,362	3,329,801
New Hampshire	2,443,833	2,309,943
Louisiana	2,107,301	1,662,296
Nebraska	1,231,109	980,908
Kansas	1,196,135	945,110
Rhode Island	740,148	[2]
Alabama	723,082	545,995
Maine	648,445	590,677
Colorado	596,999	[2]
Florida	265,361	[2]
South Carolina	223,371	[2]
Groups of States:		
Ariz., Mont., and N. Mex.	40,424	----
Del., D. C., Miss., and Okla.	1,058,702	----
States not shown separately [3]	----	1,370,096

[1] Includes value of sewing-machine cases, cabinets, and tables, $5,497,994, which can not be distributed by States without disclosing data reported by individual establishments.
[2] Included with data for "States not shown separately."
[3] Colorado, District of Columbia, Florida, Mississippi, Oklahoma, Rhode Island, South Carolina, and South Dakota.

TABLE 7.—METAL HOUSEHOLD FURNITURE—PRODUCTION, BY KIND AND VALUE: 1929, 1927, AND 1925

[See headnote, Table 4]

KIND	1929	1927	1925
Aggregate	$30,443,464	$40,390,229	$44,262,287
Bedroom, total	17,344,113	20,060,205	36,725,232
Beds	10,995,816	19,965,017	32,984,683
Cribs	499,589	935,537	903,349
Other bedroom furniture and such furniture not reported in detail	5,848,708	8,159,651	2,837,200
Living room and library, total	3,350,128	4,482,263	3,588,811
Davenports, sofas, day beds, etc.:			
Upholstered	1,507,733	2,741,671	[1]
Not upholstered	889,627	612,590	[1]
Tables	557,265	175,792	[1]
Other living-room and library furniture and such furniture not reported in detail	395,503	952,210	[1]
Kitchen, total	2,421,908	1,606,315	861,831
Cabinets	977,722	974,874	[1]
Chairs and stools	393,776	----	[1]
Kitchen—Continued.			
Tables	$174,087	$13,605	[1]
Other kitchen furniture and such furniture not reported in detail	876,323	617,836	[1]
Porch, total	2,347,303	1,069,159	$871,724
Hammocks	1,942,675	956,367	[1]
Chairs and tables	288,632	43,219	[1]
Benches and couches, and other porch furniture	115,996	69,573	[1]
Camp, total	507,077	703,870	878,089
Cots	232,720	570,434	[1]
Chairs and tables, folding	203,317	108,436	[1]
Other camp furniture and such furniture not reported in detail	71,040	25,000	[1]
Dining room, hall, miscellaneous, and not specified	4,472,935	3,468,417	1,336,600

[1] Not reported separately.

TABLE 8.—METAL HOUSEHOLD FURNITURE—PRODUCTION, BY VALUE, BY STATES: 1929, 1927, AND 1925

[This table presents statistics for all States for which separate figures can be given without disclosing the production of individual establishments, and for the remaining States in groups. See headnote, Table 4]

STATE	1929	1927	1925
United States	$30,443,464	$40,390,229	$44,262,287
Individual States:			
New York	9,424,936	11,854,268	12,771,807
Illinois	7,319,639	6,573,457	4,387,461
Ohio	1,888,092	993,449	748,116
New Jersey	1,831,032	1,757,949	2,295,198
Indiana	1,801,490	1,399,256	1,086,443
Missouri	1,665,608	1,374,190	1,435,423
Wisconsin	1,423,949	[1]	[1]
California	1,389,731	3,105,628	3,368,951
Massachusetts	773,962	472,225	554,475
Michigan	276,463	[1]	[1]
Groups of States:			
Conn., Md., and Pa	$730,932	----	----
Ga., La., N. C., and Tenn	1,166,132	----	----
Iowa, Minn., and Nebr	368,836	----	----
Okla. and Tex	235,410	----	----
Oreg. and Wash	147,252	----	----
States not shown separately	----	[2] $12,859,807	[3] $17,614,413

[1] Included with data for "States not shown separately."
[2] Connecticut, District of Columbia, Georgia, Iowa, Kansas, Louisiana, Maryland, Michigan, Minnesota, Nebraska, North Carolina, Oregon, Pennsylvania, Rhode Island, Tennessee, Texas, Washington, and Wisconsin.
[3] Alabama, Connecticut, Georgia, Iowa, Louisiana, Maryland, Michigan, Minnesota, North Carolina, Oregon, Pennsylvania, Tennessee, Texas, Virginia, and Wisconsin.

TABLE 9.—FIBER, RATTAN, REED, AND WILLOW HOUSEHOLD FURNITURE—PRODUCTION, BY KIND AND VALUE: 1929, 1927, AND 1925

[See headnote, Table 4]

KIND	1929	1927	1925
Aggregate	$16,899,035	$21,124,450	$25,345,516
Living room and library, total	12,523,886	15,581,714	20,562,337
Suites			5,490,267
Upholstered	7,383,904	6,934,526	(1)
Not upholstered	602,045	223,831	(1)
Chairs and rockers			8,284,674
Upholstered	2,400,720	3,686,778	(1)
Not upholstered	460,802	467,059	(1)
Davenports, sofas, day-beds, etc.			2,383,004
Upholstered	1,039,577	1,747,308	(1)
Not upholstered	204,296	140,364	(1)
Tables	269,444	712,373	2,695,078
Desks	62,311	971,151	
Other living-room and library furniture and such furniture not reported in detail	100,787	698,324	1,709,314
Porch, total	$3,076,045	$1,953,300	$2,892,733
Chairs	793,911	791,621	(1)
Benches and couches	503,377	236,205	(1)
Tables	220,262	200,578	(1)
Swings	32,801	188,760	(1)
Other porch furniture and such furniture not reported in detail	1,525,694	536,136	(1)
Dining room, total	57,423	113,839	282,314
Chairs	10,507	17,109	(1)
Tables	7,304	18,316	(1)
Suites and breakfast sets	27,036	15,754	(1)
Buffets, china closets, servers, and tea wagons	12,576	62,660	(1)
Bedroom	31,468	59,845	813,849
Miscellaneous and not specified above	1,210,213	3,415,752	794,283

[1] Not shown separately.

TABLE 10.—FIBER, RATTAN, REED, AND WILLOW HOUSEHOLD FURNITURE—PRODUCTION, BY VALUE, BY STATES: 1929, 1927, AND 1925

[This table presents statistics for all States for which separate figures can be given without disclosing production of individual establishments, and for the remaining States in groups. See headnote, Table 4]

STATE	1929	1927	1925
United States	$16,899,035	$21,124,450	$25,345,516
Individual States:			
Michigan	3,523,399	5,961,811	7,316,223
New York	2,445,105	2,125,823	2,826,869
Massachusetts	2,367,387	2,586,145	2,731,667
Wisconsin	1,916,801	2,682,400	3,238,751
New Jersey	872,544	920,141	754,348
California	659,659	1,044,229	1,354,015
Illinois	618,248	741,962	991,505
Pennsylvania	495,541	882,315	396,661
Groups of States:			
Ark., La., and Tenn	$225,169		
Conn. and Vt	266,184		
Fla. and Ga	332,015		
Ind. and Ohio	1,936,774		
Iowa and Minn	39,498		
Ky. and Mo	496,160		
Me. and N. H	110,040		
N. C., S. C., and Va	530,956		
Oreg. and Wash	63,555		
States not shown separately		[1] $4,179,624	[2] $5,735,477

[1] Arkansas, Colorado, Connecticut, Florida, Georgia, Indiana, Iowa, Louisiana, Maryland, Minnesota, Missouri, North Carolina, Ohio, Oregon, South Carolina, Tennessee, Vermont, Virginia, and Washington.
[2] Arkansas, Connecticut, Florida, Georgia, Indiana, Iowa, Maryland, Minnesota, Missouri, New Hampshire, Ohio, Oklahoma, Oregon, South Carolina, Vermont, Virginia, and Washington.

TABLE 11.—FURNITURE AND FIXTURES FOR OFFICES, STORES, PUBLIC BUILDINGS, ETC.—PRODUCTION, BY KIND, MATERIAL, AND VALUE: 1929 AND 1927

[See headnote, Table 4]

KIND	1929			1927		
	Total	Wood, fiber, rattan, reed, and willow [2]	Metal	Total	Wood, fiber, rattan, reed, and willow [2]	Metal
Aggregate	$253,918,697	$171,002,125	$82,916,572	$209,692,772	$142,559,462	$67,133,310
Furniture and fixtures for offices and stores, total	193,358,849	135,848,543	57,510,306	159,270,209	109,315,093	49,955,116
Office furniture:						
Chairs	12,254,558	[3] 12,254,558	([3])	10,536,240	10,352,491	183,749
Desks and tables	21,353,902	17,952,356	3,401,546	[4] 16,049,203	13,426,153	2,623,050
Filing cabinets and cases	19,312,164	2,341,174	16,970,990	([5])		
Other office furniture and such furniture not reported in detail	22,743,443	12,292,757	10,450,686	42,156,045	11,379,310	30,776,735
Store and lunch-room furniture and fixtures:						
Shelving	17,136,990	5,305,065	11,831,925	7,926,646	1,430,914	6,495,732
Counters, tables, partitions, window backs, show cases, wall cases, and cabinets	62,795,658	58,907,604	3,888,054	49,648,662	45,674,774	3,873,888
Chairs and stools	1,595,547	1,416,932	178,615	([5])		
Other store and lunch-room furniture and fixtures and such furniture and fixtures not reported in detail	[6] 36,166,587	25,378,097	10,788,490	33,053,413	27,051,451	6,001,962
Professional, laboratory, hospital, barber, and beauty-parlor chairs, tables, cots, etc	14,283,174	6,454,070	7,829,104	15,203,791	7,366,124	7,837,667
Furniture for public buildings (schools, theaters, assembly halls, churches, libraries, etc.) and seats for public conveyances, total	41,043,744	28,691,233	12,352,511	30,577,941	25,795,405	4,782,536
Chairs	11,478,923	7,618,417	3,860,506	12,608,027	9,557,635	3,050,392
Church pews and pulpits	5,670,522	5,670,522		4,719,734	4,719,734	
Desks	5,629,246	4,221,300	1,407,946	6,404,991	5,950,727	454,264
Other furniture for public buildings and such furniture not reported in detail [7]	18,265,053	11,180,994	7,084,059	6,845,189	5,567,309	1,277,880
Lockers	5,232,930	8,279	5,224,651	4,640,831	32,840	4,557,991

[1] Combined to avoid disclosing production of individual establishments.
[2] Includes value of "Metal."
[3] Included with "Wood, fiber, rattan, reed, and willow," to avoid disclosing production of individual establishments.
[4] Figures not strictly comparable because tables were not specified in questionnaire used for 1927.
[5] Not shown separately.
[6] Includes data for commercial refrigerators made as secondary products.
[7] Includes value of seats for public conveyances; not shown separately to avoid disclosing production of individual establishments.

TABLE 12.—FURNITURE FOR PUBLIC BUILDINGS—PRODUCTION, BY KIND AND VALUE, BY STATES: 1929

[See headnote, Table 4]

STATE	Total	Chairs	Desks	Church pews, pulpits, etc.	Other [1]	STATE	Total	Chairs	Desks	Church pews, pulpits, etc.	Other [1]
United States	$41,043,744	$11,478,923	$5,629,246	$5,670,522	$18,265,053	Groups of States:					
Individual States:						Ark., Ga., La., Miss., S. C., Tenn., Tex.	$589,348	$168,212	$170,424	$116,130	$134,582
Michigan	10,369,423	7,232,028	[2]	[3]	3,137,395	Conn., Ky., Md., N. H., Vt., Va., W. Va.	1,290,867	337,324	208,888	422,826	321,829
New York	5,748,026	313,254	[2]		5,434,772	Other States (Colo., Iowa, Kans., Minn., Mo., Nebr., Oreg., Wash.)	1,075,627	70,586	2,099	331,083	671,859
Illinois	4,707,846	3,452,692	355,493	[3]	899,661						
Massachusetts	4,066,220	871,794	[2]	1,591,321	1,603,105						
Indiana	3,053,349	805,283	820,836	[3]	1,427,230						
Ohio	2,632,679	[4]	724,661	219,656	1,688,362						
Wisconsin	2,449,873	336,349	[2]	1,283,208	830,316						
Pennsylvania	2,269,299	[4]	36,265	18,300	2,214,734						
New Jersey	1,412,124	[4]	[2]	[3]	1,412,124						
California	806,309	245,438	117,800	[2]	443,071						
North Carolina	572,754	431,400	[2]	[3]	141,354						

[1] Includes values of chairs and seats for public buildings and public conveyances.
[2] Included in figure for "Chairs" to avoid disclosing production of individual establishments.
[3] Included in figure for "Other" to avoid disclosing production of individual establishments.
[4] Included in figure for "Desks" to avoid disclosing production of individual establishments.

TABLE 13.—FURNITURE AND FIXTURES FOR OFFICES, STORES, ETC., NOT INCLUDING PUBLIC BUILDINGS—PRODUCTION, BY KIND AND VALUE, FOR LEADING STATES: 1929

[See headnote, Table 4]

	Aggregate	OFFICE FURNITURE				Professional, laboratory, hospital, barber, and beauty-parlor chairs, tables, cots, etc.	STORE AND LUNCH-ROOM FURNITURE AND FIXTURES			
		Chairs	Desks and tables	Filing cabinets and cases	Lockers and other office furniture and fixtures [1]		Shelving	Counters, tables, partitions, window backs, show cases, wall cases, and cabinets	Chairs and stools	Other store and lunch-room furniture and fixtures
United States	$212,874,953	$12,254,558	$21,353,902	$19,312,164	$27,976,373	$14,283,174	$17,136,990	$62,795,658	$1,595,547	$36,166,587
New York	49,441,854	1,172,135	5,053,744	4,085,409	8,657,327	2,905,587	1,647,944	10,957,725	699,354	14,262,629
Illinois	29,475,437	2,335,389	1,912,639	923,766	5,087,566	2,670,863	7,042,650	6,372,156	76,220	3,054,188
Michigan	27,209,286	614,469	2,656,763	3,517,636	1,409,850	[2]	263,567	14,154,328	[2]	4,592,673
Ohio	26,683,313	2,878,095	2,459,051	6,359,071	3,433,786	1,139,558	4,111,514	4,948,774	[2]	1,353,464
California	12,459,810	[2]	381,729	[3]	2,580,806	328,210	748,350	5,131,905	96,415	3,192,395
Pennsylvania	10,956,271	[2]	756,063	1,167,735	2,916,560	[2]	817,962	3,464,189	[2]	1,833,762
Wisconsin	9,222,739	[2]	317,440	1,497,259	2,102,367	3,837,769	86,354	901,942	[2]	479,608
Missouri	7,242,703	[2]	[3]	[3]	1,100,086	1,312,660	761,474	2,482,484	98,527	1,487,472
Indiana	6,382,101	[2]	3,916,331	[3]	973,750	829,475	[2]	322,932	[2]	339,613
Massachusetts	4,924,755	637,307	260,969	[3]	1,023,853	[2]	232,217	1,727,099	61,786	981,524
New Jersey	3,867,215	[3]	[3]	[4]	2,575,309	[2]	84,733	522,859	[2]	684,314

[1] Includes $5,232,930, value of "lockers," not shown separately by States to avoid disclosing production of individual establishments.
[2] Not shown separately to avoid disclosing production of individual establishments; included in figure for "Other store and lunch-room furniture and fixtures."
[3] Not shown separately to avoid disclosing production of individual establishments; included in figure for "Lockers and other office furniture and fixtures."

TABLE 14.—CONSUMPTION OF WOOD IN THE MANUFACTURE OF FURNITURE, BY STATES: 1929

[This table shows the quantities and costs of logs, bolts, and lumber and the costs of veneers and plywood consumed by manufacturers who reported such materials, and the "per cent of completeness," i. e., the per cent that the value of their products was of the reported total value of furniture and fixtures produced in the State]

STATE	LOGS OR BOLTS		LUMBER						Veneers and plywood, cost	Per cent of completeness
			Total		Hardwood		Softwood			
	M ft. log scale	Cost	M ft. b. m.	Cost	M ft. b. m.	Cost	M ft. b. m.	Cost		
United States	35,790	$1,079,366	1,617,436	$84,772,301	1,242,599	$71,617,567	374,837	$13,154,734	$41,607,746	74.8
Alabama			7,820	237,555	7,639	230,905	181	6,650	53,401	81.7
Arkansas			15,376	598,188	12,672	527,323	2,704	70,865	626,128	91.8
California	11	1,020	55,089	3,608,961	31,325	2,639,461	23,764	969,500	1,153,321	82.9
Colorado			1,602	113,676	407	59,953	1,195	53,723	27,881	60.8
Connecticut			2,907	222,591	2,157	190,827	750	31,764	144,301	50.9
Florida			449	29,500	419	28,300	30	1,200	5,372	55.1
Georgia	111	2,219	10,260	870,426	17,547	833,395	1,703	37,031	568,601	85.4
Illinois	420	17,433	127,772	9,285,748	100,981	8,245,929	26,791	1,039,819	8,841,222	70.9
Indiana	2,000	82,835	191,381	8,779,859	136,840	7,172,129	54,541	1,607,730	6,530,852	83.3
Iowa			15,969	681,107	14,933	637,378	1,036	43,729	490,160	87.3
Kansas			4,857	185,962	3,579	153,506	1,278	32,456	22,688	74.3
Kentucky			28,738	1,368,637	22,627	1,237,145	6,111	131,492	652,105	87.8
Louisiana			5,787	215,020	5,725	213,040	62	1,980	108,295	56.4
Maine			2,241	152,592	1,626	124,750	615	27,842	16,434	83.0
Maryland			15,377	808,465	12,164	672,845	3,213	135,620	206,665	69.5
Massachusetts			62,041	3,758,913	55,989	3,376,192	6,052	382,721	465,544	69.6
Michigan	856	17,121	156,224	8,630,986	115,548	7,235,840	40,676	1,395,146	4,631,201	86.7
Minnesota			20,779	684,045	7,186	421,848	13,593	262,197	116,163	53.4
Mississippi			3,307	151,962	3,127	144,363	180	7,599	168,871	99.6
Missouri			17,673	992,900	11,815	748,569	5,858	244,331	393,773	61.3
Nebraska			1,785	123,763	874	69,428	911	54,335	49,110	71.9
New Hampshire	545	6,840	6,154	305,507	5,833	294,096	321	11,411	66,130	67.5
New Jersey			10,798	532,423	7,989	414,245	2,809	118,178	26,794	49.2
New York	172	5,833	165,655	11,889,168	116,298	9,582,333	49,357	2,306,835	3,963,566	61.8
North Carolina	11,229	374,131	192,032	7,832,468	174,039	7,436,190	17,993	396,278	3,745,684	87.5
Ohio	1,026	45,779	70,935	3,862,270	46,676	2,911,578	24,259	950,692	946,470	68.9
Oregon	9,340	80,221	40,101	1,211,072	16,111	683,111	23,990	527,961	423,898	87.9
Pennsylvania	3,400	85,000	116,471	5,971,573	96,546	5,211,743	19,925	759,830	3,056,335	80.6
Rhode Island			592	36,810	405	25,819	187	10,991	1,222	25.5
Tennessee			40,802	1,629,337	33,798	1,453,543	7,094	175,794	939,670	94.4
Texas			15,470	700,000	12,854	591,507	2,616	108,493	216,269	86.0
Vermont	2,023	68,518	11,358	463,559	9,684	421,647	1,674	41,912	158,077	88.4
Virginia	1,470	52,183	101,276	4,213,287	90,474	3,907,311	10,802	305,976	1,400,404	75.2
Washington	2,523	218,035	11,234	465,196	6,515	328,076	4,719	137,120	102,305	88.2
West Virginia			9,772	452,564	8,840	411,410	932	41,154	431,438	97.4
Wisconsin	664	22,198	68,272	3,706,211	51,357	2,981,832	16,915	724,379	737,246	76.8

TABLE 15.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	61,712	*Horsepower* 503,970	45,960	*Horsepower* 455,881	36,366	*Horsepower* 402,719	15,106	*Horsepower* 265,156	9,182	*Horsepower* 239,952	100.0	100.0
Prime movers, total	1,060	189,194	1,035	205,003	1,474	191,055	1,551	175,151	2,087	191,273	37.5	66.1
Steam, total	965	183,793	923	199,275	1,278	182,195	1,247	165,997	1,673	178,995	36.5	62.6
Engines	918	159,160	870	168,738	1,243	169,575	1,209	158,112	(1)	(1)	31.6	59.6
Turbines	47	24,633	53	30,537	35	12,620	38	7,885	(1)	(1)	4.9	3.0
Internal-combustion engines	38	1,517	52	1,408	97	3,760	218	4,441	305	7,118	0.3	1.7
Water wheels and water turbines	57	3,884	60	4,320	99	5,100	86	4,713	109	5,160	0.8	1.8
Electric motors driven by purchased energy	60,652	314,776	44,925	250,878	34,892	211,664	13,555	90,005	7,095	48,679	62.5	33.9
Electric motors, total	80,839	432,456	63,517	385,105	49,683	320,290	20,146	140,242	11,645	86,660	100.0	100.0
Driven by purchased energy	60,652	314,776	44,925	250,878	34,892	211,664	13,555	90,005	7,095	48,679	72.8	64.2
Driven by energy generated in establishments reporting	20,187	117,680	18,592	134,227	14,791	108,626	6,591	50,237	4,550	37,981	27.2	35.8
Electric generators	424	*Kilowatts* 81,568	505	*Kilowatts* 84,698	481	*Kilowatts* 76,457	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 215,224,678		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 16.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	193,399	189,686	189,742	188,682	187,134	*186,100*	189,019	190,549	197,540	206,339	208,681	199,963	187,354	89.2
1925	181,016	178,406	180,116	180,503	177,244	173,443	171,562	*171,138*	176,423	184,109	191,114	194,673	193,398	87.9
1919	140,252	*124,305*	126,169	129,455	129,937	133,691	136,847	141,997	147,387	147,491	151,775	155,629	158,341	78.5
1914 [1]	130,423	134,355	137,925	**139,056**	136,233	132,490	129,170	125,184	128,474	128,117	127,322	124,551	*122,199*	87.9
Alabama	304	*284*	300	293	298	288	289	285	320	317	329	325	322	86.3
Arkansas	1,551	1,541	1,580	1,513	1,445	*1,408*	1,417	1,505	1,655	1,810	1,714	1,584	1,445	77.8
California	7,931	7,705	7,773	7,727	7,758	*7,669*	7,736	7,704	7,950	8,442	8,546	8,373	7,793	89.7
Colorado	195	*170*	178	180	190	198	197	199	210	201	201	205	206	81.0
Connecticut	1,246	*1,192*	1,218	1,247	1,276	1,249	1,217	1,197	1,217	1,324	1,314	1,291	1,216	90.0
Florida	122	174	98	88	*86*	117	106	111	106	116	146	149	168	49.4
Georgia	2,307	2,357	2,343	2,235	2,126	*2,099*	2,170	2,201	2,380	2,498	2,505	2,434	2,332	83.8
Illinois	23,767	24,173	23,305	22,370	21,835	*21,519*	23,595	23,291	23,965	26,544	26,716	25,150	22,745	80.5
Indiana	18,700	17,992	17,876	17,661	17,728	18,067	18,393	18,990	19,896	20,883	20,863	18,901	*17,152*	82.1
Iowa	1,552	1,440	1,458	1,452	1,449	1,486	1,552	1,591	1,675	1,765	1,766	1,504	*1,420*	80.4
Kansas	521	536	530	502	535	529	536	503	*493*	472	568	570	537	76.0
Kentucky	2,890	2,664	2,766	2,811	2,689	2,786	2,798	2,966	3,286	3,415	3,215	2,699	*2,533*	75.6
Louisiana	942	*927*	932	929	935	936	947	949	954	950	952	951	947	97.2
Maine	305	283	294	298	302	311	316	316	325	338	322	301	*293*	76.3
Maryland	2,409	2,329	2,321	2,357	2,364	2,344	*2,288*	2,318	2,451	2,520	2,592	2,602	2,423	87.9
Massachusetts	8,598	8,490	8,615	8,772	8,666	8,538	8,575	8,325	*8,209*	8,670	8,893	8,863	8,562	92.3
Michigan	20,941	21,519	21,181	20,833	20,359	20,286	20,421	20,852	21,690	22,054	22,116	20,712	*19,278*	87.1
Minnesota	2,052	*1,880*	1,964	1,993	2,033	2,016	2,009	2,073	2,162	2,189	2,212	2,107	1,981	85.0
Mississippi	368	369	335	329	336	*318*	332	362	380	434	423	407	387	73.3
Missouri	3,117	*2,921*	2,925	2,971	3,064	2,977	3,129	3,099	3,287	3,445	3,387	3,225	2,999	84.8
Nebraska	410	386	388	414	414	413	421	409	406	426	431	426	*383*	88.9
New Hampshire	775	711	723	732	*700*	725	731	743	*753*	791	803	911	*913*	76.7
New Jersey	2,568	*2,295*	2,337	2,395	2,588	2,602	2,590	2,603	2,577	2,650	2,730	2,747	2,705	83.5
New York	25,220	24,622	25,073	25,012	24,976	24,597	*24,294*	24,405	25,334	26,165	26,833	26,197	25,132	90.5
North Carolina	15,609	15,536	15,401	15,481	15,370	15,099	*15,006*	15,376	15,997	16,522	16,235	15,997	15,290	90 8
Ohio	10,707	10,319	10,501	10,735	10,556	10,356	10,442	10,294	10,877	11,367	11,682	11,070	*10,279*	88.0
Oklahoma	117	116	114	119	120	120	*111*	*111*	114	121	124	117	110	80.5
Oregon	2,095	2,064	*1,981*	1,982	2,000	2,043	2,101	2,156	2,129	2,066	2,231	2,256	2,134	87.8
Pennsylvania	12,159	11,717	11,936	11,751	*11,640*	11,958	12,255	12,275	12,514	12,644	12,737	12,523	11,964	91.4
Rhode Island	175	172	173	176	179	184	183	174	*171*	173	172	172	176	92.9
South Carolina	77	72	66	69	70	*65*	73	80	88	92	90	86	69	70.7
Tennessee	3,410	3,482	3,382	3,324	3,263	3,177	*3,097*	3,169	3,440	3,595	3,825	3,712	3,458	81.0
Texas	1,512	1,424	*1,399*	1,456	1,491	1,468	1,514	1,509	1,549	1,660	1,634	1,562	1,475	84.3
Vermont	1,147	1,016	1,048	1,028	*996*	1,013	1,153	1,273	1,289	1,257	1,278	1,234	1,151	77.3
Virginia	6,285	*6,080*	6,281	6,337	6,243	6,196	6,123	6,260	6,370	6,530	6,500	6,359	6,143	93.1
Washington	1,632	*1,555*	1,568	1,616	1,595	1,599	1,604	1,578	1,665	1,707	1,717	1,717	1,623	88.5
West Virginia	826	*710*	769	780	771	776	786	778	825	939	980	974	835	72.4
Wisconsin	8,714	*8,310*	8,469	8,566	8,540	8,429	8,379	8,401	8,770	9,099	9,651	9,345	8,604	86.1

[1] No data available for years prior to 1914.

LASTS AND RELATED PRODUCTS

Description of the industry.—This industry embraces establishments engaged chiefly in the manufacture of lasts for boots and shoes, shoe-trees, shoe stretchers, and display forms for boots and shoes.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	58	1,760	$2,569,368	$2,314,597	$7,689,555	$5,374,958	7,230
1927	59	1,718	2,504,116	2,505,032	7,529,149	5,024,117	7,655
1925	62	2,035	3,012,136	3,049,014	9,301,105	6,252,091	7,512
1923	64	2,258	3,122,737	3,196,640	9,899,925	6,703,285	6,995
1921	67	2,618	3,492,152	4,335,965	12,377,360	8,041,395	[3]
1919	64	2,910	3,415,950	3,932,662	12,470,539	8,537,877	5,539
1914	66	2,094	1,511,299	1,342,720	4,589,215	3,246,495	5,227
1909	60	1,728	1,202,982	1,324,455	4,158,933	2,834,478	3,002
1904	55	1,208	797,714	767,712	2,519,771	1,752,059	2,479
1899	65	1,131	649,654	526,670	1,879,742	1,353,072	1,550
	PER CENT OF INCREASE OR DECREASE (—)						
1927-1929	[4]	2.4	2.6	−7.6	2.1	7.0	−5.6
1925-1927	[4]	−15.6	−16.9	−17.8	−19.1	−19.6	1.9
1923-1925	[4]	−9.9	−3.5	−4.6	−6.0	−6.7	7.4
1921-1923	[4]	−13.8	−10.6	−26.3	−20.0	−16.6	
1919-1921	[4]	−10.0	2.2	10.3	−0.7	−5.8	
1919-1929	[4]	−39.5	−24.8	−41.1	−38.3	−37.0	30.5
1909-1919	[4]	68.4	184.0	196.9	199.8	201.2	84.5
1899-1909	[4]	52.8	85.2	151.5	121.3	109.5	93.7

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	58	305	1,760	7,230	2,202	5,028	$919,285	$2,569,368	$2,314,597	$2,144,105	$170,492	$7,689,555	$5,374,958
	1927	59	329	1,718	7,655	3,462	4,193	905,150	2,504,116	2,505,032	2,321,906	183,126	7,529,149	5,024,117
	1919	64	391	2,910	[4] 5,539	3,511	[4] 2,028	1,110,367	3,415,950	3,932,662	3,771,748	160,914	12,470,539	8,537,877
Individual States:														
Massachusetts	1929	28	145	728	2,884	1,402	1,482	393,772	1,111,661	970,185	901,638	68,547	3,104,258	2,134,073
	1927	29	146	782	2,882	1,552	1,330	393,127	1,072,355	1,005,526	933,719	71,807	3,173,593	2,168,067
	1919	31	190	1,299	2,861	1,315	1,546	508,446	1,598,128	1,837,036	1,759,458	77,578	5,886,356	4,049,320
New York	1929	11	67	446	2,208	400	1,808	215,216	651,416	635,933	593,311	42,622	2,162,891	1,526,958
	1927	12	73	454	2,126	775	1,351	248,023	664,730	735,289	686,667	48,622	2,053,156	1,317,867
	1919	10	61	442	1,064	700	364	171,544	540,741	625,673	601,205	24,468	2,147,435	1,521,762
Ohio	1929	4	34	224	825	250	575	75,385	305,578	188,907	171,244	17,663	660,044	471,137
Pennsylvania	1929	4	11	56	208	-------	208	37,311	79,210	52,502	41,805	10,697	215,944	163,442
	1927	4	24	69	271	-------	271	49,163	86,790	50,739	39,883	10,856	214,810	164,071
	1919	4	11	90	142	40	102	28,867	82,776	123,827	115,190	8,637	297,082	173,255
Groups of States:														
Ind., 1 est.; Mo., 4; Wis., 1	1929	6	28	216	802	-------	802	151,529	330,748	370,995	350,103	20,892	1,238,012	867,017
Me., 1 est.; N. H., 3; N. J., 1	1929	5	20	90	303	150	153	46,073	90,755	96,075	86,004	10,071	308,406	212,331
States not shown separately	[5] 1927	14	86	413	2,376	1,135	1,241	214,837	680,241	713,478	661,637	51,841	2,087,590	1,374,112
	[6] 1919	19	129	1,079	1,775	1,456	319	401,510	1,194,305	1,346,126	1,295,895	50,231	4,139,666	2,793,540

[1] Not including proprietors and firm members, as follows: For 1929, 13; 1927, 22; 1919, 43. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,078; 1927, 2,069; 1919, 3,344.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATION—Value Added by Manufacture.
[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.
[5] Illinois, 1 establishment; Indiana, 1; Maine, 1; Missouri, 4; New Hampshire, 3; New Jersey, 1; Ohio, 2; Wisconsin, 1.
[6] Illinois, 1 establishment; Maine, 2; Missouri, 2; New Hampshire, 2; New Jersey, 4; Ohio, 5; Vermont, 2; Wisconsin, 1.

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1929

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products]

KIND	Value
1. "Lasts and related products" industry, all products, total value	$7,689,555
2. Lasts and related products	7,364,992
3. Amount received for custom and contract work	83,729
4. Products (not normally belonging to the industry)	240,834
5. Lasts and related products made as secondary products in other industries	392,289
Lasts and related products, all industries, total value (sum of 2 and 5)	7,757,281
Lasts	6,749,728
Shoe-trees, shoe stretchers, shoe display forms, etc	1,007,553

TABLE 4.—CONSUMPTION OF WOOD, BY KIND AND QUANTITY: 1929

[The combined value of products reported by the 47 establishments which reported consumption of wood in detail was $6,682,511, or 86.9 per cent of the total value of products for the industry as a whole. The remaining 11 establishments failed to report consumption of wood in detail. Figures are given for each State which can be shown separately without disclosing data for individual establishments, and for the remaining States in groups]

STATE	TOTAL		MAPLE		BASSWOOD, HICKORY, POPLAR, AND PERSIMMON	
	Blocks (thousands)	M feet b. m.	Blocks (thousands)	M feet b. m.	Blocks (thousands)	M feet b. m.
United States	7,271	1,347	6,756	1,343	515	
Individual States:						
Massachusetts	2,440	581	2,434	581	6	
New York	2,454		2,453		1	
Pennsylvania	231	4	223		8	4
Groups of States:						
Ind., Mo., Ohio, Wis	1,977	425	1,477	425	500	
Me., N. H., N. J	169	337	169	337		

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	1,509	*Horsepower* 7,230	967	*Horsepower* 7,655	1,023	*Horsepower* 7,512	295	*Horsepower* 5,539	187	*Horsepower* 5,227	100.0	100.0
Prime movers, total	14	2,202	20	3,462	22	3,297	34	3,511	39	3,935	30.5	63.4
Steam, total	14	2,202	19	3,437	21	3,272	24	3,385	35	3,824	30.5	61.1
Engines	14	2,202	19	3,437	21	3,272	24	3,385	(1)	(1)	30.5	61.1
Turbines									(1)	(1)		
Internal-combustion engines			1	25	1	25	9	106	3	57		1.9
Water wheels and water turbines							1	20	1	54		.4
Electric motors driven by purchased energy	1,495	5,028	947	4,193	1,001	4,215	261	2,028	148	1,292	69.5	36.6
Electric motors, total	1,686	6,098	1,282	5,779	1,285	5,992	444	4,087	258	2,603	100.0	100.0
Driven by purchased energy	1,495	5,028	947	4,193	1,001	4,215	261	2,028	148	1,292	82.5	49.6
Driven by energy generated in establishments reporting	191	1,070	335	1,586	284	1,777	183	2,059	110	1,311	17.5	50.4
Electric generators	5	*Kilowatts* 1,100	9	*Kilowatts* 1,448	12	*Kilowatts* 1,664	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 3,173,857		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	1,760	1,804	1,816	1,742	1,670	*1,666*	1,754	1,825	1,825	1,807	1,762	1,711	1,735	91.3
1925	2,035	2,135	2,193	2,122	1,967	*1,918*	1,985	2,049	2,164	2,000	1,940	1,954	1,991	87.5
1919	2,910	*2,301*	2,459	2,619	2,777	2,975	3,055	3,108	3,146	2,981	3,065	3,176	3,258	70.6
1914	2,094	2,323	2,362	2,203	2,098	2,051	1,997	2,102	2,054	*1,905*	1,979	2,039	2,015	80.6
1909	1,728	1,715	1,792	1,784	*1,650*	1,690	1,701	1,725	1,716	1,680	1,702	1,777	1,817	90.8
Massachusetts	728	760	784	703	697	699	700	735	773	766	730	*681*	704	86.9
New York	446	444	437	451	436	*416*	450	**482**	442	447	439	450	452	86.3
Ohio	224	**242**	230	220	*211*	212	238	226	226	224	222	218	225	87.2
Pennsylvania	56	*54*	*54*	*54*	*54*	*54*	55	58	**60**	59	58	57	*54*	90.0

MATCHES

Description of the industry.—This industry, as constituted in 1929, embraced 21 establishments engaged solely in the manufacture of matches. No other classes of products were reported by these establishments, and no matches were made as secondary products by establishments engaged primarily in other lines of manufacture. Thus the manufacture of matches, unlike most industries, neither overlaps nor is overlapped by any other industry.

Omission of State statistics.—In order to avoid disclosing data reported by individual establishments, no State statistics are given in any of the tables in the report for this industry.

Detailed statistics of products (Table 3).—Manufacturers were called upon to report separately their production in 1927 and their sales in 1929 of "Strike-anywhere" and safety matches. It is impossible, however, to publish separate statistics for the two classes of matches without disclosing an approximation of the data reported by individual establishments.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	21	3,760	$4,118,093	$12,526,327	$20,351,025	$7,824,698	17,997
1927	19	3,905	4,130,988	11,884,075	24,905,835	13,021,760	17,607
1925	25	4,627	4,706,871	12,913,267	23,741,469	10,828,202	16,314
1923	22	4,712	4,424,742	11,786,382	23,940,064	12,153,682	15,388
1921	22	4,530	4,280,438	13,239,571	30,273,873	17,034,302	[3]
1919	21	3,726	3,059,537	6,852,970	18,495,876	11,642,906	12,947
1914	20	3,800	1,757,975	5,201,598	12,556,279	7,354,681	7,457
1909	26	3,631	1,389,719	4,598,878	11,353,138	6,754,260	6,219
1904	23	3,185	1,100,890	3,284,855	5,646,741	2,361,886	3,539
1899	22	2,047	612,715	3,420,740	6,005,937	2,585,197	2,666
	PER CENT OF INCREASE OR DECREASE (−)						
1927–1929	[4]	−3.7	−0.3	5.4	−18.3	−39.9	2.2
1925–1927	[4]	−16.6	−12.2	−8.0	4.9	20.3	7.9
1923–1925	[4]	−1.8	6.4	9.6	−0.8	−10.9	6.0
1921–1923		3.8	3.4	−11.0	−20.9	−28.7	
1919–1921	[4]	21.8	39.9	93.2	63.7	46.3	
1919–1929		0.9	34.6	82.8	10.0	−32.8	39.0
1909–1919	[4]	2.6	120.2	49.0	62.9	72.4	108.2
1899–1909	[4]	77.4	126.8	34.4	89.0	161.3	133.3

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS: 1929, 1927, AND 1919

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials and containers	Fuel and purchased energy	Value of products [2]	Value added by manufacture [3]
United States	[4] 1929	21	361	3,760	17,997	11,019	6,978	$802,295	$4,118,093	$12,526,327	$12,141,340	$384,987	$20,351,025	$7,824,698
	[5] 1927	19	276	3,905	17,607	11,825	5,782	557,164	4,130,988	11,884,075	11,492,760	391,315	24,905,835	13,021,760
	[6] 1919	21	1,397	3,726	12,947	9,567	3,380	1,805,995	3,059,537	6,852,970	6,577,212	275,758	18,495,876	11,642,906

[1] Not including proprietors and firm members, as follows: For 1929, 1; for 1927, none; for 1919, 3. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 4,122; 1927, 4,181; 1919, 5,126.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] California, 1 establishment; Illinois, 1; Massachusetts, 1; Michigan, 1; Minnesota, 2; Missouri, 1; New Hampshire, 1; New York, 4; Ohio, 4; Pennsylvania, 1; Washington, 1; West Virgnia, 1; Wisconsin, 2.
[5] California, 1 establishment; Illinois, 1; Massachusetts, 1; Michigan, 1; Minnesota, 2; New Hampshire, 1; New York, 3; Ohio, 4; Pennsylvania, 2; Washington, 1; West Virginia, 1; Wisconsin, 1.
[6] California, 2 establishments; Georgia, 1; Illinois, 2; Indiana, 1; Massachusetts, 1; Michigan, 1; Minnesota, 2; New Jersey, 1; New York, 2; Ohio, 3; Pennsylvania, 2; Washington, 1; West Virginia, 1; Wisconsin, 1.

TABLE 3.—PRODUCTS: 1929 AND 1927

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929		1927	
	Number	Value	Number	Value
Matches, total value		$20,351,025		[1] $24,845,404
Cases [2]	2,862,149	8,507,280	2,280,203	8,662,727
Boxes, gross [3]	14,291,756	7,571,743	16,849,578	12,210,151
Books, thousands [4]	2,505,387	4,272,002	1,551,304	3,972,526

[1] In addition, miscellaneous products valued at $60,431 were reported.
[2] The average number of matches per unit as reported by individual establishments ranged from 37,800 to 57,600, the average for all establishments being 43,471.
[3] Average number of matches per unit, 14,400.
[4] Average number of matches per unit, 20.

TABLE 4.—CONSUMPTION OF CHIEF MATERIALS: 1929

KIND	Unit	Quantity	Cost
Lumber	M ft. b. m.	60,934	$4,051,979
Phosphorus	Pound	944,902	381,903
Sulphur	Pound	1,458,054	28,881

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	1,518	*Horsepower* 17,997	1,110	*Horsepower* 17,607	760	*Horsepower* 16,314	505	*Horsepower* 12,947	174	*Horsepower* 7,457	100.0	100.0
Prime movers, total	27	11,019	30	11,825	27	10,877	33	9,567	55	6,584	61.2	73.9
Steam, total	27	11,019	30	11,825	27	10,877	32	9,563	53	6,500	61.2	73.9
Engines	20	4,705	23	5,451	18	2,647	27	5,641	(1)	(1)	26.1	43.6
Turbines	7	6,314	7	6,374	9	8,230	5	3,922	(1)	(1)	35.1	30.3
Internal-combustion engines							1	4	1	4		(2)
Water wheels and water turbines									1	80		
Electric motors driven by purchased energy	1,491	6,978	1,080	5,782	733	5,437	472	3,380	119	873	38.8	26.1
Electric motors, total	3,265	14,226	3,121	13,764	2,991	14,879	1,956	9,911	570	4,021	100.0	100.0
Driven by purchased energy	1,491	6,978	1,080	5,782	733	5,437	472	3,380	119	873	49.1	34.1
Driven by energy generated in establishments reporting	1,774	7,248	2,041	7,982	2,258	9,442	1,484	6,531	451	3,148	50.9	65.9
Electric generators	15	*Kilowatts* 7,025	17	*Kilowatts* 7,518	18	*Kilowatts* 7,266	(3)	(3)	(3)	(3)		
Electric energy purchased [4]		*Kilowatt-hours* 8,556,936		(5)		(5)		(3)		(3)		

[1] Not called for separately on schedule.
[2] Less than one-tenth of 1 per cent.
[3] Not called for on schedule.
[4] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[5] Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS: 1929, 1925, 1919, 1914, AND 1909

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

	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	
United States:														
1929	3,760	3,884	3,830	3,824	*3,756*	3,671	3,631	*3,546*	3,627	3,810	3,898	3,859	3,790	91.0
1925	4,027	*4,286*	4,341	4,350	4,804	4,809	4,706	4,637	4,749	4,491	4,632	4,675	4,542	88.4
1919	3,726	4,517	4,241	3,645	3,003	2,921	*2,804*	3,001	3,350	3,721	4,184	4,549	4,776	58.7
1914	3,800	4,275	4,380	4,244	4,099	3,890	3,585	*3,121*	3,250	3,590	3,835	3,787	*3,544*	71.3
1909	3,631	3,841	3,881	3,888	3,954	3,889	3,526	2,822	*2,270*	3,340	3,941	4,076	4,153	54.7

MIRROR AND PICTURE FRAMES

Description of the industry.—This industry embraces establishments engaged principally in the manufacture of finished picture-frame moldings; frames, chiefly of wood, for mirrors, pictures, photographs, and medallions; and framed pictures. (Establishments engaged in framing pictures, etc., to individual order are not included.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	178	4,446	$5,752,196	$6,532,524	$19,237,897	$12,705,373	8,334
1927	166	4,460	5,893,073	7,056,460	19,488,721	12,432,261	6,228
1925	162	4,230	5,645,706	6,834,953	19,169,907	12,334,954	6,102
1923	223	4,496	5,761,320	6,178,448	18,641,496	12,463,048	4,497
1921	259	3,846	4,879,454	5,643,719	15,448,208	9,804,489	[3]
1919	429	4,708	4,775,227	7,227,232	18,384,562	11,157,330	4,659
1914	438	4,787	2,850,258	4,468,492	11,014,207	6,545,715	4,054
1909	437	6,021	3,260,622	5,525,006	13,475,082	7,950,076	5,200
1904	442	6,625	3,314,735	4,975,121	13,209,645	8,294,524	4,365
1899	362	6,029	2,550,371	4,729,282	10,846,929	6,117,647	3,357
	PER CENT OF INCREASE OR DECREASE (—)						
1927-1929	7.2	—0.3	—2.4	—7.4	—1.3	2.2	33.8
1925-1927	2.5	5.4	4.4	3.2	1.7	0.8	2.1
1923-1925	—27.4	—5.9	—2.0	10.6	2.8	—1.0	35.7
1921-1923	—13.9	16.9	18.1	9.5	20.7	27.1	
1919-1921	—39.6	—18.3	2.2	—21.9	—16.0	—12.1	
1919-1929	—58.5	—5.6	20.5	—9.6	4.6	13.9	78.9
1909-1919	—1.8	—21.8	46.5	30.8	36.4	40.3	—10.4
1899-1909	20.7	—0.1	27.8	16.8	24.2	30.0	54.9

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	178	681	4,446	8,334	1,030	7,304	$2,206,339	$5,752,196	$6,532,524	$6,306,315	$226,209	$19,237,897	$12,705,373
	1927	166	629	4,460	6,228	1,620	4,608	1,748,837	5,893,073	7,056,460	6,839,538	216,922	19,488,721	12,432,261
	1919	429	823	4,708	[4] 4,656	1,453	[4] 3,206	1,726,101	4,775,227	7,227,232	7,053,524	173,708	18,384,562	11,157,330
Individual States:														
California	1929	12	27	194	236	-------	236	45,850	273,869	280,176	275,972	4,204	845,792	565,616
	1927	8	28	109	228	-------	228	59,513	144,494	245,164	242,813	2,351	671,471	426,307
	1919	33	47	182	122	-------	122	66,708	204,523	244,813	241,121	3,692	706,538	461,725
Illinois	1929	39	264	2,098	4,361	500	3,861	1,016,745	2,642,506	2,699,959	2,595,532	104,427	8,179,742	5,479,783
	1927	38	250	2,472	3,058	1,100	1,958	829,355	3,267,572	3,407,914	3,296,454	111,460	9,610,222	6,202,308
	1919	60	301	1,944	2,112	650	1,462	819,560	2,091,498	2,742,976	2,658,425	84,551	7,160,155	4,417,179
Maryland	1929	8	27	219	342	150	192	58,156	188,612	290,022	282,605	7,417	722,055	432,033
	1927	6	31	172	205	100	105	79,533	154,726	348,741	342,720	6,021	839,635	490,894
	1919	12	11	78	31	-------	31	14,045	77,078	198,036	195,167	2,869	384,349	186,313
Massachusetts	1929	14	35	165	170	80	90	80,668	221,190	194,541	188,504	6,037	677,406	482,865
	1927	16	30	168	170	80	90	59,150	249,995	281,677	274,806	6,871	798,596	516,919
	1919	26	21	148	134	-------	134	25,385	160,779	255,662	251,472	4,190	593,568	337,906
Michigan	1929	6	8	33	74	-------	74	13,165	60,516	42,361	39,868	2,493	179,877	137,516
	1927	3	7	17	7	-------	7	18,051	27,992	40,840	40,551	289	109,533	68,693
	1919	8	12	46	17	-------	17	22,076	48,167	51,358	50,025	1,333	189,123	137,765
Minnesota	1929	3	11	36	37	-------	37	24,597	52,434	67,126	61,975	5,151	234,354	167,228
	1927	[5]	[5]	[5]	[5]	-------	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]
	1919	12	23	37	36	-------	36	36,828	39,260	182,963	180,765	2,198	327,133	144,170
Missouri	1919	5	13	36	38	-------	38	32,618	47,323	58,945	56,792	2,153	191,277	132,332
	1927	5	9	24	10	-------	10	12,542	29,717	33,469	32,519	950	99,941	66,472
	1929	8	10	16	26	20	6	20,013	14,001	48,577	48,378	199	118,796	70,219
New York	1929	58	194	915	1,379	-------	1,379	658,591	1,368,307	1,871,177	1,820,708	50,469	5,182,108	3,310,931
	1927	50	144	670	943	15	928	412,284	1,049,284	1,461,355	1,417,070	44,285	3,918,405	2,457,050
	1919	109	197	1,033	711	139	572	371,594	1,064,460	1,597,434	1,562,303	35,131	4,346,368	2,748,934
Ohio	1929	5	19	168	487	-------	487	92,058	234,326	230,372	219,022	11,350	742,880	512,508
	1927	5	29	188	373	-------	373	82,575	257,137	222,161	211,144	11,017	772,072	549,911
	1919	18	80	519	663	225	438	158,354	462,248	851,959	834,740	17,219	2,050,220	1,198,261
Pennsylvania	1929	9	18	141	211	-------	211	39,766	139,295	267,146	260,432	6,714	552,577	285,431
	1927	10	16	132	214	-------	214	23,698	145,018	274,483	268,835	5,648	515,999	241,516
	1919	59	40	220	255	5	250	41,972	199,461	466,204	456,945	9,259	948,259	482,055
Texas	1929	3	1	9	8	-------	8	308	7,912	38,996	38,544	452	59,942	20,946
Washington	1929	3	2	14	16	-------	16	3,028	20,416	7,432	6,878	554	43,083	35,651
	1927	[5]	[5]	[5]	[5]	-------	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]
	1919	8	6	23	3	-------	3	2,756	25,431	21,459	21,056	403	76,347	54,888
Groups of States:														
Colo., 2 est.; Okla., 1; Utah 1	1929	4	-------	11	19	-------	19	----------	12,061	27,930	27,138	792	61,387	33,457
Conn., 1 est.; N. J., 1; R. I., 1; Vt. 1	1929	4	4	27	14	-------	14	14,951	27,897	46,994	46,086	908	114,547	67,553
Ga., 1 est.; Ind., 3; W. Va., 1	1929	5	58	380	942	300	642	125,838	455,532	409,347	386,259	23,088	1,450,870	1,041,523
States not shown separately.	[6] 1927	25	85	508	1,020	325	695	172,136	567,138	740,656	712,626	28,030	2,152,847	1,412,191
	[7] 1919	76	75	462	579	414	165	146,810	388,331	565,791	553,127	12,664	1,483,706	917,915

[1] Not including proprietors and firm members, as follows: For 1929, 99; 1927, 119; 1919, 398. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 5,226; 1927, 5,208; 1919, 5,929.

[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Withheld from publication in order to avoid disclosing data for individual establishments.

[6] Colorado, 3 establishments; Connecticut, 2; Florida, 1; Georgia, 1; Indiana, 3; Maine, 1; Minnesota, 2; Oklahoma, 1; Oregon, 2; Rhode Island, 1; Texas, 2; Utah, 1; Washington, 3; West Virginia, 1; Wisconsin, 1.

[7] Colorado, 8 establishments; Connecticut, 8; Georgia, 2; Indiana, 5; Iowa, 1; Kentucky, 2; Maine, 2; Montana, 2; Nebraska, 2; New Hampshire, 1; New Jersey, 13; North Carolina, 4; Oklahoma, 1; Oregon, 4; Rhode Island, 4; Texas, 2; Utah, 1; Virginia, 1; West Virginia, 9; Wisconsin, 4.

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1929

[Figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products]

KIND	Value	KIND	Value
1. Mirror and picture frames industry, all products, total value	$19,237,897	Mirror and picture frames, etc., all industries, total value (sum of 2 and 5)	$18,006,151
2. Mirror and picture frames, etc.	17,804,667	Mirror and picture frames:	
3. Amount received for custom and contract work	281,925	Wood	13,152,032
4. Products (not normally belonging to the industry)	1,151,305	Metal	466,845
5. Mirror and picture frames, etc., made as secondary products in other industries	201,484	Other and not specified	116,882
		Mirror and picture frame moldings, gilded or finished	3,176,564
		Kind not specified	1,093,828

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	1,616	*Horsepower* 8,334	1,206	*Horsepower* 6,228	1,030	*Horsepower* 6,102	760	*Horsepower* 4,659	462	*Horsepower* 4,054	100.0	100.0
Prime movers, total	8	1,030	14	1,620	16	1,900	20	1,453	38	2,448	12.4	31.2
Steam, total	7	1,000	13	1,590	15	1,880	17	1,434	25	2,023	12.0	30.8
Engines	7	1,000	13	1,590	12	1,430	17	1,434	(1)	(1)	12.0	30.8
Turbines					3	450			(1)	(1)		
Internal-combustion engines							3	19	12	410		0.4
Water wheels and water turbines	1	30	1	30	1	20			1	15	0.4	
Electric motors driven by purchased energy	1,608	7,304	1,192	4,608	1,014	4,202	740	3,206	424	1,606	87.6	68.8
Electric motors, total	1,608	7,304	1,192	4,608	1,021	4,206	750	3,233	467	1,732	100.0	100.0
Driven by purchased energy	1,608	7,304	1,192	4,608	1,014	4,202	740	3,206	424	1,606	100.0	99.2
Driven by energy generated in establishments reporting					7	4	10	27	43	126		0.8
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators		2	2	45	4	68	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		3,822,732		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	4,446	*4,093*	4,406	4,547	4,442	4,266	4,193	4,205	4,331	4,627	4,867	4,820	4,558	84.1
1925	4,230	3,968	4,188	4,328	4,249	4,105	4,018	*3,965*	4,104	4,283	4,572	4,596	4,390	86.3
1919	4,708	*4,060*	4,337	4,592	4,649	4,686	4,676	4,831	4,761	4,806	4,949	5,132	5,017	79.1
1914	4,787	4,597	4,926	4,933	4,787	4,714	4,723	4,602	4,761	4,896	4,970	4,928	*4,547*	91.5
1909	6,021	*5,666*	5,975	6,047	5,814	5,670	5,704	5,676	6,001	6,272	6,482	6,650	6,411	83.7
California	194	*133*	204	203	203	192	188	190	191	196	206	211	210	63.0
Illinois	2,098	*1,942*	2,093	2,125	2,085	2,000	1,956	1,988	2,069	2,222	2,362	2,274	2,061	82.2
Maryland	219	*206*	223	228	228	207	207	207	210	214	229	234	235	87.7
Massachusetts	165	163	162	164	157	158	160	157	*155*	171	169	173	189	82.0
Michigan	33	*15*	*15*	38	35	36	35	33	31	34	35	44	43	34.1
Minnesota	36	35	35	35	35	33	33	*32*	36	38	42	39	40	76.2
Missouri	36	35	37	41	37	33	37	33	*32*	34	37	37	39	78.0
New York	915	880	904	945	904	877	872	*869*	895	953	974	975	936	89.1
Ohio	168	*158*	174	178	169	163	161	163	162	170	177	177	167	88.8
Pennsylvania	141	*118*	125	140	139	132	125	121	125	146	167	178	179	65.9
Texas	9	9	9	9	9	*8*	*8*	*8*	*8*	12	11	10	10	66.7
Washington	14	*13*	*13*	*13*	*13*	*13*	*13*	*13*	*13*	14	14	15	15	86.7

PULP GOODS

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of vulcanized-fiber products, such as sheets, rods, tubes, boxes, baskets, and other containers, megaphones, etc.; laminated phenolic (bakelite) products, such as sheets, rods, tubes and fabricated pieces and parts; and dishes, etc., made of molded pulp.

Comparison with earlier years.—At censuses prior to that for 1923 the pulp-goods industry included the manufacture of wall board, other than gypsum wall board, now classified under "Wall plaster, wall board, insulating board, and floor composition." No comparable statistics for 1921 and prior years are therefore available.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1923 TO 1929

[See "Comparison with earlier years" above]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	45	3,558	$4,591,688	$12,067,760	$27,219,892	$15,152,132	14,190
1927	44	2,996	3,782,927	11,375,407	23,950,127	12,574,720	13,839
1925	35	3,017	3,767,333	10,286,201	20,270,005	9,983,804	11,338
1923	40	3,648	4,089,761	11,208,769	20,435,852	9,227,083	13,005
	PER CENT OF INCREASE OR DECREASE (−)						
1927–1929	(3)	18.8	21.4	6.1	13.7	20.5	2.5
1925–1927	(3)	−0.7	0.4	10.6	18.2	26.0	22.1
1923–1925	(3)	−17.3	−7.9	−8.2	−0.8	8.2	−16.7

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929 AND 1927

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	45	317	3,558	14,190	5,853	8,337	$1,109,205	$4,591,688	$12,067,760	$11,432,559	$635,201	$27,219,892	$15,152,132
	1927	44	602	2,996	13,839	8,573	5,266	1,787,490	3,782,927	11,375,407	10,425,471	949,936	23,950,127	12,574,720
Individual States:														
Delaware	1929	9	76	1,306	4,378	2,275	2,103	275,138	1,459,415	4,644,768	4,521,916	122,852	8,879,793	4,235,025
	1927	9	170	1,108	3,145	2,530	615	636,328	1,333,615	4,036,566	3,794,531	242,035	8,351,566	4,315,000
Ohio	1929	5	14	86	260	-------	260	56,438	99,901	317,988	306,017	11,971	555,007	237,019
	1927	5	18	67	164	-------	164	45,203	86,083	334,728	327,272	7,456	626,224	291,496
Wisconsin	1929	4	17	127	514	40	474	59,734	126,265	217,907	197,476	20,431	378,247	160,340
	1927	2	4	48	97	40	57	18,400	42,492	102,185	98,372	3,813	225,333	123,148
Groups of States:														
Calif., 2 est.; Oreg., 1	1929	3	2	14	78	-------	78	5,180	15,653	21,186	19,932	1,254	55,997	34,811
Ill., 5 est.; Ind., 1; Me., 2; Mich., 1; N. J., 1; S. C., 1	1929	11	68	713	3,415	525	2,890	208,874	925,246	2,301,333	2,134,699	166,634	5,793,050	3,491,717
Mass., 2 est.; N. H., 2; R. I., 2	1929	6	16	89	244	120	124	35,488	89,029	256,399	251,421	4,978	501,115	244,716
N. Y., 4 est.; Pa., 3	1929	7	124	1,223	5,301	2,893	2,408	468,353	1,876,179	4,308,179	4,001,098	307,081	11,056,683	6,748,504
States not shown separately	[4]1927	28	410	1,773	10,433	6,003	4,430	1,087,559	2,320,737	6,901,928	6,205,296	696,632	14,747,004	7,845,076

[1] Not including proprietors and firm members, as follows: For 1929, 7; 1927, 4. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 3,882; 1927, 3,602.
[2] For 1929, manufacturers' sales (shipments or deliveries); for 1927 production. See GENERAL EXPLANATIONS—Value of Products. This item does not include the following values of pulp goods made as secondary products by establishments classified in other industries: 1929, $302,706; 1927, $280,000.
[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Illinois, 3 establishments; Indiana, 1; Maine, 2; Massachusetts, 6; Michigan, 1; New Hampshire, 2; New Jersey, 4; New York, 5; Pennsylvania, 2; Rhode Island, 1; Washington, 1.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS, ELECTRIC MOTORS, AND GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		Per cent distribution of rated horsepower capacity, 1929
	Number	Capacity	Number	Capacity	Number	Capacity	
		Horsepower		*Horsepower*		*Horsepower*	
Prime movers and electric motors driven by purchased energy, aggregate	967	14,190	554	13,839	350	11,338	100.0
Prime movers, total	28	5,853	42	8,573	39	8,130	41.2
Steam, total	22	5,243	36	7,976	32	7,525	36.9
Engines	17	2,393	28	3,405	27	3,255	16.8
Turbines	5	2,850	8	4,571	5	4,270	20.1
Internal-combustion engines					1	8	
Water wheels and water turbines	6	610	6	597	6	597	4.3
Electric motors driven by purchased energy	939	8,337	512	5,266	311	3,208	58.8
Electric motors, total	1,384	11,616	1,147	12,279	971	11,385	100.0
Driven by purchased energy	939	8,337	512	5,266	311	3,208	71.8
Driven by energy generated in establishments reporting	445	3,279	635	7,013	660	8,177	28.2
		Kilowatts		*Kilowatts*		*Kilowatts*	
Electric generators	8	2,690	21	5,166	18	5,208	
		Kilowatt-hours					
Electric energy purchased [1]		9,978,288		[2]		[2]	

[1] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[2] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929 AND 1925, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	3,558	3,692	3,591	3,645	3,600	3,538	3,593	3,643	3,827	3,797	3,642	3,095	*3,035*	79.3
1925	3,017	3,122	3,006	2,951	2,933	*2,917*	*2,917*	2,986	3,016	3,052	3,203	3,122	2,976	91.1
Delaware	1,306	*1,250*	1,289	1,309	1,323	1,323	1,316	1,319	1,326	1,321	1,321	1,304	1,276	94.3
Ohio	86	103	75	72	94	91	105	91	92	84	76	*67*	75	63.8
Wisconsin	127	*95*	101	102	119	139	132	123	146	151	160	144	108	59.4

REFRIGERATORS AND REFRIGERATOR CABINETS, EXCLUSIVE OF MECHANICAL REFRIGERATING EQUIPMENT

Description of the industry.—This industry embraces the factory production of refrigerators, ice boxes, water coolers, cooling rooms, display refrigerators, and ice-cream cabinets, using ice as the cooling agent; and the manufacture of cabinets, for sale as such, for use with mechanical refrigerating units. It does not, however, cover the construction, by builders, of built-in cooling rooms, cabinets, etc. (The manufacture of electrically-operated and heat-operated refrigerating equipment and units for commercial and for household use is classified under "Refrigerators, mechanical," and the manufacture of ice-making machinery for use in ice factories is classified in the "Foundry and machine-shop products" industry.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	188	9,784	$13,181,656	$26,451,148	$60,483,314	$34,032,166	28,493
1927	165	9,551	12,617,121	25,094,718	58,163,054	33,068,336	24,216
1925	167	9,360	12,588,982	24,744,336	57,665,842	32,921,506	23,297
1923	132	8,485	10,732,610	21,694,669	50,076,444	28,381,775	17,136
1921	116	5,804	7,160,594	16,313,562	33,010,226	16,696,664	[3]
1919	122	5,786	5,809,351	11,948,972	26,048,808	14,099,836	13,029
1914	134	5,617	3,572,334	7,343,392	15,051,794	7,708,402	11,151
1909	131	5,026	2,682,780	4,911,809	10,689,275	5,777,466	[4]
1904	111	4,032	1,905,114	3,271,767	7,347,935	4,076,168	6,023
1899	95	3,329	1,287,488	2,476,518	5,317,886	2,841,368	4,668
	PER CENT OF INCREASE OR DECREASE (−)						
1927–1929	13.9	2.4	4.5	5.4	4.0	2.9	17.7
1925–1927	−1.2	2.0	0.2	1.4	0.9	0.4	3.9
1923–1925	26.5	10.3	17.3	14.1	15.2	16.0	36.0
1921–1923	13.8	46.2	49.9	33.0	51.7	70.0	----------
1919–1921	−4.9	0.3	23.3	36.5	26.7	18.4	----------
1919–1929	54.1	69.1	126.9	121.4	132.2	141.4	118.7
1909–1919	−6.9	15.1	116.5	143.3	143.7	144.0	----------
1899–1909	37.9	51.0	108.4	98.3	101.0	103.3	----------

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] No comparable figures available.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	188	1,673	9,784	28,493	13,893	14,600	$4,662,178	$13,181,656	$26,451,148	$25,621,334	$829,814	$60,483,314	$34,032,166
	1927	165	1,634	9,551	24,216	11,305	12,911	4,518,892	12,617,121	25,094,718	24,418,843	675,875	58,163,054	33,068,336
	1919	122	1,136	5,786	[4] 13,029	8,474	[4] 4,555	2,551,322	5,809,351	11,948,972	11,704,141	244,831	26,048,808	14,099,836
Individual States:														
California	1929	21	88	440	1,187	--------	1,187	178,345	766,874	1,570,152	1,552,389	17,763	3,196,676	1,626,524
	1927	15	49	280	857	--------	857	117,033	479,756	822,072	813,647	8,425	1,822,759	1,000,687
	1919	8	22	74	113	--------	113	31,394	112,870	296,047	294,432	1,615	501,213	205,166
Illinois	1929	12	82	423	1,182	560	622	224,691	696,731	1,222,768	1,188,488	34,310	2,940,150	1,717,352
	1927	10	70	429	1,383	650	733	215,502	696,863	1,106,555	1,058,540	48,015	2,613,406	1,506,851
	1919	9	36	309	455	331	124	77,240	325,322	386,493	375,815	10,678	1,198,255	811,762
Indiana	1929	5	190	571	1,201	710	491	419,895	782,950	1,813,247	1,769,678	43,569	5,311,868	3,498,621
	1927	6	204	597	1,031	300	731	366,258	792,000	1,820,190	1,790,009	30,181	6,688,814	4,868,624
Iowa	1929	3	24	109	317	225	92	86,756	147,220	234,017	228,208	5,809	645,124	411,107
	1927	3	28	134	316	275	41	95,088	174,473	363,912	358,886	5,026	830,672	466,760
	1919	3	24	124	197	195	2	40,823	138,944	299,265	294,990	4,275	566,634	267,369
Massachusetts	1929	8	22	181	329	125	204	99,317	299,632	277,798	271,986	5,812	906,083	628,285
	1927	11	17	183	252	45	207	78,074	285,837	433,765	426,034	7,731	1,066,519	632,754
	1919	10	31	93	205	163	42	45,606	110,418	186,462	183,018	3,444	420,507	234,045
Michigan	1929	14	303	2,511	8,711	7,763	948	839,005	3,182,111	7,757,038	7,447,789	309,249	14,188,443	6,431,405
	1927	11	317	2,573	6,379	5,568	811	894,950	2,958,133	6,568,451	6,378,171	190,280	11,735,456	5,167,005
	1919	12	259	1,655	3,468	2,855	613	484,604	1,575,915	3,205,834	3,140,571	65,263	6,718,348	3,512,514
Minnesota	1929	6	140	1,160	2,811	1,500	1,311	475,312	1,315,973	2,517,576	2,397,455	120,121	6,012,170	3,494,594
	1927	6	143	800	2,218	1,490	728	418,741	1,007,144	1,814,247	1,712,166	102,081	5,123,598	3,309,351
Missouri	1929	11	116	499	1,235	--------	1,235	341,315	674,607	1,213,054	1,182,127	30,927	3,648,201	2,435,147
	1927	9	122	421	1,163	--------	1,163	423,718	641,911	1,134,535	1,108,227	26,308	3,740,812	2,606,277
	1919	7	75	207	605	--------	605	170,476	273,683	715,926	705,241	10,685	1,527,256	811,330
New York	1929	35	160	674	2,054	400	1,654	465,260	1,099,763	2,015,250	1,969,265	45,985	4,839,693	2,824,443
	1927	33	182	954	2,447	600	1,847	578,449	1,611,544	2,667,580	2,604,322	63,258	6,439,604	3,772,024
	1919	22	101	631	1,158	310	848	250,989	638,948	1,187,676	1,164,866	22,710	2,631,150	1,443,574
Ohio	1929	6	69	237	657	120	537	255,712	201,474	1,057,229	1,042,313	14,916	2,248,082	1,190,853
	1927	7	59	205	966	190	776	146,383	331,097	592,921	580,724	12,197	1,581,932	989,011
	1919	5	46	135	417	387	30	69,887	143,734	319,496	312,130	7,366	598,861	279,365
Pennsylvania	1929	12	66	448	1,038	235	1,403	171,695	695,330	875,175	842,548	32,627	2,156,491	1,281,316
	1927	11	134	483	818	97	721	304,640	768,976	1,900,977	1,858,166	42,811	3,673,916	1,772,939
	1919	11	61	389	874	303	571	161,239	492,989	971,353	948,031	23,322	1,802,377	831,024
Washington	1929	6	3	19	76	--------	76	3,526	25,419	31,135	30,550	585	113,819	82,684
	1927	4	5	25	66	--------	66	15,900	31,104	62,249	61,383	866	134,446	72,197
Wisconsin	1929	13	118	743	2,718	1,230	1,488	363,822	895,048	1,839,018	1,779,877	59,141	3,812,543	1,973,525
	1927	10	69	602	2,025	885	1,140	240,181	792,312	1,721,622	1,674,793	46,829	3,527,932	1,806,310
	1919	7	56	544	664	325	339	163,823	453,550	980,625	961,962	18,663	2,021,500	1,040,875
Groups of States:														
Colo., 1 est.; Nebr., 1; Oreg., 2; Utah, 1	1929	5	19	95	258	--------	258	53,135	131,572	239,912	227,950	11,962	518,974	279,062
Conn., 1 est.; Me., 2	1929	3	--------	9	63	--------	63	----------	9,988	11,210	10,200	1,010	32,652	21,442
Del., 1 est.; Md., 2; N. J., 4	1929	7	125	530	1,061	150	911	262,491	885,520	1,224,433	1,201,137	23,296	3,638,594	2,414,161
Ga., 2 est.; Okla., 1; Tenn., 6; Tex., 2	1929	11	85	864	1,655	475	1,180	249,760	969,993	1,903,401	1,853,334	50,067	4,615,215	2,711,814
Ky., 2 est.; N. C., 1; Va., 1; W. Va., 1	1929	5	15	45	442	--------	442	53,311	51,831	112,485	104,932	7,553	335,229	222,744
N. H., 2 est.; R. I., 1; Vt., 2	1929	5	48	226	898	400	498	118,830	259,620	536,220	521,108	15,112	1,323,807	787,087
States not shown separately	[5] 1927	20	235	1,775	4,295	1,205	3,090	623,975	2,045,971	4,085,642	3,993,775	91,867	9,183,188	5,097,546
	[6] 1919	28	425	1,625	5,076	3,605	1,471	1,055,241	1,542,978	3,399,895	3,323,085	76,810	8,062,707	4,662,812

[1] Not including proprietors and firm members, as follows: For 1929, 78; 1927, 74; 1919, 72. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 11,535; 1927, 11,259; 1919, 6,994.

[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Colorado, 1 establishment; Connecticut, 2; Georgia, 1; Kentucky, 1; Louisiana, 1; Maine, 2; Maryland, 1; Nebraska, 1; New Hampshire, 1; New Jersey, 6; North Carolina, 1; Tennessee, 4; Texas, 3; Vermont, 2; Virginia, 1; West Virginia, 1.

[6] Alabama, 1 establishment; Georgia, 2; Indiana, 3; Louisiana, 1; Maine, 1; Maryland, 2; Minnesota, 2; Nebraska, 1; New Hampshire, 1; New Jersey, 5; Tennessee, 2; Texas, 2; Vermont, 3; Washington, 1; West Virginia, 1.

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1929

[The figures refer to sales (shipments or deliveries) by manufacturers. See GENERAL EXPLANATIONS—Value of Products]

KIND	VALUE	KIND	VALUE
1. "Refrigerators and refrigerator cabinets, exclusive of mechanical refrigerating equipment" industry, all products, total	$60,463,314	Refrigerators, ice boxes, cooling rooms, refrigerating cabinets, etc.—Continued.	
2. Refrigerators, ice boxes, cooling rooms, refrigerating cabinets, etc.	54,304,377	Commercial:	
3. Amount received for custom and contract work	254,400	Wood	$21,173,291
4. Other products (not normally belonging to the industry)	5,924,537	Metal	5,010,193
5. Refrigerators, ice boxes, cooling rooms, refrigerating cabinets, etc., made as secondary products in other industries	3,133,883	Not specified	718,121
Refrigerators, ice boxes, cooling rooms, refrigerating cabinets, etc., all industries, total (sum of 2 and 5)	57,438,260	Not reported by kind:	
Domestic:		Wood	217,076
Wood	18,536,067	Metal	102,232
Metal	10,038,513	Not specified	24,509
Not specified	1,618,238		

TABLE 4.—CONSUMPTION OF LOGS, LUMBER, VENEERS, AND PLYWOOD: 1929

[The combined value of products reported by the 146 establishments which reported consumption of logs, lumber, veneer, and plywood in detail was 88.5 per cent of the total value of products for the industry as a whole. The remaining 42 establishments did not report consumption in detail]

	Total value	QUANTITY AND VALUE REPORTED		Value only reported		Total value	QUANTITY AND VALUE REPORTED		Value only reported
		Quantity (M feet b. m.)	Value				Quantity (M feet b. m.)	Value	
Logs or bolts:					Lumber—Continued.				
Domestic—M feet, log scale	$1,500			$1,500	Softwood—				
Lumber:					Domestic	$1,923,638	44,443	$1,671,280	$252,358
Hardwood—					Imported	27,479	706	27,479	
Domestic	2,648,815	50,817	$2,487,479	161,336	Kind not specified	922,293	13,500	809,293	113,000
Imported	27,581	107	15,316	12,265	Veneer and plywood	537,906			537,906

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	3,320	*Horsepower* 28,493	2,664	*Horsepower* 24,216	2,040	*Horsepower* 23,297	642	*Horsepower* 13,029	376	*Horsepower* 11,151	100.0	100.0
Prime movers, total	52	13,893	55	11,305	59	11,683	61	8,474	79	9,079	48.8	65.0
Steam, total	51	13,868	52	11,228	52	11,072	47	8,009	59	8,583	48.7	61.4
Engines	47	10,168	47	8,411	51	10,972	44	7,653	(1)	(1)	35.7	58.7
Turbines	4	3,700	5	2,817	1	100	3	356	(1)	(1)	13.0	2.7
Internal-combustion engines			2	52	4	486	14	465	20	496		3.6
Water wheels and water turbines	1	25	1	25	3	125					0.1	
Electric motors driven by purchased energy	3,268	14,600	2,609	12,911	1,981	11,614	581	4,555	297	2,072	51.2	35.0
Electric motors, total	5,381	26,805	4,197	23,520	3,238	20,245	999	6,970	632	4,605	100.0	100.0
Driven by purchased energy	3,268	14,600	2,609	12,911	1,981	11,614	581	4,555	297	2,072	54.5	65.4
Driven by energy generated in establishments reporting	2,113	12,205	1,588	10,609	1,257	8,631	418	2,415	335	2,533	45.5	34.6
Electric generators	35	*Kilowatts* 7,491	26	*Kilowatts* 5,841	31	*Kilowatts* 5,839	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 12,739,414		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	9,784	9,442	9,971	10,814	11,308	11,431	10,949	9,929	8,714	*8,568*	8,674	8,806	8,798	75.0
1925	9,360	9,617	9,707	9,915	9,676	9,573	9,003	9,123	*8,564*	8,849	9,158	9,556	9,579	86.4
1919	5,786	5,547	5,656	5,784	5,838	*5,762*	5,646	5,611	*5,483*	5,701	5,823	6,120	6,461	84.9
1914	5,617	6,056	6,260	6,361	6,339	6,231	5,962	5,446	*4,482*	4,498	4,802	5,424	5,483	70.5
California	440	*357*	373	386	461	481	514	518	506	469	430	393	387	68.9
Illinois	423	420	434	476	498	528	505	442	344	363	380	*314*	388	59.5
Indiana	571	425	595	668	771	670	629	547	489	545	542	571	*395*	51.2
Iowa	109	108	117	131	133	131	114	115	85	*72*	94	104	104	54.1
Massachusetts	181	176	179	183	197	193	195	189	173	178	174	*165*	168	83.8
Michigan	2,511	2,561	2,728	3,096	3,216	3,306	2,908	2,405	*1,891*	1,924	1,918	2,040	2,138	57.2
Minnesota	1,160	1,090	1,128	1,273	1,313	1,355	1,415	1,337	1,214	973	*890*	925	1,008	62.9
Missouri	499	450	453	470	560	571	569	543	515	487	476	466	*425*	74.1
New York	674	693	716	777	764	800	742	662	603	594	582	*576*	581	72.0
Ohio	237	*200*	219	245	250	267	275	268	224	225	230	218	224	72.7
Pennsylvania	448	428	433	442	465	470	474	474	469	438	*424*	426	428	89.5
Washington	19	18	18	18	18	19	*15*	16	17	17	17	24	26	57.7
Wisconsin	743	750	799	860	844	777	796	720	*493*	519	730	798	833	57.3

TURPENTINE AND ROSIN

Source of statistics.—The Bureau of the Census, in cooperation with the Bureau of Chemistry and Soils, Department of Agriculture, published annual statistics for the turpentine and rosin industry for the crop years ended March 31, 1922, 1923, and 1924. For the crop years ended March 31, 1925 and 1926, production statistics were compiled by the Turpentine and Rosin Producers' Association. The report for the crop year ended March 31, 1928, was one of the series presenting the results of the fourth biennial census of manufactures, and the present report, for the crop year ended March 31, 1930, belongs to the fifth biennial series.

Description of the industry.—The turpentine and rosin industry consists in the distillation of the semi-fluid exudation from certain species of pine trees. This exudation is known by various names, as crude gum, crude turpentine, and dip. Relatively small quantities of wood turpentine and wood rosin are obtained from pine wood by steam and solvent extraction and by destructive distillation. Establishments engaged in the production of turpentine, or of both turpentine and rosin, by these methods are treated as belonging to the wood-distillation industry, and no statistics for these secondary products are included in this report except in Tables 3 and 5.

Crop year.—The producing season in the turpentine and rosin industry commences in the spring, when the sap begins to flow. In order to make the statistics conform as nearly as possible to the crop year and to make the task of reporting 12 months' activities less difficult for the operators, the data have been collected at the last eight canvasses for the crop years ended March 31. The earlier census figures, however, except those for the crop years 1920–21, 1918–19, and 1917–18, in Tables 1 and 3, relate to calendar years.

Cost of materials in comparison with value of products.—The cost of materials includes the rental of pine forests, the cost of containers, and the amount paid for crude gum which was purchased. In most cases, however, the gum is gathered by the establishment operating the distillery, and therefore a large part of the actual cost of materials at the distillery is represented by the compensation of the employees engaged in gathering the gum, which is reported under the head of "Wages." It appears probable, also, that the cost of materials as reported does not in all cases include the rental of pine forests (turpentine rights). As a result, the cost of materials shown for this industry is relatively low.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[The figures for 1919 and earlier years as presented in this table refer to calendar years; those for 1921 and subsequent years, to crop years ended March 31. Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929-30	1,183	40,157	$15,036,175	$10,293,954	$36,281,632	$25,987,678	1,995
1927-28	1,149	37,913	16,953,054	12,173,394	39,902,971	27,729,577	3,211
1925-26	1,007	29,413	15,190,076	11,887,395	42,364,413	30,477,018	3,138
1923-24	1,203	34,328	15,448,590	8,972,758	35,166,715	26,193,957	1,932
1921-22	1,062	27,422	9,512,177	6,199,179	23,300,845	17,101,666	[3]
1919	1,191	28,067	16,972,881	13,929,888	53,051,294	39,121,406	2,276
1914	1,394	34,817	8,582,970	5,535,561	20,990,191	15,454,630	2,478
1909	1,585	39,511	9,363,359	4,910,838	25,295,017	20,384,179	4,122
1904	1,287	33,382	8,382,700	3,774,637	23,937,024	20,162,387	1,175
1899	1,503	41,864	8,393,483	6,186,492	20,344,888	14,158,396	866
	PER CENT OF INCREASE OR DECREASE (—)						
1927-28 to 1929-30	3.0	5.9	—11.3	—15.4	—9.1	—6.3	—37.9
1925-26 to 1927-28	14.1	28.9	11.6	2.4	—5.8	—9.0	2.3
1923-24 to 1925-26	—16.3	—14.3	—1.7	32.5	20.5	16.4	62.4
1921-22 to 1923-24	13.3	25.2	62.4	44.7	50.9	53.2	
1919 to 1921-22	—10.8	—2.3	—44.0	—55.5	—56.1	—56.3	
1919 to 1929-30	—0.7	43.1	—11.4	—26.1	—31.6	—33.6	—12.3
1909-1919	—24.9	—29.0	81.3	183.7	109.7	91.9	—44.8
1899-1909	5.5	—5.6	11.6	—20.6	24.3	44.0	376.0

[1] The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	1,183	1,583	40,157	1,995	1,975	20	$1,941,210	$15,036,176	$10,293,954	$10,012,461	$281,493	$36,281,632	$25,987,678
	1927	1,149	2,120	37,913	3,211	3,155	56	2,615,681	16,953,054	12,173,394	11,708,436	464,958	39,902,971	27,729,577
	1919	1,191	1,566	28,067	[4] 2,276	2,257	[4] 19	2,242,856	16,972,881	13,929,888	13,654,976	274,912	53,051,294	39,121,406
Individual States:														
Alabama	1929	96	112	2,514	54	50	4	135,790	911,016	639,525	622,211	17,314	2,243,955	1,604,430
	1927	113	138	2,870	399	397	2	171,563	1,290,386	997,243	964,606	32,637	2,899,579	1,902,336
	1919	174	152	3,014	329	326	3	233,959	2,002,190	1,784,283	1,745,901	38,382	5,892,492	4,108,209
Florida	1929	325	521	13,788	655	653	2	635,448	5,090,444	3,374,423	3,307,932	66,491	11,727,809	8,353,386
	1927	343	757	13,237	1,129	1,085	44	986,849	6,211,546	3,670,956	3,573,674	97,282	13,499,130	9,888,174
	1919	452	726	11,748	904	884	20	866,207	6,832,835	5,858,824	5,755,424	103,400	21,508,553	15,640,729
Georgia	1929	662	725	19,912	1,135	1,123	12	865,660	7,415,034	5,212,144	5,046,183	165,961	18,076,499	12,864,355
	1927	614	953	17,453	1,387	1,377	10	1,070,925	7,345,068	5,797,649	5,504,457	293,192	18,055,937	12,268,288
	1919	441	303	7,078	783	780	3	357,238	4,177,639	2,944,254	2,855,868	88,386	10,874,714	7,930,460
Mississippi	1929	23	74	1,360	56	55	1	124,914	548,474	327,069	316,307	10,762	1,557,660	1,230,591
	1927	28	117	1,931	181	181	-------	182,735	982,757	874,675	857,509	17,166	2,548,886	1,674,211
	1919	45	122	2,495	78	78	-------	162,980	1,574,063	1,290,401	1,276,579	13,822	5,547,813	4,257,412
Groups of States:														
Louisiana and Texas	[5] 1929	15	89	1,091	40	40	-------	120,034	465,051	336,732	324,160	12,572	1,294,776	958,044
	[5] 1927	18	110	1,523	95	95	-------	150,104	754,452	434,546	417,562	16,984	1,897,920	1,463,374
	[5] 1919	43	260	3,622	195	175	20	619,772	2,323,560	1,898,585	1,872,695	25,890	8,891,929	6,993,344
North Carolina and South Carolina	[6] 1929	62	62	1,492	55	54	1	59,364	606,106	404,061	395,668	8,393	1,380,933	976,872
	[6] 1927	33	45	899	20	20	-------	53,505	368,845	398,325	390,628	7,697	991,519	593,194
	[6] 1919	36	3	110	14	14	-------	2,700	62,594	153,541	148,509	5,032	335,793	182,252

[1] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 43,224; proprietors and firm members, 1,484. For 1927, total, 40,876; proprietors and firm members, 843. For 1919, total, 31,093; proprietors and firm members, 1,460.

[2] The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] For 1929, Louisiana, 10 establishments; Texas, 5. For 1927, Louisiana, 13; Texas, 5. For 1919, Louisiana, 33; Texas, 10.

[6] For 1929, North Carolina, 3 establishments; South Carolina, 59. For 1927, North Carolina, 1; South Carolina, 32. For 1919, North Carolina, 14; South Carolina, 22.

TABLE 3.—TURPENTINE AND ROSIN—PRODUCTION, FOR THE UNITED STATES: 1899 TO 1929-30

[These statistics were compiled as follows: For 1925-26 and 1924-25, for turpentine and rosin distilled from crude gum, by the Turpentine and Rosin Producers' Association and for turpentine and rosin distilled from wood, by the Bureau of Chemistry and Soils, Department of Agriculture; all statistics for 1920-21, 1918-19, and 1917-18, by the Bureau of Chemistry and Soils; all statistics for 1929-30, 1927-28, 1923-24, 1922-23, 1921-22, 1919, 1914, 1909, 1904, and 1899, by the Bureau of the Census]

YEAR [1]	TURPENTINE (GALLONS)			ROSIN (BARRELS, 500 POUNDS)			YEAR [1]	TURPENTINE (GALLONS)			ROSIN (BARRELS, 500 POUNDS)		
	Total	Distilled from crude gum [2]	Distilled from wood [3]	Total	Distilled from crude gum [2]	Distilled from wood [3]		Total	Distilled from crude gum [2]	Distilled from wood [3]	Total	Distilled from crude gum [2]	Distilled from wood [3]
1929-30	35,940,124	31,320,871	4,619,253	2,454,186	1,975,631	478,555	1919	19,228,174	17,693,841	1,534,333	1,269,717	1,138,660	131,057
1927-28	35,882,258	31,549,082	4,333,176	2,524,000	2,071,813	452,187	1918-19	18,050,000	17,050,000	1,000,000	1,238,000	1,115,000	123,000
1925-26	27,261,425	23,922,250	3,339,175	1,903,370	1,578,866	324,504	1917-18	24,900,000	23,700,000	1,200,000	1,631,000	1,531,000	100,000
1924-25	29,333,450	26,072,200	3,261,250	2,018,296	1,720,765	297,531							
1923-24	29,781,944	27,174,580	2,607,364	1,990,865	1,790,087	200,778	1914	[4] 27,648,939	26,980,981	575,557	[5] 1,649,160	1,615,643	29,022
1922-23	24,252,835	22,394,137	1,858,698	1,651,795	1,499,538	152,257	1909	[6] 29,714,132	28,988,954	706,868	1,827,760	1,827,760	[7]
							1904	31,129,236	30,687,051	442,185	1,964,674	1,964,674	[7]
1921-22	24,820,620	24,378,854	441,766	1,690,971	1,661,624	29,347	1899	37,733,500	37,733,500	[7]	2,434,933	2,434,933	[7]
1920-21	26,200,000	24,450,000	1,750,000	1,757,000	1,577,000	180,000							

[1] Figures showing production of turpentine and rosin from crude gum relate to crop years ended Mar. 31, 1928, 1926, 1925, 1924, 1923, 1922, 1921, 1919, and 1918, and to calendar years 1919, 1914, 1909, 1904, and 1899. Figures for turpentine and rosin distilled from wood relate to crop years ended Mar. 31, 1926 and 1925. All others relate to calendar years.

[2] Compiled from data reported by establishments in the turpentine and rosin industry.

[3] Compiled from data reported by establishments in the wood-distillation industry.

[4] Includes 92,401 gallons of turpentine reported by establishments engaged in the manufacture of lumber and timber products.

[5] Includes 4,495 barrels of rosin reported by establishments engaged in the manufacture of lumber and timber products.

[6] Includes 18,310 gallons of turpentine reported by establishments engaged in the manufacture of lumber and timber products.

[7] Not reported.

TABLE 4.—QUANTITY OF TURPENTINE AND ROSIN DISTILLED FROM CRUDE GUM AND NUMBER OF CROPS WORKED, BY STATES: 1929–30, 1927–28, AND 1925–26

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments, and for the remaining States in groups]

STATE	1929–30			1927–28			1925–26 [1]		
	Production		Number of crops worked [2]	Production		Number of crops worked [2]	Production		Number of crops worked
	Turpentine (gallons)	Rosin (barrels of 500 pounds)		Turpentine (gallons)	Rosin (barrels of 500 pounds)		Turpentine (gallons)	Rosin [3] (barrels of 500 pounds)	
United States	31,320,871	1,975,631	14,688.1	31,549,082	2,071,813	15,061.4	23,922,250	1,578,806	13,663.4
Individual States:									
Alabama	1,993,410	123,798	1,000.4	2,170,710	144,381	1,109.7	1,557,200	102,775	931.8
Florida	9,847,151	623,188	4,864.4	10,275,713	711,852	5,051.2	8,649,050	570,837	5,562.7
Georgia	15,938,491	1,002,446	7,441.5	15,060,761	953,923	6,910.7	10,301,750	679,915	5,796.6
Mississippi	1,267,776	81,683	437.8	1,879,418	117,688	577.5	(4)	(4)	(4)
Groups of States:									
Louisiana and Texas	1,032,900	70,580	304.0	1,357,929	93,601	432.8	[5] 2,914,250	[5] 192,339	[5] 1,017.3
North Carolina and South Carolina	1,241,143	73,936	640.0	795,551	50,368	379.5	500,000	33,000	355.0

[1] Statistics for 1925–26 were compiled by the Turpentine and Rosin Producers' Association.
[2] Number of crops worked by establishments reporting, not including crops worked by those gathering crude gum for sale as such.
[3] Data on the production of rosin were not given in the reports on which these figures are based, but the quantities have been calculated from the turpentine figures by the use of the factor 3.3.
[4] Included in figure for Louisiana and Texas.
[5] Includes data for Mississippi.

TABLE 5.—STOCKS OF TURPENTINE AND ROSIN ON HAND MARCH 31, 1930, 1928, AND 1926

[Figures for stocks on hand at gum-turpentine stills compiled by the Bureau of the Census, Department of Commerce; all others by the Bureau of Chemistry and Soils, Department of Agriculture]

STOCKS HELD AT [1]—	MARCH 31, 1930		MARCH 31, 1928		MARCH 31, 1926	
	Turpentine (gallons)	Rosin (barrels of 500 pounds)	Turpentine (gallons)	Rosin (barrels of 500 pounds)	Turpentine (gallons)	Rosin (barrels of 500 pounds)
Total	6,374,279	609,394	[2] 6,327,204	[2] 608,734	4,052,834	444,221
Gum-turpentine stills	642,429	87,259	508,391	101,998	378,400	92,245
Plants of consuming industries	1,247,333	200,963	1,367,883	211,903	848,890	105,543
Wood-distillation plants	752,858	91,498	[3] 543,114	98,101	233,944	22,838
Ports and distributing points [3]	3,731,659	229,674	3,907,816	196,732	2,591,600	163,595

[1] Data are included for shipments in transit from stills and distillation plants and to distributing points and consuming plants.
[2] Not including stocks at destructive wood-distillation plants.
[3] Figures comprise data for stocks held in the large yards and by dealers and jobbers; they do not cover supplies for retail counter sales only.

TABLE 6.—PRIME MOVERS, MOTORS, AND GENERATORS—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	453	*Horsepower* 1,995	698	*Horsepower* 3,211	746	*Horsepower* 3,138	543	*Horsepower* 2,276	522	*Horsepower* 2,478	100.0	100.0
Prime movers, total	442	1,975	674	3,155	742	3,133	538	2,257	522	2,478	99.0	99.2
Steam, total	211	1,238	245	1,326	143	913	253	1,343	325	1,669	62.1	59.0
Engines	211	1,238	245	1,326	139	900	243	1,296	(1)	(1)	62.1	56.9
Turbines					4	13	10	47	(1)	(1)		2.1
Internal-combustion engines	231	737	427	1,784	595	2,209	269	884	193	789	36.9	38.9
Water wheels and water turbines			2	45	4	11	16	30	4	20		1.3
Electric motors driven by purchased energy	11	20	24	56	4	5	5	19			1.0	0.8
Electric motors, total	11	20	24	56	4	5	5	19	1	2	100.0	100.0
Driven by purchased energy	11	20	24	56	4	5	5	19			100.0	100.0
Driven by energy generated in establishments reporting									1	2		
Electric generators		*Kilowatts*		*Kilowatts*	1	*Kilowatts* 15	(2)	(2)	(2)	(2)		

[1] Not called for separately on schedule.
[2] Data for electric generators not called for on schedule prior to 1925.

TABLE 7.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	40,157	39,033	*39,022*	39,352	40,618	40,603	40,825	40,713	40,729	40,440	40,523	40,199	39,823	95.6
1925	29,413	28,099	28,212	*28,017*	30,079	30,414	30,315	30,377	30,112	29,864	29,424	29,172	28,871	92.1
1919	28,067	*25,918*	20,756	27,548	28,537	28,723	28,802	28,664	28,692	28,319	28,617	28,296	27,932	90.0
1914	34,817	33,717	33,984	35,759	37,408	37,767	37,647	37,579	35,747	34,031	32,608	31,150	*30,407*	80.5
1909	39,511	*37,112*	37,340	38,489	39,974	40,378	40,555	40,634	40,583	40,378	39,749	39,597	39,343	91.3
Alabama	2,514	2,462	*2,415*	2,492	2,529	2,533	2,546	2,548	2,534	2,514	2,573	2,561	2,457	93.8
Florida	13,788	*13,216*	13,221	13,459	13,814	13,926	13,954	14,008	14,087	13,985	14,119	13,953	13,716	93.6
Georgia	19,912	*19,493*	19,601	19,606	20,204	20,135	20,311	20,105	20,084	19,948	19,901	19,814	19,744	96.0
Mississippi	1,360	1,349	1,341	1,342	1,387	1,402	1,382	1,403	1,393	1,367	1,347	*1,290*	1,321	91.9

WINDOW AND DOOR SCREENS AND WEATHER STRIP

Description of the industry.—This industry embraces establishments engaged principally in the manufacture of window screens, door screens, and weather strip, regardless of the materials used.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1914 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size. No comparable figures available for years prior to 1914]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	280	4,034	$4,957,661	$10,512,746	$24,451,700	$13,938,954	14,034
1927	214	3,661	4,805,657	9,303,982	22,643,361	13,339,379	11,520
1925	183	3,803	4,687,461	9,545,351	22,397,907	12,852,556	10,674
1923	165	3,687	4,196,519	9,565,525	21,256,148	11,690,623	9,515
1921	157	2,129	2,655,825	6,102,420	12,037,778	5,935,358	[3]
1919	214	2,179	2,046,768	4,897,389	10,932,857	6,035,468	7,515
1914	220	3,194	1,894,257	4,260,569	9,167,288	4,906,719	8,128
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	30.8	10.2	3.2	13.0	8.0	4.5	21.8
1925–1927	16.9	−3.7	2.5	−2.5	1.1	3.8	7.9
1923–1925	10.9	3.1	11.7	−0.2	5.4	9.9	12.2
1921–1923	5.1	73.2	58.0	56.7	76.6	97.0	----------
1919–1921	−26.6	−2.3	29.8	24.6	10.1	−1.7	----------
1919–1929	30.8	85.1	142.2	114.7	123.7	131.0	86.7

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	280	829	4,034	14,034	4,528	9,506	$2,416,318	$4,957,661	$10,512,746	$10,288,590	$224,156	$24,451,700	$13,938,954
	1927	214	778	3,661	11,520	4,337	7,183	1,994,342	4,805,657	9,303,982	9,123,939	180,043	22,643,361	13,339,379
	1919	214	406	2,179	[4] 7,515	5,104	[4] 2,411	825,868	2,046,768	4,897,389	4,798,429	98,960	10,932,857	6,035,468
Individual States:														
California	1929	19	47	218	1,001	--------	1,001	130,148	314,522	555,108	547,468	7,640	1,318,735	763,627
	1927	16	60	195	988	--------	988	142,922	278,874	432,303	424,162	8,141	1,144,545	712,242
	1919	11	15	60	440	15	425	21,221	65,068	110,133	107,012	3,121	247,217	137,084
Connecticut	1929	8	16	48	71	--------	71	40,058	70,990	119,066	117,505	1,561	289,784	170,718
	1927	[5]	[5]	[5]	[5]	--------	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]
	1919	6	7	29	34	--------	34	18,952	33,445	46,381	45,541	840	126,312	79,931
Illinois	1929	40	110	318	860	150	710	335,383	482,107	1,621,156	1,600,146	21,010	3,493,383	1,872,227
	1927	31	86	320	859	150	709	285,310	519,451	1,453,368	1,432,106	21,262	3,496,144	2,042,776
	1919	26	56	201	511	200	311	136,862	192,288	648,610	642,100	6,510	1,328,892	680,282
Indiana	1929	9	5	22	76	--------	76	8,830	26,550	51,590	51,086	504	121,632	70,042
	1927	5	3	11	29	--------	29	3,500	15,557	22,674	22,237	437	62,076	39,402
	1919	12	-------	21	75	39	36	----------	23,425	39,494	38,656	838	82,700	43,206
Louisiana	1929	7	2	21	97	--------	97	1,207	25,965	28,856	28,022	834	82,811	53,955
	1927	6	1	33	79	--------	79	1,560	32,249	40,022	38,128	1,894	100,356	60,334
	1919	6	2	22	36	--------	36	2,820	19,582	28,115	27,556	559	61,275	33,160
Maryland	1929	6	19	62	138	--------	138	36,263	60,448	95,167	93,816	1,351	275,817	180,650
	1927	6	18	84	169	75	94	25,163	96,173	132,839	131,716	1,123	324,075	191,236
	1919	3	10	27	275	200	75	17,633	33,935	32,668	31,535	1,133	107,958	75,290
Massachusetts	1929	27	38	173	549	163	386	56,913	239,130	342,735	331,768	10,967	831,243	488,508
	1927	22	33	158	468	151	317	83,207	226,220	356,896	347,793	9,103	852,529	495,633
	1919	17	12	60	231	170	61	15,644	55,596	82,579	78,529	4,050	202,753	120,174

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
Individual States—Contd.														
Michigan	1929	17	61	441	2,321	1,200	1,121	$186,137	$491,412	$1,439,781	$1,421,264	$18,517	$2,546,413	$1,106,632
	1927	13	58	383	1,633	1,265	368	157,284	459,146	1,290,852	1,278,039	12,813	2,565,632	1,274,780
	1919	15	50	319	1,028	950	78	111,623	273,732	864,066	848,214	15,852	1,716,617	852,551
Missouri	1929	19	68	167	556		556	220,595	257,326	473,809	460,405	13,404	1,282,582	808,773
	1927	16	76	167	582		582	172,918	250,953	430,159	420,077	10,082	1,320,499	890,340
	1919	9	28	84	292	236	56	47,980	70,084	121,623	116,972	4,651	384,133	262,510
New Jersey	1929	11	35	148	261		261	97,740	193,403	239,287	229,887	9,400	779,885	540,598
	1927	7	41	84	134		134	111,805	193,733	203,093	196,462	6,631	696,634	493,541
New York	1929	35	73	206	451	5	446	207,719	296,695	589,703	571,568	18,135	1,439,220	849,517
	1927	26	64	233	440		440	139,422	356,594	591,915	580,170	11,745	1,449,199	857,284
	1919	17	33	110	247	4	243	51,133	118,255	358,423	350,955	7,468	607,372	248,949
North Carolina	1929	3	2	6	28		28	2,209	8,758	10,581	10,182	399	25,873	15,292
	1927	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	4		9	34	9	25		8,350	11,351	10,900	451	26,201	14,850
Ohio	1929	16	69	325	1,154		1,154	220,795	472,097	735,324	711,686	23,638	2,076,194	1,340,870
	1927	10	50	250	842		842	113,034	342,880	485,627	466,132	19,495	1,355,086	869,459
	1919	15	45	181	447	200	247	63,157	183,895	349,013	342,493	7,120	747,001	397,388
Oklahoma	1929	6	23	68	180		180	73,868	62,221	143,434	140,666	2,768	450,730	307,296
	1927	5	16	35	46		46	22,281	40,777	118,530	117,303	1,227	301,679	183,149
Pennsylvania	1929	10	36	213	719	360	359	148,344	293,931	559,315	544,799	14,516	1,273,060	714,345
	1927	10	27	183	691	350	341	90,470	254,608	488,058	476,070	11,988	1,163,767	675,709
	1919	13	15	130	517	374	143	34,542	138,051	297,954	292,262	5,692	682,436	384,482
Texas	1929	10	39	100	357		357	63,025	115,496	240,812	231,794	9,018	496,218	255,406
	1927	10	38	102	387		387	81,724	100,830	205,128	200,289	4,839	505,477	300,349
	1919	9	10	44	126	14	112	17,031	44,905	70,843	68,471	2,372	176,897	106,054
Groups of States: Ala., 1 est.; Fla. 1; Ga., 2; Tenn., 2	1929	6	8	196	894	850	44	35,430	177,400	331,481	324,986	6,495	773,753	442,272
Ark., 1 est; Ky., 5	1929	6	60	405	1,052	457	595	150,245	383,590	625,180	614,105	11,075	1,600,449	975,269
D. C., 1 est; Va., 3	1929	4	21	148	825	525	300	37,545	196,944	264,705	254,438	10,267	547,514	282,809
Iowa, 2 est.; Kans., 1; Minn., 3; Nebr., 1; Wis., 4	1929	11	36	299	882	380	502	170,736	368,901	958,342	938,748	19,594	2,378,503	1,420,161
Me., 1 est.; N. H., 2; R. I., 1; Vt., 1	1929	5	59	421	1,517	438	1,079	189,200	384,610	1,053,800	1,031,315	22,485	2,272,724	1,218,924
Colo., 3 est.; Oreg., 1; Wash., 1	1929	5	2	29	45		45	3,928	35,156	33,514	32,936	578	94,577	61,063
States not shown separately	[6] 1927	31	207	1,423	4,173	2,340	1,827	557,742	1,028,522	3,052,518	2,993,255	59,263	7,305,663	4,253,145
	[7] 1919	51	123	882	3,237	2,693	544	287,270	786,157	1,835,536	1,797,233	38,303	4,435,093	2,599,557

[1] Not including proprietors and firm members, as follows: For 1929, 192; 1927, 134; 1919, 197. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 5,055; 1927, 4,573; 1919, 2,782.

[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Withheld from publication in order to avoid disclosing data for individual establishments.

[6] Arkansas, 1 establishment; Colorado, 2; Connecticut, 4; District of Columbia, 1; Florida, 2; Georgia, 1; Iowa, 1; Kansas, 1; Kentucky, 4; Maine, 1; Minnesota, 2; New Hampshire, 1; North Carolina, 1; Oregon, 1; Rhode Island, 1; Tennessee, 3; Vermont, 1; Virginia, 1; Washington, 1; Wisconsin, 1.

[7] Alabama, 1 establishment; Arkansas, 2; Colorado, 3; District of Columbia, 1; Georgia, 3; Idaho, 1; Iowa, 1; Kansas, 1; Kentucky, 5; Maine, 1; Minnesota, 5; Nebraska, 3; New Hampshire, 2; New Jersey, 7; Oklahoma, 1; Rhode Island, 1; South Carolina, 2; South Dakota, 1; Tennessee, 4; Vermont, 1; Washington, 4; Wisconsin, 1.

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1929 AND 1927

The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for 1927 represent production. See GENERAL EXPLANATIONS—Value of Products]

KIND	VALUE		KIND	VALUE	
	1929	1927		1929	1927
1. "Window and door screens and weather strip" industry, all products, total value	$24,451,700	$22,643,361	5. Window and door screens and weather strip made as secondary products in other industries	$6,996,219	$6,935,250
2. Window and door screens and weather strip, value	21,190,351	18,703,812			
3. Amount received for custom and contract work	157,366	141,822	Window and door screens and weather strip, all industries, total value (sum of 2 and 5)	28,186,570	25,639,062
4. Products (not normally belonging to the industry)	3,103,983	[1] 3,797,727	Window and door screens	23,032,543	20,848,161
			Weather strip	5,154,027	4,790,901

[1] Revised.

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	2,267	*Horsepower* 14,034	1,677	*Horsepower* 11,520	1,190	*Horsepower* 10,674	487	*Horsepower* 7,515	491	*Horsepower* 8,128	100.0	100.0
Prime movers, total	32	4,528	25	4,337	51	4,720	57	5,104	81	5,895	32.3	67.9
Steam, total	28	4,445	21	4,266	25	4,422	23	4,452	36	5,349	31.7	59.2
Engines	25	4,138	19	3,858	22	4,218	21	4,043	(1)	(1)	29.5	53.8
Turbines	3	307	2	408	3	204	2	409	(1)	(1)	2.2	5.4
Internal-combustion engines	2	28	2	26	25	263	30	337	44	506	0.2	4.5
Water wheels and water turbines	2	55	2	45	1	35	4	315	1	40	0.4	4.2
Electric motors driven by purchased energy	2,235	9,566	1,652	7,183	1,139	5,954	430	2,411	410	2,233	67.7	32.1
Electric motors, total	2,551	12,007	1,934	9,743	1,239	6,847	596	4,051	705	4,384	100.0	100.0
Driven by purchased energy	2,235	9,506	1,652	7,183	1,139	5,954	430	2,411	410	2,233	79.2	59.5
Driven by energy generated in establishments reporting	316	2,501	282	2,560	100	893	166	1,640	295	2,151	20.8	40.5
Electric generators	13	*Kilowatts* 1,558	15	*Kilowatts* 1,837	11	*Kilowatts* 1,193	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 3,543,685		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	4,034	3,835	3,780	3,980	4,348	4,612	4,546	4,087	3,798	3,931	3,925	3,823	*3,742*	81.1
1925	3,803	*3,398*	3,555	3,870	4,225	4,326	4,299	3,820	3,530	3,516	3,680	3,689	3,730	78.5
1919	2,179	2,031	1,967	*1,956*	2,147	2,226	2,267	2,182	2,052	2,164	2,316	2,366	2,475	79.0
1914 [1]	3,194	3,099	3,214	3,495	3,878	**3,924**	3,786	3,049	*2,687*	2,704	2,788	2,772	2,932	68.5
California	218	215	217	228	234	236	238	239	218	206	194	193	*191*	79.9
Connecticut	48	*34*	41	44	54	54	58	54	54	49	47	42	48	58.6
Illinois	318	276	*269*	293	343	364	**374**	357	342	334	310	286	*269*	71.9
Indiana	22	*18*	19	21	22	25	**26**	25	24	22	20	21	19	69.2
Louisiana	21	*20*	*20*	*20*	*20*	22	23	23	23	23	21	*20*	21	87.0
Maryland	62	*46*	*46*	62	74	78	78	79	75	64	48	*46*	*46*	58.2
Massachusetts	173	141	142	168	208	235	**243**	217	173	154	149	128	*123*	50.6
Michigan	441	435	450	450	465	**528**	516	385	*268*	406	427	444	465	50.8
Missouri	167	*137*	*137*	155	202	214	195	190	162	155	153	157	148	64.0
New Jersey	148	*124*	126	140	151	158	181	175	155	151	149	133	128	68.5
New York	206	*160*	171	197	228	236	**246**	218	228	201	208	195	185	65.0
North Carolina	6	7	6	6	7	7	**7**	7	6	*5*	*5*	*5*	*5*	71.4
Ohio	325	318	306	334	384	**384**	365	302	320	323	299	289	*273*	71.1
Oklahoma	68	*60*	*60*	64	72	71	75	76	75	71	67	66	*60*	78.9
Pennsylvania	213	186	189	223	249	248	**265**	243	195	*184*	188	192	194	69.4
Texas	100	98	105	122	94	99	97	88	102	107	100	95	*93*	75.4

[1] No comparable figures available for years prior to 1914.

WOOD PRESERVING

Description of the industry.—This industry embraces establishments engaged primarily in treating wood with creosote, zinc chloride, or other preservatives to prevent decay and for protection against insects. The treatment is applied either under pressure or by a non-pressure process. Among the products are railway ties, poles, paving blocks, etc. The treatment of battery separators and the staining of wood shingles are also included under this classification.

Comparableness of statistics.—The figures for cost of materials, value of products, and value added by manufacture, for 1925 and earlier years, shown in Table 1, are not comparable with those for 1927 and 1929 because of the inclusion for 1927 and 1929 and the exclusion for earlier years of the estimated value of forest products not owned by the establishments reporting. (See Table 3.)

Detailed statistics of products (Tables 3 and 4).—A special schedule, calling for detailed data on the several classes of products, was used for this industry for the first time at the census for 1927. For this reason no comparable detailed product statistics can be given for earlier years.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	199	13,077	$14,939,973	$147,702,724	$190,944,645	$43,241,921	57,913
1927	193	12,259	13,725,857	141,554,898	184,557,640	43,002,742	50,606
1925	131	8,416	9,605,973	66,709,471	91,184,381	24,474,910	33,521
1923	103	6,520	6,878,258	50,138,913	71,082,869	20,943,956	37,998
1921	78	4,153	4,501,849	34,432,474	47,421,997	12,989,523	[3]
1919	73	3,978	4,342,277	23,241,858	33,239,313	9,997,455	16,104
1914	68	2,830	1,784,690	16,059,754	21,054,857	4,995,103	11,551
1909	53	2,403	1,066,466	9,328,453	14,098,978	4,770,525	10,647
1904	26	737	314,604	2,462,860	3,368,480	905,620	3,431
1899	21	478	205,105	1,825,355	2,395,748	570,393	1,000
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	3.1	6.7	8.8	4.3	3.5	0.6	14.4
1925–1927	47.3	45.7	42.9	[4]	[4]	[4]	51.0
1923–1925	27.2	29.1	39.7	33.0	28.3	16.9	—11.8
1921–1923	[3]	57.0	52.8	45.6	9.9	61.2	
1919–1921	[3]	4.4	3.7	48.1	2.7	29.9	
1919–1929	[3]	228.7	244.1	535.5	474.5	332.5	259.6
1909–1919	[3]	65.5	307.2	149.2	135.8	109.6	51.3
1899–1909	[3]	402.7	420.0	411.0	488.5	736.4	964.7

[1] The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Figures not comparable. See text, "Comparableness of statistics."
[5] Per cent not computed when base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size.]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products [2]	Value added by manufacture [3]
United States	1929	199	1,413	13,077	57,313	36,438	21,475	$3,621,564	$14,939,973	$147,702,724	$145,476,451	$2,226,273	$190,944,645	$43,241,921
	1927	193	1,461	12,259	50,606	33,818	16,788	3,290,771	13,725,557	141,554,898	139,147,628	2,407,270	184,557,640	43,002,742
	1919	73	636	3,978	[4] 16,104	15,322	[4] 782	1,293,239	4,342,277	23,241,858	22,458,984	782,874	33,239,313	9,997,455
Individual States:														
Alabama	1929	5	48	681	2,062	1,037	1,025	109,337	841,598	2,695,553	2,608,518	87,035	4,219,676	1,524,123
	1927	6	45	349	662	417	245	91,715	423,120	4,198,848	4,134,142	64,706	6,142,371	1,943,523
California	1929	10	29	325	6,392	5,570	822	64,894	447,403	5,440,316	5,345,081	95,235	6,232,330	792,014
	1927	10	27	333	6,170	5,400	770	60,199	435,670	5,868,435	5,809,068	59,367	6,479,944	611,509
Florida	1929	4	39	269	864	458	406	108,368	245,667	3,125,004	3,064,935	60,069	4,294,960	1,169,956
Georgia	1929	7	62	521	2,714	1,837	877	215,298	431,586	3,125,772	3,042,956	82,816	4,830,633	1,704,861
	1927	6	45	447	2,554	1,242	1,312	112,350	405,094	3,641,080	3,560,594	81,086	5,314,090	1,672,410
Idaho	1929	6	20	143	1,145	720	425	48,851	227,198	3,022,207	3,002,571	19,636	3,798,781	776,574
	1927	7	17	113	274	.....	274	38,133	170,823	1,639,635	1,621,371	18,264	1,944,565	304,930
Illinois	1929	11	84	1,130	3,458	1,842	1,616	227,650	1,088,663	14,499,913	14,344,159	155,754	17,302,714	2,802,801
	1927	11	64	1,008	2,143	1,208	935	150,251	1,156,879	12,527,063	12,349,106	177,957	15,265,978	2,738,915
	1919	7	46	518	998	883	115	100,499	638,954	1,725,305	1,618,683	106,622	3,142,546	1,417,240
Indiana	1929	6	23	275	910	510	400	64,559	347,239	2,998,522	2,942,565	55,957	3,784,709	786,187
	1927	6	23	287	1,125	795	330	47,085	336,084	2,814,222	2,753,315	60,907	3,652,343	838,121
	1919	5	50	177	760	760	.....	70,142	211,304	1,213,166	1,164,500	48,666	1,783,912	570,746
Kentucky	1929	3	14	363	517	326	191	31,485	425,285	5,431,878	5,385,236	46,642	5,907,118	475,240
	1927	3	16	377	312	212	100	33,734	507,732	7,167,209	7,119,700	47,509	8,782,876	1,615,667
Louisiana	1929	9	53	560	4,166	3,792	374	118,294	448,474	6,220,215	6,084,471	135,744	8,188,310	1,968,095
	1927	10	113	798	3,348	2,978	370	211,127	628,157	7,854,729	7,731,312	123,417	10,272,130	2,417,401
	1919	6	42	292	1,260	1,256	4	114,822	234,497	1,680,468	1,584,294	96,174	2,740,393	1,059,925
Massachusetts	1929	3	10	63	184	.....	184	33,585	95,529	388,881	375,822	13,059	561,921	173,040
Michigan	1929	11	35	260	724	226	498	114,731	363,321	3,429,089	3,383,436	45,653	4,433,076	1,003,987
	1927	8	33	209	879	416	463	78,968	294,703	2,034,923	1,975,612	59,311	2,852,728	817,805
Minnesota	1929	16	121	869	2,601	786	1,815	315,258	1,204,503	11,374,895	11,244,731	130,164	16,329,511	4,954,616
	1927	16	151	748	2,106	603	1,503	267,181	960,448	9,482,228	9,354,282	127,946	13,223,561	3,741,333
Mississippi	1929	8	136	1,203	3,627	1,619	2,008	386,267	1,067,303	8,492,019	8,242,883	249,136	12,268,786	3,776,767
	1927	6	102	692	1,080	880	200	228,334	670,622	7,139,426	6,960,079	179,347	9,619,268	2,479,842
	1919	4	15	206	1,180	1,080	100	34,360	195,525	690,894	625,107	65,787	1,184,246	493,352
Missouri	1929	5	20	190	796	665	131	37,466	231,303	2,546,639	2,522,550	24,089	3,275,387	728,748
	1927	4	5	202	793	665	128	11,259	258,003	3,135,186	3,107,050	28,136	3,890,766	755,580
New York	1929	6	81	390	448	185	263	146,357	447,115	4,908,702	4,882,933	25,769	6,278,271	1,369,569
	1927	6	119	367	935	505	430	263,498	415,007	6,141,004	6,114,938	26,066	8,055,101	1,914,097
Ohio	1929	12	70	636	2,514	1,475	1,039	237,665	868,461	9,781,002	9,698,185	82,817	11,950,094	2,169,092
	1927	13	106	667	2,259	1,205	1,054	343,030	841,332	5,615,296	5,514,615	100,681	8,695,279	3,079,983
	1919	6	107	444	1,330	995	335	228,553	504,152	2,313,490	2,261,525	51,965	3,498,431	1,184,941
Oregon	1929	5	22	147	2,882	2,180	702	64,515	212,944	1,872,254	1,828,656	43,598	2,607,866	735,612
	1927	5	18	131	2,877	2,180	697	42,871	204,831	2,100,608	2,067,125	38,883	2,657,075	551,067
Pennsylvania	1929	6	8	110	1,056	968	58	20,328	150,661	2,909,704	2,891,568	18,136	3,493,128	583,424
	1927	6	22	121	609	578	31	33,579	171,767	3,312,861	3,286,010	26,851	3,566,132	253,271
Texas	1929	9	190	1,733	6,764	4,244	2,520	326,855	1,879,482	16,266,244	15,967,060	299,184	21,622,654	5,356,410
	1927	9	209	1,962	7,659	5,906	1,753	448,286	2,049,349	16,776,175	16,431,405	344,770	23,382,846	6,606,671
	1919	7	119	754	3,957	3,957	.....	210,619	820,905	4,690,849	4,552,314	138,535	6,264,501	573,652
Virginia	1929	9	56	388	1,973	1,225	748	174,247	524,202	3,682,362	3,597,602	84,760	4,892,830	1,210,468
	1927	9	43	483	1,271	1,055	216	115,361	511,995	4,572,974	4,488,541	84,433	6,570,093	1,997,119
	1919	4	24	151	500	500	.....	71,620	133,859	651,396	617,983	33,413	945,080	1,293,684
Washington	1929	12	59	519	2,849	1,320	1,529	183,366	734,911	5,415,458	5,336,472	78,986	8,074,312	2,658,854
	1927	11	60	367	2,139	636	1,503	165,342	521,207	3,020,388	2,949,288	71,100	5,180,108	2,159,720
Wyoming	1929	3	17	144	464	.....	464	33,887	200,211	2,074,560	2,046,955	27,605	2,308,658	234,098
	1927	3	17	145	927	450	477	33,949	211,465	3,254,750	3,202,259	52,491	3,500,164	245,414

[1] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 14,497; proprietors and firm members, 7. For 1927, total, 13,725; proprietors and firm members, 5. For 1919, total, 4,615; proprietors and firm members, 1.

[2] The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
Groups of States: Ariz., 2 est.; Ark., 1; Colo., 2; Mont., 3; Okla., 2	1929	10	53	629	1,191	437	754	$92,552	$708,054	$8,805,351	$8,708,704	$96,647	$10,690,936	$1,885,585
Conn., 1 est.; N. H., 2; N. J., 4; Wis., 2	1929	9	64	742	2,520	1,172	1,348	175,414	904,269	10,604,187	10,453,207	150,980	12,628,854	2,024,667
Me., 1 est.; Md., 1; N. Mex., 2; W. Va., 2	1929	6	29	308	2,804	2,559	335	59,375	390,550	4,804,442	4,755,510	48,932	5,289,694	485,252
N. C., 2 est.; S. C., 2; Tenn., 4	1929	8	70	479	2,193	1,255	943	230,960	454,041	3,787,555	3,719,685	67,870	5,679,436	1,891,881
States not shown separately	[5] 1927	38	226	2,393	10,484	6,487	3,997	514,519	2,551,269	29,251,858	28,617,816	634,042	35,510,222	6,258,364
	[6] 1919	34	233	1,436	6,284	5,891	393	462,624	1,603,081	10,276,290	10,034,578	241,712	13,680,205	3,403,915

[1] Arizona, 2 establishments; Arkansas, 1; Colorado, 1; Connecticut, 3; Florida, 4; Maine, 1; Maryland, 1; Massachusetts, 2; Montana, 3; New Hampshire, 2; New Jersey, 3; New Mexico, 2; North Carolina, 2; Oklahoma, 2; South Carolina, 2; Tennessee, 4; West Virginia, 2; Wisconsin, 1.
[6] Alabama, 2 establishments; Arkansas, 1; California, 1; Florida, 2; Georgia, 2; Idaho, 1; Kentucky, 2; Michigan, 2; Minnesota, 1; Missouri, 2; Montana, 1; New Jersey, 3; New York, 4; Oklahoma, 1; Oregon, 1; Pennsylvania, 3; Washington, 3; West Virginia, 1; Wyoming, 1.

TABLE 3.—FOREST PRODUCTS TREATED WITH PRESERVATIVES—VALUE, BY OWNERSHIP, FOR THE UNITED STATES: 1929 AND 1927

[The figures for both census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

	1929	1927
Wood-preserving industry, all products, aggregate	$190,944,645	$184,557,640
Forest products treated, total	[1] 190,545,282	[1] 183,648,327
Forest products owned by establishments reporting, selling value after treatment	116,526,964	113,194,606
Forest products not owned by establishments reporting:		
Estimated value before treatment	50,443,287	44,550,760
Amount received for treatment	23,575,031	25,902,961
Other products (not normally belonging to the industry)	399,363	909,313

[1] In addition, wood preserving to the value of $401,281 for 1929 and $287,217 for 1927 was done by establishments classified in other industries.

TABLE 4.—FOREST PRODUCTS TREATED WITH PRESERVATIVES—VALUE, BY OWNERSHIP AND BY STATES: 1929

[The figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products. Figures are given for each State which can be shown separately without disclosing data for individual establishments, and for the remaining States in groups]

STATES	1929			STATES	1929		
	Total value of products treated	Selling value after treatment of products			Total value of products treated	Selling value after treatment of products	
		Owned by establishments reporting	Not owned by establishments reporting			Owned by establishments reporting	Not owned by establishments reporting
United States	[1] $190,545,282	$116,526,964	[2] $74,018,318	Groups of States:			
Individual States:				Ala. and Mo	$7,493,768	$3,977,806	$3,515,962
Idaho	3,798,781	2,165,342	1,633,439	Ariz., Ark., Colo., Okla., and Mont	10,690,936	3,572,908	7,118,028
Illinois	17,290,108	8,811,906	8,478,202	Calif. and Oreg	8,574,690	8,185,218	389,472
Indiana	3,784,709	1,136,224	2,648,485	Conn., N. H., N. J., and Wis	12,628,854	3,130,115	9,498,739
Minnesota	16,227,268	10,961,951	5,265,317	Fla. and Ga	9,119,014	7,037,785	2,081,229
Ohio	11,940,110	4,017,660	7,922,450	Ky. and Tex	27,529,772	17,072,893	10,456,879
Washington	8,074,312	4,439,594	3,634,718	La. and Miss	20,457,096	15,676,821	4,780,275
Wyoming	2,308,658	2,308,658		Me., Md., N. Mex., and W. Va	5,289,694	5,289,694	
				Mass. and Mich	4,993,997	3,176,838	1,817,159
				N. Y., Pa., and Va	14,664,079	10,393,486	4,270,593
				N. C., S. C., and Tenn	5,679,436	5,172,065	507,371

[1] See Table 3, note 1.
[2] Total of estimated value of materials before treatment plus amount received for treatment.

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horsepower		*Horsepower*		*Horsepower*		*Horsepower*		*Horsepower*		
Prime movers and electric motors driven by purchased energy, aggregate	1,800	57,913	1,301	50,606	772	33,521	280	16,104	257	11,551	100.0	100.0
Prime movers, total	501	36,438	501	33,818	446	27,196	222	15,322	216	11,059	62.9	95.1
Steam, total	464	35,113	462	31,800	426	26,764	214	15,279	210	10,961	60.6	94.9
Engines	413	32,217	420	30,041	412	26,080	211	15,060	(1)	(1)	55.6	93.5
Turbines	51	2,896	42	1,759	14	684	3	219	(1)	(1)	5.0	1.4
Internal-combustion engines	37	1,325	25	1,207	20	432	8	43	6	98	2.3	0.3
Water wheels and water turbines			14	811								
Electric motors driven by purchased energy	1,359	21,475	800	16,788	326	6,325	58	782	41	492	37.1	4.9
Electric motors, total	1,598	26,175	976	20,183	516	9,903	189	3,220	155	3,589	100.0	100.0
Driven by purchased energy	1,359	21,475	800	16,788	326	6,325	58	782	41	492	82.0	24.3
Driven by energy generated in establishments reporting	239	4,700	176	3,395	190	3,578	131	2,438	114	3,097	18.0	75.7
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	48	4,408	46	2,902	61	3,130	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		14,867,418		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	13,077	*11,800*	12,236	12,835	13,120	13,442	13,586	13,876	13,934	13,392	13,066	12,940	12,694	84.7
1925	8,416	*7,750*	7,784	7,981	8,331	8,706	8,891	9,116	8,933	8,595	8,361	8,203	8,338	85.0
1919	3,978	3,465	3,472	*3,459*	3,830	4,139	4,086	4,213	4,164	4,160	4,282	4,210	4,276	80.3
1914	2,830	2,809	*2,544*	2,811	2,848	2,943	2,991	3,131	3,010	2,829	2,772	2,694	2,578	81.3
1909	2,403	*2,075*	2,198	2,214	2,312	2,297	2,572	2,696	2,616	2,592	2,545	2,435	2,280	77.0
Alabama	681	640	649	678	654	661	693	**760**	751	720	680	661	*625*	82.0
California	325	333	336	352	324	325	321	320	*312*	*312*	314	322	329	88.6
Florida	269	*209*	239	269	269	287	289	289	255	253	271	288	310	67.4
Georgia	521	*401*	439	479	510	522	540	566	649	569	533	517	527	61.8
Idaho	143	*112*	114	120	140	145	194	173	159	160	138	137	124	57.7
Illinois	1,130	*986*	1,087	1,184	1,203	1,213	1,208	1,240	1,194	1,129	1,093	1,011	1,017	79.5
Indiana	275	*203*	210	265	276	298	328	293	291	286	274	296	278	61.9
Kentucky	363	*230*	343	342	385	395	361	356	355	399	369	371	353	82.7
Louisiana	560	537	521	532	538	575	601	688	612	581	543	*489*	508	71.1
Massachusetts	63	*49*	59	65	66	67	64	64	67	71	70	62	53	69.0
Michigan	260	220	*209*	261	**307**	303	289	209	286	260	240	238	241	68.1
Minnesota	869	*745*	783	836	908	903	940	945	956	909	840	864	802	77.9
Mississippi	1,203	1,148	1,246	1,188	1,180	1,204	1,187	1,238	**1,330**	1,256	1,147	1,212	*1,106*	83.2
Missouri	190	180	170	179	161	232	221	228	193	186	195	179	*153*	65.9
New York	390	420	365	396	407	391	464	437	383	386	*337*	351	339	72.6
Ohio	636	*541*	569	629	652	629	632	668	700	634	665	673	637	77.3
Oregon	147	128	*113*	*113*	**166**	163	153	163	154	147	156	157	151	68.1
Pennsylvania	110	112	*102*	110	116	110	112	113	109	110	108	107	106	87.9
Texas	1,733	*1,528*	1,602	1,599	1,689	1,795	**1,836**	1,805	1,793	1,824	1,805	1,783	1,737	83.1
Virginia	388	400	402	**425**	405	397	392	392	412	362	368	*349*	351	82.1
Washington	519	468	*437*	486	512	540	523	570	**577**	544	526	530	516	75.7
Wyoming	144	167	170	167	166	115	*100*	130	140	135	126	140	173	57.8

WOOD TURNED AND SHAPED AND OTHER WOODEN GOODS, NOT ELSEWHERE CLASSIFIED

Description of the industry.—This industry embraces establishments engaged primarily in turning and shaping wood and in manufacturing wood handles; furniture turnings and shapes; textile-machinery turnings and shapes; vehicle stock; rough-turned toys, toy parts, and novelties; turned and shaped woodenware, including wood dishes, skewers, clothespins, and clothes bars; ladders and scaffolding equipment; and miscellaneous turned and shaped wooden products.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	894	18,712	$18,616,688	$28,428,563	$69,619,990	$41,191,427	88,398
1927	748	15,937	16,333,285	26,063,907	60,530,005	34,466,098	77,425
1925	721	14,948	14,862,392	24,635,926	55,728,095	31,092,169	65,110
1923	715	17,013	16,059,137	27,347,580	59,810,722	32,463,142	65,806
1921	724	14,636	13,517,045	25,468,723	51,553,013	26,084,290	[3]
1919	967	17,092	14,968,916	26,782,568	56,640,400	29,857,832	65,596
1914	1,102	18,033	8,412,758	14,118,055	29,208,815	15,090,760	62,924
1909	1,369	20,919	8,957,855	14,509,487	32,825,305	18,315,818	69,126
1904	1,299	21,281	8,388,642	12,456,430	28,700,665	16,244,235	63,162
1899	1,270	14,764	5,444,016	7,298,379	17,903,115	10,604,736	35,863
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	19.5	17.4	14.0	9.1	15.0	19.5	14.2
1925–1927	3.7	6.6	9.9	5.8	8.6	10.9	18.9
1923–1925	0.8	−12.1	−7.5	−9.9	−6.8	−4.2	−1.1
1921–1923	−1.2	16.2	18.8	7.4	16.0	24.5	
1919–1921	−25.1	−14.4	−9.7	−4.9	−9.0	−12.6	
1919–1929	−7.5	9.5	24.4	6.1	22.9	38.0	34.8
1909–1919	−29.4	−18.3	67.1	84.6	72.6	63.0	−5.1
1899–1909	7.8	41.7	64.5	98.8	83.3	72.7	92.8

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	894	2,200	18,712	88,398	53,142	35,256	$5,566,664	$18,616,688	$28,428,563	$27,540,336	$888,227	$69,619,990	$41,191,427
	1927	748	1,829	15,937	77,425	49,136	28,289	4,370,124	16,333,285	26,063,907	25,266,275	797,632	60,530,005	34,466,098
	1919	967	1,933	17,092	[4] 65,596	53,218	[4] 12,378	3,403,734	14,968,916	26,782,568	26,290,174	492,394	56,640,400	29,857,832
Individual States:														
Alabama	1929	4	8	94	597	530	67	11,595	60,132	146,497	145,088	1,409	241,773	95,276
	1927	4	37	59	397	300	97	5,612	41,067	79,195	77,083	2,112	144,608	65,413
Arkansas	1929	29	54	547	1,947	1,670	277	112,740	427,622	726,137	720,966	5,171	1,611,935	885,798
	1927	24	46	564	2,033	2,033		111,374	420,500	868,745	864,254	4,491	1,643,483	774,738
	1919	22	35	418	2,000	2,000		70,303	327,321	830,939	829,478	1,461	1,427,048	596,109
California	1929	32	31	255	888		888	89,728	300,451	444,828	435,049	9,779	1,159,212	714,384
	1927	27	31	207	700		700	69,757	288,646	368,187	360,192	7,995	1,055,413	687,226
	1919	33	9	118	340	6	334	8,025	117,889	161,107	155,741	5,366	383,554	222,447
Connecticut	1929	16	19	149	561	295	266	40,239	162,207	321,192	311,821	9,371	658,094	336,902
	1927	17	28	168	982	690	292	66,620	178,340	253,538	242,308	11,230	638,417	384,879
	1919	34	31	241	1,011	818	193	41,158	207,930	342,247	331,695	10,552	675,156	332,909
Georgia	1929	6	18	228	415	325	90	29,566	88,296	188,734	183,293	5,441	383,790	195,056
	1927	5	14	199	799	410	389	28,041	126,418	209,200	202,760	6,440	431,668	222,468
	1919	4	13	112	735	660	75	28,067	87,661	167,609	166,861	748	354,630	187,021
Illinois	1929	48	160	1,046	3,432	1,530	1,902	457,132	1,284,924	1,610,835	1,549,200	61,635	4,458,849	2,848,014
	1927	45	142	968	3,668	1,855	1,813	393,405	1,263,317	1,816,174	1,750,189	65,985	4,437,160	2,620,986
	1919	37	162	776	1,677	1,158	519	275,868	852,782	1,406,591	1,372,487	34,104	3,280,517	1,873,926
Indiana	1929	28	111	848	3,485	1,940	1,545	266,254	809,685	1,668,762	1,635,058	33,704	3,516,704	1,847,942
	1927	30	97	666	3,226	2,160	1,066	216,516	669,647	1,574,975	1,541,926	33,049	3,107,819	1,532,844
	1919	44	152	1,196	3,518	2,960	558	288,135	973,757	2,391,047	2,362,839	28,208	4,307,681	1,916,634

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees[1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products[2]	Value added by manufacture[3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
Individual States—Con.														
Kentucky	1929	17	51	447	1,687	983	704	$165,746	$414,856	$795,351	$779,615	$15,736	$1,699,417	$904,066
	1927	7	51	502	1,717	542	1,175	142,907	450,594	948,186	931,516	16,670	1,689,348	741,162
	1919	10	35	432	792	302	490	105,897	344,268	1,199,858	1,190,900	8,958	1,911,656	711,798
Louisiana	1929	9	25	277	978	695	283	71,317	186,948	474,207	466,562	7,645	849,665	375,458
	1927	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	6	11	84	300	182	118	13,540	69,767	141,788	138,853	2,935	287,526	145,738
Maine	1929	72	213	2,212	11,760	8,428	3,332	396,740	2,187,269	2,513,163	2,452,049	61,114	6,613,430	4,100,267
	1927	64	156	1,896	10,960	8,076	2,884	352,433	1,730,005	2,676,648	2,620,624	56,024	6,324,833	3,648,185
	1919	68	164	1,759	7,707	6,615	1,092	288,990	1,386,956	2,375,094	2,346,906	28,188	5,007,723	2,632,629
Maryland	1929	7	12	99	491	100	391	21,609	106,871	182,330	176,107	6,223	358,660	176,330
Massachusetts	1929	51	85	833	3,562	1,668	1,894	224,094	867,302	1,233,535	1,192,494	41,041	3,028,175	1,794,640
	1927	48	96	1,063	4,493	2,983	1,510	248,621	1,173,784	1,509,726	1,459,701	50,025	3,546,697	2,036,971
	1919	61	86	1,083	3,661	3,122	539	182,576	950,681	1,618,804	1,586,176	32,628	3,587,784	1,968,980
Michigan	1929	53	174	1,427	6,496	4,041	2,455	527,946	1,694,182	2,318,435	2,214,609	103,826	6,351,694	4,033,259
	1927	40	129	1,222	5,129	3,974	1,155	359,992	1,463,529	1,950,970	1,865,435	85,535	5,291,821	3,340,851
	1919	52	187	1,606	6,411	4,923	1,488	337,252	1,282,912	2,346,042	2,296,199	49,843	5,223,452	2,877,410
Mississippi	1929	9	20	141	580	485	95	47,902	106,237	155,420	154,670	750	374,435	219,015
Missouri	1929	22	45	358	1,679	1,158	521	99,054	324,881	481,960	468,955	13,005	1,179,997	698,037
	1927	19	57	310	1,574	870	704	131,493	262,201	611,470	596,143	15,327	1,223,380	611,910
New Hampshire	1929	30	35	425	2,769	2,208	561	77,233	412,220	507,599	489,222	18,377	1,402,435	894,836
	1927	26	23	308	2,039	1,628	411	45,254	310,189	360,748	346,826	13,922	993,765	633,017
	1919	21	30	395	2,551	1,788	763	52,698	308,614	378,913	365,653	13,260	899,148	520,235
New Jersey	1929	23	43	176	762	143	619	107,301	208,301	300,082	280,795	20,187	787,877	486,895
	1927	25	31	185	815	294	521	83,398	241,377	286,391	268,241	18,150	782,559	496,168
	1919	35	16	154	548	390	158	27,950	135,465	273,732	258,335	15,397	549,977	276,245
New York	1929	107	253	1,774	8,555	4,308	4,247	783,960	2,165,108	3,359,621	3,235,987	123,634	8,749,350	5,389,729
	1927	84	184	1,287	8,166	5,360	2,806	472,332	1,661,914	2,025,317	1,937,272	88,045	5,482,559	3,457,242
	1919	167	151	1,153	4,991	3,962	1,029	336,725	1,344,588	1,992,482	1,951,107	41,375	4,746,252	2,753,770
North Carolina	1929	30	32	359	1,764	1,085	679	62,156	250,113	530,354	518,197	12,157	1,139,429	609,075
Ohio	1929	48	172	1,206	6,232	3,239	2,993	413,631	1,347,643	2,154,954	2,090,775	64,179	5,092,121	2,937,167
	1927	49	156	1,171	5,385	2,923	2,462	401,988	1,284,229	2,565,405	2,511,746	53,659	5,562,467	2,997,062
	1919	63	152	1,223	5,627	4,528	1,099	295,236	1,137,655	2,626,216	2,584,677	41,539	5,025,086	2,398,870
Oregon	1929	10	16	80	631	100	531	25,375	86,849	218,533	209,926	8,607	441,834	223,301
	1927	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	12	5	78	566	150	416	7,308	59,698	83,114	78,723	4,391	203,172	120,058
Pennsylvania	1929	58	126	1,231	5,360	2,766	2,594	271,080	1,283,381	1,604,929	1,530,188	74,741	4,064,224	2,459,295
	1927	65	103	1,173	5,152	2,723	2,429	204,182	1,261,431	1,702,176	1,632,159	70,017	4,215,939	2,513,763
	1919	86	91	990	4,003	3,067	936	125,542	818,694	1,134,777	1,096,542	38,235	2,654,952	1,520,175
Rhode Island	1929	8	40	310	718	350	368	74,543	330,114	319,972	303,460	16,512	837,361	517,389
	1927	6	29	279	608	350	258	53,792	272,642	280,532	266,492	14,040	695,625	415,093
	1919	10	47	375	469	381	88	63,586	341,482	453,018	443,303	9,715	1,007,997	554,979
South Carolina	1929	6	8	69	154	55	99	20,850	63,473	71,947	67,363	4,584	240,937	168,990
	1927	4	8	105	206	----------	206	16,895	100,128	253,456	243,086	10,370	463,937	210,481
Tennessee	1929	52	147	1,222	7,621	6,621	1,000	319,144	981,834	2,193,325	2,167,198	26,127	4,796,369	2,603,044
	1927	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	20	65	785	2,275	2,121	154	163,550	528,144	1,175,089	1,157,803	17,286	2,409,382	1,234,293
Texas	1929	6	8	86	503	500	3	18,695	61,055	137,534	135,584	1,950	260,279	122,745
Vermont	1929	49	98	906	5,320	2,969	2,351	229,327	752,649	857,029	807,561	49,468	2,647,607	1,790,578
	1927	47	93	929	5,340	3,248	2,092	200,449	819,108	1,167,902	1,114,045	53,857	2,870,361	1,702,459
	1919	34	34	541	3,358	3,089	269	58,394	434,447	551,055	540,828	10,227	1,368,934	817,879
Virginia	1929	18	55	725	3,179	2,766	413	162,690	564,427	770,931	739,419	31,512	1,767,607	996,676
	1927	8	21	151	895	595	300	56,119	150,157	313,402	307,283	6,119	603,923	290,521
Washington	1929	9	17	128	1,329	200	1,129	66,015	164,774	326,652	318,380	8,272	700,715	374,063
Wisconsin	1929	16	35	201	1,413	184	1,229	63,089	185,017	364,980	337,353	27,627	877,136	512,156
	1927	14	26	125	1,116	160	956	58,796	128,089	309,751	290,311	19,440	614,000	304,249
	1919	23	72	923	2,906	2,698	208	164,523	839,360	1,377,840	1,341,876	35,964	3,351,031	1,973,191
Groups of States: Del., 1 est., W. Va., 4	1929	5	37	279	1,229	1,175	54	149,340	240,902	561,350	557,387	3,963	1,343,938	782,588
Fla., 2 est., Okla., 2	1929	4	5	22	83	40	43	6,367	21,103	18,403	18,172	231	64,033	45,630
Iowa, 4 est.; Kans., 1; Minn., 7	1929	12	47	552	2,218	585	1,633	149,206	475,862	868,082	847,833	20,249	1,920,908	1,052,826
States not shown separately	[6] 1927	90	271	2,400	12,025	7,962	4,063	651,148	2,029,973	3,931,813	3,836,683	95,130	8,710,223	4,778,410
	[7] 1919	125	385	2,650	10,358	8,298	2,060	467,411	2,418,845	3,755,206	3,693,192	62,014	7,977,742	4,222,536

[1] Not including proprietors and firm members, as follows: For 1929, 587; 1927, 443; 1919, 885. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 21,499; 1927, 18,209; 1919, 19,910.

[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Withheld from publication in order to avoid disclosing data for individual establishments.

[6] Colorado, 1 establishment; Delaware, 1; Florida, 1; Iowa, 2; Kansas, 1; Louisiana, 7; Maryland, 6; Minnesota, 4; Mississippi, 3; North Carolina, 13; Oklahoma, 2; Oregon, 7; Tennessee, 27; Texas, 4; Washington, 7; West Virginia, 4.

[7] Alabama, 2 establishments; Colorado, 1; Delaware, 1; Florida, 3; Iowa, 10; Maryland, 8; Minnesota, 7; Mississippi, 1; Missouri, 27; North Carolina, 15; North Dakota, 1; Oklahoma, 1; South Carolina, 5; Texas, 5; Utah, 1; Virginia, 18; Washington, 11; West Virginia, 8.

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1929 AND 1927

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for 1927 represent production. See GENERAL EXPLANATIONS—Value of Products]

KIND	VALUE	
	1929	1927
1. "Wood turned and shaped and other wooden goods" industry, all products, total value	$69,619,990	$60,530,005
2. Wood turned and shaped and other wooden goods	65,046,378	57,119,349
3. Amount received for custom and contract work	1,125,123	798,913
4. Products (not normally belonging to the industry	3,448,489	2,611,743
5. Wood turned and shaped and other wooden goods made as secondary products by establishments classified in other industries	5,151,155	3,524,589
Wood turned and shaped and other wooden goods, all industries, total value (sum of 2 and 5)	70,197,533	60,643,938
Handles, total	16,223,870	16,928,892
Tool and implement	11,526,381	11,651,968
Other	4,247,915	5,276,924
Not specified	449,574	
Woodenware—bowls, dishes, pastry boards, clothespins, ironing boards, clothes racks, washboards, etc.	13,045,158	11,390,772
Textile-machinery turnings and shapes	6,490,967	6,753,737
Furniture turnings and shapes	7,612,176	5,211,380
Ladders and parts	5,345,167	4,811,443
Scaffolding equipment (other than ladders)—horses, scaffold jacks, extension planks, window jacks, etc.	208,076	(1)
Vehicle stock	1,320,503	1,722,669
Toys, toy parts, and novelties, turned and shaped	3,053,391	1,372,843
Miscellaneous turned and shaped wooden goods, not specified	16,898,165	12,452,202

[1] Not called for separately on schedule.

TABLE 4.—CONSUMPTION OF WOOD, BY KIND AND QUANTITY: 1929

[The combined value of products reported by the 622 establishments which reported the consumption of wood in detail amounted to 87.4 per cent of the total value of products for the industry. The remaining 272 establishments did not report consumption of wood in detail]

KIND OF WOOD	1929	
	M feet b. m.	Cords
Total	323,330	142,838
Alder	137	
Ash	27,324	9,795
Balsam	5,900	
Basswood	4,414	4,541
Beach	22,187	2,683
Birch	48,425	44,658
Butternut	10	
Cedar	2,566	
Cherry	174	
Chestnut	22	
Cottonwood	1,547	703
Cypress	129	
Dogwood	286	2,519
Douglas and white fir	15,586	5,860
Elm	402	1
Gum and tupelo	23,560	
Hemlock	1,706	
Hickory	24,100	46,708
Ironwood		14
Lauan	7	
Locust	4,074	12,000
Magnolia	400	
Mahogany	270	
Maple	55,747	2,760
Myrtle	10	
Oak	8,479	3,287
Persimmon	1,224	
Redwood	15	
Rosewood	3	
Spruce	7,179	
Sycamore	584	
Walnut	834	300
Western pine	1,350	
White pine	12,044	1,462
Yellow pine	21,217	
Yellow poplar	4,486	
Other and not specified	20,932	5,487

TABLE 5.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	6,857	*Horsepower* 88,398	4,871	*Horsepower* 77,425	3,484	*Horsepower* 65,110	2,284	*Horsepower* 65,596	1,645	*Horsepower* 62,924	100.0	100.0
Prime movers, total	613	53,142	551	49,136	564	45,316	767	53,218	1,023	58,307	60.1	81.1
Steam, total	503	48,272	431	43,981	425	39,685	515	46,436	690	50,563	54.6	70.8
Engines	492	45,940	421	40,774	413	37,278	507	44,063	(1)	(1)	52.0	67.2
Turbines	11	2,332	10	3,207	12	2,407	8	2,373	(1)	(1)	2.6	3.6
Internal-combustion engines	47	1,476	45	1,425	57	1,423	140	3,144	159	2,411	1.7	4.8
Water wheels and water turbines	63	3,394	75	3,730	82	4,208	112	3,638	174	5,333	3.8	5.5
Electric motors driven by purchased energy	6,244	35,256	4,320	28,289	2,920	19,794	1,517	12,378	622	4,617	39.9	18.9
Electric motors, total	8,143	46,113	6,019	37,984	3,915	29,240	2,322	18,470	853	7,041	100.0	100.0
Driven by purchased energy	6,244	35,256	4,320	28,289	2,920	19,794	1,517	12,378	622	4,617	76.5	67.0
Driven by energy generated in establishments reporting	1,899	10,857	1,699	9,695	995	9,446	805	6,092	231	2,424	23.5	33.0
Electric generators	76	*Kilowatts* 10,909	55	*Kilowatts* 8,422	78	*Kilowatts* 6,932	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 21,431,532		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 6.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	18,712	18,756	19,274	19,558	**19,656**	19,279	18,790	18,159	18,269	18,384	18,735	18,184	*17,495*	89.0
1925	14,918	15,466	16,005	**16,222**	15,829	15,389	14,727	14,169	13,970	*13,930*	14,351	14,572	14,753	85.9
1919	17,092	*16,441*	16,797	16,991	16,954	16,888	16,965	16,822	17,125	17,055	17,183	17,644	18,209	90.3
1914 [1]	18,033	18,892	**19,336**	19,218	19,137	18,454	17,936	17,372	17,223	*16,815*	17,333	17,137	17,543	87.0
Alabama	94	94	92	91	95	96	98	*85*	100	**101**	97	86	88	84.2
Arkansas	547	571	567	557	565	531	522	519	570	556	*515*	535	550	90.2
California	255	242	*232*	253	258	260	261	258	265	265	**266**	257	247	87.2
Connecticut	149	154	153	**159**	157	152	146	154	152	*138*	142	143	139	86.8
Georgia	228	242	246	234	242	229	211	207	230	246	258	*191*	194	74.0
Illinois	1,046	1,004	1,027	1,071	1,076	1,074	1,057	1,028	1,057	**1,105**	1,097	1,034	*920*	83.3
Indiana	848	800	825	849	865	869	856	852	885	881	**886**	828	777	87.7
Kentucky	447	431	475	**486**	463	454	445	*404*	429	423	460	454	437	83.1
Louisiana	277	288	286	282	281	282	267	*265*	267	271	279	272	282	92.0
Maine	2,212	2,398	2,473	**2,518**	2,481	2,363	2,343	2,069	1,859	*1,854*	1,994	2,018	2,168	73.6
Maryland	99	97	110	105	111	96	92	99	97	93	95	*87*	106	78.4
Massachusetts	833	808	834	839	**881**	864	842	806	818	820	845	845	*797*	90.5
Michigan	1,427	1,390	1,377	1,390	1,449	1,392	1,403	1,447	1,437	1,478	1,570	1,494	*1,298*	82.7
Mississippi	141	153	136	150	145	152	145	145	*122*	123	144	140	140	79.7
Missouri	358	*334*	359	351	372	**386**	372	351	357	353	366	352	344	86.5
New Hampshire	425	436	**442**	438	430	430	424	422	419	418	421	412	*406*	91.9
New Jersey	176	173	177	182	185	183	180	167	*166*	175	177	175	172	89.7
New York	1,774	1,753	1,778	1,761	1,823	1,802	1,797	1,836	1,809	1,855	1,803	1,692	*1,577*	85.0
North Carolina	359	*327*	361	356	351	354	355	359	362	360	381	**387**	360	84.5
Ohio	1,206	1,200	1,240	1,270	1,266	1,248	1,203	1,171	1,159	1,183	1,209	1,172	*1,147*	90.3
Oregon	80	68	75	74	72	*64*	76	88	98	85	87	90	87	65.3
Pennsylvania	1,231	1,208	1,213	1,267	**1,289**	1,275	1,226	1,188	1,218	1,238	1,276	1,196	*1,181*	91.6
Rhode Island	310	304	306	**329**	321	328	321	314	315	307	307	*282*	289	85.7
South Carolina	69	71	72	72	71	72	72	72	74	**74**	74	*54*	*54*	73.0
Tennessee	1,222	1,276	**1,311**	1,294	1,289	1,236	1,182	1,168	1,163	1,184	1,203	1,208	*1,154*	88.0
Texas	86	97	*66*	92	100	94	85	70	81	88	95	77	82	66.0
Vermont	906	899	994	**1,006**	970	932	932	884	849	863	849	802	*831*	82.6
Virginia	725	800	832	838	819	**843**	747	588	710	642	672	669	*545*	64.7
Washington	128	116	115	*114*	125	123	117	131	147	146	140	132	129	77.6
Wisconsin	201	*184*	191	**239**	229	203	210	185	191	195	195	200	191	77.0

[1] No comparable figures available for years prior to 1914.

Group 4.—PAPER AND ALLIED PRODUCTS

THE GROUP AS A WHOLE

For census purposes establishments engaged primarily in the manufacture of paper and paperboard and of pulp (wood and other fiber) and those engaged primarily in the further manufacture of paper and paperboard into commodities such as boxes, bags, etc. (designated as "Converted paper products"), are assigned to separate subgroups in the major industry group "Paper and allied products." Although the manufacture of converted paper products is carried on to a considerable extent in paper mills, the establishments which are engaged solely or primarily in this line of manufacture purchase their principal materials—paper and paperboard—from paper mills. Thus the products of the first of these subgroups become the materials for the second, and as a result there is a large amount of duplication in the figures for cost of materials and value of products for the group as a whole.

At the census for 1929 "Paper patterns" was discontinued as an industry classification because it appeared that the production of paper patterns was so closely allied to lithographing and printing that it was impracticable to classify separately the establishments engaged in this line of production. Reports for such establishments were therefore transferred to the "Printing, publishing, and allied industries" group, and the figures for converted paper products given below and on page 555 have been adjusted accordingly.

SUMMARY FOR GROUP 4.—PAPER AND ALLIED PRODUCTS: 1914 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and 1914 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
Aggregate for the group	1929	3,126	233,393	$287,330,792	$1,092,722,103	$1,892,251,148	$799,529,045	3,166,804
	[3] 1927	2,972	224,437	272,153,670	1,082,363,311	1,785,997,679	703,634,368	2,813,694
	[3] 1925	2,727	221,502	263,097,389	919,657,498	1,546,814,124	627,156,626	2,574,707
	[3] 1923	2,685	219,026	250,144,000	878,763,995	1,456,970,076	578,206,081	2,313,562
	[3] 1921	2,600	184,756	202,702,800	669,070,172	1,071,800,316	402,730,144	(4)
	[3] 1919	2,677	208,115	212,724,291	720,908,211	1,250,445,203	529,536,992	1,997,446
	[3] 1914	2,452	166,752	88,844,233	314,882,826	519,689,671	204,856,845	1,697,269
Paper and pulp, total	1929	883	128,040	173,077,781	723,360,707	1,206,114,305	482,753,598	2,968,431
	1927	929	123,360	162,002,097	724,110,963	1,138,089,666	413,978,703	2,642,806
	[3] *1927*	*764*	*125,360*	*162,002,097*	*615,556,264*	*1,029,534,967*	*413,978,703*	*2,642,806*
	1925	763	123,842	160,145,932	605,860,286	971,882,320	366,022,034	2,427,010
	1923	746	120,677	151,476,693	573,727,153	907,346,992	333,619,839	2,178,623
	1921	738	105,294	127,028,767	445,992,351	667,435,847	221,443,496	(4)
	1919	729	113,759	135,690,642	467,482,037	788,059,377	320,576,740	1,849,699
	1914	718	88,457	53,245,639	213,181,286	332,147,175	118,965,889	1,611,954
Paper	1929	685	103,320	140,398,374	574,607,978	967,186,026	392,578,048	(5)
	1927	710	98,566	130,474,739	572,785,538	919,891,465	347,105,927	(5)
Pulp (wood and other fiber)	1929	198	24,729	32,679,407	148,752,729	238,928,279	90,175,550	(5)
	1927	219	24,794	31,527,358	151,325,425	218,198,201	66,872,776	(5)
Converted paper products, total	1929	2,243	105,344	114,253,011	369,361,396	686,136,843	316,775,447	198,373
	[3] 1927	2,043	101,077	110,151,573	358,252,348	647,908,013	289,655,665	170,888
	[3] 1925	1,964	97,660	102,951,437	313,797,212	574,931,804	261,134,592	147,697
	[3] 1923	1,939	98,349	98,667,307	305,036,842	549,623,084	244,586,242	134,930
	[3] 1921	1,862	79,462	75,674,033	223,077,821	404,364,469	181,286,648	(4)
	[3] 1919	1,948	94,356	77,033,649	253,425,574	462,385,826	208,960,252	117,747
	[3] 1914	1,734	78,295	35,598,594	101,651,540	187,542,496	85,890,956	85,314
Bags, paper, exclusive of those made in paper mills	1929	95	6,970	6,661,235	43,238,392	64,021,192	21,382,800	13,416
	1927	88	6,463	6,393,675	40,734,599	57,489,652	16,755,053	9,336
	1925	66	5,585	5,523,708	29,956,962	45,977,902	16,020,940	6,414
	1923	64	4,686	4,586,991	29,375,224	42,272,470	12,897,246	6,108
	1921	57	3,707	3,475,487	29,797,291	41,190,179	11,392,888	(4)
	1919	75	4,168	3,662,330	33,350,481	47,263,990	13,913,509	4,429
	1914	59	3,505	1,659,070	12,200,884	17,602,543	5,401,659	3,677
Boxes, paper, not elsewhere classified	1929	1,249	55,654	57,109,700	159,839,577	294,253,296	134,413,719	80,064
	1927	1,219	56,398	57,700,664	168,463,799	306,555,062	138,091,263	81,300
	1925	1,229	57,148	57,172,027	151,711,699	281,943,969	130,232,270	76,185
	1923	1,216	56,855	53,965,852	144,079,470	264,209,159	120,129,689	61,687
	1921	1,191	46,242	40,476,681	88,267,758	174,248,477	85,980,719	(4)
	1919	1,201	55,862	43,325,554	101,135,202	206,419,343	105,284,051	54,675
	1914	1,043	45,311	18,704,790	36,268,379	74,711,047	38,442,677	37,340

See footnotes at end of table.

SUMMARY FOR GROUP 4.—PAPER AND ALLIED PRODUCTS: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
Cardboard, not made in paper mills	1929	13	609	$819,178	$2,665,258	$5,629,498	$2,964,240	1,549
	1927	9	658	848,807	2,868,056	5,581,164	2,713,108	1,779
	1925	13	978	1,188,290	3,474,507	7,288,016	3,813,509	1,795
	1923	15	1,176	1,339,370	5,331,704	9,339,814	4,008,110	2,354
	1921	20	1,157	1,172,139	3,914,393	7,641,962	3,727,569	(4)
	1919	16	1,425	1,337,177	4,953,915	9,138,415	4,184,500	3,251
	1914	18	1,159	579,942	2,962,334	4,350,347	1,388,013	2,685
Card cutting and designing	1929	70	2,338	2,725,047	9,285,931	19,648,179	10,362,248	3,909
	1927	60	2,024	2,706,633	7,544,043	16,871,312	9,327,269	3,915
	1925	49	1,086	1,083,764	2,436,165	6,201,284	3,765,119	1,355
	1923	47	1,207	1,242,242	2,643,095	6,109,298	3,466,203	1,262
	1921	49	762	803,406	2,018,892	4,557,834	2,538,942	(4)
	1919	75	1,148	958,877	2,298,389	5,323,349	3,024,960	743
	1914	58	517	264,895	420,736	1,054,904	634,168	441
Envelopes	1929	171	10,367	11,526,849	29,927,683	61,286,992	31,359,309	13,077
	1927	153	9,745	10,754,636	28,973,192	56,006,225	27,033,033	11,391
	1925	135	9,052	9,987,202	27,423,300	51,188,914	23,765,614	10,288
	1923	132	9,241	9,525,054	27,527,875	50,751,558	23,223,683	9,904
	1921	123	7,944	8,180,523	24,051,507	43,910,409	19,858,902	(4)
	1919	106	8,129	6,649,989	21,964,743	39,664,077	17,699,334	7,124
	1914	90	6,970	3,378,184	10,234,841	18,481,013	8,246,172	5,196
Labels and tags	1929	153	4,474	5,868,952	10,555,674	28,042,325	17,486,651	6,473
	1927	121	6,141	8,000,426	16,259,439	34,397,630	18,138,191	6,869
	1925	113	5,356	6,730,184	13,095,856	28,045,440	14,949,584	4,808
	1923	103	5,048	6,224,101	12,129,804	26,023,030	13,893,226	4,538
	1921	89	4,152	4,776,868	8,819,700	19,538,302	10,718,602	(4)
	1919	119	5,227	4,549,902	11,274,767	24,243,992	12,969,225	4,033
	1914	108	2,600	1,458,777	2,907,876	6,584,058	3,676,182	2,155
Wall paper	1929	56	4,705	5,731,932	13,480,205	30,007,649	16,527,444	12,740
	1927	53	4,811	5,981,451	14,612,415	30,059,153	15,446,738	13,343
	1925	49	5,069	5,862,765	14,999,041	30,069,005	15,069,964	11,528
	1923	51	5,412	6,221,266	16,991,411	34,755,700	17,764,289	11,246
	1921	43	3,988	4,981,572	16,336,110	29,147,905	12,811,795	(4)
	1919	48	4,262	3,882,396	13,162,503	23,047,901	9,895,398	8,123
	1914	48	4,738	2,703,175	8,536,255	15,887,123	7,350,868	6,930
Paper goods, not elsewhere classified	1929	436	20,227	23,810,118	100,368,676	182,647,712	82,279,036	67,145
	1927	340	14,837	17,765,281	78,796,805	140,947,815	62,151,010	42,955
	1925	310	13,386	15,403,497	70,699,682	124,217,274	53,517,592	35,324
	1923	311	14,724	15,592,431	66,958,259	116,162,055	49,203,796	37,840
	1921	290	11,510	11,807,357	49,872,170	84,129,401	34,257,231	(4)
	1919	308	14,135	12,666,924	65,295,484	107,284,759	41,989,275	35,369
	1914	310	13,495	6,849,761	28,120,244	48,871,461	20,751,217	26,890

[1] The 1929 figures for the paper and pulp industries refer to production, not to sales; those for all other industries covered by this table relate to sales (shipments or deliveries). The figures for 1927 and earlier years refer in all cases to production. See GENERAL EXPLANATIONS—Value of Products.

[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] These figures differ from those formerly published, having been adjusted in order to make them strictly comparable with those for 1929. The adjustment was made necessary because "Paper patterns," formerly an industry in this group, was abandoned as a separate industry classification and the data included in those for the "Printing and publishing, book and job" industry, Group 5.

[4] Not called for on schedule.

[5] The figures in italics were adjusted for comparison with 1925 and earlier years by deducting the data for 165 establishments engaged in the manufacture of both pulp and paper, which were counted twice in the original total for 929 establishments. (See "Comparison with previous census years", p. 543.)

[6] Because of the fact that in many cases a paper mill and a pulp mill are supplied with power from the same power plant, it is impossible to give separate figures for each industry.

PAPER AND PULP (WOOD AND OTHER FIBER)

Description of the industries.—These industries embrace the manufacturing operations carried on in (1) the "Paper" industry, in which are classified establishments engaged primarily in the manufacture of paper and paperboard, and (2) the "Pulp (wood and other fiber)" industry, embracing establishments engaged primarily in the manufacture of pulp. The principal material used in the paper mills is wood pulp, the greater part of which is manufactured in pulp mills operated in conjunction with the paper mills. Small quantities of pulp made from rags, waste paper, straw, and other fibers of various kinds are also used.

Prior to the census for 1927 a single industry classification, "Paper and wood pulp," covered all establishments engaged in the manufacture of either paper or pulp, but at the censuses for 1927 and 1929, the two lines of manufacture have been classified separately as "Paper" and "Pulp (wood and other fiber)," respectively.

Comparison with previous census years.—The statistics for 1925 and earlier census years are not strictly comparable with those for 1927 and 1929 because of the change in classification explained in the preceding paragraph. This change has resulted in an increase in the amount of duplication in the combined figures for cost of materials and value of products for the two industries. At preceding censuses the pulp made and consumed in the same establishments (each comprising a pulp mill and a paper mill) was treated as an intermediate product, to which no cost or value was assigned. At the censuses for 1927 and 1929, however, the values of such pulp, amounting to $172,791,689 and $183,255,593, respectively, have been included both in the value of products of the pulp industry and in the cost of materials of the paper industry.

In addition, the values of "interplant transfers" of pulp (transfers from a pulp mill to a paper mill operated by the same company), which were separately reported at censuses prior to that for 1927, are now included in the value of products of the pulp industry and in the cost of materials of the paper industry. These values were as follows: 1925, $18,789,213; 1923, $28,189,246; 1921, $26,432,900; 1919, $21,802,862. The values of interplant transfers were not separately reported for 1927 and 1929 but were presumably included in most cases in the item "Produced for use by company reporting." (This item is made up mainly of production for consumption in the same establishments.) The figures for 1927 and 1929 are therefore more nearly complete than those for preceding years, since they show the approximate total quantities and values of the pulp and of the paper manufactured in the United States.

Table 1 gives, for 1929 and 1927, under "Paper and pulp industries, total," the sum of the numbers of establishments reported for the paper and pulp industries. This results in counting as two establishments each mill which manufactured both paper and pulp. The table also gives the 1927 figures adjusted for comparison with those for earlier years, and the numbers of establishments thus shown represent the actual numbers of mills reporting, counting as a single unit each mill manufacturing both paper and pulp.

State statistics.—Table 6 gives production figures for the chief classes of paper and paperboards for each State, so far as they can be shown separately without disclosing the production of individual establishments. If the principal item for any State can not be shown separately, the total only is given. Where it is possible to give figures for the principal item in any State, this is done; and in such cases figures are also given, if possible, for the items ranking second, third, etc., in importance; but all items which can not be shown without disclosing the production of individual establishments, and all items of less importance than the most important one which can not be shown separately, are combined and presented as "Other." The least important item for which figures are given separately is, therefore, of greater importance than any item included in "Other."

Imports and exports.—The figures shown in Table 10 in the report on paper and paperboards, and in Tables 11 and 12 in the report on pulpwood consumption and wood-pulp production, were taken from Foreign Commerce and Navigation of the United States, published by the Bureau of Foreign and Domestic Commerce, Department of Commerce, and are included in this report for ready reference. For convenience in making comparisons, all quantities of pulp and paper have been reduced to tons of 2,000 pounds.

TABLE 1.—COMBINED SUMMARY FOR THE PAPER AND PULP INDUSTRIES, FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size. See also "Comparison with previous census years," p. 543]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
PAPER AND PULP INDUSTRIES							
Total:							
1929	[3] 883	128,049	$173,077,781	$723,360,707	$1,206,114,305	$482,753,598	2,968,431
1927	929	123,360	162,002,097	724,110,963	1,138,089,666	413,978,703	2,642,806
Paper:							
1929	[4] 685	103,320	140,398,374	574,607,978	967,186,026	392,578,048	[5]
1927	710	98,566	130,474,739	572,785,538	919,891,465	347,105,927	[5]
Pulp:							
1929	[6] 198	24,729	32,679,407	148,752,729	238,928,279	90,175,550	[5]
1927	219	24,794	31,527,358	151,325,425	218,198,201	66,872,776	[5]
PAPER AND PULP							
1927 (adjusted for comparison with prior years)	*764*	*123,360*	*162,002,097*	*615,556,264*	*1,029,534,967*	*413,978,703*	*2,642,806*
1925	763	123,842	160,145,932	605,860,286	971,882,320	366,022,034	2,427,010
1923	746	120,677	151,476,693	573,727,153	907,346,992	333,619,830	2,178,623
1921	738	105,294	127,028,767	445,992,351	667,435,847	221,443,496	[7]
1919	729	113,759	135,690,642	467,482,637	788,059,377	320,576,740	1,849,699
1914	718	88,457	53,245,639	213,181,286	332,147,175	118,965,889	1,611,954
1909	777	75,978	40,804,502	165,442,341	267,656,964	102,214,623	1,302,795
1904	761	65,964	32,019,212	111,251,478	188,715,189	77,463,711	1,093,505
1899	763	49,646	20,746,426	70,530,236	127,326,162	56,795,926	761,943
Per cent of increase or decrease (−):							
1927–1929	−5.0	3.8	6.8	−0.1	6.0	16.6	12.3
1925–1927	0.1	−0.4	1.2	1.6	5.9	13.1	8.9
1923–1925	2.3	2.6	5.7	5.6	7.1	9.7	11.4
1921–1923	1.1	14.6	19.2	28.6	35.9	50.7	----------
1919–1921	1.2	−7.4	−6.4	−4.6	−15.3	−30.9	----------
1919–1929	21.1	12.6	27.6	54.7	53.0	50.6	60.5
1909–1919	−6.2	49.7	232.5	182.6	194.4	213.6	42.0
1899–1909	1.8	53.0	96.7	134.6	110.2	80.0	71.0

[1] The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] The 883 establishments reporting for 1929 operated 910 individual mills. (See footnotes 4 and 6.)
[4] The 685 establishments reporting for 1929 operated 702 individual mills, combined reports having been made in a number of cases for two or more mills operated by a single establishment. For 1927 the numbers of establishments and the numbers of mills are identical. (See footnote 4, Table 4.)
[5] See headnote to Table 2.
[6] The 198 establishments reporting for 1929 operated 208 individual mills (three of which manufactured pulp from materials other than wood), combined reports having been made in a number of cases for two or more mills operated by a single establishment. For 1927 the numbers of establishments and the numbers of mills are identical. (See footnote 4, Table 12.)
[7] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; COMBINED FOR THE PAPER AND PULP INDUSTRIES

[Because of the fact that in many cases a paper mill and a pulp mill are supplied with power from the same power plant, it is impossible to give separate figures for each industry]

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	29,215	*Horsepower* 2,968,431	22,663	*Horsepower* 2,642,806	18,003	*Horsepower* 2,427,010	11,753	*Horsepower* 1,849,699	9,049	*Horsepower* 1,611,954	100.0	100.0
Prime movers, total	4,745	2,168,012	5,385	1,973,563	5,457	1,948,871	5,752	1,613,037	6,434	1,484,255	73.0	87.2
Steam, total	2,965	1,280,956	3,362	1,068,359	3,275	1,012,088	3,157	698,983	2,980	597,840	43.2	37.8
Engines	2,248	533,968	2,796	546,190	2,699	593,330	3,157	698,983	(1)	(1)	18.0	37.8
Turbines	717	746,988	566	522,169	576	418,758	---------	----------	(1)	(1)	25.2	-------
Internal-combustion engines	74	17,983	48	6,047	35	5,355	37	3,101	62	9,674	0.6	0.2
Water wheels and water turbines	1,706	869,073	1,975	899,157	2,147	931,398	2,558	910,863	3,392	876,741	29.3	49.2
Electric motors driven by purchased energy	24,470	800,419	17,278	669,243	12,546	478,139	6,001	236,662	2,615	127,699	27.0	12.8
Electric motors, total	70,013	2,000,945	50,716	1,641,204	39,895	1,309,517	17,756	583,586	8,210	325,211	100.0	100.0
Driven by purchased energy	24,470	800,419	17,278	669,243	12,546	478,139	6,001	236,662	2,615	127,699	40.0	40.6
Driven by energy generated in establishments reporting	45,543	1,200,526	33,438	971,961	27,349	831,378	11,755	346,924	5,595	197,512	60.0	59.4
Electric generators	1,325	*Kilowatts* 945,393	1,293	*Kilowatts* 692,451	1,323	*Kilowatts* 627,187	(2)	(2)	(2)	(2)	-------	-------
Electric energy purchased [3]	---------	*Kilowatt-hours* 2,892,016,927	---------	(4)	---------	(4)	---------	(2)	---------	(2)	---------	---------

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 3.—PRIME MOVERS AND ELECTRIC MOTORS DRIVEN BY PURCHASED ENERGY—COMBINED SUMMARY, BY STATES, FOR THE PAPER AND PULP INDUSTRIES: 1929 AND 1927

[Because of the fact that in many cases a paper mill and a pulp mill are supplied with power from the same power plant, it is impossible to give separate power equipment figures for the two industries]

STATE	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT					
	1929			1927		
	Total	Prime movers	Electric motors run by purchased energy	Total	Prime movers	Electric motors run by purchased energy
United States	2,968,431	2,168,012	800,419	2,642,806	1,973,563	669,243
Individual States:						
California	44,948	17,020	27,928	26,830	10,535	16,295
Connecticut	37,864	28,175	9,689	32,647	28,054	4,593
Delaware	16,469	6,368	10,101	9,963	8,643	1,320
Illinois	58,304	48,885	9,419	58,030	47,916	10,114
Indiana	49,302	44,392	4,910	40,987	35,683	5,304
Louisiana	75,674	51,968	23,706	55,774	36,004	19,770
Maine	415,909	365,605	50,304	375,801	313,060	62,741
Maryland	26,832	21,626	5,206	31,217	25,268	5,949
Massachusetts	171,785	109,555	62,230	167,357	121,399	45,958
Michigan	199,092	179,740	19,352	193,051	169,923	23,128
Minnesota	83,325	71,370	11,955	82,077	68,180	13,897
New Hampshire	133,499	123,895	9,604	109,395	105,705	3,690
New Jersey	79,662	58,764	20,898	64,365	39,006	25,359
New York	472,945	256,113	216,832	472,999	290,603	182,396
North Carolina	34,446	28,710	5,736	(1)	(1)	(1)
Ohio	152,788	103,595	49,193	116,755	90,184	26,571
Individual States—Con.						
Oregon	91,006	50,322	40,684	69,995	53,298	16,697
Pennsylvania	148,653	116,424	32,229	153,585	114,782	38,803
Tennessee	19,875	16,130	3,745	9,629	8,022	1,607
Vermont	22,560	20,270	2,290	33,067	29,892	3,175
Virginia	77,670	60,163	17,507	55,986	40,305	15,681
Washington	141,602	59,068	82,534	102,076	24,620	77,456
West Virginia	15,439	13,340	2,099	15,788	13,475	2,313
Wisconsin	321,035	264,431	56,604	294,712	245,425	49,287
Groups of States:						
Ala., Ark., Miss., Tex	53,206	34,885	18,321			
Colo., Iowa, Kans., Mo	15,185	10,866	4,319			
Other States (D. C., Ga., R. I., S. C.)	9,356	6,332	3,024			
States not shown separately				70,720	53,581	17,139

[1] Not reported separately.

TABLE 4.—GENERAL STATISTICS FOR THE PAPER INDUSTRY, BY STATES: 1929 AND 1927

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
							Total	Materials	Fuel and purchased energy		
United States	1929	[4] 685	11,744	103,320	$37,623,897	$140,308,374	$574,607,978	$513,671,787	$60,936,191	$967,186,026	$392,578,048
	1927	710	10,537	98,566	33,618,599	130,474,739	572,785,538	512,935,626	59,849,912	919,891,465	347,105,927
Individual States:											
California	1929	12	243	1,763	595,276	2,701,135	9,300,159	8,148,823	1,151,336	17,136,402	7,836,243
	1927	11	171	1,439	425,334	2,084,703	7,779,475	6,714,932	1,064,543	13,938,098	6,158,623
Connecticut	1929	27	236	2,032	879,445	2,806,908	8,146,718	6,872,541	1,274,177	17,361,068	9,214,350
	1927	32	246	1,898	797,458	2,753,288	9,228,160	7,946,151	1,282,009	16,153,988	6,925,828
Delaware	1929	7	45	555	187,329	808,863	3,473,962	2,999,588	474,374	4,817,327	1,343,365
	1927	7	40	602	193,733	762,275	3,019,519	2,640,352	379,167	4,485,618	1,466,099
Illinois	1929	29	354	3,675	1,118,686	5,266,787	19,977,220	17,868,329	2,108,891	34,438,372	14,461,152
	1927	30	308	3,452	890,790	4,509,852	19,304,234	16,804,308	2,499,926	32,979,761	13,675,527
Indiana	1929	24	192	2,180	684,655	2,722,399	11,127,053	9,703,371	1,423,682	18,120,354	6,993,301
	1927	26	202	2,400	643,021	2,925,839	13,307,203	11,551,695	1,755,508	19,940,649	6,633,446
Louisiana	1929	11	132	1,150	396,266	1,592,769	11,461,087	10,022,601	1,438,486	18,058,539	6,597,452
	1927	9	109	1,245	304,996	1,478,399	9,591,116	8,624,208	966,908	15,518,937	5,927,821
Maine	1929	26	813	8,296	2,240,097	10,994,794	56,819,684	51,849,634	4,970,050	90,072,846	33,253,162
	1927	25	905	8,132	3,144,827	11,121,676	53,144,869	48,483,710	4,661,159	88,594,957	35,450,088
Maryland	1929	6	88	1,240	360,066	1,490,721	7,583,352	7,133,934	449,418	10,419,840	2,836,488
	1927	10	101	1,360	367,530	1,561,446	8,066,555	7,456,158	610,397	11,325,129	3,258,574
Massachusetts	1929	73	1,525	12,138	5,329,555	16,403,702	49,013,252	43,359,837	5,653,415	93,317,072	44,303,820
	1927	80	1,524	12,127	4,979,516	15,607,992	50,383,003	44,441,589	5,941,414	91,095,083	40,712,080
Michigan	1929	42	1,171	11,455	4,087,560	16,268,768	57,633,300	51,928,828	5,704,472	97,322,852	39,689,552
	1927	42	1,088	11,382	3,606,106	15,323,895	58,525,518	53,321,418	5,204,100	95,798,872	37,273,354
Minnesota	1929	8	214	1,901	575,726	2,621,774	12,969,199	11,168,971	1,800,228	21,604,107	8,634,908
	1927	9	196	1,772	604,947	2,314,308	14,412,472	12,890,018	1,522,454	20,922,532	6,510,060
New Hampshire	1929	23	288	2,580	960,934	3,203,186	14,702,114	13,144,555	1,557,159	22,483,315	7,781,201
	1927	24	275	2,487	811,438	3,204,031	17,670,230	15,871,449	1,798,781	24,616,237	6,946,007
New Jersey	1929	35	415	4,143	1,657,834	5,985,087	21,089,749	17,859,554	3,230,195	37,743,106	16,653,357
	1927	37	414	3,773	1,733,716	5,333,022	21,101,342	17,990,564	3,110,778	35,769,883	14,668,541
New York	1929	127	1,740	13,531	4,839,159	18,900,777	81,077,913	72,432,166	8,645,744	129,560,343	48,482,430
	1927	136	1,378	12,685	3,984,383	17,435,829	82,789,611	74,280,993	8,508,618	124,189,463	41,399,852
North Carolina	1929	5	50	425	99,471	502,546	3,786,583	3,069,569	717,014	5,684,513	1,897,930
Ohio	1929	53	929	9,321	3,558,896	13,160,017	48,295,375	44,201,961	4,093,414	80,558,443	32,263,068
	1927	53	767	8,714	2,607,138	11,509,358	48,981,533	44,886,650	4,094,883	74,593,069	25,611,536
Oregon	1929	5	144	1,115	374,236	1,728,423	8,503,547	7,324,060	1,179,487	16,229,279	7,725,732
	1927	6	133	1,139	274,635	1,541,266	7,054,162	6,192,176	861,986	15,050,427	7,996,265
Pennsylvania	1929	56	1,016	7,026	2,972,930	9,966,431	41,638,985	37,587,739	4,051,246	72,837,456	31,198,471
	1927	56	981	7,251	2,944,449	10,452,661	43,253,387	38,786,978	4,466,409	72,676,705	29,423,318
Tennessee	1929	6	74	466	217,269	673,750	2,608,537	2,374,227	234,310	4,547,551	1,939,014
	1927	3	40	243	140,715	267,077	1,523,894	1,372,604	151,290	2,265,719	741,825
Vermont	1929	11	132	869	369,350	995,019	4,442,961	3,970,150	472,811	7,825,057	3,382,096
	1927	14	114	982	333,121	1,196,266	5,767,434	5,185,123	582,311	8,712,148	2,944,714
Virginia	1929	16	261	1,935	1,023,255	2,277,494	14,338,534	13,194,705	1,143,829	20,967,376	6,628,842
	1927	9	190	1,756	721,439	1,926,860	13,770,655	12,644,138	1,126,517	19,481,040	5,710,385
Washington	1929	15	297	2,774	911,147	3,667,255	15,878,422	13,774,146	2,104,276	28,429,104	12,550,682
	1927	12	267	2,049	615,551	2,989,403	10,313,026	8,443,244	1,869,782	19,746,323	9,433,297
West Virginia	1929	6	71	732	233,600	910,718	4,265,515	4,010,305	255,210	6,826,291	2,560,776
	1927	6	62	530	220,432	683,887	2,549,404	2,304,442	244,962	4,588,760	2,039,356
Wisconsin	1929	48	1,076	9,741	3,387,312	12,370,195	57,208,228	51,929,207	5,279,021	93,400,631	36,192,403
	1927	51	891	9,414	2,739,736	11,472,092	60,331,646	54,701,099	5,630,547	90,173,655	29,842,009
Groups of States:											
Ala., 2 est.; Ark., 1; Miss., 1; Tex., 2	1929	6	59	710	174,838	824,533	4,279,468	3,562,124	717,344	7,996,139	3,716,671
Colo., 1 est.; Iowa, 2; Kans., 3; Mo., 2	1929	8	64	547	155,749	697,678	2,737,469	2,205,113	532,356	4,852,348	2,114,879
Other States (D. C., 1 est.; Ga., 2; R. I., 1; S. C., 2)	1929	6	113	990	383,336	856,835	2,249,592	1,975,346	274,246	4,575,695	2,326,103
States not shown separately	[5] 1927	22	195	1,734	533,188	2,019,314	10,917,090	9,401,627	1,515,463	17,274,412	6,357,322

[1] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 115,096; proprietors and firm members, 32. For 1927, total, 109,141; proprietors and firm members, 38.

[2] The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] The 685 establishments reporting for 1929 operated 702 individual mills, combined reports having been made in a number of cases for 2 or more mills operated by a single establishment. The numbers of mills reported for individual States are identical with the numbers of establishments, with the following exceptions: Iowa, 2 establishments, 3 mills; Maine, 26 establishments, 27 mills; Massachusetts, 73 establishments, 75 mills; Michigan, 42 establishments, 43 mills; Minnesota, 8 establishments, 9 mills; New Hampshire, 23 establishments, 24 mills; New Jersey, 35 establishments, 37 mills; New York, 127 establishments, 131 mills; Pennsylvania, 56 establishments, 57 mills; Wisconsin, 48 establishments, 51 mills. For 1927 the numbers of establishments and the numbers of mills are identical.

[5] Alabama, 1 establishment; Colorado, 1; District of Columbia, 1; Georgia, 2; Iowa, 3; Kansas, 3; Mississippi, 1; Missouri, 1; North Carolina, 4; Rhode Island, 1; South Carolina, 2; Texas, 2.

TABLE 5.—PAPER AND PAPERBOARDS—PRODUCTION, BY CLASS, KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929, 1927, AND 1925

[The figures for all years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products]

CLASS	1929		1927		1925	
	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value
1. Paper industry, all products, total		$967,186,026		$919,891,465	(1)	(1)
Paper and paperboards:						
2. Produced for sale	8,331,297	715,145,798	7,806,935	724,025,274	(1)	(1)
3. Produced and transferred to other plants of same company	1,612,554	101,878,865	1,312,747	83,344,583	(1)	(1)
4. Products other than paper and paperboards (not normally belonging to the industry)		150,161,363		111,921,608	(1)	(1)
5. Paper and paperboards produced for use in same plant	1,196,384	86,276,477	792,388	64,236,990	(1)	(1)
Paper and paperboards, aggregate, (sum of 2, 3, and 5)	[2] 11,140,235	[2] 903,301,140	[2] 10,002,070	[2] 872,206,847	[2] 9,182,204	[2] $862,588,916
Newsprint, standard, in rolls and sheets	1,409,169	80,706,899	1,516,929	98,782,477	1,563,318	106,083,161
Hanging papers	101,002	7,293,931	112,658	9,034,599	104,554	9,506,383
Catalogue	111,771	9,570,858	(3)	(3)	(3)	(3)
Poster, novel, news-tablets, lining, etc.[4]	150,649	11,743,437	183,338	15,573,062	[5] 83,959	[5] 7,096,374
Book paper, total	1,497,912	168,271,655	1,328,782	160,868,747	1,343,310	177,291,847
Book papers	1,176,596	131,852,168	1,098,673	132,905,596	[6] 1,147,273	[6] 143,554,803
Lithograph	19,577	2,417,196	(3)	(3)	(7)	(7)
Offset	26,304	3,847,128	20,184	3,184,596	(3)	(3)
Body stock for coated paper	250,234	26,755,587	170,648	19,176,179	(7)	(7)
Other book paper	24,901	3,399,576	[8] 39,277	[8] 5,602,376	[9] 196,037	[9] 33,736,954
Cover paper	28,072	6,429,856	26,333	5,937,919	24,285	5,806,029
Writing paper (fine), total	607,590	113,223,595	508,808	105,148,140	473,804	105,474,234
100 per cent rag	17,397	11,143,620	15,576	10,462,226	17,513	10,140,496
Less than 100 per cent to 50 per cent rag	40,416	15,972,906	40,634	16,663,230	42,667	17,685,758
Less than 50 per cent rag	60,806	15,536,771	62,564	16,426,916	66,993	19,092,784
Sulphite bond	284,609	41,724,237	255,276	40,939,948	346,631	58,555,196
Other chemical wood-pulp writing paper	204,362	28,846,061	134,658	20,655,820		
Wrapping paper, total	1,605,783	163,442,382	1,525,305	162,579,549	1,292,049	143,587,475
For bags:						
Sulphite	47,002	4,308,885	56,964	5,597,853	128,705	14,617,053
Sulphate [10]	134,234	11,411,650	141,695	14,545,455		
Unbleached sulphite wrapping	143,568	13,564,762	206,973	20,010,092	[11] 93,051	[11] 8,333,534
Bleached sulphite wrapping	25,207	3,101,407	26,787	3,446,275	[12] 34,407	[12] 5,082,393
Bogus and screenings	38,529	2,086,111	51,646	3,153,613	77,484	5,706,759
Greaseproof	7,965	1,607,935	23,073	2,621,381	47,642	9,198,620
Glassine	47,438	9,736,951	38,644	9,005,642		
Heavy (mill wrappers, etc.)	63,238	3,423,428	55,352	2,027,737	58,725	3,930,384
Kraft:[9]						
Northern	375,254	40,530,615	394,913	43,454,493	479,975	51,113,642
Pacific Coast	54,961	4,847,524				
Southern	282,019	23,121,332	242,382	21,792,638		
Rope, jute, etc.	62,270	12,075,511	43,761	9,228,313	[13] 84,279	[13] 13,143,778
Groundwood and chemical manila	54,893	4,600,720	45,974	4,180,255	[14] 38,583	[14] 3,308,741
Tag board, light manila board, and pattern	30,616	3,503,536	41,280	5,208,336	21,241	3,004,336
Other wrapping paper	238,589	25,521,956	[15] 175,861	[15] 18,216,966	[16] 232,957	[16] 26,148,253
Boards, total	4,451,187	227,741,517	3,773,608	211,263,855	3,286,580	192,941,535
Container boards:						
Liners	1,108,852	55,212,515	911,508	52,842,058	[16] 487,475	[16] 28,081,633
Chip (plain and test)	785,199	27,865,152	847,646	34,795,136	[17] 951,579	[17] 44,488,965
Straw (for corrugated-container use)	361,486	16,085,279	340,996	16,808,917	[18] 338,273	[18] 16,254,317
Folding box boards (bending):						
Manila-lined (all lined boards)	590,523	30,869,321	405,673	24,037,734	(3)	(3)
Patent coated	182,831	11,195,006	185,347	12,805,444	(3)	(3)
Other folding box boards (including shell and unlined boards)	217,931	11,085,633	205,196	10,335,289	(3)	(3)
Set-up box board (nonbending):						
Chip and straw	325,111	11,753,491	168,911	7,234,760	(3)	(3)
Newsboard	189,028	7,430,984	179,041	8,045,854	253,460	12,009,817
Other (including tube, egg-case filler, pasted news, and pasted chip boards)	85,526	3,859,432	96,276	4,441,248	(3)	(3)
Binders' board	64,165	4,675,097	51,610	4,084,667	38,804	2,948,056
Cardboard	47,233	4,921,690	49,244	5,311,185	72,280	7,172,930
Leather board	24,223	2,942,498	24,195	2,498,496	14,269	1,717,754
Pressboard	11,901	2,480,486	6,938	1,452,683	6,991	1,237,416
Other boards	457,173	37,304,873	301,027	26,510,384	[19] 1,123,458	[19] 79,030,647
Tissue papers, total	387,811	53,300,059	316,070	46,616,919	281,243	45,734,920
High grade	63,834	15,307,089	58,590	13,262,707	49,818	10,934,837
Manila and No. 2 white	40,691	5,543,375	40,929	5,817,197	37,359	4,671,816
Napkin	29,536	4,138,515	13,675	2,410,082	11,979	2,240,054
Toilet	142,725	15,102,952	119,777	14,268,263	108,847	17,129,702
Towel	52,283	4,903,065	40,310	4,140,829	28,741	3,815,549
Waxing	58,742	8,305,063	42,789	6,708,841	44,499	6,942,062
Absorbent papers, total	90,800	16,972,984	63,766	13,331,497	51,126	9,999,928
Blotting	14,125	2,828,427	13,090	2,700,322	12,948	2,585,368
Matrix	4,281	1,516,233	2,843	681,584	2,158	464,921
For vulcanized fiber	25,928	4,106,713	16,763	3,156,082	17,148	3,402,589
Other absorbent paper [20]	46,466	8,521,611	31,070	6,793,509	18,872	3,547,050

See footnotes at end of table.

TABLE 5.—PAPER AND PAPERBOARDS—PRODUCTION, BY CLASS, KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929, 1927, AND 1925—Continued

[See note at head of this table]

CLASS	1929		1927		1925	
	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value
Building papers, total	659, 178	$39, 375, 990	625, 589	$40, 062, 024	582, 400	$45, 691, 878
Sheathing	52, 205	2, 214, 947	61, 326	2, 607, 607	[21] 101, 394	[21] 7, 256, 529
Felts	540, 166	32, 544, 935	503, 774	32, 790, 921	[22] 453, 837	[22] 36, 774, 260
Asbestos-filled and asbestos paper	66, 807	4, 610, 108	60, 489	4, 663, 496	27, 169	1, 661, 089
Other paper	39, 311	5, 227, 977	20, 884	3, 008, 059	95, 576	13, 375, 152

[1] It is impossible to assemble corresponding data for 1925 for the reason that the manufacture of paper and the manufacture of pulp were treated as a single industry at the census for that year.
[2] Includes data for paper and paperboards used in the manufacture of converted paper products in the plants which produced the paper and paperboards, as follows: For 1929, 1,196,384 tons, valued at $86,276,477; for 1927, 792,388 tons, valued at $64,236,990; no comparable data for 1925.
[3] Not reported separately.
[4] Figures for 1927 and 1925 include data for catalogue paper.
[5] Reported as "poster, novel, tablet, lining, etc."
[6] Reported as "machine-finished" and "sized and supercalendered."
[7] Not reported separately. (See footnote 9.)
[8] Includes data for lithograph paper.
[9] Includes data for plate, lithograph, map, woodcut, etc., and coated paper. The value of coated paper included in this item amounted to $31,970,357. The corresponding values of coated paper for 1927 and 1929, which are included in the item "Products other than paper and paper board (not normally belonging to the industry)" (see line 4, p. 547), are $34,851,381 and $30,972,502, respectively.
[10] "Sulphate for bags" should be included with "Kraft" in order to show the total kraft-paper production.
[11] Reported as "fiber."
[12] Reported as "bleached fiber."
[13] Reported as "manilas (rope, jute, etc.)."
[14] Reported as "wood manila."
[15] Includes data for "straw wrapping."
[16] Reported as "test liner board."
[17] Reported as "chip board."
[18] Reported as "strawboard."
[19] The 1925 figures for "other boards" are not comparable with those for 1927 and 1929 because of the inclusion of data for certain boards which were reported separately for 1927 and 1929 but not for 1925.
[20] "Filter paper," paper "for parchmentizing," etc., for 1929, 1927, and 1925, and in addition, paper "for celluloid" for 1927.
[21] Reported as "building and sheathing."
[22] Reported as "felts and roofing."

TABLE 6.—PAPER INDUSTRY—PRINCIPAL PRODUCTS, BY QUANTITY AND VALUE, BY STATES: 1929, 1927, AND 1925

[This table shows, by States, the output of the principal products for which separate figures can be given without disclosing the production of individual establishments. Where the product of chief importance can not be shown, only the State total is given]

STATE	1929		1927		1925	
	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value
United States	11, 140, 235	$903, 301, 140	10, 002, 070	$872, 206, 847	9, 182, 204	$862, 588, 916
California	253, 800	15, 140, 414	219, 366	13, 138, 842	177, 045	11, 612, 312
Boards	159, 049	8, 561, 878	(1)	(1)	(1)	(1)
Other	94, 751	6, 578, 536	(1)	(1)	(1)	(1)
Connecticut	197, 060	15, 656, 533	176, 707	14, 293, 197	194, 986	15, 946, 428
Boards	189, 156	12, 474, 337	162, 601	10, 744, 147	172, 897	11, 876, 969
Other	7, 901	3, 182, 196	14, 106	3, 549, 050	22, 089	4, 069, 459
Delaware	39, 366	4, 817, 327	31, 453	4, 478, 118	27, 268	4, 267, 326
Illinois	596, 577	29, 748, 082	531, 434	30, 307, 240	484, 540	29, 098, 184
Boards	406, 597	16, 835, 403	345, 047	15, 493, 018	333, 723	16, 355, 132
Building papers	133, 269	7, 817, 275	115, 673	8, 189, 221	96, 131	6, 988, 726
Other	56, 711	5, 095, 404	70, 714	6, 625, 001	54, 686	5, 754, 326
Indiana	348, 769	18, 120, 354	336, 898	19, 940, 649	327, 689	21, 357, 746
Boards	315, 630	15, 370, 414	292, 587	16, 067, 587	266, 041	15, 465, 577
Other	33, 139	2, 749, 940	44, 311	3, 873, 062	61, 648	5, 892, 169
Louisiana	273, 574	18, 041, 807	204, 428	15, 509, 816	124, 274	9, 668, 225
Wrapping papers	143, 758	10, 887, 962	130, 426	11, 006, 139	62, 716	5, 825, 100
Boards	119, 534	6, 431, 155	63, 976	3, 878, 210	50, 987	2, 975, 843
Other	10, 282	722, 690	10, 026	625, 467	10, 571	867, 282
Maine	1, 061, 384	87, 021, 341	953, 907	84, 405, 747	867, 705	83, 092, 923
Newsprint	560, 626	31, 482, 173	507, 553	32, 896, 556	469, 897	32, 358, 703
Other	500, 758	55, 539, 168	446, 354	51, 509, 191	397, 808	50, 234, 220
Maryland	109, 348	9, 453, 897	108, 519	10, 356, 322	112, 460	12, 252, 925
Massachusetts	562, 462	91, 044, 282	539, 513	88, 097, 442	510, 903	89, 055, 964
Boards	182, 166	13, 186, 124	173, 910	13, 298, 423	143, 544	12, 588, 732
Book papers	144, 945	20, 833, 368	147, 654	21, 138, 752	147, 935	22, 103, 367
Writing papers	89, 769	35, 096, 982	99, 125	34, 889, 361	90, 878	33, 357, 688
Wrapping papers	65, 996	10, 735, 863	64, 092	9, 973, 490	55, 536	9, 400, 530
Tissue papers	14, 174	3, 903, 301	12, 519	3, 187, 014	13, 028	3, 503, 315
Other	65, 412	7, 378, 644	42, 303	5, 610, 362	59, 982	8, 102, 332

TABLE 6.—PAPER INDUSTRY—PRINCIPAL PRODUCTS, BY QUANTITY AND VALUE, BY STATES: 1929, 1927, AND 1925—Continued

[See note at head of this table]

STATE	1929		1927		1925	
	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value
Michigan	1,092,111	$82,016,379	1,004,391	$80,783,111	847,475	$77,210,534
Boards	640,143	32,746,893	575,303	31,655,765	442,586	24,103,090
Book papers	186,043	19,395,095	179,771	20,107,843	181,799	25,205,739
Wrapping papers	92,996	9,892,052	113,149	11,910,481	107,917	13,225,159
Other	172,929	19,982,349	136,168	17,109,022	115,143	14,673,546
Minnesota	318,387	21,647,522	281,314	19,704,112	224,453	17,096,646
Boards	138,125	9,470,807	(1)	(1)	(1)	(1)
Newsprint	121,563	7,324,383	150,292	9,845,581	122,445	8,575,819
Other	58,699	4,852,327	131,022	9,858,531	102,008	8,520,827
New Hampshire	195,547	22,206,610	207,421	23,531,292	206,288	23,632,167
Wrapping papers	80,991	9,314,017	96,884	11,134,155	105,453	12,416,521
Tissue papers	30,425	3,584,077	(1)	(1)	(1)	(1)
Writing papers	26,575	3,875,333	(1)	(1)	(1)	(1)
Other	57,556	5,433,183	110,537	12,397,137	100,835	11,215,646
New Jersey	604,940	37,074,136	488,947	35,218,566	406,409	33,080,459
Boards	433,560	18,874,082	361,347	18,389,419	289,605	15,635,710
Building papers	122,139	7,320,003	75,229	4,599,679	49,230	3,915,549
Other	49,241	10,880,051	52,371	12,229,468	67,574	13,529,200
New York	1,512,855	124,711,086	1,457,711	122,246,476	1,503,022	131,590,428
Boards	442,427	26,066,202	417,360	25,672,471	365,547	23,447,438
Newsprint	235,072	13,420,219	366,473	24,015,004	433,029	33,745,684
Wrapping papers	200,952	20,293,568	176,887	18,050,491	180,718	17,212,778
Book papers	182,593	19,485,201	170,870	19,463,592	181,841	21,124,459
Tissue papers	95,225	11,557,173	38,892	12,183,513	84,631	12,631,943
Building papers	60,695	3,979,953	62,707	4,088,583	77,802	6,341,477
Hanging papers	59,202	4,035,157	66,422	5,415,301	59,903	5,344,688
Other	236,689	26,874,213	108,100	13,362,521	69,551	11,241,961
North Carolina	69,616	5,552,263	(1)	(1)	(1)	(1)
Ohio	936,572	72,284,788	812,212	69,202,689	776,600	70,708,819
Boards	500,874	22,349,366	436,212	22,333,174	421,887	23,411,876
Book papers	227,335	26,038,088	185,992	23,360,236	144,343	20,575,991
Building papers	73,195	4,783,045	78,596	5,513,431	89,327	6,734,078
Wrapping papers	58,338	6,801,987	39,162	5,593,578	41,612	5,752,509
Writing papers	54,013	8,162,772	51,108	8,713,159	61,586	10,720,235
Other	22,767	4,149,530	21,142	3,680,111	17,940	3,603,530
Oregon	222,731	16,158,578	187,663	15,050,427	146,215	9,756,189
Pennsylvania	748,960	67,117,895	716,344	68,612,012	678,401	75,705,769
Boards	268,256	11,815,392	239,420	11,269,197	199,322	10,033,066
Book papers	210,178	23,438,352	192,119	24,482,194	178,043	24,679,039
Building papers	64,566	3,661,156	109,079	6,393,314	105,579	7,738,396
Wrapping papers	62,527	6,875,780	63,368	7,470,544	69,297	8,368,060
Writing papers	61,384	11,342,639	60,193	10,578,113	72,064	14,866,425
Tissue papers	59,326	6,099,957	46,071	5,181,515	32,947	6,066,440
Other	22,723	3,884,619	18,094	3,237,135	21,149	3,954,343
Tennessee	83,564	4,407,312	32,526	2,265,719	31,399	2,168,157
Vermont	72,677	6,763,124	87,251	8,366,774	84,325	7,574,422
Wrapping papers	31,955	3,243,743	35,100	3,942,211	16,885	1,759,123
Other	40,722	3,519,381	52,151	4,424,563	67,440	5,815,299
Virginia	242,455	20,296,766	192,864	19,160,245	143,039	14,543,770
Wrapping papers	89,637	7,801,947	79,553	7,826,073	39,724	3,808,116
Boards	86,090	4,590,673	56,512	3,849,917	43,334	2,640,986
Other	66,728	7,904,146	56,799	7,484,255	59,981	8,094,668
Washington	382,253	27,679,043	233,200	18,919,093	179,060	13,140,528
Newsprint	140,016	7,924,268	112,709	7,153,510	96,216	5,288,971
Boards	98,700	4,994,567	(1)	(1)	(1)	(1)
Wrapping papers	79,419	6,416,013	51,713	4,714,565	28,856	2,463,132
Other	64,118	8,344,195	68,778	7,051,018	53,988	5,388,425
West Virginia	51,889	5,016,561	47,769	4,212,122	48,700	5,379,048
Wrapping papers	19,305	2,620,119	21,352	2,340,498	18,994	2,304,840
Other	32,584	2,396,442	26,417	1,871,624	29,715	3,074,208
Wisconsin	886,146	85,240,423	891,939	87,495,394	832,954	85,555,997
Wrapping papers	251,402	25,319,055	268,779	25,800,105	224,346	22,083,554
Boards	157,120	8,134,518	142,768	8,561,357	134,762	7,846,828
Book papers	135,306	12,494,393	(1)	(1)	(1)	(1)
Newsprint	103,458	6,165,356	148,116	9,758,744	151,131	10,520,029
Other	238,860	33,127,101	332,276	43,375,188	322,715	45,105,586
Groups of States:						
Alabama, Arkansas, Georgia, South Carolina, Texas, boards	32,000	1,475,612				
Colorado, Iowa, Kansas, Missouri, boards	109,402	4,648,381				
Alabama, Arkansas, Mississippi, wrapping papers	87,591	6,453,894				
District of Columbia, Georgia, South Carolina, Texas, wrapping papers	16,564	1,130,502				
Other States (District of Columbia, Rhode Island, Texas), other paper	31,635	2,375,628				
States not shown separately			258,293	16,911,442	246,985	19,003,950

(1) Not reported separately.

TABLE 7.—PRINCIPAL MATERIALS CONSUMED IN THE PAPER INDUSTRY, BY KIND, QUANTITY, AND COST, FOR THE UNITED STATES: 1929

KIND	Quantity (ton, 2,000 pounds)	Cost
Wood pulp, total	6,289,318	$302,923,324
Purchased	2,230,302	132,879,235
Produced for consumption in paper mills operated in conjunction with pulp mills	4,059,016	170,044,089
Rags	739,422	33,249,233
Paper stock	3,841,942	74,232,577
Manila stock (rope, jute, bagging, etc.)	128,800	6,115,292
Straw	575,263	5,197,706
Rosin	38,390	2,155,114
Rosin sizing	99,443	6,567,703
Casein	18,451	4,346,664
Clay	470,528	7,129,281

TABLE 8.—WOOD PULP, PAPER STOCK, AND RAGS CONSUMED IN THE PAPER INDUSTRY, BY QUANTITY AND COST, BY STATES: 1929

KIND	Quantity (ton, 2,000 pounds)	Cost
WOOD PULP		
United States	6,289,318	$302,923,324
Individual States:		
California	39,389	1,748,951
Connecticut	29,816	1,605,747
Illinois	50,692	2,766,930
Indiana	37,047	2,003,975
Louisiana	242,921	7,574,972
Maine	1,031,661	43,704,135
Massachusetts	284,842	14,596,813
Michigan	504,533	27,024,818
Minnesota	231,217	6,839,373
New Hampshire	185,556	10,654,090
New Jersey	77,960	4,514,185
New York	1,014,571	48,137,570
North Carolina	58,205	2,764,070
Ohio	321,897	20,657,340
Oregon	149,584	3,796,615
Pennsylvania	368,436	23,965,216
Vermont	75,731	3,900,887
Virginia	197,183	10,851,521
Washington	366,369	10,833,923
Wisconsin	735,777	37,597,832
Groups of States:		
Alabama, Arkansas, Mississippi, Tennessee, Texas	141,229	4,920,938
Colorado, Iowa, Kansas, Missouri	11,090	135,761
Delaware, District of Columbia, Maryland, South Carolina, West Virginia	133,612	7,927,662
PAPER STOCK		
United States	3,841,942	74,232,577
Individual States:		
California	173,790	2,946,061
Connecticut	171,775	3,262,146
Illinois	443,166	6,977,145
Indiana	193,834	3,592,576
Louisiana	41,605	733,135
Maine	23,500	615,617
Massachusetts	257,114	7,334,828
Michigan	504,851	11,823,763
New Hampshire	14,701	422,803
New Jersey	405,762	5,333,068
New York	348,373	8,206,879
Ohio	468,153	9,601,173
Pennsylvania	348,561	5,833,069
Virginia	30,318	520,919
Washington	39,346	713,977
Wisconsin	125,962	2,292,814
Groups of States:		
Alabama, Georgia, North Carolina, South Carolina, Tennessee, West Virginia	80,176	1,284,002
Delaware, Maryland, Rhode Island, Vermont	21,135	466,067
Other States (Iowa, Kansas, Minnesota, Texas, and Missouri)	149,760	2,272,535

TABLE 8.—WOOD PULP, PAPER STOCK, AND RAGS CONSUMED IN THE PAPER INDUSTRY, BY QUANTITY AND COST, BY STATES: 1929—Continued

KIND	Quantity (ton, 2,000 pounds)	Cost
RAGS		
United States	739,422	$33,249,233
Individual States:		
California	39,929	1,132,914
Connecticut	6,456	961,553
Illinois	103,344	3,521,801
Massachusetts	59,014	8,168,256
Michigan	60,152	1,432,502
New Jersey	110,024	3,424,430
New York	87,505	3,400,231
Ohio	53,846	2,201,059
Pennsylvania	30,764	1,196,966
Wisconsin	27,083	1,991,072
Groups of States:		
Delaware, District of Columbia, Maryland, Virginia	49,874	2,091,309
Maine, New Hampshire, Rhode Island, Vermont	53,266	1,819,750
Other States (Colorado, Indiana, Louisiana, Minnesota, and Washington)	58,165	1,907,330

TABLE 9.—PAPER MACHINES, BY TYPE, NUMBER, AND CAPACITY, BY KIND OF PAPER MADE: 1929 AND 1928

KIND	Total capacity per year of 310 days (ton, 2,000 pounds)	FOURDRINIER		CYLINDER	
		Number	Capacity per 24 hours (ton, 2,000 pounds)	Number	Capacity per 24 hours (ton, 2,000 pounds)
Total:					
1929	13,704,480	937	22,131	738	22,077
1928	12,933,200	949	21,152	753	20,508
1927 [1]	12,536,090	949	20,981	744	19,455
Newsprint:					
1929	1,695,080	126	5,461	1	7
1928	1,891,310	141	6,101		
Book paper:					
1929	1,774,750	239	5,691	4	34
1928	1,621,300	236	5,209	3	21
Cover paper:					
1929	46,810	13	132	3	10
1928	26,970	7	61	6	26
Writing paper:					
1929	623,410	143	1,984	2	27
1928	640,770	142	2,067		
Wrapping paper:					
1929	2,039,800	206	5,597	69	983
1928	1,711,510	206	4,897	67	624
Boards:					
1929	5,696,870	29	742	470	17,635
1928	5,334,480	19	436	480	16,772
Tissue paper:					
1929	442,680	102	952	94	476
1928	418,810	101	892	93	459
Absorbent paper:					
1929	148,800	36	369	16	111
1928	131,440	38	405	15	19
Building paper:					
1929	911,090	5	230	72	2,709
1928	841,650	4	168	74	2,547
All other:					
1929	325,190	38	973	7	76
1928	314,960	55	916	15	100

[1] Because of a change in the method of reporting, no strictly comparable figures for 1927 can be given for the several kinds of paper.

TABLE 10.—IMPORTS AND EXPORTS OF PAPER AND PAPER BOARDS, BY KIND, QUANTITY, AND VALUE: 1929 AND 1927

[From "Foreign Commerce and Navigation of the United States"]

KIND	1929		1927	
	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value
IMPORTS				
Paper and paper boards, total value	2,476,077	$148,304,437	2,056,822	$136,021,160
Printing:				
Standard newsprint	2,422,700	144,492,736	1,987,066	131,489,034
Other	2,168	219,184	5,182	506,458
Hanging	219	21,076	151	21,895
Wrapping:				
Greaseproof and imitation parchment	597	275,965	517	104,300
Vegetable parchment	141	65,737	235	89,275
Kraft	4,881	422,833	6,085	518,877
Other	3,459	175,411	6,421	317,151
Boards:				
Pulp	29,362	1,271,740	30,064	1,423,125
Leather	41	3,992	241	15,802
Other	11,228	568,330	18,428	796,577
Absorbent	519	386,047	478	297,816
Building and sheathing, felts and roofing	762	78,919	1,046	110,773
Other paper		322,467	908	270,077

KIND	1929		1927	
	Quantity (ton, 2,000 pounds)	Value	Quantity (ton, 2,000 pounds)	Value
EXPORTS				
Paper and paper boards, total value	167,771	$20,304,355	114,690	$15,516,409
Standard newsprint	18,695	1,345,873	12,329	1,191,033
Book	18,908	2,651,325	8,022	1,370,932
Cover	1,027	350,445	826	283,083
Writing (other than papeteries)	13,995	2,955,732	6,614	1,918,051
Wrapping:				
Greaseproof and waterproof	1,454	520,281	1,307	380,647
Other	21,941	2,957,204	16,156	2,256,059
Boards:				
Box board	26,729	1,424,446	21,817	1,351,016
Bristol and bristol board	1,454	286,400	922	180,136
Paper board and strawboard	23,658	2,096,850	19,277	2,072,702
Wall board	[1] 19,134	2,233,383	[1] 12,841	1,506,412
Tissue and crêpe	2,399	1,061,250	2,401	1,091,531
Toilet	3,517	787,919	2,764	668,871
Paper towels and napkins	1,809	435,245	1,180	331,700
Blotting	1,803	428,997	1,833	411,410
Building and sheathing	11,248	757,005	6,401	502,826

[1] Approximate.

TABLE 11.—WAGE EARNERS, BY MONTHS, BY STATES, FOR THE PAPER INDUSTRY: 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	103,320	*102,082*	103,231	103,311	102,809	102,847	103,614	103,508	104,241	104,036	104,309	103,489	102,362	97.9
1927	98,566	98,643	98,973	99,291	98,609	98,084	*97,847*	98,101	98,801	98,687	98,711	98,972	98,072	98.5
California	1,763	1,648	1,644	*1,638*	1,698	1,715	1,761	1,825	1,855	1,883	1,873	1,821	1,799	87.0
Connecticut	2,032	2,029	2,079	2,042	1,999	2,027	2,058	2,065	2,045	2,024	2,040	2,002	*1,978*	95.1
Delaware	585	578	581	*548*	591	570	620	583	595	593	586	595	573	88.4
Illinois	3,675	3,675	3,741	3,760	3,822	3,838	3,685	3,617	3,717	3,678	3,649	3,535	*3,369*	87.8
Indiana	2,180	2,162	2,240	2,222	2,087	2,159	2,132	2,175	2,296	2,264	2,191	2,153	*2,084*	90.8
Louisiana	1,150	1,156	1,196	1,201	1,119	1,111	*1,107*	1,120	1,235	1,138	1,134	1,130	1,148	89.6
Maine	8,296	*7,882*	8,118	8,126	8,097	8,099	8,297	8,316	8,487	8,456	8,587	8,558	8,530	91.8
Maryland	1,240	1,210	1,201	1,243	1,254	1,249	1,281	1,324	1,282	1,270	1,202	1,185	*1,188*	89.4
Massachusetts	12,138	*11,900*	12,029	12,124	12,225	12,182	12,202	12,078	12,147	12,129	12,250	12,176	12,211	97.1
Michigan	11,455	11,507	11,508	11,614	11,653	11,560	11,594	11,469	11,512	11,385	11,384	11,203	*11,069*	95.0
Minnesota	1,901	1,908	1,939	1,907	1,932	1,905	1,930	1,885	1,837	*1,789*	1,869	1,910	1,949	90.3
New Hampshire	2,580	2,575	2,631	2,592	2,583	2,561	2,568	2,608	2,501	2,580	2,607	2,566	*2,554*	96.3
New Jersey	4,143	4,065	4,088	4,158	4,041	4,083	4,131	4,315	4,208	4,262	4,252	4,087	*3,962*	91.8
New York	13,531	13,703	13,781	13,652	13,556	13,489	13,493	13,361	13,388	*13,349*	13,523	13,594	13,476	96.9
North Carolina	425	450	441	463	457	430	440	417	421	414	409	*375*	387	80.6
Ohio	9,321	*9,088*	9,156	9,224	9,301	9,267	9,632	9,448	9,516	9,432	9,431	9,305	9,113	93.7
Oregon	1,115	1,114	1,114	*1,011*	1,087	1,092	1,118	1,099	1,134	1,159	1,130	1,129	1,194	84.7
Pennsylvania	7,026	6,950	7,076	7,120	6,977	7,112	7,077	*6,891*	6,918	7,043	7,019	7,115	7,012	96.8
Tennessee	466	389	389	384	386	*382*	385	552	560	543	542	547	534	68.2
Vermont	869	863	876	869	865	864	866	869	871	876	877	879	*858*	97.6
Virginia	1,935	*1,868*	1,932	2,018	1,971	1,937	1,939	1,989	1,935	1,943	1,905	1,908	1,871	92.6
Washington	2,774	2,912	2,948	2,923	2,621	*2,583*	2,666	2,745	2,807	2,809	2,777	2,773	2,719	87.9
West Virginia	732	*705*	708	710	731	796	720	722	731	755	795	708	709	88.6
Wisconsin	9,741	9,716	9,741	9,664	*9,597*	9,706	9,643	9,694	9,777	9,862	9,891	9,869	9,737	97.0

TABLE 12.—GENERAL STATISTICS FOR PULP (WOOD AND OTHER FIBER), BY STATES: 1929 AND 1927

[This table presents statistics for 1929 separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
							Total	Materials	Fuel and purchased energy		
United States	1929	[4] 198	1,885	24,729	$5,844,301	$32,679,407	$148,752,729	$134,422,319	$14,330,410	$238,928,279	$90,175,550
	1927	219	2,995	24,794	5,963,432	31,527,358	151,325,425	134,231,864	17,093,561	218,198,201	66,872,776
Individual States:											
Louisiana	1929	7	91	996	181,300	1,360,201	4,037,718	3,724,872	312,846	8,125,987	4,088,269
	1927	7	83	963	234,654	1,238,373	3,974,174	3,572,325	401,849	7,348,812	3,374,638
Maine	1929	24	236	3,835	746,092	5,129,508	29,211,810	26,583,350	2,628,460	43,407,951	14,286,141
	1927	26	312	3,752	943,707	5,018,401	30,133,465	26,982,659	3,150,806	40,280,291	10,146,826
Massachusetts	1929	3	26	223	64,003	245,191	1,078,217	965,688	112,529	1,767,501	689,284
Michigan	1929	11	47	899	151,926	1,208,673	5,903,692	5,406,032	497,660	8,681,479	2,777,787
	1927	12	95	1,243	219,775	1,535,410	6,889,955	6,171,703	718,252	9,582,235	2,692,280
Minnesota	1929	5	43	653	107,160	841,078	3,961,142	3,644,327	316,815	6,712,776	2,751,634
	1927	7	67	740	168,786	1,001,117	4,951,884	4,509,675	442,209	7,546,912	2,595,028
New Hampshire	1929	5	269	2,432	328,563	3,533,484	11,610,579	10,035,192	1,575,387	20,418,031	8,807,452
	1927	7	216	2,534	481,411	3,064,369	12,873,326	11,380,753	1,486,573	18,545,615	5,672,289
New York	1929	47	176	2,796	656,103	3,568,264	20,769,650	18,579,660	2,190,590	29,982,080	9,212,430
	1927	61	237	3,161	737,179	4,127,308	24,518,659	21,894,703	2,623,956	32,957,012	8,438,353
Pennsylvania	1929	9	126	1,290	465,372	1,840,477	8,997,052	8,273,025	724,027	14,493,546	5,496,494
	1927	12	187	1,640	657,283	2,356,553	10,184,724	9,071,815	1,112,909	15,753,242	5,568,518
Tennessee	1929	5	43	477	132,341	489,745	3,466,226	3,150,023	316,203	5,815,077	2,348,851
	1927	4	40	364	122,898	360,103	1,963,730	1,769,690	194,040	3,047,402	1,083,672
Vermont	1929	3	4	84	11,230	119,325	484,629	449,308	35,321	728,067	243,438
	1927	4	7	126	20,625	161,527	632,074	616,942	15,132	1,039,285	407,211
Virginia	1929	7	114	1,553	412,594	1,503,259	8,460,495	7,726,059	734,436	14,203,969	5,743,474
	1927	8	125	1,426	447,224	1,252,264	7,545,092	6,670,392	874,700	11,244,630	3,699,547
Washington	1929	15	188	2,394	498,972	3,648,961	10,756,098	9,844,461	911,637	18,664,992	7,908,894
	1927	13	87	1,237	228,910	1,670,615	5,896,997	4,868,722	1,028,275	9,201,570	3,304,573
Wisconsin	1929	31	228	3,446	652,971	4,355,021	22,546,539	20,571,634	1,974,905	36,058,146	13,511,607
	1927	33	262	3,722	768,424	4,946,262	24,382,418	21,733,090	2,649,328	34,876,945	10,494,527
Groups of States:											
Ala., 1 est.; Ark., 1; Miss., 1; Tex., 1	1929	4	17	450	43,905	539,895	1,733,142	1,551,284	181,858	3,538,323	1,805,181
Calif., 1 est.; Oreg., 8	1929	9	72	755	156,486	1,147,809	4,429,281	3,823,437	605,844	7,011,203	2,581,922
Del., 1 est.; D. C., 1; Md., 2; N. C., 3 est.; S. C., 1; Ohio, 2; W. Va., 3	1929	4	44	601	161,979	679,859	3,111,832	2,709,696	402,136	5,228,469	2,116,637
	1929	9	161	1,845	573,304	2,408,657	8,194,627	7,384,871	809,756	14,000,682	5,806,055
States not shown separately	[5] 1927	25	377	3,886	932,556	4,795,056	17,378,927	14,983,395	2,395,532	26,774,241	9,395,314

[1] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 26,625; proprietors and firm members, 11. For 1927, total, 26,896; proprietors and firm members, 7.

[2] The figures for all census years refer to production, not to sales. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value added by Manufacture.

[4] The 198 establishments reporting for 1929 operated 208 individual mills (3 of which manufactured pulp from materials (other than wood), combined reports having been made in a number of cases for two or more mills operated by a single establishment. The numbers of mills reported for individual States are identical with the numbers of establishments, with the following exceptions: Maine, 24 establishments, 26 mills; Minnesota, 5 establishments, 6 mills; New Hampshire, 5 establishments, 7 mills; New York, 47 establishments, 51 mills; Wisconsin, 31 establishments, 32 mills. For 1927 the numbers of establishments and the numbers of mills are identical.

[5] California, 1 establishment; Delaware, 1; District of Columbia, 1; Maryland, 2; Massachusetts, 3; Mississippi, 1; North Carolina, 2; Ohio, 2; Oregon, 6; South Carolina, 1; Texas, 1; West Virginia, 4.

TABLE 13.—PULP—PRODUCTION, BY PROCESS, FOR CONSUMPTION AND FOR SALE, BY QUANTITY AND VALUE, FOR THE UNITED STATES: 1929, 1928, AND 1927

[See also report on "Pulpwood consumption and wood-pulp production," p. 570]

KIND	1929		1928		1927	
	Quantity (tons of 2,000 pounds)	Value (f. o. b. mill)	Quantity (tons of 2,000 pounds)	Value (f. o. b. mill)	Quantity (tons of 2,000 pounds)	Value (f. o. b. mill)
1. Pulp industry, all products, total		$238,928,279				$218,198,201
2. Pulp (wood and other fiber), total	4,937,235	234,759,420	4,510,800	$206,490,469	4,369,591	214,176,710
3. For consumption	4,167,189	183,255,593			3,783,249	172,791,689
4. For sale	770,046	51,503,827			586,342	41,385,021
5. Products other than pulp (not normally belonging to the industry) [1]		4,168,859				4,021,491
Pulp (wood and other fiber) aggregate (line 2, above)	4,937,235	234,759,420	4,510,800	206,490,469	4,369,591	214,176,710
For consumption [2]	4,167,189	183,255,593	(3)	(3)	3,783,249	172,791,689
For sale	770,046	51,503,827	(3)	(3)	586,342	41,385,021
Wood pulp, total	4,862,885	223,178,096	4,510,800	206,490,469	4,313,403	207,332,666
For consumption [2]	4,121,955	177,091,587	(3)	(3)	[4] 3,740,849	[4] 168,554,754
For sale	740,930	46,086,509	(3)	(3)	[4] 560,571	[4] 38,271,761
Ground, steamed, total	163,238	6,605,759	64,748	1,737,779	175,088	6,649,705
For consumption [2]	158,014	6,446,183	(3)	(3)	169,535	6,475,582
For sale	5,224	159,576	(3)	(3)	5,553	174,123
Ground, not steamed, total	1,474,415	40,617,139	1,546,240	42,064,031	1,435,321	39,309,498
For consumption [2]	1,447,135	39,763,417	(3)	(3)	1,405,984	38,350,215
For sale	27,280	853,722	(3)	(3)	29,337	959,283
Soda fiber, total	520,729	34,064,784	488,641	31,662,638	487,478	32,842,265
For consumption [2]	397,731	26,156,655	(3)	(3)	368,987	24,912,839
For sale	122,998	7,908,129	(3)	(3)	118,491	7,929,426
Sulphite fiber, bleached, total	839,953	62,152,903	722,107	55,560,276	680,288	53,847,240
For consumption [2]	549,685	37,719,011	(3)	(3)	444,518	33,270,157
For sale	290,268	24,433,892	(3)	(3)	235,770	20,577,089
Sulphite fiber, unbleached, total	841,558	40,812,205	836,751	39,816,951	872,411	44,779,425
For consumption [2]	678,794	32,979,824	(3)	(3)	780,081	39,840,840
For sale	162,764	7,832,381	(3)	(3)	92,330	4,938,585
Sulphate fiber, total	918,084	37,173,860	774,225	33,558,493	603,253	28,691,055
For consumption [2]	801,881	32,563,810	(3)	(3)	534,824	25,210,657
For sale	116,203	4,610,050	(3)	(3)	68,429	3,480,398
Semichemical, total [5]	40,481	707,645	29,967	1,321,782	11,983	506,151
For consumption [2]	40,481	707,645	(3)	(3)	(6)	(6)
For sale			(3)	(3)	(6)	(6)
Screenings, mechanical, total	11,459	144,718	4,701	56,415	8,229	95,907
For consumption [2]	10,899	139,118	(3)	(3)	7,965	89,980
For sale	560	5,600	(3)	(3)	264	5,927
Screenings, chemical, total	52,908	809,083	43,420	712,104	39,352	611,414
For consumption [2]	37,335	525,924	(3)	(3)	28,955	404,484
For sale	15,633	283,159	(3)	(3)	10,397	206,930
Other pulp, total [7]	74,350	11,581,324			56,188	6,844,044
For consumption [2]	45,234	6,164,006	(3)	(3)	(6)	(6)
For sale	29,116	5,417,318	(3)	(3)	(6)	(6)

[1] Conduit pipe and cores, tannic acid, turpentine, wood flour, etc.
[2] Wood pulp made and consumed in the same plant or transferred to and consumed in other plants operated by the same companies.
[3] Not reported separately.
[4] Not including data for semichemical pulp. (See footnote 6.)
[5] Figures include data for a small quantity of wood pulp, not covered by items specified.
[6] Can not be shown without disclosing production of individual establishments.
[7] Includes data for cottonseed-hull-fiber pulp, cotton-linters pulp, rag pulp, and deinked pulp.

TABLE 14.—EQUIPMENT, BY KIND, NUMBER, AND CAPACITY, FOR THE PULP INDUSTRY: 1929 AND 1927

[Capacity given in tons of 2,000 pounds]

KIND	1929	1927	KIND	1929	1927
Grinders:			Capacity of equipment per annum, total, tons	5,900,230	5,602,980
Number	1,164	1,217	Ground	2,355,070	2,433,110
Capacity per 24 hours, tons	7,597	7,694	Sulphite	1,970,670	1,845,510
Digesters, total number	727	713	Soda	631,470	627,870
			Sulphate	943,020	696,490
Sulphite-fiber	385	377			
Soda-fiber	198	214			
Sulphate-fiber	144	122			

TABLE 15.—WAGE EARNERS, BY MONTHS, BY STATES, FOR THE PULP INDUSTRY: 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	24,729	24,384	24,545	25,088	25,148	25,196	25,336	24,827	24,834	24,437	24,384	24,337	*24,235*	95.7
1927	24,704	25,199	25,250	25,718	25,486	24,998	25,062	24,543	24,432	24,147	*24,024*	24,285	24,378	93.4
Louisiana	996	1,036	1,032	995	980	987	983	980	994	*965*	977	1,005	1,020	93.1
Maine	3,835	3,673	3,835	3,871	3,907	3,937	3,987	3,925	3,893	3,831	3,830	3,724	*3,615*	90.6
Massachusetts	223	222	223	226	232	231	225	224	*217*	224	219	220	219	93.5
Michigan	899	930	928	918	935	921	928	894	878	885	865	861	*845*	90.4
Minnesota	653	618	664	667	722	682	645	653	653	658	663	*599*	618	83.0
New Hampshire	2,432	*2,363*	2,412	2,407	2,450	2,495	2,451	2,466	2,462	2,475	2,420	2,383	2,394	94.7
New York	2,786	2,766	2,775	**2,916**	2,894	2,806	2,846	2,827	2,790	2,742	*2,693*	2,762	2,731	92.4
Pennsylvania	1,290	1,272	1,291	1,293	1,283	1,284	1,291	1,294	1,300	1,308	1,308	1,285	*1,268*	96.9
Tennessee	477	*435*	436	436	449	454	476	511	503	481	502	529	507	82.2
Vermont	84	94	71	89	100	99	82	75	*67*	70	98	92	74	67.0
Virginia	1,553	1,709	1,635	1,665	1,629	1,574	1,537	1,527	1,569	1,503	1,513	1,422	*1,353*	79.2
Washington	2,394	2,045	*2,004*	2,311	2,384	2,540	**2,667**	2,599	2,582	2,407	2,408	2,395	2,392	75.1
Wisconsin	3,446	3,521	**3,525**	3,514	3,404	3,405	3,417	*3,325*	3,437	3,426	3,427	3,474	3,479	94.3

CONVERTED PAPER PRODUCTS

Description of the industries.—The "Converted paper products" group of industries comprises those engaged *primarily* in the conversion of paper and paperboards into containers and other commodities. The industries embraced by this group are as follows:

Bags, paper, exclusive of those made in paper mills.—The establishments classified in this industry are engaged primarily in the manufacture, from purchased paper, of bags for groceries and other merchandise, shopping bags, and garment bags. Some establishments in certain other industries manufacture the paper bags in which their products are shipped, but the value of such bags is not separately reported and consequently such production is not covered by this report.

Boxes, paper, not elsewhere classified.—The establishments in this industry are engaged primarily in the manufacture of shipping containers; cartons and folding boxes; set-up paper boxes; paper cans; decorated, lithographed, lacquered, and fancy covered paper boxes; and other paper boxes and containers.

Cardboard, not made in paper mills.—The establishments in this industry are engaged primarily in surface coating and glazing paper, box board, fiber board, and the like. The principal products are printers' cardboard, display cut-outs, lithographic mounts, etc.

Card cutting and designing.—The establishments in this industry are engaged primarily in the manufacture of index, library, and record cards; guides, etc.; stencil cards for addressing machines; photograph mats, mounts, and folders; pattern cards for weaving; and related products.

Envelopes.—This classification covers all manufacturers whose products of chief value are envelopes of any description, including those used for filing, wrapping, etc.

Labels and tags.—The establishments in this industry are engaged primarily in the manufacture of labels and tags of paper, cardboard, metal, celluloid, etc.; baggage and other checks; labels for clothing; patent indexes; laundry and shipping tags; pin tickets; gummed stickers, etc.

Wall paper.—The establishments in this industry are engaged primarily in designing and printing wall paper, using as their principal material "hanging paper" manufactured in paper mills.

Paper goods, not elsewhere classified.—The establishments in this industry are engaged primarily in the manufacture, from purchased paper stock, of waxed paper; glazed and fancy paper; toilet paper; coated book paper; gummed tape; paper cups, dishes, spoons, etc.; paper napkins; water-proof wrapping paper; paper towels; crêpe and lace paper; bottle caps; playing cards; paper cores and tubes; egg-case fillers; bag, barrel, and trunk linings; adding-machine and cash-register paper; soda straws; stencil paper; etc.

Statistics of products.—The differences between the values of the several classes of products as given in Table 3 and the values of the products of the corresponding industries as given in Tables 1 and 2 are due to the fact that the statistics in Table 3 cover the entire output of the items, regardless of the industries reporting them, whereas the statistics in Tables 1 and 2 relate, respectively, to the establishments whose principal products are those from which the industries derive their titles.

To illustrate: The total value of envelopes given in Table 3, $57,657,514, is made up of $56,605,538 representing the value of envelopes manufactured in the envelope industry and $1,051,976 representing the value of envelopes made as secondary products in other industries; whereas the total value of products for the envelope industry $61,286,992 (Tables 1 and 2), is made up of the value of envelopes manufactured in the industry, $56,605,538, and the value of secondary products normally belonging to other industries, $4,681,454.

TABLE 1.—CONVERTED-PAPER-PRODUCTS INDUSTRIES—SUMMARY FOR THE GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size. See also second paragraph of text, p. 541]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
THE GROUP AS A WHOLE							
1929	2,243	105,344	$114,253,011	$369,361,396	$686,136,843	$316,775,447	198,373
1927	2,043	101,077	110,151,573	358,252,348	647,908,013	289,655,665	170,888
1925	1,964	97,660	102,951,437	313,797,212	574,931,804	261,134,592	147,697
1923	1,939	98,349	98,667,307	305,036,842	549,623,084	244,586,242	134,939
1921	1,862	79,462	75,674,033	223,077,821	404,304,469	181,286,648	[3]
1919	1,948	94,356	77,033,649	253,425,574	462,385,826	208,960,252	117,747
1914	1,734	78,295	35,598,594	101,651,540	187,542,496	85,890,956	85,814
1909	1,635	68,812	26,889,758	77,227,555	145,469,142	68,241,587	58,406
1904	1,337	55,238	19,453,211	51,019,075	97,081,678	46,062,603	37,554
1899	1,179	44,620	14,935,800	37,228,548	70,857,106	33,628,558	24,131
Per cent of increase or decrease (–):							
1927–1929	9.8	4.2	3.7	3.1	5.9	9.4	16.1
1925–1927	4.0	3.5	7.0	14.2	12.7	10.9	15.7
1923–1925	1.3	–0.7	4.3	2.9	4.6	6.8	9.5
1921–1923	4.1	23.8	30.4	36.7	35.9	34.9	
1919–1921	–4.4	–15.8	–1.8	–12.0	–12.5	–13.2	
1919–1929	15.1	11.6	48.3	45.7	48.4	51.6	68.5
1909–1919	19.1	37.1	186.5	228.2	217.9	206.2	101.6
1899–1909	38.7	54.2	80.0	107.4	105.3	102.9	142.0

See footnotes at end of table.

TABLE 1.—CONVERTED-PAPER-PRODUCTS INDUSTRIES—SUMMARY FOR THE GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1899 TO 1929—Continued

[See note at head of this table]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
BAGS, PAPER, EXCLUSIVE OF THOSE MADE IN PAPER MILLS							
1929	95	6,970	$6,661,235	$43,238,392	$64,621,192	$21,382,800	13,416
1927	88	6,463	6,393,675	40,734,599	57,489,652	16,755,053	9,336
1925	66	5,585	5,523,708	29,956,962	45,977,902	16,020,940	6,414
1923	64	4,686	4,586,991	29,375,224	42,272,470	12,897,246	6,108
1921	57	3,707	3,475,487	29,797,291	41,190,179	11,392,888	(3)
1919	75	4,168	3,662,830	33,350,481	47,263,990	13,913,509	4,429
1914	59	3,505	1,659,070	12,200,884	17,602,543	5,401,659	3,677
1909	74	3,212	1,306,342	10,354,592	15,697,959	5,343,367	3,817
1904	62	2,473	930,171	6,594,976	10,086,863	3,491,887	2,591
1899	63	1,989	628,033	4,499,416	6,799,425	2,300,009	1,940
Per cent of increase or decrease (−):							
1927–1929	(4)	7.8	4.2	6.1	12.4	27.6	43.7
1925–1927	(4)	15.7	15.7	36.0	25.0	4.6	45.6
1923–1925	(4)	19.2	20.4	2.0	8.8	24.2	5.0
1921–1923	(4)	26.4	32.0	−1.4	2.6	13.2	----------
1919–1921	(4)	−11.1	−5.1	−10.7	−12.9	−18.1	----------
1919–1929	(4)	67.2	81.9	29.6	36.7	53.7	202.9
1909–1919	(4)	29.8	180.4	222.1	201.1	160.4	16.0
1899–1909	(4)	61.5	108.0	130.1	130.9	132.3	96.8
BOXES, PAPER, NOT ELSEWHERE CLASSIFIED							
1929	1,249	55,654	$57,109,700	$159,839,577	$294,253,296	$134,413,719	80,064
1927	1,219	56,398	57,700,664	168,463,709	306,555,062	138,091,263	81,309
1925	1,229	57,148	57,172,027	151,711,699	281,943,969	130,232,270	76,185
1923	1,216	56,855	53,965,852	144,079,470	264,209,159	120,129,689	61,687
1921	1,191	46,242	40,476,681	88,267,758	174,248,477	85,980,719	(3)
1919	1,201	55,862	43,325,554	101,135,292	206,419,343	105,284,051	54,675
1914	1,043	45,311	18,704,790	36,268,370	74,711,047	38,442,677	37,340
1909	949	39,514	14,015,383	25,716,241	54,450,015	28,733,774	21,703
1904	796	32,082	10,207,827	16,685,826	36,866,589	20,180,763	13,717
1899	729	27,653	8,151,025	11,765,424	27,316,317	15,550,893	7,919
Per cent of increase or decrease (−):							
1927–1929	2.5	−1.3	−1.0	−1.0	−4.0	−2.7	−1.5
1925–1927	−0.8	−1.3	0.9	11.0	8.7	6.0	6.7
1923–1925	1.1	0.5	5.9	5.3	6.7	8.4	23.5
1921–1923	2.1	23.0	33.3	63.2	51.6	39.7	----------
1919–1921	−0.8	−17.2	−6.6	−12.7	−15.6	−18.3	----------
1919–1929	4.0	−0.4	31.8	58.0	42.6	27.7	46.4
1909–1919	26.6	41.4	209.1	293.3	279.1	266.4	151.9
1899–1909	30.7	42.9	71.9	118.6	99.3	84.8	174.1
CARDBOARD, NOT MADE IN PAPER MILLS							
1929	13	609	$819,178	$2,665,258	$5,629,498	$2,964,240	1,549
1927	9	658	848,807	2,868,056	5,581,164	2,713,108	1,779
1925	13	978	1,188,290	3,474,507	7,288,016	3,813,509	1,795
1923	15	1,176	1,339,370	5,331,704	9,339,814	4,008,110	2,354
1921	20	1,157	1,172,139	3,914,393	7,041,962	3,727,569	(3)
1919	16	1,425	1,337,177	4,953,915	9,138,415	4,184,500	3,251
1914	18	1,159	579,942	2,962,334	4,350,347	1,388,013	2,685
1909	12	925	414,294	2,667,855	3,779,080	1,111,225	(5)
1904	4	586	234,490	926,964	1,564,303	637,339	1,028
1899	5	626	264,427	705,527	1,270,416	564,889	790
Per cent of increase or decrease (−):							
1927–1929	(4)	−7.3	−3.5	−7.1	0.9	9.3	−12.9
1925–1927	(4)	−32.7	−28.6	−17.5	−23.4	−28.9	−0.9
1923–1925	(4)	−16.8	−11.3	−34.8	−22.0	−4.9	−23.7
1921–1923	(4)	1.6	14.3	36.2	22.2	7.5	----------
1919–1921	(4)	−18.8	−12.3	−21.0	−16.4	−10.9	----------
1919–1929	(4)	−57.3	−38.7	−46.2	−38.4	−29.2	−52.4
1909–1919	(4)	54.1	222.8	85.7	141.8	276.6	----------
1899–1909	(4)	47.8	56.7	278.1	197.5	96.7	----------
CARD CUTTING AND DESIGNING							
1929	70	2,338	$2,725,047	$9,285,931	$19,648,179	$10,362,248	3,909
1927	60	2,024	2,706,633	7,544,043	16,871,312	9,327,269	3,915
1925	49	1,086	1,083,764	2,436,165	6,201,284	3,765,119	1,855
1923	47	1,207	1,242,242	2,643,095	6,109,298	3,466,203	1,262
1921	49	762	803,406	2,018,892	4,557,834	2,538,942	(3)
1919	75	1,148	958,877	2,298,389	5,323,349	3,024,960	743
1914	58	517	264,895	420,736	1,054,904	634,168	441
1909	68	525	237,775	374,113	1,031,392	657,279	217
1904	60	696	261,023	477,609	1,083,278	605,669	170
1899	43	325	135,139	312,760	618,488	305,728	178
Per cent of increase or decrease (−):							
1927–1929	(4)	15.5	0.7	23.1	16.5	11.1	−0.2
1925–1927	(4)	86.4	149.7	209.7	172.1	147.7	188.9
1923–1925	(4)	−10.0	−12.8	−7.8	1.5	8.6	7.4
1921–1923	(4)	58.4	54.6	30.9	34.0	36.5	----------
1919–1921	(4)	−33.6	−16.2	−12.2	−14.4	−16.1	----------
1919–1929	(4)	103.7	184.2	304.0	269.1	242.6	426.1
1909–1919	(4)	118.7	303.3	514.4	416.1	360.2	242.4
1899–1909	(4)	61.5	75.9	19.6	66.8	115.0	21.9

See footnotes at end of table

TABLE 1.—CONVERTED-PAPER-PRODUCTS INDUSTRIES—SUMMARY FOR THE GROUP AND FOR EACH INDUSTRY, FOR THE UNITED STATES: 1899 TO 1929—Continued

[See note at head of this table]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
ENVELOPES							
1929	171	10,367	$11,526,849	$29,927,683	$61,286,992	$31,359,309	13,077
1927	153	9,745	10,754,636	28,973,192	56,006,225	27,033,033	11,391
1925	135	9,052	9,987,202	27,423,300	51,188,914	23,765,614	10,288
1923	132	9,241	9,525,054	27,527,875	50,751,558	23,223,683	9,904
1921	123	7,944	8,180,523	24,051,507	43,910,409	19,858,902	[3]
1919	106	8,129	6,649,989	21,964,743	39,664,077	17,699,334	7,124
1914	90	6,970	3,378,184	10,234,841	18,481,013	8,246,172	5,196
1909	78	5,303	2,226,187	7,566,906	13,453,522	5,886,526	3,091
1904	72	4,208	1,629,511	5,974,948	10,222,366	4,247,418	1,971
1899	51	2,984	1,150,463	3,665,275	6,299,330	2,634,055	1,392
Per cent of increase or decrease (−):							
1927–1929	11.8	6.4	7.2	3.3	9.4	16.0	14.8
1925–1927	13.3	7.7	7.7	5.7	9.4	13.7	10.7
1923–1925	2.3	−2.0	4.9	−0.4	0.9	2.3	3.9
1921–1923	7.3	16.3	16.4	14.5	15.6	16.9	----------
1919–1921	16.0	−2.3	23.0	9.5	10.7	12.2	----------
1919–1929	61.3	27.5	73.3	36.3	54.5	77.2	83.6
1909–1919	[4]	53.3	198.7	190.3	194.8	200.7	130.5
1899–1909	[4]	77.7	93.5	106.5	113.6	123.5	122.1
LABELS AND TAGS							
1929	153	4,474	$5,868,952	$10,555,674	$28,042,325	$17,486,651	6,473
1927	121	6,141	8,000,426	16,259,439	34,397,630	18,138,191	6,869
1925	113	5,356	6,730,184	13,095,856	28,045,440	14,949,584	4,808
1923	103	5,048	6,224,101	12,129,804	26,023,030	13,893,226	4,538
1921	89	4,152	4,776,868	8,819,700	19,538,302	10,718,602	[3]
1919	119	5,227	4,549,902	11,274,767	24,243,992	12,969,225	4,033
1914	108	2,600	1,458,777	2,907,876	6,584,058	3,676,182	2,155
1909	96	2,313	1,122,548	1,910,339	4,669,965	2,759,626	1,462
1904	67	1,348	609,439	957,028	2,462,497	1,505,469	817
1899	47	754	289,273	387,517	1,104,652	717,135	280
Per cent of increase or decrease (−):							
1927–1929	26.4	−27.1	−26.6	−35.1	−18.5	−3.6	−5.8
1925–1927	7.1	14.7	18.9	24.2	22.6	21.3	42.9
1923–1925	9.7	6.1	8.1	8.0	7.8	7.6	5.9
1921–1923	15.7	21.6	30.3	37.5	33.2	29.6	----------
1919–1921	−25.2	−20.6	5.0	−21.8	−19.4	−17.4	----------
1919–1929	28.6	−14.4	29.0	−6.4	15.7	34.8	60.5
1909–1919	[4]	126.0	305.3	490.2	419.1	370.0	175.9
1899–1909	[4]	206.8	288.1	393.0	322.8	284.8	422.1
WALL PAPER							
1929	56	4,705	$5,731,932	$13,480,205	$30,007,649	$16,527,444	12,740
1927	53	4,811	5,981,451	14,612,415	30,059,153	15,446,738	13,343
1925	49	5,069	5,862,765	14,999,041	30,069,005	15,069,964	11,528
1923	51	5,412	6,221,266	16,991,411	34,755,700	17,764,289	11,246
1921	43	3,988	4,981,572	16,336,110	29,147,905	12,811,795	[3]
1919	48	4,262	3,882,396	13,152,503	23,047,901	9,895,398	8,123
1914	48	4,738	2,703,175	8,536,255	15,887,123	7,350,868	6,930
1909	45	4,037	2,038,937	7,623,351	14,449,247	6,825,896	5,680
1904	44	3,913	1,868,213	6,658,165	12,636,580	5,978,415	4,615
1899	51	4,172	2,074,138	6,072,809	10,663,209	4,590,400	4,156
Per cent of increase or decrease (−):							
1927–1929	[4]	−2.2	−4.2	−7.7	−0.2	7.0	−4.5
1925–1927	[4]	−5.1	2.0	−2.6	[5]	2.5	15.7
1923–1925	[4]	−6.3	−5.8	−11.7	−13.5	−15.2	2.5
1921–1923	[4]	35.7	24.9	4.0	19.2	38.7	----------
1919–1921	[4]	−6.4	28.3	24.2	26.5	29.5	----------
1919–1929	[4]	10.4	47.6	2.5	30.2	67.0	56.8
1909–1919	[4]	5.6	90.4	72.5	59.5	45.0	43.0
1899–1909	[4]	−3.2	−1.7	25.5	35.5	48.7	36.7
PAPER GOODS, NOT ELSEWHERE CLASSIFIED							
1929	436	20,227	$23,810,118	$100,368,676	$182,047,712	$82,279,036	67,145
1927	340	14,837	17,765,281	78,796,805	140,947,815	62,151,010	42,955
1925	310	13,386	15,403,497	70,699,682	124,217,274	53,517,592	35,324
1923	311	14,724	15,562,431	66,958,259	116,162,055	49,203,796	37,840
1921	290	11,510	11,807,357	49,872,170	84,129,401	34,257,231	[3]
1919	308	14,135	12,666,924	65,295,484	107,284,759	41,989,275	35,369
1914	310	13,495	6,849,761	28,120,244	48,871,461	20,751,217	26,890
1909	313	12,983	5,528,292	21,014,068	37,937,962	16,923,894	22,436
1904	232	9,842	3,712,537	12,743,559	22,159,202	9,415,643	12,645
1899	190	6,117	2,242,702	9,819,820	16,785,269	6,965,449	7,476
Per cent of increase or decrease (−):							
1927–1929	28.2	36.3	34.0	27.4	29.6	32.4	56.3
1925–1927	9.7	10.8	15.3	11.5	13.5	16.1	21.6
1923–1925	−0.3	−0.1	−1.0	5.6	6.9	8.8	−6.7
1921–1923	7.2	27.0	31.8	34.3	38.1	43.6	----------
1919–1921	−5.8	−18.6	−6.8	−23.6	−21.6	−18.4	----------
1919–1929	41.6	43.1	88.0	53.7	70.2	96.0	89.8
1909–1919	−1.6	8.9	129.1	210.7	182.8	148.1	57.6
1899–1909	64.7	112.2	146.5	114.0	126.0	143.0	200.1

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.
[5] Not available.
[6] Less than one-tenth of 1 per cent.

TABLE 2.—GENERAL STATISTICS FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, BY STATES: 1929, 1927, AND 1919

[This table presents, for each industry, statistics separately for each State for which figures can be given for 1929 without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials and containers	Fuel and purchased energy	Value of products [1]	Value added by manufacture [2]
BAGS, PAPER, EXCLUSIVE OF THOSE MADE IN PAPER MILLS														
United States	1929	95	[3] 873	6,970	13,416	1,048	12,368	$2,347,743	$6,661,235	$43,238,392	$42,887,265	$351,127	$64,621,192	$21,382,800
	1927	88	[3] 833	6,463	9,336	1,190	8,146	2,112,610	6,393,675	40,734,599	40,439,859	294,740	57,489,652	16,755,053
	1919	75	[3] 878	4,168	4,429	1,642	2,787	2,175,360	3,662,830	33,350,481	33,177,718	172,763	47,263,990	13,913,509
Individual States:														
Illinois	1929	5	67	405	738	-------	738	152,599	513,249	2,322,182	2,287,813	34,369	3,476,530	1,154,348
	1927	4	55	458	691	125	566	124,981	435,657	3,022,002	2,993,614	28,388	4,194,661	1,172,659
Louisiana	1929	6	31	590	818	-------	818	61,562	428,208	2,874,623	2,847,904	26,719	3,952,211	1,077,588
Massachusetts	1929	4	22	193	256	100	156	52,079	212,204	1,344,642	1,334,198	10,444	1,833,191	488,549
	1927	4	24	203	371	100	271	53,627	209,190	1,628,806	1,617,605	11,201	2,222,451	593,645
	1919	4	17	162	423	216	207	27,238	124,945	783,752	776,075	7,677	1,100,519	316,767
New Jersey	1929	4	9	70	81	-------	81	36,150	66,716	245,691	243,260	2,431	569,716	324,025
	1927	3	17	55	50	-------	50	39,377	50,370	218,795	214,248	4,547	507,672	288,877
New York	1929	32	285	1,947	3,099	30	3,069	822,727	1,926,810	14,304,202	14,225,671	78,531	21,224,070	6,919,868
	1927	27	253	1,656	2,798	25	2,773	671,262	1,747,986	13,613,237	13,533,896	79,341	18,482,290	4,869,053
	1919	23	204	1,289	991	200	791	606,161	1,150,412	10,052,000	9,990,250	61,750	14,071,692	4,019,692
Ohio	1929	14	146	1,075	1,866	300	1,566	503,801	1,108,677	6,531,076	6,461,183	69,893	10,743,189	4,212,113
	1927	14	117	1,050	1,449	300	1,149	331,273	1,041,435	6,652,237	6,597,639	54,598	9,722,338	3,070,101
	1919	11	229	694	785	590	195	592,109	653,579	9,139,232	9,109,811	29,421	12,609,656	3,470,424
Pennsylvania	1929	11	119	579	1,119	268	851	246,182	727,017	3,161,883	3,119,893	41,990	5,152,646	1,990,763
	1927	10	100	588	1,134	235	899	246,549	787,499	3,292,790	3,256,466	36,324	4,955,122	1,662,332
	1919	13	27	307	281	235	46	53,182	236,288	1,185,216	1,178,462	6,754	1,833,856	648,640
Groups of States:														
Ala., 1 est.; Ga., 1; Tex., 1	1929	3	36	284	588	275	313	94,344	178,486	974,020	965,371	8,649	1,866,242	892,222
Calif., 1 est.; Wash., 2	1929	3	28	333	2,770	-------	2,770	62,139	297,809	2,898,055	2,888,375	9,680	3,598,386	700,331
Ind., 2 est.; Mich., 1; Wis., 3	1929	6	77	735	805	-------	805	188,370	597,001	3,781,654	3,754,993	26,661	5,536,305	1,754,651
Me., 2 est.; Md., 3; Va., 2	1929	7	53	759	1,276	75	1,201	127,790	605,058	4,800,364	4,758,604	41,760	6,668,706	1,868,342
States not shown separately:	[4] 1927	26	267	2,453	2,843	405	2,438	645,541	2,121,568	12,306,732	12,226,391	80,341	17,405,118	5,098,386
	[5] 1919	24	401	1,716	1,949	401	1,548	896,670	1,497,606	12,190,281	12,123,120	67,161	17,648,267	5,457,986
BOXES, PAPER, NOT ELSEWHERE CLASSIFIED														
United States	1929	1,249	[6] 7,860	55,654	80,064	12,208	67,856	22,314,874	57,109,700	159,839,577	156,045,925	2,893,652	294,253,296	134,413,719
	1927	1,219	[6] 7,739	56,398	81,300	15,379	65,921	20,738,937	57,700,664	168,463,799	165,373,368	3,090,431	306,555,062	138,091,263
	1919	1,201	[6] 6,779	55,862	[7] 54,675	25,559	[7] 29,116	15,572,451	43,325,554	101,135,292	98,932,387	2,202,905	206,419,343	105,284,051
Individual States:														
California	1929	38	250	1,482	3,109	-------	3,109	698,184	1,733,250	5,797,260	5,745,846	51,423	10,264,694	4,467,425
	1927	45	316	1,857	3,748	-------	3,748	761,604	2,358,369	6,420,938	6,363,875	57,063	11,918,464	5,497,526
	1919	31	192	1,253	1,315	-------	1,315	408,399	1,010,844	2,671,301	2,647,124	24,177	4,988,121	2,316,820
Colorado	1929	4	23	177	212	-------	212	82,042	145,459	301,212	294,081	7,131	683,723	382,511
	1927	4	20	170	177	-------	177	58,012	149,663	295,724	288,403	7,321	642,953	347,229
Connecticut	1929	47	206	2,290	3,106	275	2,831	675,536	2,486,171	4,571,288	4,434,714	136,574	10,160,766	5,589,478
	1927	42	233	2,021	4,121	365	3,756	776,604	2,124,625	4,591,784	4,481,631	110,153	8,916,590	4,324,806
	1919	44	189	2,267	3,027	1,812	1,215	564,051	1,551,464	3,342,114	3,271,435	70,679	7,446,403	4,104,289
Georgia	1929	10	48	304	304	40	264	128,987	224,882	620,619	593,399	27,220	1,143,936	523,317
	1927	9	76	393	363	150	213	230,963	260,746	840,016	827,008	13,008	1,817,213	977,197
	1919	10	113	488	495	175	320	360,356	304,480	2,301,411	2,286,959	14,452	3,660,610	1,359,199
Illinois	1929	108	874	5,382	7,384	2,478	4,861	2,600,876	6,080,344	17,524,318	17,244,621	279,697	31,885,633	14,361,315
	1927	110	878	5,936	8,654	1,809	6,845	2,517,802	6,997,010	21,410,623	21,088,840	321,783	37,585,955	16,175,332
	1919	87	904	5,923	8,195	4,909	3,286	2,224,009	5,170,085	15,555,825	15,260,475	295,350	28,893,083	13,337,258
Indiana	1929	26	406	2,198	3,436	450	2,986	810,060	2,365,769	8,621,233	8,478,212	143,021	14,491,474	5,870,241
	1927	26	333	1,854	2,940	480	2,460	730,066	2,135,816	8,626,317	8,488,005	138,312	13,831,025	5,204,708
	1919	21	242	1,562	1,541	530	1,011	453,458	1,181,090	4,405,560	4,339,156	66,404	8,406,158	4,000,598
Iowa	1929	10	50	283	335	-------	335	102,930	254,632	682,189	666,202	15,987	1,291,729	609,540
	1927	11	45	294	358	-------	358	116,548	243,430	807,882	792,555	15,327	1,457,815	649,933
	1919	10	24	238	178	60	118	40,238	142,137	978,332	971,072	7,260	1,437,596	459,264
Louisiana	1929	7	41	310	342	-------	342	126,522	204,584	876,236	869,644	6,592	1,551,610	675,374
	1927	7	30	296	340	80	260	83,400	186,286	614,873	603,647	11,226	1,138,653	523,780
	1919	6	34	324	146	-------	146	69,719	161,452	420,017	413,781	6,236	794,883	374,866
Maine	1929	13	28	279	198	-------	198	58,511	212,664	341,030	331,563	9,467	728,094	387,064
	1927	12	27	285	273	-------	273	59,988	210,634	336,595	326,947	9,648	729,086	392,491
	1919	15	40	443	409	180	229	57,621	277,946	529,852	515,450	14,402	1,239,524	709,672
Maryland	1929	29	133	1,301	2,578	1,205	1,373	351,739	1,012,701	2,878,613	2,814,974	63,639	5,145,429	2,266,816
	1927	20	156	1,228	1,566	28	1,538	351,616	977,542	2,502,319	2,455,621	46,698	4,993,916	2,491,597
	1919	23	206	1,898	2,099	757	1,342	433,438	1,430,144	3,405,741	3,332,264	73,477	6,234,094	2,828,353

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [1]	Value added by manufacture [2]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
BOXES, PAPER, NOT ELSEWHERE CLASSIFIED—continued.														
Massachusetts	1929	110	778	5,349	6,312	395	5,917	$1,914,359	$5,422,332	$13,505,859	$13,263,582	$242,277	$25,247,448	$11,741,589
	1927	117	751	5,300	6,664	485	6,179	1,763,321	5,135,138	12,504,680	12,254,736	249,944	24,263,922	11,759,242
	1919	102	482	4,711	4,166	1,270	2,896	1,185,318	3,547,093	7,463,490	7,326,670	136,820	15,666,081	8,202,591
Michigan	1929	23	129	1,453	1,457	15	1,442	353,527	1,668,224	7,424,118	7,324,575	99,543	10,282,656	2,858,538
	1927	22	136	1,156	1,463	15	1,448	416,846	1,226,304	5,096,763	5,036,707	60,056	8,006,313	2,909,550
	1919	22	175	2,336	5,226	3,935	1,291	442,570	2,161,400	5,286,045	4,976,235	309,810	10,934,722	5,648,677
Minnesota	1929	17	164	781	2,339	--------	2,339	394,670	812,882	2,990,672	2,937,027	53,645	5,015,112	2,024,440
	1927	17	134	864	2,520	--------	2,520	363,472	924,217	2,704,295	2,676,491	27,804	4,705,497	2,001,202
	1919	16	77	711	523	--------	523	185,024	482,918	962,930	936,155	26,775	2,085,980	1,123,050
Missouri	1929	53	425	2,958	4,395	250	4,145	1,106,819	2,700,501	8,570,102	8,446,734	123,368	14,977,672	6,407,570
	1927	53	437	2,774	3,846	335	3,511	1,094,256	2,677,610	8,383,822	8,245,453	138,369	15,080,185	6,696,363
	1919	41	332	2,369	1,550	165	1,385	794,675	1,502,606	4,956,169	4,744,582	211,587	8,857,121	3,900,952
New Hampshire	1929	8	29	141	234	70	164	71,674	119,107	374,707	365,216	9,491	674,698	299,991
	1927	9	22	168	373	175	198	48,151	140,369	408,102	397,113	10,989	710,006	301,904
	1919	8	20	240	270	108	162	40,885	169,868	321,895	315,366	6,529	691,832	369,937
New Jersey	1929	66	367	2,945	6,371	785	5,586	1,204,094	3,171,904	10,459,535	10,188,879	270,706	17,520,497	7,060,912
	1927	63	388	2,996	6,728	1,883	4,845	1,230,150	3,200,942	9,755,873	9,557,165	198,708	17,541,113	7,785,240
	1919	51	324	2,659	2,198	740	1,458	765,658	2,070,890	3,745,339	3,657,008	88,331	8,201,921	4,456,582
New York	1929	343	1,766	12,290	13,958	2,834	11,124	5,819,639	13,531,733	28,954,931	28,427,372	527,559	62,509,788	33,554,857
	1927	317	1,716	12,646	13,814	3,173	10,641	4,711,010	13,895,890	32,074,434	31,353,087	721,347	66,727,643	34,653,209
	1919	387	1,836	14,509	12,060	6,952	5,108	4,507,870	12,792,650	22,724,739	22,268,532	456,207	53,164,253	30,439,514
North Carolina	1929	9	28	422	438	--------	438	83,864	271,930	764,754	751,344	13,410	1,459,255	694,501
	1927	9	18	311	198	--------	198	38,386	215,220	471,338	462,500	8,838	933,305	461,967
	1919	5	6	102	53	--------	53	8,667	50,668	77,871	75,557	2,314	171,293	93,422
Ohio	1929	71	439	3,846	9,348	1,215	8,133	1,300,452	4,227,200	13,795,334	13,495,706	299,628	23,496,427	9,701,093
	1927	66	384	3,821	9,586	4,294	5,292	1,195,424	4,182,365	16,439,552	16,046,234	393,318	25,717,846	9,278,294
	1919	58	299	2,952	2,893	768	2,125	638,348	2,034,909	4,804,671	4,721,322	83,349	10,029,812	5,225,141
Oregon	1929	9	30	219	276	45	231	89,927	221,410	387,161	379,917	7,244	866,513	479,352
	1927	8	22	217	240	60	180	54,207	191,939	350,097	342,079	8,018	785,528	435,431
	1919	5	15	169	167	50	117	46,984	124,739	304,139	298,585	5,554	585,249	281,110
Pennsylvania	1929	131	709	5,276	5,288	328	4,960	1,905,061	4,670,323	10,093,292	9,876,456	216,836	21,367,664	11,274,372
	1927	131	660	5,269	4,570	409	4,161	1,833,447	4,641,754	10,473,322	10,274,486	193,836	20,944,864	10,471,542
	1919	150	523	5,209	3,188	1,221	1,967	1,001,412	3,300,037	6,608,972	6,465,141	143,831	14,002,789	7,393,817
Rhode Island	1929	12	81	563	430	155	284	221,619	485,337	593,101	577,212	15,889	1,700,505	1,107,404
	1927	11	62	528	432	155	277	158,137	468,230	571,039	556,258	14,781	1,485,645	914,606
	1919	13	34	456	179	10	169	54,207	290,558	286,462	277,653	8,809	811,934	525,472
Tennessee	1929	12	84	722	980	225	755	278,279	600,910	1,960,920	1,926,997	33,923	3,282,998	1,322,078
	1927	12	92	672	819	90	729	255,101	510,914	2,177,912	[3]2,151,999	25,913	3,332,092	1,154,180
	1919	8	92	635	242	50	192	156,256	475,164	1,396,012	1,377,047	18,965	2,401,363	1,005,351
Texas	1929	9	43	326	284	--------	284	92,424	242,505	995,627	981,025	14,602	1,651,047	655,420
	1927	8	32	275	241	--------	241	70,621	185,847	650,680	639,670	11,010	1,149,497	498,817
Virginia	1929	12	74	509	656	60	596	167,120	436,611	1,441,865	1,418,702	23,163	2,509,922	1,068,057
	1927	13	59	567	692	--------	692	150,467	434,240	1,464,796	1,443,841	20,955	2,460,333	995,537
	1919	16	70	631	565	95	470	123,237	383,859	851,572	837,079	14,493	1,708,371	856,799
Washington	1929	14	56	257	278	--------	278	107,440	246,560	733,684	723,678	10,006	1,374,441	640,757
	1927	12	47	258	346	--------	346	139,613	260,594	690,352	668,047	22,305	1,385,727	695,375
	1919	11	36	329	213	--------	213	87,552	249,117	452,469	445,506	6,963	973,316	520,847
West Virginia	1929	7	47	365	887	--------	887	112,074	368,068	2,176,929	2,151,277	25,652	3,320,637	1,143,708
	1927	6	46	334	768	--------	768	101,908	307,373	2,056,863	2,022,047	34,816	3,116,449	1,059,586
	1919	4	27	154	261	--------	261	58,100	125,940	604,275	595,736	8,539	981,032	376,757
Wisconsin	1929	30	310	1,865	2,544	480	2,064	878,195	1,839,438	6,701,816	6,595,769	106,047	10,995,936	4,294,120
	1927	28	443	2,077	3,113	510	2,603	961,396	2,092,703	9,665,337	9,526,588	138,749	15,263,525	5,598,188
	1919	24	230	1,636	878	206	672	387,216	1,174,184	2,454,594	2,416,750	37,844	5,094,717	2,640,123
Groups of States: Ala., 1 est.; Ark., 2; Ky., 5	1929	8	68	368	613	--------	613	217,586	323,848	1,773,156	1,753,230	19,926	2,732,069	958,913
Kans., 3 est.; Nebr., 1; Okla., 2; S. Dak., 1; Utah, 2	1929	9	96	857	1,942	875	1,067	278,932	916,334	3,854,976	3,818,338	36,638	5,701,321	1,846,345
Del., 1 est.; D. C., 2; Vt., 1	1929	4	12	76	71	33	38	21,732	62,037	72,981	69,633	3,348	219,602	146,621
States not shown separately	[4] 1927	22	176	1,831	2,347	883	1,464	466,391	1,314,894	6,077,471	6,002,335	75,136	9,853,902	3,776,431
	[5] 1919	33	257	1,658	2,918	1,566	1,352	477,183	1,153,712	4,223,495	4,159,747	63,748	6,957,035	2,733,590

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [1]	Value added by manufacture [2]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
CARDBOARD, NOT MADE IN PAPER MILLS														
United States	1929	13	[18] 210	609	1,549	1,030	519	$853,208	$819,178	$2,665,258	$2,618,559	$46,699	$5,629,498	$2,964,240
	1927	9	[19] 238	658	1,779	1,025	754	788,260	848,807	2,808,056	2,816,283	51,773	5,581,164	2,713,108
	[11] 1919	16	[19] 287	1,425	[7] 3,251	2,555	[7] 696	743,723	1,337,177	4,953,915	4,802,293	151,622	9,138,415	4,184,500
Individual States: Pennsylvania	1929	3	107	258	649	580	69	421,820	343,622	1,030,730	1,011,348	19,382	2,488,822	1,458,092
	1927	3	143	331	761	575	186	469,945	418,462	1,176,479	1,159,344	17,135	2,497,655	1,321,176
Groups of States: Ill., 3 est.; Ind., 1; Nebr., 1	1929	5	55	121	218	----------	218	226,110	184,272	501,742	492,992	8,750	1,214,103	712,361
Mass., 1 est.; N. Y., 3; R. I., 1	1929	5	48	230	682	450	232	205,278	291,284	1,132,786	1,114,219	18,567	1,926,573	793,787
States not shown separately	[12] 1927	6	95	327	1,018	450	568	318,315	430,345	1,691,577	1,656,939	34,638	3,083,509	1,391,932
CARD CUTTING AND DESIGNING														
United States	1929	70	[13] 470	2,338	3,909	1,087	2,822	1,383,196	2,725,047	9,285,931	9,180,771	105,160	19,648,179	10,362,248
	1927	60	[13] 450	2,024	3,915	1,140	2,775	1,227,691	2,706,633	7,544,043	7,443,530	100,513	16,871,312	9,327,269
	1919	75	[13] 180	1,148	743	113	630	442,902	958,877	2,298,389	2,269,678	28,711	5,323,349	3,024,960
Individual States: Massachusetts	1929	6	79	232	321	----------	321	166,492	240,865	822,564	810,436	12,128	1,717,194	894,630
	1927	5	37	81	92	----------	92	76,737	84,111	265,505	261,864	3,641	660,391	394,886
	1919	6	4	8	15	5	10	6,091	7,003	21,044	20,785	259	44,795	23,751
Michigan	1929	5	83	494	1,273	475	798	349,672	619,804	3,772,047	3,742,497	29,550	5,850,673	2,078,626
	1927	4	64	380	1,000	520	480	278,358	508,833	2,477,834	2,453,710	24,124	3,933,613	1,455,779
New Jersey	1929	5	9	49	31	----------	31	32,341	94,793	109,622	108,327	1,295	303,192	193,570
	1927	7	9	62	99	----------	99	38,559	115,448	361,169	358,455	2,714	648,684	287,515
	1919	5	9	22	7	----------	7	19,328	33,192	92,863	91,901	962	191,998	99,135
New York	1929	27	118	590	756	----------	756	272,324	696,110	2,307,717	2,281,896	25,821	5,416,859	3,109,142
	1927	17	139	347	1,158	6	1,152	305,706	450,265	1,720,167	1,702,081	18,086	4,670,954	2,950,787
	1919	28	72	406	273	67	206	118,745	361,277	803,342	791,658	11,684	1,576,485	773,143
Ohio	1929	7	54	256	289	----------	289	213,429	269,612	469,717	458,972	10,745	1,489,865	1,020,148
	1927	6	76	472	455	----------	455	183,090	776,985	1,061,015	1,048,201	12,754	2,671,344	1,610,329
	1919	4	42	203	112	----------	112	123,547	169,922	259,230	255,980	3,250	850,123	590,893
Pennsylvania	1929	10	40	254	377	----------	377	148,276	283,160	353,320	346,651	6,669	1,068,635	715,315
	1927	10	44	249	275	----------	275	148,459	267,797	316,814	310,013	6,801	1,003,287	686,473
	1919	17	17	147	185	28	157	39,047	119,960	253,639	249,719	3,920	544,015	290,376
Groups of States: Calif., 1 est.; Ill., 3; Wis., 1	1929	5	72	391	741	600	141	182,293	435,536	779,245	765,952	13,293	1,895,594	1,116,349
D. C., 1 est.; Md., 1; Mo., 2; N. C., 1	1929	5	15	72	121	12	109	18,369	85,167	671,699	666,040	5,659	1,906,167	1,234,468
States not shown separately	[14] 1927	11	81	433	836	614	222	196,782	503,194	1,341,539	1,309,146	32,393	3,283,039	1,941,500
	[14] 1919	15	36	[8] 362	151	13	138	136,144	267,523	868,271	859,635	8,636	2,115,933	1,247,662
ENVELOPES														
United States	1929	171	[16] 2,027	10,367	13,077	3,494	9,583	5,424,496	11,526,849	29,927,683	29,492,924	434,759	61,286,992	31,359,309
	1927	153	[16] 1,718	9,745	11,391	3,036	8,355	4,176,574	10,754,636	28,973,192	28,570,493	402,699	56,006,225	27,033,033
	1919	106	[16] 1,331	8,129	[7] 7,124	3,001	[7] 4,123	2,798,311	6,649,989	21,964,743	21,731,660	233,083	39,664,077	17,699,334
Individual States: California	1929	9	82	398	462	----------	462	195,581	482,086	1,094,992	1,084,561	10,431	2,411,969	1,316,977
	1927	8	59	320	373	----------	373	116,748	406,543	914,268	905,971	8,297	1,943,606	1,029,338
Illinois	1929	20	241	1,123	1,802	229	1,573	750,364	1,465,328	2,778,403	2,720,462	57,941	7,116,213	4,337,810
	1927	21	297	1,305	1,927	134	1,793	809,569	1,694,120	3,828,425	3,759,914	68,511	8,539,163	4,710,738
	1919	17	251	1,394	1,309	134	1,175	519,174	1,185,578	3,326,299	3,281,992	44,307	6,431,059	3,104,760
Maryland	1929	4	17	92	150	----------	150	49,592	98,075	290,801	284,932	5,869	584,040	293,239
Massachusetts	1929	19	423	2,211	2,901	1,635	1,266	1,033,314	2,445,592	7,927,843	7,843,389	84,454	14,437,752	6,509,909
	1927	17	417	2,228	2,501	1,300	1,201	872,007	2,490,333	7,868,920	7,790,258	78,662	13,876,224	6,007,304
	1919	13	242	1,917	1,401	1,020	381	460,892	1,673,251	6,550,143	6,504,528	45,615	10,868,966	4,318,823
Michigan	1929	4	53	186	210	----------	210	154,540	219,931	613,237	601,099	12,138	1,325,562	712,325
	1927	4	34	168	281	----------	281	90,362	212,721	493,135	485,511	7,624	1,066,719	573,584
	1919	4	26	105	116	----------	116	38,070	96,594	217,448	213,775	3,673	455,305	237,857
Minnesota	1929	8	64	298	259	----------	259	95,354	276,546	581,143	572,516	8,627	1,334,221	753,078
	1927	7	46	254	225	----------	225	84,075	244,568	426,897	415,235	11,662	961,051	534,154
	1919	6	58	398	131	----------	131	96,613	177,374	291,267	285,245	6,022	674,393	383,126
Missouri	1929	12	143	528	655	225	430	403,265	537,132	1,350,258	1,322,952	27,306	3,154,242	1,803,984
	1927	12	93	467	723	225	498	249,796	503,786	1,419,256	1,397,144	22,112	2,848,061	1,428,805
	1919	7	101	467	612	245	367	272,304	355,385	812,422	799,639	12,783	1,952,440	1,140,018
New York	1929	36	341	1,515	1,777	360	1,417	1,004,210	1,755,530	4,270,747	4,190,915	79,832	9,058,092	4,787,845
	1927	33	339	1,564	1,772	410	1,362	758,939	1,663,761	3,795,906	3,722,165	73,741	7,859,898	4,063,992
	1919	21	254	1,144	910	465	445	599,789	878,433	2,581,725	2,545,426	36,299	5,287,694	2,705,969
Ohio	1929	12	170	1,648	1,646	375	1,271	444,905	1,800,401	5,078,565	5,030,118	48,447	9,145,795	4,067,230
	1927	9	87	1,558	1,247	382	865	290,553	1,630,969	5,749,034	5,693,338	55,696	9,530,241	3,781,207
	1919	7	78	1,021	1,106	570	536	221,435	879,539	3,877,818	3,846,974	30,844	5,892,541	2,014,723
Pennsylvania	1929	16	174	787	676	----------	676	501,836	734,121	1,725,676	1,696,580	29,096	4,093,238	2,367,562
	1927	13	95	557	497	25	472	293,896	546,970	1,225,913	1,203,951	21,962	2,626,688	1,400,775
	1919	11	89	473	466	35	431	180,627	375,228	853,051	837,562	15,489	1,903,478	1,050,427

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [1]	Value added by manufacture [2]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
ENVELOPES—contd.														
Groups of States: Colo., 2 est.; Oreg., 1; Utah, 1; Wash., 2	1929	6	27	110	125	-------	125	$63,131	$104,224	$232,667	$227,427	$5,240	$591,259	$358,592
Conn., 3 est.; D. C., 1; Ky., 1; N. J. 1; Va., 4	1929	10	175	892	1,319	545	774	391,203	998,326	2,461,303	2,426,937	34,366	4,639,718	2,178,415
Ga., 1 est.; La., 1; Tex., 2	1929	4	21	151	162	-------	162	73,545	132,620	279,281	271,358	7,923	731,068	451,787
Ind., 2 est.; Iowa, 2; Nebr., 2; Wis., 5	1929	11	96	428	933	125	808	263,656	476,937	1,242,767	1,219,678	23,089	2,663,823	1,421,056
States not shown separately.	[17]1927	29	251	1,324	1,845	560	1,285	610,629	1,360,865	3,251,438	3,197,006	54,432	6,754,574	3,503,136
	[18]1919	20	232	1,210	1,136	532	604	409,407	1,028,607	3,454,570	3,416,519	38,051	6,198,201	2,743,631
LABELS AND TAGS														
United States	1929	153	[19]997	4,474	6,473	524	5,949	3,107,478	5,868,952	10,555,674	10,328,852	226,822	28,042,325	17,486,651
	1927	121	[19]1,689	6,141	6,869	2,045	4,224	3,479,380	8,000,426	16,259,439	15,991,300	268,139	34,397,630	18,138,191
	1919	119	[19]1,348	5,227	[7]4,033	1,724	[7]2,309	2,458,276	4,549,902	11,274,767	11,120,220	154,547	24,243,992	12,969,225
Individual States: California	1929	8	37	169	340	-------	340	172,658	278,461	364,193	355,017	9,176	1,133,629	769,436
Illinois	1929	15	106	358	568	43	525	283,201	442,005	925,634	901,249	24,385	2,512,656	1,587,022
	1927	12	125	375	519	150	369	278,072	516,232	1,070,599	1,051,517	19,082	2,387,838	1,317,239
	1919	13	213	694	637	298	339	451,269	627,388	1,320,510	1,295,883	24,627	3,428,419	2,107,909
Massachusetts	1929	8	15	60	47	-------	47	97,101	72,568	148,284	145,972	2,312	503,929	355,645
Michigan	1929	8	39	164	208	-------	208	95,897	194,905	318,602	308,941	9,661	1,005,939	687,337
	1927	9	41	158	211	-------	211	105,028	175,548	426,598	419,189	7,409	948,736	522,138
	1919	7	33	81	78	-------	78	47,423	79,868	135,557	131,892	3,665	328,712	193,155
Missouri	1929	9	57	234	421	-------	421	219,634	284,890	641,407	630,592	10,815	1,283,445	642,038
	1927	6	30	110	103	-------	103	53,014	132,077	112,315	108,065	4,250	452,061	339,746
	1919	7	47	136	94	-------	94	83,193	113,250	147,169	143,754	3,415	435,435	288,266
New York	1929	48	265	977	1,579	-------	1,579	783,009	1,509,835	2,444,725	2,383,440	61,285	6,615,286	4,170,561
	1927	42	225	914	1,193	65	1,128	702,886	1,339,331	2,378,905	2,334,413	44,492	6,166,257	3,787,352
	1919	42	292	1,304	1,084	175	909	747,832	1,358,129	3,389,606	3,342,473	47,133	7,165,313	3,775,707
Ohio	1929	8	105	964	1,082	-------	1,082	428,024	1,446,582	2,407,081	2,373,387	33,694	6,413,004	4,005,923
	1927	7	175	1,185	1,501	725	776	561,297	1,537,176	3,322,857	3,276,506	46,351	6,969,139	3,646,282
	1919	9	46	228	244	-------	244	107,934	216,443	550,456	540,314	10,142	1,156,023	605,567
Pennsylvania	1929	15	175	723	648	36	612	387,493	606,226	1,530,051	1,501,594	28,457	3,751,725	2,221,674
	1927	13	159	740	437	31	406	325,704	681,861	1,278,585	1,246,163	32,422	3,194,995	1,916,410
	1919	13	97	489	299	40	259	350,539	385,475	805,640	791,826	13,814	2,406,769	1,601,129
Rhode Island	1929	4	44	177	558	390	168	185,786	158,362	294,776	287,680	7,096	902,907	608,131
Tennessee	1929	3	3	21	14	-------	14	9,800	35,606	41,529	38,959	2,570	121,079	79,541
Groups of States: Conn., 1 est.; Md., 2; N. H., 2; N. J., 5	1929	10	91	398	634	55	579	292,452	584,089	932,722	908,662	24,060	2,468,898	1,536,174
D. C., 1 est.; Ga., 1; Ky., 3; Va., 2; Ind., 1 est.; Minn., 1; Tex., 1; Wis., 2	1929	7	19	92	125	-------	125	38,411	92,841	190,159	184,281	5,878	543,302	353,143
Oreg., 3 est.; Wash., 2	1929	5	32	103	127	-------	127	103,171	128,766	261,006	255,214	5,792	653,251	392,245
	1929	5	9	34	62	-------	62	10,841	33,816	55,505	53,864	1,641	133,286	77,781
States not shown separately.	[20]1927	32	934	2,659	2,905	1,674	1,231	1,453,379	3,618,201	7,669,580	7,555,447	114,133	14,278,604	6,609,024
	[21]1919	28	620	2,295	1,625	1,211	414	670,086	1,769,349	4,925,829	4,874,078	51,751	9,323,321	4,397,492
WALL PAPER														
United States	1929	56	[22]715	4,705	12,740	6,660	6,080	2,550,885	5,731,932	13,480,205	12,990,809	489,396	30,007,649	16,527,444
	1927	53	[22]826	4,811	13,343	6,962	6,381	2,287,981	5,981,451	14,612,415	14,075,489	536,926	30,059,153	15,446,738
	1919	48	[22]833	4,262	[7]8,123	5,159	[7]2,964	1,767,335	3,882,396	13,152,503	12,855,155	297,348	23,047,901	9,895,398
Individual States: Illinois	1929	13	125	1,186	4,658	2,393	2,265	452,189	1,472,208	4,635,898	4,475,444	160,454	9,327,899	4,692,001
	1927	13	271	1,252	4,465	2,220	2,245	510,492	1,687,654	5,177,783	4,982,687	195,096	9,233,334	4,056,051
	1919	9	194	954	2,236	981	1,255	376,454	909,222	3,327,853	3,254,803	73,050	5,707,927	2,380,074
New Jersey	1929	6	115	747	2,098	1,257	841	387,241	856,671	1,465,683	1,417,520	48,163	3,636,944	2,171,261
	1927	6	126	786	1,997	1,167	830	474,885	1,035,782	2,179,994	2,127,352	52,642	4,875,653	2,695,659
	1919	5	110	534	1,192	915	277	284,064	577,297	1,748,267	1,705,037	43,230	3,334,261	1,585,994
New York	1929	16	214	1,219	2,722	1,130	1,592	703,826	1,422,171	2,813,436	2,684,767	128,669	6,966,071	4,152,635
	1927	16	247	1,405	3,906	1,525	2,381	651,459	1,640,815	3,420,427	3,245,976	174,451	7,910,437	4,490,010
	1919	14	316	1,542	2,482	1,835	647	613,327	1,266,700	3,822,334	3,721,435	100,899	7,037,962	3,215,628
Pennsylvania	1929	13	167	1,151	2,193	1,630	563	645,634	1,395,333	3,191,356	3,088,035	103,321	6,793,653	3,602,297
	1927	11	130	1,080	2,298	1,825	473	433,340	1,215,874	2,968,745	2,879,072	89,673	5,842,789	2,874,044
	1919	12	151	999	1,783	1,183	600	336,521	884,013	3,582,870	3,522,711	60,159	5,588,875	2,006,005

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials and containers	Fuel and purchased energy	Value of products [1]	Value added by manufacture [1]
WALL PAPER—contd.														
Groups of States: Ind., 2 est.; Mo., 1; Ohio, 3	1929	6	43	183	544	150	394	$160,386	$277,964	$696,792	$666,945	$29,847	$1,371,959	$675,167
Conn., 1 est.; Mass., 2	1929	3	51	219	525	100	425	201,609	307,585	677,040	658,098	18,942	1,911,123	1,234,083
States not shown separately	[3]1927	7	52	288	677	225	452	217,805	401,326	865,466	840,402	25,064	2,196,440	1,330,974
	[4]1919	8	62	233	465	245	220	156,969	245,164	671,179	651,169	20,010	1,378,876	707,697
PAPER GOODS, NOT ELSEWHERE CLASSIFIED														
United States	1929	436	[2]4,288	20,227	67,145	13,289	53,856	12,835,089	23,810,118	100,368,676	98,487,101	1,881,575	182,647,712	82,279,036
	1927	340	[2]2,934	14,837	42,955	12,254	30,701	8,638,956	17,765,281	78,796,805	77,160,546	1,636,259	140,947,815	62,151,010
	1919	308	[2]2,918	14,135	[5]35,369	20,203	[5]15,166	6,741,607	12,666,924	65,295,484	64,021,089	1,274,395	107,284,759	41,989,275
Individual States: California	1929	14	51	194	774	--------	774	163,505	284,927	1,780,027	1,757,519	22,508	2,896,360	1,116,333
	1927	10	13	182	517	20	497	28,380	195,265	1,467,443	1,451,618	15,825	2,209,828	742,385
Connecticut	1929	5	14	60	191	--------	191	32,030	69,060	207,004	199,554	7,450	406,618	199,614
	1927	4	9	36	124	--------	124	15,470	47,420	119,818	114,806	5,012	229,255	109,437
	1919	8	71	400	415	340	75	176,769	372,069	1,152,397	1,137,038	15,359	2,364,024	1,212,227
Illinois	1929	30	393	1,475	3,704	150	3,554	1,293,965	2,158,958	8,893,486	8,743,678	149,808	18,232,378	9,338,892
	1927	26	254	1,178	3,229	150	3,079	958,792	1,700,317	7,695,484	7,581,183	114,301	15,870,947	8,175,463
	1919	20	239	543	756	--------	756	609,255	507,529	3,001,028	2,972,047	28,981	5,588,956	2,587,928
Indiana	1929	14	61	563	992	15	977	135,064	356,116	1,755,184	1,727,924	27,260	2,783,534	1,028,350
	1927	7	23	230	321	35	286	48,878	225,142	1,401,616	1,378,242	23,374	2,140,856	739,240
	1919	6	31	311	1,838	1,600	238	51,076	336,204	2,388,429	2,337,125	51,304	3,302,010	973,581
Iowa	1929	5	17	55	143	--------	143	55,235	64,457	926,613	919,386	7,227	1,235,139	308,526
	1927	3	15	28	118	--------	118	35,783	37,877	601,731	598,937	2,794	710,928	109,197
Massachusetts	1929	63	966	4,053	25,681	3,183	22,498	2,412,760	5,219,802	17,869,531	17,481,241	388,290	29,886,025	12,016,494
	1927	54	465	2,007	7,622	1,552	6,070	1,224,298	2,413,778	11,015,381	10,750,982	264,399	18,241,172	7,225,791
	1919	44	321	1,969	7,994	3,985	4,009	794,956	1,823,614	8,580,254	8,379,837	200,417	13,552,393	4,972,139
Michigan	1929	16	86	349	1,200	320	880	236,507	410,896	1,959,591	1,913,120	46,471	3,391,016	1,431,425
	1927	10	37	161	962	325	637	101,473	220,597	1,009,634	979,381	30,253	1,634,222	624,588
	1919	10	110	451	577	290	287	248,498	480,642	2,295,609	2,256,505	39,104	3,747,514	1,451,905
Missouri	1929	6	26	147	1,595	--------	1,595	110,207	231,025	1,812,565	1,699,985	112,580	2,942,721	1,130,156
	1927	5	20	112	837	--------	837	111,538	160,307	1,168,110	1,132,670	35,440	2,024,158	856,048
New Jersey	1929	35	327	1,704	4,147	2,775	1,372	1,284,552	2,104,346	7,976,785	7,818,516	158,269	16,739,186	8,762,401
	1927	31	254	1,176	3,333	1,515	1,818	778,710	1,433,481	6,257,990	6,125,066	132,924	12,017,598	5,759,608
	1919	29	231	1,036	2,543	2,085	458	618,853	1,114,833	6,037,568	5,852,126	185,442	9,718,659	3,681,091
New York	1929	106	819	3,902	9,841	4,098	5,743	2,591,954	4,435,669	19,914,120	19,613,975	300,145	35,784,274	15,870,154
	1927	74	642	3,115	10,707	6,379	4,328	2,020,131	3,720,387	16,149,624	15,771,713	377,911	27,697,654	11,548,030
	1919	95	829	4,017	8,334	6,226	2,108	1,998,066	3,081,440	17,076,578	16,830,451	246,127	26,876,747	9,800,169
Ohio	1929	30	408	2,846	5,102	553	4,549	1,263,710	3,215,405	10,779,173	10,578,212	200,961	24,687,574	13,908,401
	1927	21	266	2,598	4,465	553	3,912	726,928	3,104,640	9,630,668	9,453,773	176,895	22,936,242	13,305,574
	1919	22	252	1,755	3,813	1,967	1,846	661,237	1,627,664	8,010,268	7,894,645	115,623	15,368,229	7,357,961
Oregon	1929	7	62	172	680	--------	680	129,595	203,197	1,008,115	986,880	21,235	1,649,716	641,601
Pennsylvania	1929	28	322	1,084	2,319	283	2,036	973,988	1,233,499	4,240,900	4,150,767	90,133	8,178,317	3,937,417
	1927	29	208	948	1,900	98	1,802	791,000	1,095,304	4,066,141	3,970,562	89,579	7,132,663	3,072,522
	1919	20	113	500	1,286	730	556	228,489	421,143	1,803,003	1,759,667	43,336	2,797,654	994,651
Rhode Island	1929	11	61	306	1,739	75	1,664	260,539	425,054	1,063,545	1,003,200	60,345	2,495,630	1,432,084
	1927	11	50	400	1,697	115	1,582	217,327	456,449	1,175,091	1,107,979	67,112	2,344,824	1,169,733
	1919	6	40	263	1,213	240	973	141,780	239,547	855,714	817,028	38,686	1,664,193	808,479
Wisconsin	1929	20	212	935	1,961	802	1,159	517,398	952,955	5,373,425	5,278,163	95,262	8,188,460	2,815,035
	1927	15	184	810	1,935	812	1,123	497,524	899,718	4,295,623	4,211,850	83,773	7,133,891	2,838,268
	1919	17	263	1,106	2,787	1,320	1,467	475,211	1,129,666	5,481,111	5,334,862	146,249	8,222,054	2,740,943
Groups of States: Ala., 1 est.; Ga., 3; La., 1; Tex., 3	1929	8	62	344	707	--------	707	204,014	287,222	1,730,198	1,701,194	29,004	2,805,410	1,075,212
Ariz., 1 est.; Minn., 4; Wash., 4	1929	9	41	196	444	40	404	108,027	202,467	1,310,900	1,294,117	16,783	1,973,948	663,048
Colo., 1 est.; Kans., 1; Nebr., 2	1929	4	21	44	105	--------	105	49,448	36,729	232,268	228,192	4,076	494,096	261,828

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [1]	Value added by manufacture [2]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
PAPER GOODS, NOT ELSEWHERE CLASSIFIED—continued.														
Groups of States—Continued.														
Del., 1 est.; D. C., 3; Md., 3	1929	7	36	164	503	145	358	$127,298	$179,740	$756,253	$735,311	$20,942	$1,760,162	$1,003,909
Me., 1 est.; N. H., 5; Vt., 3	1929	9	270	1,243	4,623	836	3,787	792,824	1,530,891	9,375,247	9,269,927	105,320	14,006,760	4,631,513
N. C., 1 est.; Tenn., 5; Va., 3	1929	9	33	241	694	14	680	92,469	207,673	1,403,746	1,386,240	17,506	2,110,379	706,633
States not shown separately	[26] 1927	40	464	1,856	5,188	700	4,488	1,082,724	2,054,599	12,748,451	12,531,784	216,667	18,623,577	5,875,126
	[27] 1919	31	418	1,784	3,982	1,420	2,562	737,412	1,532,573	8,613,525	8,449,758	163,767	14,021,726	5,408,201

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.

[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 7,861; proprietors and firm members, 18. For 1927, total, 7,323; proprietors and firm members, 27. For 1919, total, 5,087; proprietors and firm members, 41.

[4] California, 2 establishments; Connecticut, 1; Indiana, 2; Louisiana, 4; Maine, 1; Maryland, 3; Michigan, 1; Minnesota, 1; Mississippi, 1; Missouri, 1; Texas, 1; Virginia, 3; Wisconsin, 5.

[5] California, 2 establishments; Connecticut, 1; Illinois, 4; Indiana, 2; Louisiana, 1; Maine, 3; Maryland, 3; Michigan, 1; New Jersey, 1; Texas, 1; Virginia, 1; Wisconsin, 4.

[6] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 63,894; proprietors and firm members, 440. For 1927, total, 64,649; proprietors and firm members, 512. For 1919, total, 63,408; proprietors and firm members, 767.

[7] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[8] Alabama, 1 establishment; Arkansas, 2; Delaware, 1; District of Columbia, 2; Florida, 1; Kansas, 3; Kentucky, 5; Nebraska, 1; Oklahoma, 1; South Dakota, 1; Utah, 2; Vermont, 2.

[9] Arkansas, 2 establishments; Colorado, 3; Delaware, 1; District of Columbia, 2; Florida, 3; Kansas, 3; Kentucky, 6; Nebraska, 3; Oklahoma, 1; South Dakota, 1; Texas, 3; Utah, 2; Vermont, 3.

[10] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 820; proprietors and firm members, 1. For 1927, total, 807; proprietors and firm members, 1. For 1919, total, 1,714; proprietors and firm members, 2.

[11] California, 1 establishment; Illinois, 3; Indiana, 1; Massachusetts, 2; New Jersey, 2; New York, 1; Pennsylvania, 5; Rhode Island, 1.

[12] Illinois, 2 establishments; Massachusetts, 2; New York, 1; Rhode Island, 1.

[13] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 2,853; proprietors and firm members, 45. For 1927, total, 2,505; proprietors and firm members, 31. For 1919, total, 1,397; proprietors and firm members, 69.

[14] California, 1 establishment; District of Columbia, 1; Illinois, 2; Indiana, 1; Maryland, 2; Missouri, 2; Rhode Island, 1; Wisconsin, 1.

[15] California, 1 establishment; District of Columbia, 1; Illinois, 5; Maryland, 2; Michigan, 1; Rhode Island, 5.

[16] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 12,432; proprietors and firm members, 38. For 1927, total, 11,496; proprietors and firm members, 33. For 1919, total, 9,493; proprietors and firm members, 33.

[17] Colorado, 2 establishments; Connecticut, 2; Georgia, 1; Indiana, 1; Iowa, 1; Kentucky, 2; Maryland, 3; Nebraska, 2; New Jersey, 2; Tennessee, 1; Texas, 2; Utah, 1; Virginia, 3; Washington, 2; Wisconsin, 4.

[18] California, 4 establishments; Connecticut, 2; Georgia, 1; Indiana, 1; Maine, 1; Maryland, 1; Nebraska, 1; New Jersey, 1; Texas, 1; Virginia, 3; Wisconsin, 4.

[19] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 5,528; proprietors and firm members, 57. For 1927, total, 7,879; proprietors and firm members, 49. For 1919, total, 6,648; proprietors and firm members, 73.

[20] California, 3 establishments; District of Columbia, 1; Georgia, 1; Indiana, 1; Kentucky, 3; Maryland, 1; Massachusetts, 6; Minnesota, 2; New Hampshire, 1; New Jersey, 4; Oregon, 1; Rhode Island, 3; Tennessee, 1; Virginia, 1; Washington, 1; Wisconsin, 2.

[21] California, 1 establishment; Connecticut, 1; Georgia, 1; Iowa, 1; Kentucky, 3; Massachusetts, 7; Minnesota, 1; Nebraska, 1; New Hampshire, 1; New Jersey, 3; Oregon, 1; Rhode Island, 2; Tennessee, 1; Texas, 2; Virginia, 1; Wisconsin, 1.

[22] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 5,421; proprietors and firm members, 1. For 1927, total, 5,638; proprietors and firm members, 1. For 1919, total, 5,098; proprietors and firm members, 3.

[23] Connecticut, 1 establishment; Indiana, 1; Massachusetts, 2; Ohio, 3.

[24] Delaware, 1 establishment; Indiana, 2; Massachusetts, 2; Ohio, 3.

[25] Not including proprietors and firm members. The total numbers of persons engaged and the numbers of proprietors and firm members, as reported for this industry, are as follows: For 1929, total, 24,618; proprietors and firm members, 103. For 1927, total 17,870; proprietors and firm members, 99. For 1919, total, 17,177; proprietors and firm members, 124.

[26] District of Columbia, 1 establishment; Georgia, 2; Kansas, 1; Louisiana, 1; Maine, 1; Maryland, 4; Minnesota, 4; Nebraska, 1; New Hampshire, 3; North Carolina, 2; Oregon, 2; Tennessee, 4; Texas, 2; Virginia, 3; Washington, 4; Vermont, 5.

[27] Alabama, 1 establishment; California, 3; District of Columbia, 2; Georgia, 1; Iowa, 1; Maine, 1; Maryland, 3; Minnesota, 3; Missouri, 3; New Hampshire, 3; South Carolina, 1; Vermont, 4; Virginia, 4; West Virginia, 1.

TABLE 3.—CONVERTED PAPER PRODUCTS—PRODUCTION, BY CLASS, TYPE, AND VALUE, FOR THE UNITED STATES: 1929 AND 1927

CLASS AND TYPE	VALUE	
	1929	1927
1. Converted-paper-products industries, all products, total value	$686,136,843	$647,908,013
2. Converted paper products	664,544,650	625,591,276
3. Other products (not normally belonging to the industries)	[1] 21,592,193	22,316,737
4. Converted paper products made as secondary products in other industries (principally paper mills)	184,078,254	145,292,004
Converted paper products, all industries: Aggregate value (sum of 2 and 4)	848,622,904	770,883,280
Bags, paper, total	79,124,252	71,010,527
Kraft	63,884,477	(2)
Other	15,239,775	(2)
Bottle caps, paper	5,523,755	3,812,271
Boxes and containers, paper and paperboard, total	346,446,958	332,428,153
Shipping containers, corrugated	97,959,464	96,229,324
Shipping containers, solid-fiber	42,035,357	45,673,839
Cartons and folding boxes	95,726,976	83,793,936
Set-up paper boxes	85,382,513	89,931,531
Paper cans	13,023,526	8,126,247
Decorated, lithographed, lacquered, and fancy covered boxes	6,600,125	2,981,553
Other boxes and containers	5,718,997	5,691,723
Cards cut and designed, total	16,104,053	15,681,891
Index, library, etc., cards, plain	3,640,527	2,502,885
Jacquard cards for textile-fabric machines	476,304	680,295
Photograph mats, mounts, folders, etc.	5,222,592	4,946,331
Other	6,764,630	7,552,380
Cardboard	6,937,388	7,266,582
Coated book paper	49,514,438	40,725,170
Confetti	61,016	73,734
Crêpe paper	5,003,664	2,296,453
Cups, paper	10,713,637	6,413,480
Dishes, spoons, etc., paper	6,113,115	3,686,026
Envelopes, total	57,657,514	54,511,905
Writing	22,128,068	(3)
Kraft	9,539,711	(3)
Other	25,989,735	(3)
Glazed and fancy paper	10,575,108	11,367,144
Gummed paper and tape, total	13,025,734	[3] 8,241,670
Gummed flat paper	2,247,730	(3)
Gummed paper tape	6,125,077	(3)
Gummed cloth tape	4,652,927	(3)
Labels and tags	[4] 30,897,857	29,238,288
Lace, paper	2,152,334	1,701,946
Napkins, paper	6,899,617	5,686,365
Papeteries	17,459,242	16,093,472
Rolls, paper (for adding machines, etc.)	1,768,206	(3)
Tablets, total	9,446,543	8,684,323
Book	809,755	842,736
News	2,232,570	7,841,587
Writing	4,204,303	
Other	2,199,915	
Toilet paper	25,323,220	20,746,866
Towels, paper	8,035,657	6,098,813
Tubes, paperboard	6,087,140	(3)
Twisted paper (cord, twine, etc.)	424,782	(5)
Wall paper	30,004,881	29,984,612
Waterproof wrapping paper	3,259,295	4,211,545
Waxed paper	35,464,098	27,577,399
Other converted paper and paperboard products [6]	64,599,400	63,344,645

[1] Includes $1,008,083, receipts for custom and contract work.
[2] Not reported separately.
[3] Reported as value of gummed tape.
[4] Paper, $22,004,620; other specified materials, $3,650,380; materials not specified, $5,242,857.
[5] Included in figure for "Other converted paper and paperboard products."
[6] Includes (1) cigarette paper and playing cards for 1929 and 1927, converted roofing paper for 1929, and twisted paper for 1927, which can not be shown separately without disclosing the production of individual establishments; and (2) miscellaneous paper products not specifically reported by kind.

TABLE 4.—CONSUMPTION OF PAPER AND PAPERBOARDS, BY KIND, IN THE MANUFACTURE OF CONVERTED PAPER PRODUCTS, FOR THE UNITED STATES: 1929

KIND	Quantity consumed (ton, 2,000 pounds)
Total	[1] 5,122,193
Book paper	345,430
Hanging paper	122,220
Envelope paper	171,980
Tissue paper	258,418
Wrapping paper	662,030
Other paper	198,225
Container boards	1,833,630
Folding box boards	769,880
Set-up box boards	392,830
Other boards	367,550

[1] Estimated in part.

TABLE 5.—CONSUMPTION OF PAPER AND PAPERBOARDS IN THE MANUFACTURE OF SPECIFIED CONVERTED PAPER PRODUCTS, FOR THE UNITED STATES: 1929

KIND	Net weight of paper or paper boards consumed (ton, 2,000 pounds)
Total	[1] 5,122,193
Bags, paper:	
Kraft	436,700
Other	85,480
Bottle caps, paper	24,090
Boxes and containers, paper and paperboard:	
Shipping containers, corrugated	1,111,810
Shipping containers, solid fiber	665,290
Cartons and folding boxes	809,250
Set-up paper boxes	425,940
Paper cans	70,160
Decorated, lithographed, lacquered, and fancy covered boxes	17,890
Other boxes and containers	36,860
Card cutting and designing:	
Index, library, etc., cards, plain	9,290
Jacquard cards for textile-fabric machines	1,100
Photograph mats, mounts, folders, etc.	10,950
Other	17,920
Cardboard (converted)	38,760
Coated book paper	299,790
Confetti	300
Crêpe paper	13,970
Cups, paper	18,250
Dishes, spoons, etc., paper	16,360
Envelopes:	
Writing	59,580
Kraft	30,920
Other	95,530
Glazed and fancy paper	30,170
Gummed paper and tape:	
Gummed flat paper	6,260
Gummed paper tape	28,340
Labels, paper and paperboard	41,760
Lace, paper	3,880
Napkins, paper	27,660
Papeteries	2,700
Rolls, paper (for adding machines, etc.)	6,430
Tablets:	
Book	1,430
News	4,400
Writing	6,190
Other	3,770
Tags, paper and paperboard	18,260
Toilet paper (converted)	140,440
Towels, paper	51,650
Tubes, paperboard	20,120
Twisted paper (cord, twine, etc.)	2,970
Wall paper	108,000
Waterproof wrapping paper	23,760
Waxed paper	159,398
Other converted paper and paperboard products	138,415

[1] Estimated in part.

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
BAGS, PAPER, EXCLUSIVE OF THOSE MADE IN PAPER MILLS												
Prime movers and electric motors driven by purchased energy, aggregate	3,261	*Horsepower* 13,416	2,959	*Horsepower* 9,336	2,045	*Horsepower* 6,414	929	*Horsepower* 4,429	365	*Horsepower* 3,077	100.0	100.0
Prime movers, total	11	1,048	12	1,190	12	1,158	22	1,642	32	1,873	7.8	37.1
Steam, total	9	960	9	925	10	878	16	1,480	18	1,264	7.2	33.4
Engines	8	810	9	925	10	878	16	1,480	(1)	(1)	6.0	33.4
Turbines	1	150							(1)	(1)	1.1	
Internal-combustion engines	2	88	2	85			5	87	11	257	0.7	2.0
Water wheels and water turbines			1	180	2	280	1	75	3	352		1.7
Electric motors driven by purchased energy	3,250	12,368	2,947	8,146	2,033	5,256	907	2,787	333	1,804	92.2	62.9
Electric motors, total	3,437	12,756	3,086	8,682	2,195	5,699	1,172	3,411	533	2,600	100.0	100.0
Driven by purchased energy	3,250	12,368	2,947	8,146	2,033	5,256	907	2,787	333	1,804	97.0	81.7
Driven by energy generated in establishments reporting	187	388	139	536	162	443	265	624	200	796	3.0	18.3
Electric generators	6	*Kilowatts* 305	5	*Kilowatts* 538	10	*Kilowatts* 915	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 16,746,494		(4)		(4)		(2)		(2)		
BOXES, PAPER, NOT ELSEWHERE CLASSIFIED												
Prime movers and electric motors driven by purchased energy, aggregate	23,343	*Horsepower* 80,064	20,926	*Horsepower* 81,300	17,761	*Horsepower* 76,185	8,608	54,675	4,462	37,340	100.0	100.0
Prime movers, total	106	12,208	125	15,379	166	16,971	270	25,559	344	22,422	15.3	46.7
Steam, total	85	10,649	103	14,495	110	15,122	184	22,471	219	18,734	13.3	41.1
Engines	80	9,399	99	13,847	104	12,733	184	22,471	(1)	(1)	11.7	41.1
Turbines	5	1,250	4	648	6	2,389			(1)	(1)	1.6	
Internal-combustion engines	18	689	16	603	30	1,141	65	1,124	103	1,709	0.9	2.0
Water wheels and water turbines	3	870	6	281	26	708	21	1,964	22	1,979	1.1	3.6
Electric motors driven by purchased energy	23,237	67,856	20,801	65,921	17,595	59,214	8,338	29,116	4,118	14,918	84.7	53.3
Electric motors, total	25,845	77,424	23,654	77,742	19,360	67,787	10,235	38,235	5,762	22,722	100.0	100.0
Driven by purchased energy	23,237	67,856	20,801	65,921	17,595	59,214	8,338	29,116	4,118	14,918	87.6	76.2
Driven by energy generated in establishments reporting	2,608	9,568	2,853	11,821	1,765	8,573	1,897	9,119	1,644	7,804	12.4	23.8
Electric generators	60	*Kilowatts* 7,192	69	*Kilowatts* 8,801	103	*Kilowatts* 9,616	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 72,870,312		(4)		(4)		(2)		(2)		
CARDBOARD, NOT MADE IN PAPER MILLS												
Prime movers and electric motors driven by purchased energy, aggregate	113	*Horsepower* 1,549	304	*Horsepower* 1,779	219	*Horsepower* 1,795	120	3,251	108	2,685	100.0	100.0
Prime movers, total	10	1,030	10	1,025	13	1,143	19	2,555	16	1,855	66.5	78.6
Steam, total	10	1,030	10	1,025	11	1,105	13	2,410	12	1,780	66.5	74.1
Engines	10	1,030	10	1,025	11	1,105	13	2,410	(1)	(1)	66.5	74.1
Turbines									(1)	(1)		
Internal-combustion engines					2	38	2	45	4	75		1.4
Water wheels and water turbines							4	100				3.1
Electric motors driven by purchased energy	103	519	294	754	206	652	101	696	92	830	33.5	21.4
Electric motors, total	279	1,057	494	879	306	762	310	1,868	152	1,499	100.0	100.0
Driven by purchased energy	103	519	294	754	206	652	101	696	92	830	49.1	37.3
Driven by energy generated in establishments reporting	176	538	200	125	100	110	209	1,172	60	669	50.9	62.7
Electric generators	3	*Kilowatts* 220	3	*Kilowatts* 225	3	*Kilowatts* 225	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 476,148		(4)		(4)		(2)		(2)		

See footnotes at end of table.

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES—Continued

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
CARD CUTTING AND DESIGNING												
		Horsepower		*Horsepower*		*Horsepower*		*Horsepower*		*Horsepower*		
Prime movers and electric motors driven by purchased energy, aggregate	1,090	3,909	1,137	3,915	340	1,355	288	743	132	441	100.0	100.0
Prime movers, total	6	1,087	7	1,140	8	702	9	113	8	47	27.8	15.2
Steam, total	5	1,075	6	1,126	3	600	1	60	2	25	27.5	8.1
Engines	5	1,075	6	1,126	3	600	1	60	(1)	(1)	27.5	8.1
Turbines									(1)	(1)		
Internal-combustion engines	1	12	1	14	5	102	8	53	6	22	0.3	7.1
Water wheels and water turbines												
Electric motors driven by purchased energy	1,084	2,822	1,130	2,775	332	653	279	630	124	394	72.2	84.8
Electric motors, total	1,253	3,584	1,280	3,523	368	983	279	630	124	394	100.0	100.0
Driven by purchased energy	1,084	2,822	1,130	2,775	332	653	279	630	124	394	78.7	100.0
Driven by energy generated in establishments reporting	169	762	150	748	36	330					21.3	
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	5	700	5	700	3	300	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		2,276,706		(4)		(4)		(2)		(2)		
ENVELOPES												
		Horsepower		*Horsepower*		*Horsepower*						
Prime movers and electric motors driven by purchased energy, aggregate	5,619	13,077	4,965	11,391	4,358	10,288	2,048	7,124	1,183	5,196	100.0	100.0
Prime movers, total	30	3,494	29	3,036	31	3,174	30	3,001	35	2,847	26.7	42.1
Steam, total	25	3,039	23	2,661	24	2,719	25	2,611	27	2,391	23.2	36.7
Engines	24	2,989	22	2,611	21	2,619	25	2,611	(1)	(1)	22.8	36.7
Turbines	1	50	1	50	3	100			(1)	(1)	0.4	
Internal-combustion engines	3	160	4	110	5	190	4	265	3	67	1.2	3.7
Water wheels and water turbines	2	295	2	265	2	265	1	125	5	389	2.3	1.7
Electric motors driven by purchased energy	5,589	9,583	4,936	8,355	4,327	7,114	2,018	4,123	1,148	2,349	73.3	57.9
Electric motors, total	7,405	13,037	6,692	11,078	5,800	9,258	2,938	5,761	1,607	3,810	100.0	100.0
Driven by purchased energy	5,589	9,583	4,936	8,355	4,327	7,114	2,018	4,123	1,148	2,349	73.5	71.6
Driven by energy generated in establishments reporting	1,816	3,454	1,756	2,723	1,473	2,144	920	1,638	459	1,461	26.5	28.4
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	23	2,204	21	2,042	22	1,843	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		9,488,111		(4)		(4)		(2)		(2)		
LABELS AND TAGS												
		Horsepower		*Horsepower*		*Horsepower*						
Prime movers and electric motors driven by purchased energy, aggregate	2,414	6,473	1,862	6,869	1,186	4,808	867	4,033	524	2,155	100.0	100.0
Prime movers, total	8	524	14	2,645	13	1,912	20	1,724	24	891	8.1	42.7
Steam, total	2	293	9	2,459	7	1,718	8	1,317	7	560	4.5	32.7
Engines	1	250	8	2,425	6	1,683	8	1,317	(1)	(1)	3.8	32.7
Turbines	1	43	1	34	1	35			(1)	(1)	0.7	
Internal-combustion engines	3	36	3	46	4	54	11	405	16	329	0.6	10.0
Water wheels and water turbines	3	195	2	140	2	140	1	2	1	2	3.0	(4)
Electric motors driven by purchased energy	2,406	5,949	1,848	4,224	1,173	2,896	847	2,309	500	1,264	91.9	57.3
Electric motors, total	2,474	6,124	3,276	8,065	2,220	5,902	1,453	4,828	689	1,858	100.0	100.0
Driven by purchased energy	2,406	5,949	1,848	4,224	1,173	2,896	847	2,309	500	1,264	97.1	47.8
Driven by energy generated in establishments reporting	68	175	1,428	4,441	1,047	3,006	606	2,519	189	594	2.9	52.2
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	1	120	9	1,233	12	1,677	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		5,630,879		(4)		(4)		(2)		(2)		

See footnotes at end of table.

TABLE 6.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES—Continued

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
WALL PAPER												
Prime movers and electric motors driven by purchased energy, aggregate	927	*Horsepower* 12,740	904	*Horsepower* 13,343	641	*Horsepower* 11,528	382	*Horsepower* 8,123	220	*Horsepower* 6,930	100.0	100.0
Prime movers, total	44	6,660	50	6,962	50	6,241	49	5,159	57	5,668	52.3	63.5
Steam, total	44	6,660	50	6,962	50	6,241	47	5,127	55	5,636	52.3	63.1
Engines	39	5,843	47	6,375	48	5,754	47	5,127	(1)	(1)	45.9	63.1
Turbines	5	817	3	587	2	487			(1)	(1)	6.4	
Internal-combustion engines							2	32	2	32		0.4
Water wheels and water turbines												
Electric motors driven by purchased energy	883	6,080	854	6,381	591	5,287	333	2,964	163	1,262	47.7	36.5
Electric motors, total	1,267	9,475	1,179	8,517	866	8,030	507	4,687	281	2,609	100.0	100.0
Driven by purchased energy	883	6,080	854	6,381	591	5,287	333	2,964	163	1,262	64.2	63.2
Driven by energy generated in establishments reporting	384	3,395	325	2,136	275	2,743	174	1,723	118	1,347	35.8	36.8
Electric generators	27	*Kilowatts* 3,816	22	*Kilowatts* 3,499	22	*Kilowatts* 3,410	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 5,008,129		(4)		(4)		(2)		(2)		
PAPER GOODS, NOT ELSEWHERE CLASSIFIED												
Prime movers and electric motors driven by purchased energy, aggregate	7,636	*Horsepower* 67,145	5,182	*Horsepower* 42,955	4,095	*Horsepower* 35,324	2,778	35,369	1,182	26,890	100.0	100.0
Prime movers, total	72	13,289	70	12,254	65	11,959	109	20,203	179	20,568	19.8	57.1
Steam, total	57	12,146	52	10,624	46	10,791	80	17,688	136	19,096	18.1	50.0
Engines	52	11,678	48	10,365	44	10,656	80	17,688	(1)	(1)	17.4	50.0
Turbines	5	468	4	259	2	135			(1)	(1)	0.7	
Internal-combustion engines	7	168	9	170	12	208	17	255	38	507	0.2	0.7
Water wheels and water turbines	8	975	9	1,460	7	960	12	2,260	5	965	1.5	6.4
Electric motors driven by purchased energy	7,564	53,856	5,112	30,701	4,030	23,365	2,669	15,166	1,003	6,322	80.2	42.9
Electric motors, total	9,790	83,826	7,188	39,260	5,237	32,132	4,417	25,664	2,699	15,106	100.0	100.0
Driven by purchased energy	7,564	53,856	5,112	30,701	4,030	23,365	2,669	15,166	1,003	6,322	64.2	59.0
Driven by energy generated in establishments reporting	2,226	29,970	2,076	8,559	1,207	8,767	1,748	10,498	1,696	8,784	35.8	41.0
Electric generators	49	*Kilowatts* 8,071	39	*Kilowatts* 6,741	27	*Kilowatts* 6,722	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 40,884,528		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.
[5] Less than one-tenth of 1 per cent.

TABLE 7.—WAGE EARNERS, BY MONTHS, FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum by *italic* figures]

STATE	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	
BAGS, PAPER, EXCLUSIVE OF THOSE MADE IN PAPER MILLS														
United States														
1929	6,970	*6,550*	6,840	7,136	7,295	7,098	7,072	6,998	6,979	6,930	7,125	6,931	6,687	89.8
1925	5,585	5,656	5,734	5,682	5,544	5,488	5,346	5,502	*5,278*	5,669	5,773	5,732	5,617	91.3
1919	4,168	4,124	3,833	3,785	3,591	*3,266*	3,895	4,205	4,404	4,588	4,721	4,754	4,850	67.3
1914	3,505	3,443	3,457	3,470	3,432	3,420	*3,342*	3,374	3,489	3,701	3,796	3,666	3,470	88.0
1909	3,212	3,157	3,215	3,230	3,135	*3,110*	3,132	3,147	3,234	3,278	3,279	3,328	3,294	93.4
Illinois	405	457	445	443	475	438	437	416	469	317	328	327	*305*	64.2
Louisiana	590	590	676	677	668	589	535	566	543	561	603	557	*511*	75.5
Massachusetts	193	*148*	153	185	192	203	209	204	203	202	206	203	205	70.8
New Jersey	70	53	59	95	104	118	94	65	58	53	54	44	*43*	36.4
New York	1,947	1,883	1,889	1,948	1,990	1,992	1,985	1,946	1,985	2,028	1,958	1,909	*1,816*	91.0
Ohio	1,075	*988*	1,034	1,104	1,197	1,115	1,043	1,045	1,040	1,037	1,099	1,105	1,093	82.5
Pennsylvania	579	552	567	581	554	562	556	*549*	577	596	621	610	618	88.4
BOXES, PAPER, NOT ELSEWHERE CLASSIFIED														
United States														
1929	55,654	*53,289*	54,088	54,651	54,552	53,967	53,972	54,047	55,436	57,316	59,770	59,813	56,941	89.1
1925	57,148	55,852	56,103	56,413	55,745	55,080	*54,417*	54,681	55,712	58,160	60,965	62,083	60,570	87.7
1919	55,862	53,373	52,850	52,932	53,106	*52,776*	53,888	56,193	56,845	55,982	59,616	61,455	61,328	85.9
1914	45,311	46,512	46,213	46,583	45,996	45,311	44,619	*43,824*	43,857	45,227	46,126	45,283	44,181	94.1
1909	39,514	*37,864*	37,888	38,669	38,596	38,264	38,108	37,884	38,442	40,157	42,126	43,123	43,039	87.8
California	1,482	*1,380*	1,426	1,449	1,497	1,495	1,481	1,408	1,459	1,515	1,556	1,582	1,541	87.2
Colorado	177	150	148	151	146	*143*	167	205	206	207	212	201	188	67.5
Connecticut	2,290	*2,146*	2,152	2,200	2,207	2,241	2,267	2,312	2,315	2,381	2,434	2,463	2,360	87.1
Georgia	304	279	293	282	282	285	284	*278*	298	313	349	359	347	77.4
Illinois	5,382	5,165	5,255	5,311	5,225	*5,060*	5,135	5,113	5,239	5,608	5,920	5,957	5,592	84.9
Indiana	2,198	2,040	*2,021*	2,089	2,105	2,124	2,122	2,180	2,300	2,332	2,407	2,380	2,280	84.0
Iowa	283	280	302	311	297	297	270	269	263	271	296	283	*257*	82.6
Louisiana	310	292	290	283	*280*	299	286	289	328	341	360	348	325	77.8
Maine	279	290	303	293	274	257	*252*	255	266	276	265	304	307	82.1
Maryland	1,301	*1,280*	1,282	1,299	1,308	1,310	1,307	1,293	1,300	1,293	1,295	1,328	1,317	96.4
Massachusetts	5,349	*5,100*	5,256	5,241	5,243	5,194	5,168	5,151	5,403	5,487	5,779	5,749	5,443	88.3
Michigan	1,453	*1,378*	1,410	1,444	1,453	1,463	1,437	1,429	1,432	1,426	1,508	1,567	1,488	87.9
Minnesota	781	739	736	*731*	773	748	734	765	804	826	834	874	808	83.6
Missouri	2,958	*2,815*	2,825	2,827	2,824	2,852	2,922	2,960	2,971	3,093	3,225	3,155	3,028	87.3
New Hampshire	141	142	138	139	146	141	141	148	142	142	145	132	*131*	90.5
New Jersey	2,945	*2,751*	2,826	2,916	2,941	2,883	2,858	2,893	2,918	2,958	3,170	3,247	3,000	84.1
New York	12,260	11,921	12,101	12,299	12,215	11,969	11,987	*11,818*	12,102	12,525	13,067	13,001	12,479	90.4
North Carolina	422	425	422	417	424	414	*408*	416	428	427	437	422	421	93.4
Ohio	3,846	*3,672*	3,741	3,753	3,748	3,745	3,768	3,781	3,912	3,986	4,160	4,084	3,806	88.3
Oregon	219	201	*196*	204	201	213	208	198	201	233	261	255	259	75.1
Pennsylvania	5,276	5,210	5,231	5,151	5,142	5,057	*4,975*	5,005	5,107	5,361	5,639	5,815	5,617	85.6
Rhode Island	563	522	520	548	540	526	*509*	561	580	613	629	628	581	80.9
Tennessee	722	705	724	730	739	735	715	*697*	701	699	746	744	723	93.4
Texas	326	*278*	294	282	281	285	291	317	347	396	414	403	326	67.1
Virginia	569	576	570	566	560	563	562	571	*558*	579	570	577	573	96.4
Washington	257	243	*229*	240	238	239	250	254	262	271	288	292	273	78.4
West Virginia	365	335	353	387	369	347	379	375	403	388	381	359	*309*	76.7
Wisconsin	1,865	*1,775*	1,800	1,842	1,840	1,831	1,846	1,845	1,854	1,944	1,980	1,962	1,858	89.6
CARDBOARD, NOT MADE IN PAPER MILLS														
United States														
1929	609	593	604	605	599	*588*	597	605	614	627	623	629	622	93.5
1925	978	982	960	983	982	964	961	1,053	1,006	961	1,024	1,000	*856*	81.3
1919	1,425	*1,365*	1,405	1,403	1,370	1,364	1,377	1,450	1,450	1,473	1,476	1,493	1,479	90.5
1914[1]	1,159	1,116	1,120	1,164	1,157	*1,092*	1,167	1,169	1,178	1,215	1,210	1,207	1,113	89.9
Pennsylvania	258	257	252	252	*250*	251	253	265	274	262	260	264	259	91.2
CARD CUTTING AND DESIGNING														
United States														
1929	2,338	*2,195*	2,323	2,385	2,377	2,322	2,297	2,300	2,321	2,376	2,392	2,397	2,369	91.6
1925	1,086	1,045	1,075	*1,033*	1,066	1,061	1,058	1,052	1,060	1,120	1,150	1,104	1,140	89.2
1919	1,148	*1,015*	1,053	1,117	1,092	1,142	1,147	1,167	1,201	1,172	1,178	1,231	1,261	80.5
1914	517	*486*	490	497	477	478	466	483	486	552	583	643	653	66.8
1909	525	534	539	539	530	522	508	*506*	519	533	520	525	543	93.2
Massachusetts	232	226	225	230	257	251	258	231	219	*215*	223	225	226	83.3
Michigan	494	522	551	551	521	428	483	502	496	484	456	*426*	443	77.3
New Jersey	49	*44*	*44*	*44*	50	51	52	51	52	50	51	50	51	84.6
New York	590	*522*	589	604	592	578	601	596	584	586	608	615	606	84.9
Ohio	256	*252*	256	244	243	234	242	253	254	270	277	299	289	77.6
Pennsylvania	254	*229*	234	254	272	266	267	249	262	257	258	256	237	84.2

[1] Data not available for years prior to 1914.

TABLE 7.—WAGE EARNERS, BY MONTHS, FOR THE CONVERTED-PAPER-PRODUCTS INDUSTRIES, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929—Continued

[See note at head of this table]

STATE	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	
ENVELOPES													
United States													
1929	10,367	*10,031*	10,177	10,291	10,404	10,363	10,350	10,299	10,320	10,461	10,598	10,573	10,536	94.6
1925	9,052	9,081	9,226	9,374	9,292	9,170	8,930	8,771	*8,641*	8,883	8,947	9,145	9,163	92.2
1919	8,129	7,934	7,891	7,901	*7,845*	7,858	7,852	8,100	8,100	8,274	8,461	8,565	8,767	89.5
1914[1]	6,970	7,007	6,995	7,129	7,174	7,085	6,968	6,813	*6,771*	6,954	6,986	6,908	6,850	94.4
California	398	*366*	376	388	389	414	416	383	388	401	418	421	418	86.9
Illinois	1,123	1,104	1,101	1,108	1,116	1,096	*1,095*	1,115	1,144	1,165	1,179	1,146	1,108	92.9
Maryland	92	90	92	90	*89*	*89*	92	90	92	91	92	99	99	89.9
Massachusetts	2,211	*2,077*	2,111	2,166	2,201	2,234	2,267	2,248	2,247	2,254	2,268	2,227	2,237	91.6
Michigan	186	185	188	190	190	185	185	186	187	188	187	184	*178*	93.7
Minnesota	298	269	277	*268*	305	305	306	311	307	311	301	300	310	86.2
Missouri	528	515	534	526	528	521	517	*513*	521	533	540	543	541	94.5
New York	1,515	1,485	1,510	1,540	1,539	1,515	*1,484*	1,492	1,507	1,517	1,540	1,538	1,508	96.4
Ohio	1,648	1,629	1,647	1,661	1,673	1,652	1,653	1,636	*1,587*	1,620	1,642	1,678	1,694	93.7
Pennsylvania	787	789	795	795	795	787	783	*772*	775	787	782	792	792	97.1
LABELS AND TAGS														
United States														
1929	4,474	*4,197*	4,322	4,417	4,398	4,423	4,492	4,518	4,547	4,593	4,653	4,597	4,534	90.2
1925	5,356	*5,205*	5,223	5,327	5,355	5,386	5,403	5,302	5,371	5,325	5,409	5,415	5,460	95.3
1919	5,227	4,808	*4,769*	4,772	4,819	5,012	5,111	5,280	5,462	5,489	5,571	5,704	5,927	80.5
1914	2,600	2,614	2,616	2,625	2,577	2,596	2,587	2,635	2,621	2,621	2,604	2,588	*2,516*	95.5
1909	2,313	*2,242*	2,323	2,306	2,252	2,277	2,251	2,258	2,270	2,349	2,378	2,431	2,423	92.2
California	169	160	*159*	170	175	173	173	175	173	177	172	161	164	89.8
Illinois	358	353	349	355	349	348	370	*351*	366	365	374	375	359	88.3
Massachusetts	60	61	61	59	60	60	57	59	60	*55*	61	61	61	90.2
Michigan	164	159	*156*	164	170	162	169	170	165	166	165	164	159	91.8
Missouri	234	183	*180*	185	185	187	248	268	271	270	283	279	272	63.6
New York	977	973	978	983	976	973	982	982	975	981	979	971	*967*	98.4
Ohio	964	*778*	898	937	918	917	935	972	1,000	1,058	1,093	1,038	1,024	71.0
Pennsylvania	723	744	743	742	738	727	711	718	709	*688*	713	724	720	92.5
Rhode Island	177	167	*166*	176	183	183	175	179	171	183	178	175	187	88.8
Tennessee	21	21	21	21	21	21	21	21	21	21	21	21	21	----
WALL PAPER														
United States														
1929	4,705	5,209	4,709	4,446	4,445	4,417	4,228	*4,077*	4,223	4,811	5,112	5,354	5,427	75.1
1925	5,069	5,714	5,504	5,110	4,821	4,539	4,457	*4,259*	4,442	5,139	5,430	5,617	5,813	72.9
1919	4,262	4,606	4,597	4,410	4,214	4,084	3,965	3,834	*3,567*	4,129	4,371	4,572	4,795	74.4
1914	4,738	5,517	5,466	5,202	4,864	4,448	4,007	3,945	*3,176*	4,633	5,064	5,234	5,300	57.6
1909	4,037	4,395	4,392	4,337	4,126	3,810	3,546	3,484	*2,828*	3,904	4,414	4,535	4,861	60.7
Illinois	1,186	1,259	1,208	1,136	1,152	1,130	1,185	*997*	1,083	1,248	1,256	1,300	1,282	76.7
New Jersey	747	852	766	686	674	689	635	*601*	719	747	802	871	925	65.0
New York	1,219	1,484	1,165	1,100	1,132	1,104	*1,011*	1,045	1,015	1,259	1,390	1,447	1,469	68.1
Pennsylvania	1,151	1,212	1,194	1,168	1,140	1,103	*1,036*	1,066	1,058	1,149	1,204	1,236	1,246	83.1
PAPER GOODS, NOT ELSEWHERE CLASSIFIED														
United States														
1929	20,227	*19,395*	19,858	20,085	20,132	20,337	20,469	20,590	20,582	20,685	20,515	20,365	19,726	93.9
1925	13,386	*13,066*	13,273	13,484	13,527	13,452	13,372	13,330	13,189	13,202	13,301	13,730	13,711	95.2
1919	14,135	13,862	13,395	13,376	13,353	*13,305*	13,621	14,180	14,657	14,647	14,866	14,984	15,374	86.5
1914	13,495	13,544	13,665	13,901	14,158	14,277	13,846	13,399	13,135	13,180	13,207	12,929	*12,690*	88.9
1909	19,211	*18,554*	18,791	19,022	19,170	19,061	18,969	18,727	18,721	19,193	19,794	20,218	20,309	91.4
California	194	195	188	206	190	*185*	196	191	191	187	199	198	203	89.8
Connecticut	60	60	64	63	57	58	61	61	62	61	61	57	*56*	87.5
Illinois	1,475	1,435	1,481	1,514	1,479	1,433	1,415	1,425	*1,397*	1,482	1,558	1,544	1,536	89.7
Indiana	563	530	538	579	597	588	610	621	587	535	*514*	531	532	82.8
Iowa	55	58	59	61	60	61	62	51	52	50	50	50	*46*	74.2
Massachusetts	4,053	*3,946*	3,998	4,044	4,024	4,067	4,107	4,101	4,083	4,111	4,127	4,074	3,957	95.6
Michigan	349	331	423	372	354	339	331	334	325	330	*305*	342	401	72.1
Missouri	147	*135*	136	*155*	142	148	150	149	159	157	147	151	151	84.9
New Jersey	1,704	1,575	1,613	1,593	1,638	1,663	1,663	1,774	1,864	1,946	1,812	1,750	*1,553*	79.8
New York	3,962	*3,744*	3,780	3,867	3,855	3,933	3,943	3,994	4,070	4,084	4,106	4,128	4,042	90.7
Ohio	2,846	2,759	2,889	2,921	2,980	2,956	2,958	2,892	2,887	2,864	2,793	2,747	*2,504*	84.0
Oregon	172	168	170	169	164	172	190	188	177	172	166	164	*162*	85.3
Pennsylvania	1,084	*972*	1,001	1,017	1,052	1,104	1,134	1,163	1,155	1,086	1,103	1,085	1,082	82.1
Rhode Island	396	301	392	396	*387*	387	391	400	405	409	407	403	390	94.9
Wisconsin	935	904	908	927	921	934	954	978	932	963	949	955	*896*	91.8

[1] Data not available for years prior to 1914.

PULPWOOD CONSUMPTION AND WOOD-PULP PRODUCTION: 1929

Comparison with previous census years.—This report is one of a series of annual reports on pulpwood consumption and wood-pulp production published by the Bureau of the Census in cooperation with the Forest Service, Department of Agriculture. The statistics are here presented, so far as possible, in the same form as in reports for preceding years, in order to preserve their comparableness.

PULPWOOD CONSUMPTION

Condition in which wood is purchased.—The wood used is purchased either rough, peeled, or rossed. Wood purchased rough (with the bark on) contributed 40.7 per cent of the total quantity consumed in 1929, peeled wood 52.5 per cent, and rossed wood 6.8 per cent. The peeling process is performed by hand, and no part of the wood fiber is wasted. The proportion of wood fiber lost in the rossing of bolts of small diameters is, however, considerable.

Consumption of wood, by process.—Pulpwood is reduced by one or another of five processes, namely, sulphite, mechanical, soda, sulphate, and semichemical. The following statement shows, for 1929, 1928, and 1927, the percentage reduced by each process:

YEAR	Total pulpwood consumed (cords)	PER CENT OF TOTAL REDUCED BY SPECIFIED PROCESS				
		Sulphite	Mechanical	Soda	Sulphate	Semichemical
1929	7,645,011	44.5	20.4	12.1	22.3	0.7
1928	7,160,100	44.6	21.8	13.0	20.0	0.6
1927	6,750,935	45.8	23.2	13.4	17.4	0.2

WOOD-PULP PRODUCTION

Process of manufacture.—The following statement shows, for 1929, 1928, and 1927, the percentage of total quantity of wood pulp produced by each process:

YEAR	Total wood pulp produced (ton, 2,000 lbs.)	PER CENT OF TOTAL REDUCED BY SPECIFIED PROCESS					
		Mechanical	Sulphite	Soda	Sulphate	Semichemical	Screenings
1929	4,862,855	33.7	34.6	10.7	18.8	0.8	1.4
1928	4,510,800	35.7	34.6	10.8	17.2	0.7	1.0
1927	4,313,403	37.3	36.0	11.3	14.0	0.3	1.1

The increase in the production of sulphate pulp is noteworthy and is in line with the increased consumption of southern yellow pine, which is pulped principally by the sulphate process.

Average value of pulp per ton.—The average values of pulp presented in the statement below are based on the total quantities and total values reported. They are not strictly comparable, however, because in some cases the actual production costs were reported instead of the estimated market values of pulp f. o. b. mill. The questionnaire used for collecting the data for 1928 carried the following note: "Where pulp is consumed at mill and not sold, please state production cost or price charged to paper plant, and indicate with letters 'P. C.' " The questionnaires used for 1927 and 1929 called only for the estimated market value f. o. b. mill.

YEAR	AVERAGE VALUE OF PULP PER TON[1]						
	Mechanical		Sulphite		Soda	Sulphate	Semichemical
	Not steamed	Steamed	Unbleached	Bleached	Unbleached and bleached	Unbleached and bleached	
1929	$27.55	$40.46	$48.49	$73.99	$65.41	$40.49	$19.70
1928	27.20	26.83	47.58	76.94	72.08	43.34	44.10
1927	27.36	37.88	51.32	79.15	67.37	47.57	42.24

[1] See "Average value of pulp per ton," above.

Imports and exports.—The figures for imports of pulpwood (Table 11) are not identical with those for *imported pulpwood used*, compiled by the Bureau of the Census (Tables 2, 3, 4, 5), for the reason that the consumption in many mills included some stock imported in previous years and excluded some imported but not consumed within the year to which the statistics relate.

TABLE 1.—PULPWOOD CONSUMPTION, BY QUANTITY AND COST, FOR THE UNITED STATES: 1899 TO 1929

YEAR	Quantity (cords)	COST (F. O. B. MILL)		YEAR	Quantity (cords)	COST (F. O. B. MILL)	
		Total	Average per cord			Total	Average per cord
1929	7,645,011	$100,054,139	$13.09	1917	5,489,075	$60,815,057	$11.10
1928	7,160,100	97,024,190	13.55	1916	5,228,558	[1] 45,785,682	8.76
1927	6,750,935	95,452,365	14.14	1914	4,470,703	39,408,453	8.81
1926	6,766,007	101,229,402	14.96	1911	4,328,052		
1925	6,093,821	94,329,540	15.48	1910	4,094,306		
1924	5,768,082	92,671,688	16.07	1909	4,001,607	34,477,540	8.62
1923	5,872,870	95,306,283	16.23	1908	3,346,953	28,047,473	8.38
1922	5,548,842	89,895,191	16.20	1907	3,962,660	32,360,276	8.17
1921	4,557,179	91,589,103	20.10	1906	3,661,176	26,411,887	7.21
1920	6,114,072	116,495,720	19.05	1905	3,192,123	17,735,665	5.56
1919	5,477,832	87,386,083	15.95	1899	1,986,310	9,837,516	4.95
1918	5,250,794	73,167,118	13.93				

[1] Not including cost of slabs and other mill waste in Louisiana, Massachusetts, North Carolina, and Virginia.

TABLE 2.—PULPWOOD CONSUMPTION—QUANTITY, BY KIND OF WOOD, FOR THE UNITED STATES: 1929, 1928, AND 1927

KIND OF WOOD	QUANTITY (CORDS)			PER CENT DISTRIBUTION		
	1929	1928	1927	1929	1928	1927
Total	7,645,011	[1] 7,160,100	6,750,935	100.0	100.0	100.0
Spruce:						
Domestic	2,074,267	2,000,433	2,077,893	27.1	27.9	30.8
Imported	1,029,913	1,063,348	948,216	13.5	14.9	14.0
Hemlock:						
Domestic	1,309,170	1,158,958	1,138,783	17.1	16.2	16.9
Imported	15,379	18,677	5,048	0.2	0.3	0.1
Yellow pine, Southern	1,036,272	925,698	755,175	13.6	12.9	11.2
Poplar:						
Domestic	329,466	225,194	220,268	4.3	3.1	3.3
Imported	157,829	199,871	186,695	2.1	2.8	2.8
Balsam fir:						
Domestic	317,552	257,379	305,143	4.2	3.6	4.5
Imported	45,412	102,287	84,087	0.6	1.4	1.2
Jack pine	195,577	[2] 175,957	168,734	2.5	2.5	2.5
Yellow poplar	129,697	122,738	131,168	1.7	1.7	1.9
White fir	111,054	105,161	97,148	1.5	1.5	1.4
Beech, birch, and maple:						
Domestic	76,950	65,227	78,311	1.0	0.9	1.2
Imported		17,100			0.2	
Gum	39,685	72,611	64,314	0.5	1.0	1.0
Tamarack (larch)	51,835	67,394	61,104	0.7	0.9	0.9
Other woods [3]	163,668	126,462	142,764	2.1	1.8	2.1
Slabs and mill waste	561,285	[1] 455,605	286,084	7.3	6.4	4.2

[1] Includes data for a small quantity of spent licorice root of no market value.
[2] Includes data for a small quantity of imported jack pine.
[3] Domestic basswood, cedar, chestnut, cottonwood, Douglas fir, white pine, and willow, for the 3 years shown; in addition, boxelder and buckeye for 1928, western yellow pine for 1927, imported jack pine for 1929, imported basswood for 1929 and 1928, and imported cottonwood for 1928.

TABLE 3.—PULPWOOD CONSUMPTION—QUANTITY, BY KIND OF WOOD AND PROCESS OF MANUFACTURE, FOR THE UNITED STATES: 1929

KIND OF WOOD	Total (cords)	PROCESS OF MANUFACTURE (CORDS)				
		Mechanical	Sulphite	Soda	Sulphate	Semi-chemical
Total	7,645,011	1,559,788	3,401,966	925,371	1,701,359	56,527
Spruce:						
Domestic	2,074,267	950,134	1,064,876	2,213	57,044	
Imported	1,029,913	320,413	673,784	25,723	9,993	
Hemlock:						
Domestic	1,309,170	111,184	960,380	10,640	226,966	
Imported	15,379	9,728	5,651			
Yellow pine, Southern	1,036,272	6,827	34,035	95,884	899,526	
Poplar:						
Domestic	329,466	36,830	9,577	281,993	1,066	
Imported	157,829	78	14,505	143,246		
Balsam fir:						
Domestic	317,552	49,176	188,018	613	79,745	
Imported	45,412	5,767	33,580		6,065	
Jack pine	195,577	11,576			184,001	
Yellow poplar	129,697		13,638	116,059		
White fir	111,054	31,681	64,847		14,526	
Beech, birch, and maple	76,950	12	3,753	73,185		
Gum	39,685	605	1,515	33,584		3,981
Tamarack (larch)	51,835	87			51,748	
Other woods [1]	163,668	2,926	362	128,181	10,338	21,866
Slabs and mill waste	561,285	22,764	333,445	14,050	160,346	30,680

[1] Domestic basswood, cedar, chestnut, cottonwood, Douglas fir, white pine, and willow, and imported basswood and jack pine.

TABLE 4.—PULPWOOD CONSUMPTION—QUANTITY AND AVERAGE COST PER CORD, BY CONDITION IN WHICH PURCHASED, AND BY KIND OF WOOD, FOR THE UNITED STATES: 1929

KIND OF WOOD	TOTAL		ROUGH		PEELED		ROSSED	
	Quantity (cords)	Average cost per cord (f. o. b. mill)	Quantity (cords)	Average cost per cord (f. o. b. mill)	Quantity (cords)	Average cost per cord (f. o. b. mill)	Quantity (cords)	Average cost per cord (f. o. b. mill)
Total	7,645,011	$13.09	3,115,053	$10.49	4,010,156	$15.45	519,802	$10.46
Spruce:								
Domestic	2,074,267	16.79	760,925	14.65	1,250,084	18.27	63,258	13.38
Imported	1,029,913	19.89	260,047	17.93	739,002	20.50	30,864	21.66
Hemlock:								
Domestic	1,309,170	9.90	583,648	9.30	439,763	11.06	285,759	9.34
Imported	15,379	12.23	----	----	15,379	12.23	----	----
Yellow pine, Southern	1,036,272	7.57	638,909	6.15	397,363	9.84	----	----
Poplar:								
Domestic	329,466	13.60	37,238	8.72	292,228	14.22	----	----
Imported	157,829	17.99	----	----	157,829	17.99	----	----
Balsam fir:								
Domestic	317,552	13.17	211,234	11.76	93,851	16.53	12,467	11.61
Imported	45,412	17.84	18,105	16.71	22,296	18.13	5,011	20.60
Jack pine	195,577	10.86	127,784	10.56	27,355	13.72	40,438	9.89
Yellow poplar	129,697	11.41	----	----	129,697	11.41	----	----
White fir	111,054	9.12	52,668	8.88	43,408	8.42	14,978	11.98
Beech, birch, and maple	76,950	14.82	1,288	20.44	75,662	14.78	----	----
Gum	39,685	11.85	4,011	8.70	35,674	12.20	----	----
Tamarack (larch)	51,835	11.94	49,856	11.84	1,979	14.41	----	----
Other woods [1]	163,668	10.04	38,606	10.21	125,062	9.98	----	----
Slabs and mill waste	561,285	5.26	330,734	4.53	163,524	6.26	67,027	6.37

[1] See footnote 1, Table 3.

TABLE 5.—PULPWOOD CONSUMPTION, BY KIND OF WOOD, BY STATES: 1929

[This table presents statistics for each State for which separate figures can be given for 1929 without disclosing data for individual establishments, and for the remaining States in groups]

STATE	Number of establishments	PULPWOOD CONSUMED (CORDS)							
		Total	Spruce		Hemlock		Yellow pine, Southern	Poplar	
			Domestic	Imported	Domestic	Imported		Domestic	Imported
United States	[1] 195	7,645,011	2,074,267	1,029,913	1,309,170	15,379	1,036,272	329,466	157,829
Individual States:									
Louisiana	7	459,553	----	----	----	----	450,309	----	----
Maine	24	1,311,577	794,446	138,092	47,301	7,112	----	157,519	34,615
Michigan	11	313,477	91,936	69,840	43,041	----	----	74	----
Minnesota	5	266,320	158,248	----	----	----	----	47,432	----
New Hampshire	5	376,014	253,183	102,683	850	----	----	----	----
New York	47	826,312	306,454	397,055	8,862	1,875	----	46,404	43,665
Pennsylvania	9	397,680	10,519	138,735	19,265	----	41,132	2,251	78,873
Vermont	3	25,486	20,796	800	----	----	----	----	----
Virginia	7	375,179	2,745	43,613	7,711	----	235,237	----	----
Washington	15	956,132	58,045	374	406,669	6,392	----	----	----
Wisconsin	31	1,233,962	247,098	131,710	475,746	----	----	11,558	----
Groups of States:									
Ark., 1 est.; Miss., 1; Tex., 1	3	165,086	----	----	----	----	165,086	----	----
Ala., 1 est.; Calif., 1; Del., 1; D. C., 1; Md., 2; Mass., 3; N. C., 3; Ohio, 1; Oreg., 8; S. C., 1; Tenn., 3; W. Va., 3	28	938,233	130,797	7,011	298,825	----	144,508	64,228	1,276

STATE	PULPWOOD CONSUMED (CORDS)									
	Balsam fir		Jack pine	Yellow poplar	Beech, birch, and maple	White fir	Gum	Tamarack (larch)	Other [2]	Slabs and other mill waste
	Domestic	Imported								
United States	317,552	45,412	195,577	129,697	76,950	111,054	39,685	51,835	163,668	561,285
Individual States:										
Louisiana	----	----	----	----	----	----	----	----	----	9,244
Maine	74,409	18,418	----	----	24,888	----	----	----	4,323	10,454
Michigan	29,522	11,244	29,500	----	----	----	----	11,979	10,183	15,258
Minnesota	25,791	----	24,300	----	----	----	----	602	----	9,947
New Hampshire	14,895	----	----	----	----	----	----	----	----	4,403
New York	2,491	2,776	----	8,176	8,329	----	----	----	825	----
Pennsylvania	1,657	12,877	----	13,169	35,052	----	2,760	----	12,037	28,753
Vermont	3,793	97	----	----	----	----	----	----	----	----
Virginia	----	----	----	60,144	3,753	----	1,515	----	----	20,461
Washington	----	----	----	----	----	53,922	----	----	44,231	386,499
Wisconsin	164,994	----	141,777	----	12	----	----	39,254	150	21,663
Groups of States:										
Ark., 1 est.; Miss., 1; Tex., 1	----	----	----	----	----	----	----	----	----	----
Ala., 1 est.; Calif., 1; Del., 1; D. C., 1; Md., 2; Mass., 3; N. C., 3; Ohio, 1; Oreg., 8; S. C., 1; Tenn., 3; W. Va., 3	----	----	----	48,208	4,316	57,132	35,410	----	91,919	54,603

[1] See footnote 1, Table 10.

[2] See footnote 1, Table 3.

TABLE 6.—PULPWOOD CONSUMPTION—QUANTITY AND AVERAGE COST PER CORD, BY CONDITION IN WHICH PURCHASED, BY STATES: 1929

[This table presents statistics for each State for which separate figures can be given for 1929 without disclosing data for individual establishments, and for the remaining States in groups]

STATE	TOTAL		ROUGH		PEELED		ROSSED	
	Quantity (cords)	Average cost per cord (f. o. b. mill)	Quantity (cords)	Average cost per cord (f. o. b. mill)	Quantity (cords)	Average cost per cord (f. o. b. mill)	Quantity (cords)	Average cost per cord (f. o. b. mill)
United States	7,645,011	$13.09	3,115,053	$10.48	4,010,156	$15.45	519,802	$10.46
Individual States:								
Louisiana	459,553	5.81	361,554	6.00	97,999	5.14		
Maine	1,311,577	16.99	254,895	15.98	1,042,622	17.20	14,060	20.27
Massachusetts	45,100	17.44			41,674	16.99	3,426	22.91
Michigan	313,477	14.11	225,685	13.72	87,792	15.10		
Minnesota	266,320	10.44	234,295	10.09	32,025	12.98		
New Hampshire	376,014	19.61	61,889	15.91	313,517	20.36	608	15.02
New York	826,312	19.35	60,894	19.16	743,568	19.31	21,850	21.16
Pennsylvania	397,680	17.43	103,057	16.56	294,623	17.73		
Vermont	25,486	17.55	11,771	15.00	12,818	19.50	897	23.60
Virginia	375,179	11.04	103,263	6.86	271,916	12.63		
Washington	956,132	6.83	425,659	5.29	313,011	8.06	217,432	8.06
Wisconsin	1,233,902	12.67	915,398	12.60	252,737	12.96	65,827	12.44
Groups of States:								
Ala., N. C., S. C., Tenn.	323,841	9.90	86,899	6.75	236,942	11.06		
Ark., Miss., Tex.	165,086	6.06	165,086	6.06				
Calif., Oreg.	340,745	9.27	62,263	6.80	82,780	8.74	195,702	10.27
Del., D. C., Md.	138,567	13.39			138,567	13.39		
Ohio, W. Va.	89,980	9.41	42,415	9.62	47,565	9.02		

TABLE 7.—WOOD-PULP PRODUCTION—QUANTITY, BY PROCESS, FOR THE UNITED STATES, FOR SPECIFIED YEARS: 1899 TO 1929

[Tons of 2,000 pounds]

YEAR	Total	Mechanical	Sulphite	Soda	Sulphate	Semi-chemical
1929	[1] 4,862,885	1,649,112	1,729,889	520,729	922,674	40,481
1928	[2] 4,510,800	1,615,089	1,595,951	488,641	780,552	29,967
1927	[3] 4,313,403	1,618,038	1,588,132	487,478	607,172	11,983
1926	[5] 4,394,766	1,774,192	1,590,776	496,920	523,878	(4)
1925	[6] 3,962,217	1,629,680	1,447,191	472,647	412,690	(4)
1924	[7] 3,723,266	1,643,283	1,336,551	440,697	302,735	(4)
1923	[8] 3,788,672	1,580,553	1,448,690	445,162	314,267	(4)
1922	[7] 3,521,644	1,483,787	1,374,319	419,857	243,681	(4)
1921	[7] 2,875,601	[7] 1,267,382	[7] 1,166,926	300,533	140,760	(4)
1920	3,821,704	1,583,914	1,585,834	463,305	188,651	(4)
1919	[9] 3,517,952	1,518,829	1,419,829	411,693	120,378	(4)
1918	3,313,861	1,364,504	1,456,633	350,362	142,362	(4)
1917	3,509,939	1,535,953	1,451,757	437,430	84,799	(4)
1916	3,435,001	1,503,139	1,466,402	387,021	78,439	(4)
1914	[10] 2,893,150	1,293,661	1,151,327	347,928	52,641	(4)
1911	2,686,134	(11)	(11)	(11)	(11)	(4)
1910	2,533,976	(11)	(11)	(11)	(11)	(4)
1909	2,495,523	1,179,266	1,017,631	298,626		(4)
1908	2,118,947	(11)	(11)	(11)	(11)	(4)
1907	2,547,879	(11)	(11)	(11)	(11)	(4)
1904	1,921,768	968,976	756,022	196,770		(4)
1899	1,179,525	586,374	416,037	177,114		(4)

[1] Includes data for screenings, as follows: Mechanical, 11,459 tons; sulphite, 48,378; sulphate, 4,590.
[2] Includes data for screenings, as follows: Mechanical, 4,701 tons; sulphite, 37,093; sulphate, 6,327.
[3] Includes data for screenings, as follows: Mechanical, 8,229 tons; sulphite, 35,433; sulphate, 3,919.
[4] Data for "semichemical" not called for prior to 1927.
[5] Includes data for screenings, as follows: Mechanical, 9,944 tons; sulphite, 41,601; sulphate, 3,918.
[6] Includes data for screenings, as follows: Mechanical, 17,670 tons; sulphite, 44,105; sulphate, 2,922.
[7] Includes data for some screenings.
[8] Includes data for screenings, as follows: Mechanical, 12,759 tons; sulphite, 37,463; sulphate, 1,784.
[9] Includes data for screenings, as follows: Mechanical, 12,220 tons; chemical, not shown by process, 35,003.
[10] Includes data for screenings, as follows: Mechanical, 11,769 tons; chemical, not shown by process, 35,824.
[11] Not reported separately.

TABLE 8.—WOOD-PULP PRODUCTION—QUANTITY, BY PROCESS AND CONDITION, FOR THE UNITED STATES: 1929, 1928, AND 1927

[Tons of 2,000 pounds]

PROCESS AND CONDITION	1929	1928	1927
Total	4,862,885	4,510,800	4,313,403
Mechanical, total	1,637,653	1,610,988	1,610,409
Not steamed	1,474,415	1,546,240	1,435,321
Steamed	163,238	64,748	175,088
Sulphite, total	1,681,511	1,558,858	1,552,699
Unbleached	841,558	836,751	872,411
Bleached	839,953	722,107	680,288
Soda, unbleached and bleached [1]	520,729	488,641	487,478
Sulphate, unbleached and bleached [1]	918,084	774,225	603,253
Semichemical [2]	40,481	29,967	11,983
Screenings, total	64,427	48,121	47,581
Mechanical	11,459	4,701	8,229
Chemical	52,968	43,420	39,352

[1] Statistics for unbleached and for bleached not shown separately in order to avoid disclosing production of individual establishments.
[2] Figures include data for a small quantity of wood pulp not covered by items specified.

TABLE 9.—WOOD-PULP PRODUCTION, BY QUANTITY, AND VALUE, BY STATES: 1929

[This table presents statistics for each State for which separate figures can be given for 1929 without disclosing data for individual establishments, and for the remaining States in groups]

STATE	Quantity (ton, 2,000 pounds)	VALUE	
		Total	Average per ton
United States	4,862,885	$223,178,096	$45.89
Individual States:			
Louisiana	246,590	8,091,515	32.81
Maine	981,433	43,497,951	44.32
Massachusetts	29,492	1,767,501	59.93
Michigan	178,015	8,681,479	48.77
Minnesota	189,664	6,712,776	35.39
New Hampshire	212,774	17,977,651	84.49
New York	662,988	28,824,543	43.48
Pennsylvania	213,083	14,445,046	67.79
Vermont	26,307	728,067	27.68
Virginia	206,050	10,725,719	52.05
Washington	523,948	18,574,577	35.45
Wisconsin	733,617	30,012,973	40.09
Groups of States:			
Ala., N. C., S. C., Tenn.	185,294	9,644,394	52.04
Ark., Miss., Tex.	91,033	2,912,323	31.99
Calif., Oreg.	256,546	7,011,203	27.33
Del., D. C., Md	79,578	5,228,469	65.70
Ohio, W. Va.	46,473	2,341,900	50.39

TABLE 10.—PULPWOOD CONSUMPTION AND WOOD-PULP PRODUCTION—NUMBER OF ESTABLISHMENTS REPORTING, QUANTITY AND COST OF WOOD CONSUMED, AND QUANTITY OF PULP PRODUCED, BY STATES: 1929, 1928, AND 1927

[This table presents statistics for each State for which separate figures can be given for 1929 without disclosing data for individual establishments, and for the remaining States in groups]

STATE	Census year	Number of establishments	WOOD CONSUMED			Pulp produced (ton, 2,000 pounds)
			Quantity, cords	Cost (f. o. b. mill)		
				Total	Average per cord	
United States	1929	[1] 195	7,645,011	$100,054,139	$13.09	4,862,885
	1928	204	[2] 7,160,100	97,024,190	13.55	4,510,300
	1927	219	6,750,935	95,452,365	14.14	4,313,403
Individual States:						
Louisiana	1929	7	459,553	2,671,881	5.81	246,590
	1928	7	413,602	2,429,247	5.87	226,708
	1927	7	349,272	2,056,671	5.89	179,878
Maine	1929	24	1,311,577	22,281,806	16.99	981,433
	1928	25	1,309,988	22,602,624	17.25	970,690
	1927	26	1,273,268	21,850,760	17.16	942,162
Massachusetts	1929	3	45,100	786,742	17.44	29,492
	1928	3	51,325	974,324	18.98	32,370
	1927	3	49,473	958,794	19.38	31,822
Michigan	1929	11	313,477	4,422,317	14.11	178,015
	1928	11	331,697	4,634,972	13.97	196,203
	1927	12	351,688	4,712,584	13.40	193,539
Minnesota	1929	5	266,320	2,780,312	10.44	189,664
	1928	6	282,691	3,365,081	11.90	194,399
	1927	7	281,156	3,397,201	12.08	191,220
New Hampshire	1929	5	376,014	7,375,455	19.61	212,774
	1928	8	351,849	6,843,713	19.48	198,587
	1927	7	358,376	6,958,956	19.42	200,324
New York	1929	47	820,312	15,987,105	19.35	662,988
	1928	53	802,115	14,962,631	18.65	633,182
	1927	61	872,780	16,882,733	19.34	710,227
Pennsylvania	1929	9	397,680	6,930,456	17.43	213,083
	1928	11	405,276	7,016,656	17.31	218,598
	1927	12	398,021	7,171,606	18.02	216,587
Vermont	1929	3	25,486	447,168	17.55	26,307
	1928	3	20,081	330,702	16.47	19,831
	1927	4	31,795	549,741	17.29	32,562
Virginia	1929	7	375,179	4,143,285	11.04	206,050
	1928	7	342,813	3,942,477	11.50	189,925
	1927	8	316,032	3,775,393	11.95	170,630
Washington	1929	15	956,132	6,527,585	6.83	523,948
	1928	12	651,657	4,781,566	7.34	349,107
	1927	13	445,664	3,588,506	8.05	268,349
Wisconsin	1929	31	1,233,962	15,632,746	12.67	733,617
	1928	33	1,225,630	15,869,381	12.95	720,781
	1927	33	1,199,615	15,174,013	12.65	690,921
Groups of States:						
Ala., 1 est.; Ark., 1; Miss., 1; Tex., 1	1929	4	195,428	1,172,257	6.00	107,084
Calif., 1 est.; Oreg., 8	1929	9	340,745	3,157,499	9.27	256,546
Del., 1 est.; D. C., 1; Md., 2	1929	4	138,567	1,855,415	13.39	79,578
Ohio, 1 est.; W. Va., 3; N. C., 3 est.; S. C., 1; Tenn., 3	1929	4	89,980	847,360	9.42	46,473
	1929	7	203,499	3,034,750	10.34	169,243
States not shown separately	1928	25	971,876	9,270,816	9.54	560,419
	1927	26	823,795	8,375,407	10.17	485,182

[1] The 195 establishments reported for 1929 operated 205 individual mills, combined reports having been made in a number of cases for two or more mills operated by a single establishment. The numbers of mills reported for individual States are identical with the numbers of establishments, with the following exceptions: Maine, 24 establishments, 26 mills; Minnesota, 5 establishments, 6 mills; New Hampshire, 5 establishments, 7 mills; New York, 47 establishments, 51 mills; Wisconsin, 31 establishments, 32 mills. For 1928 and 1927, the numbers of establishments and the numbers of mills are identical.

[2] Includes data for a small quantity of spent licorice root with no market value.

TABLE 11.—IMPORTS AND EXPORTS OF PULPWOOD, BY QUANTITY, VALUE, AND CONDITION: 1929 AND 1928

[Taken from "Foreign Commerce and Navigation of the United States"]

CONDITION	1929			1928		
	Quantity (cords)	Total value	Average value per cord	Quantity (cords)	Total value	Average value per cord
IMPORTS						
Pulpwood, total	1,350,722	$14,598,949	$10.81	1,546,338	$16,157,295	$10.45
Rough	401,509	4,081,512	10.17	515,078	5,080,534	9.86
Peeled	931,903	10,321,110	11.08	978,182	10,277,758	10.51
Rossed	17,310	196,327	11.34	53,078	799,003	15.05
EXPORTS						
Pulpwood (condition not specified)	52,682	464,313	8.81	27,518	221,259	8.04

TABLE 12.—IMPORTS AND EXPORTS OF WOOD PULP, BY QUANTITY, VALUE, AND PROCESS: 1929 AND 1928

[Taken from "Foreign Commerce and Navigation of the United States"]

KIND	1929			1928		
	Quantity (ton, 2,000 pounds)	Total value	Average value per ton	Quantity (ton, 2,000 pounds)	Total value	Average value per ton
IMPORTS						
Wood pulp, total	1,887,505	$89,087,990	$47.20	1,762,325	$83,919,778	$47.56
Sulphite, total	1,159,974	60,667,585	52.30	1,062,243	55,955,558	52.58
Unbleached	785,631	35,328,982	44.97	717,530	32,587,134	45.42
Bleached	374,343	25,338,603	67.69	344,704	23,368,424	67.80
Sulphate, total	447,294	21,658,496	48.42	443,348	22,065,535	49.77
Unbleached	430,086	20,518,676	47.71	427,007	21,170,948	49.58
Bleached	17,208	1,139,820	66.24	16,341	894,587	54.74
Ground wood	273,461	6,247,776	22.84	249,199	5,443,495	21.84
Other pulp	6,776	514,139	75.88	7,535	455,190	60.41
EXPORTS						
Wood pulp, total	54,068	2,729,423	50.48	33,484	1,779,179	53.14
Sulphite	43,853	2,116,428	48.26	24,945	1,308,459	52.45
Soda	2,196	159,988	72.89	2,734	194,325	71.08
Other	8,019	453,007	56.49	5,805	276,395	47.61

Group 5.—PRINTING, PUBLISHING, AND ALLIED INDUSTRIES

THE GROUP AS A WHOLE

For census purposes printing and publishing and the several allied activities specified below are classified together as one of the 16 major groups of industries covered by the Census of Manufactures, and the group is divided into two subgroups, namely, (1) Printing and publishing and (2) Allied industries. Summary statistics for the group, the two subgroups, and the individual industries are given in the table below.

Relationship of the industries.—The printing and publishing industries embrace all establishments engaged either in printing or in publishing. (See "Description of the industries," p. 577.) More or less closely allied to these industries are a number of others, namely, steel and copperplate engraving and plate printing, lithographing, bookbinding and blank-book making, wood engraving, photo-engraving, the manufacture of printing materials and of engravers' materials, stereotyping and electrotyping, type founding, and engraving, chasing, etching, and die sinking. Statistics for these allied industries are presented on pages 599 to 625, and combined statistics for printing and publishing and these allied industries are given in the table below.

Duplication in value of products and value added by manufacture.—The statistics for this group of industries include some duplication both in the value of products and in the value added by manufacture, as given in the table below and in Tables 1 and 2. This duplication results from the fact that some publishers employ other establishments to do all or a part of their engraving, lithographing, printing, and bookbinding. The amounts paid for such work, which are reported by the publishing establishments under the head "Paid for contract work," appear as "Value of products" in the returns made by lithographing, engraving, commercial-printing, and bookbinding establishments. The duplication appears not only in the total value of products but also in the value added by manufacture, which is calculated by subtracting the cost of materials, fuel, and purchased electric energy (not including amounts paid for contract work) from the total value of products. If the combined amount paid in 1929 for contract work by all establishments in these industries, $169,898,605, be subtracted from the combined value of products, $3,170,139,651, there remains approximately $3,000,000,000, which, with a further slight reduction for duplication due to the sale of products of certain establishments to others within the industry group, represents the net value of products; and the deduction of the contract-work item from the value added by manufacture, $2,403,656,103, leaves approximately $2,234,000,000 as the net value added by manufacture. Similarly, the deduction of the amount paid for contract work by establishments in the printing and publishing industries alone, $169,898,605 (which is the same as the contract-work figure for the entire group of industries, no payments for contract work having been reported in this group by establishments other than those engaged in printing and publishing), from the total value of products for the industries, $2,760,195,928, leaves, in round millions, $2,590,000,000, which amount approximates the net value of products for the industries; and the deduction of the contract-work item from the value added by manufacture, $2,100,166,816, leaves approximately $1,930,000,000 as the net value added by manufacture.

SUMMARY FOR GROUP 5.—PRINTING, PUBLISHING, AND ALLIED INDUSTRIES: 1914 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]	Horsepower
Aggregate	1929	27,522	357,988	$636,371,372	$766,483,548	$3,170,139,651	$2,403,656,103	649,441
	1927	25,433	328,603	586,183,261	755,037,668	2,859,860,389	2,104,822,721	569,528
	1925	23,826	315,264	542,418,876	694,576,980	2,596,870,775	1,902,293,795	486,087
	1923	23,114	307,993	492,905,953	665,654,236	2,315,318,106	1,649,663,870	429,967
	1921	22,777	282,500	434,727,594	663,300,138	2,078,763,839	1,415,463,701	(2)
	1919	33,747	301,934	351,997,797	587,293,851	1,764,386,909	1,177,093,058	379,236
	1914	34,757	286,254	207,720,982	266,435,038	937,125,476	670,690,438	341,805
Printing and publishing, total [3]	1929	24,360	281,119	506,290,108	660,029,112	2,760,195,928	2,100,166,816	544,588
	1927	22,558	262,740	474,638,841	664,528,306	2,521,208,269	1,856,679,963	482,295
	1925	21,072	252,515	440,427,479	612,059,699	2,283,303,640	1,671,243,941	400,121
	1923	20,471	247,384	400,485,636	587,109,283	2,030,614,695	1,443,505,412	358,019
	1921	20,336	230,305	357,515,067	590,616,672	1,838,339,928	1,247,723,256	(2)
	1919	30,630	244,688	287,125,883	513,893,032	1,537,936,665	1,024,043,633	326,252
	1914	31,637	229,442	168,125,218	227,208,391	813,534,097	586,325,706	295,923
Book and job [3]	1929	12,712	150,649	251,576,692	266,749,365	1,006,656,768	739,907,403	211,448
	1927	11,466	142,347	241,810,478	253,056,059	920,251,123	667,195,064	194,718
	1925	10,338	134,559	221,424,851	230,690,867	820,552,827	589,861,960	170,090
	1923	10,094	130,819	202,314,555	221,376,622	747,486,319	526,109,697	153,334
	1921	9,776	121,871	181,909,679	217,476,068	700,605,428	483,129,360	(2)
	1919	13,108	123,408	141,850,722	211,384,064	599,191,610	387,807,546	131,544
	1914	12,140	114,194	78,990,985	97,079,543	310,350,883	213,277,340	113,566

See footnotes at end of table.

SUMMARY FOR GROUP 5.—PRINTING, PUBLISHING, AND ALLIED INDUSTRIES: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]	Horsepower
Printing and publishing—continued								
Music	1929	124	810	$1,314,401	$1,542,042	$15,240,268	$13,698,226	956
	1927	119	994	1,677,680	1,658,367	15,881,634	14,223,267	1,343
	1925	109	955	1,461,661	1,828,230	15,089,636	13,261,406	1,363
	1923	110	919	1,366,756	2,252,530	14,626,810	12,373,980	1,231
	1921	107	900	1,246,863	2,016,311	14,024,672	12,008,361	[2]
	1919	160	899	926,988	2,123,781	14,592,177	12,468,396	634
	1914	180	873	572,985	1,046,630	7,271,266	6,224,636	594
Newspaper and periodical	1929	11,524	129,660	253,399,075	391,737,705	1,738,298,892	1,346,561,187	332,184
	1927	10,973	119,399	231,150,653	409,813,880	1,585,075,512	1,175,261,632	286,234
	1925	10,625	117,001	217,540,967	379,540,602	1,447,661,177	1,068,120,575	237,062
	1923	10,267	115,646	196,804,325	363,479,831	1,268,501,566	905,021,735	203,454
	1921	10,453	107,534	174,358,525	371,124,293	1,123,709,828	752,585,535	[2]
	1919	17,362	120,381	144,348,173	300,385,187	924,152,878	623,767,691	194,074
	1914	19,317	114,375	88,561,248	129,082,218	495,905,948	366,823,730	181,763
Allied industries, total	1929	3,162	76,869	130,081,204	106,454,436	409,943,723	303,489,287	104,853
	1927	2,875	65,863	111,544,420	90,509,362	338,052,120	248,142,758	87,233
	1925	2,754	62,749	101,991,397	82,517,281	313,507,135	231,049,854	76,966
	1923	2,643	60,609	92,420,317	78,544,953	284,703,411	206,158,458	71,948
	1921	2,441	52,195	77,212,527	72,683,466	240,423,911	167,740,445	[2]
	1919	3,117	57,246	64,871,914	73,400,819	226,450,244	153,049,425	52,984
	1914	3,120	56,812	39,595,764	39,226,647	123,591,379	84,364,732	45,882
Bookbinding and blank-book making	1929	1,108	24,754	31,779,037	30,754,777	102,783,405	72,028,628	21,741
	1927	1,063	21,909	28,281,066	25,875,185	87,327,392	61,452,207	19,038
	1925	970	20,836	26,005,621	24,127,012	81,600,302	57,473,290	16,147
	1923	965	20,728	25,216,055	23,073,048	76,959,420	53,886,372	15,539
	1921	869	17,465	20,317,877	19,886,243	63,854,402	43,968,159	[2]
	1919	1,113	20,361	18,658,821	23,235,171	66,020,677	42,785,506	11,037
	1914	1,124	21,693	11,574,723	13,334,207	38,104,368	24,770,161	10,842
Engravers' materials	1929	19	313	448,385	1,794,804	3,129,483	1,334,679	1,493
	1927	17	178	293,962	1,289,261	2,168,737	879,476	864
	1925	16	177	276,204	1,202,203	2,014,036	811,833	921
	1923	24	224	391,557	1,359,350	2,302,627	943,277	832
	1921	22	184	302,206	1,046,403	1,816,873	770,470	[2]
	1919	21	174	212,171	1,484,269	2,248,122	763,853	733
	1914	13	106	73,391	550,659	768,258	217,599	491
Engraving (other than steel, copperplate, or wood) chasing, etching, and diesinking	1929	189	2,240	3,211,743	2,583,039	10,933,741	8,350,702	2,965
	1927	173	1,805	2,612,434	2,078,160	7,930,688	5,852,528	2,028
	1925	188	1,827	2,690,803	2,177,251	8,022,823	6,445,572	1,753
	1923	210	1,887	2,853,125	2,820,179	9,121,446	6,301,267	2,345
	1921	193	1,276	1,760,335	1,397,020	4,849,882	3,452,862	[2]
	1919	478	1,878	2,391,504	1,927,323	7,350,602	5,423,279	1,750
	1914	486	1,536	1,075,721	596,107	3,133,791	2,537,684	1,035
Engraving, steel and copperplate, and plate printing	1929	456	10,130	14,489,730	11,864,764	47,161,641	35,296,877	8,506
	1927	393	8,549	11,885,737	10,236,216	39,071,105	28,834,889	6,894
	1925	368	7,259	10,168,600	7,628,311	32,106,150	24,477,839	5,764
	1923	377	7,529	10,185,393	7,957,756	32,551,209	24,593,453	5,738
	1921	367	7,156	9,612,206	7,608,520	28,778,665	21,170,145	[2]
	1919	421	7,014	7,908,109	6,980,747	24,209,154	17,228,407	5,353
	1914	399	6,859	4,526,684	3,914,508	13,786,385	9,871,877	5,670
Engraving, wood	1929	27	142	323,211	82,250	738,951	656,701	54
	1927	23	132	290,777	76,354	641,437	565,083	45
	1925	22	117	233,849	46,499	525,240	478,741	32
	1923	24	141	218,824	42,099	523,752	481,653	26
	1921	24	131	219,033	138,991	628,368	489,377	[2]
	1919	55	235	407,215	219,268	1,153,618	934,350	67
	1914	72	302	310,318	96,384	719,234	622,850	68
Lithographing	1929	376	18,979	32,021,919	38,992,142	121,014,321	82,022,179	35,471
	1927	309	16,348	27,465,552	32,703,772	97,050,124	64,346,352	28,541
	1925	331	16,957	27,106,883	32,171,152	98,721,268	66,550,116	28,623
	1923	328	16,317	25,067,427	31,008,765	91,670,752	60,661,987	26,869
	1921	296	13,971	21,085,435	30,522,209	79,472,260	48,950,051	[2]
	1919	331	15,618	18,201,089	27,718,217	73,151,115	45,432,898	18,550
	1914	336	15,171	11,861,018	14,017,181	39,135,973	25,118,792	15,024
Photo-engraving, not done in printing establishments	1929	654	12,353	31,831,176	11,003,121	77,382,259	66,379,138	9,349
	1927	611	11,033	28,381,480	10,790,128	69,207,376	58,417,248	9,366
	1925	577	9,868	24,320,884	8,392,623	58,640,247	50,247,624	6,735
	1923	450	8,521	18,668,866	6,606,207	43,660,021	37,053,814	5,786
	1921	421	6,971	15,046,323	5,928,493	36,215,570	30,287,077	[2]
	1919	422	6,769	10,423,541	5,038,382	29,389,386	24,351,004	3,800
	1914	376	6,211	6,166,638	2,798,132	15,358,604	12,560,472	3,724
Printing materials, not including type or ink	1929	84	1,004	1,649,276	2,184,544	8,579,006	6,394,462	2,709
	1927	70	882	1,402,256	2,034,348	7,022,343	4,987,995	2,339
	1925	71	888	1,378,748	1,780,570	6,525,379	4,738,809	1,981
	1923	68	560	843,963	1,162,531	4,805,648	3,643,117	1,062
	1921	74	816	1,153,276	1,713,736	5,319,261	3,605,525	[2]
	1919	82	723	799,402	1,619,718	4,918,799	3,299,081	1,351
	1914	94	423	340,041	763,212	2,110,814	1,347,602	638
Stereotyping and electrotyping, not done in printing establishments	1929	230	6,487	13,770,676	6,546,881	35,617,297	29,070,416	21,347
	1927	197	4,502	10,272,775	4,676,853	25,549,214	20,872,361	16,888
	1925	193	4,283	9,206,642	4,280,244	22,361,187	18,080,943	13,774
	1923	179	4,096	8,333,721	3,805,550	20,596,208	16,790,658	12,313
	1921	157	3,017	7,081,705	3,745,595	17,358,994	13,613,399	[2]
	1919	171	3,664	5,002,545	4,234,479	15,919,014	11,684,535	9,498
	1914	189	3,457	3,001,309	2,254,920	8,154,171	5,899,245	6,743
Type founding	1929	19	467	556,051	648,114	2,603,619	1,955,505	1,218
	1927	19	525	658,381	749,085	2,683,704	1,934,619	1,230
	1925	18	537	603,163	705,416	2,450,503	1,745,087	1,236
	1923	18	606	646,386	709,468	2,512,328	1,802,860	1,438
	1921	18	608	634,131	696,256	2,129,636	1,433,380	[2]
	1919	23	810	867,517	943,245	2,689,757	1,746,512	845
	1914	31	1,054	665,861	901,331	2,319,781	1,418,450	1,647

[1] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[2] Not called for on schedule.
[3] The figures for 1927 and earlier years differ from those formerly published because of the inclusion of data for establishments engaged primarily in the production of paper patterns and fashion plates. (See second paragraph, "Description of the industries," p. 577.)

PRINTING AND PUBLISHING

"PRINTING AND PUBLISHING, BOOK AND JOB"; "PRINTING AND PUBLISHING, MUSIC"; "PRINTING AND PUBLISHING, NEWSPAPER AND PERIODICAL"

Description of the industries.—The printing and publishing subgroup comprises three industries, namely, (1) Book and job, (2) Music, and (3) Newspaper and periodical. Establishments classified in the first industry are engaged primarily in commercial printing, machine composition for other establishments, book printing and publishing, or book publishing only; those in the second industry, in music printing and publishing or music publishing only; and those in the third industry, in printing and publishing, or publishing only, newspapers and periodicals. An exception to the general rule of classification on the basis of products of chief value (see "GENERAL EXPLANATIONS—Classification of establishments") is made in the case of establishments engaged in publishing newspapers and periodicals, all of which, including those whose income is derived mainly from other sources, are classified in the newspaper-and-periodical industry.

Some of the establishments in the first industry manufacture, either as major or as minor products, cut and stamped paper patterns for garments, embroidery, etc., transfer patterns, and fashion plates. At former censuses, establishments engaged primarily in the production of such patterns, etc., were given a separate industry classification, "Paper patterns," in the "Paper and allied products" group of industries; but at the current census such establishments have been classified in the book and job printing industry, and the figures for prior years, as given in this report, have been revised so as to make them comparable with those for 1929. This change was made partly because of the fact that all paper patterns and fashion plates carry printed or lithographed directions, and partly for the reason that paper patterns and fashion plates are made to some extent as secondary products by establishments engaged primarily in printing and publishing, which establishments are necessarily classified in the printing and publishing industry.

Some of the establishments are engaged solely in the publication of books, music, or periodicals printed by others, and maintain no printing plants and perform no printing or other manufacturing processes of any kind. It has been necessary, however, to treat such establishments as within the industry in order to make a complete statistical presentation for it. This necessity arises because commercial printers are not in a position to report the selling value of books and other publications printed for others, this information being obtainable only from the publishers for whom the commercial printing is done.

Value of products.—The term "Value of products," as applied to the printing and publishing industries, covers revenue from subscriptions and sales, advertising, and work done for others.

Secondary products.—As explained elsewhere (see "GENERAL EXPLANATIONS—Classification of establishments"), the output of each industry includes certain minor products different from those covered by the industry designation, but does not include products which normally belong to the industry but are made by establishments engaged primarily in other lines of production. To illustrate: An establishment engaged primarily in book and job (commercial) printing may also publish considerable music, and one whose chief business is printing and publishing newspapers and periodicals may also do commercial printing. Thus considerable overlapping occurs among the several industries of the subgroup, and for this reason the total values of the several classes of products as given in Tables 3 and 4 are not identical with the total values of all products shown for the corresponding industries, as given in Tables 1 and 2. The figures in Tables 3 to 22, inclusive, relate in most cases to the subgroup as a whole and not to the separate industries.

Number of publications and aggregate circulation per issue.—In calculating the number of newspapers, as shown in Table 9 and elsewhere, morning, evening, and Sunday editions of the same newspaper are counted separately. Thus every daily paper which publishes a Sunday edition counts as two in the total, and every daily which publishes morning, evening, and Sunday editions counts as three. The "Aggregate circulation per issue" is calculated, for each class of publications, by totalizing the returns for average circulation per issue as made for individual publications.

TABLE 1.—SUMMARY FOR THE PRINTING AND PUBLISHING INDUSTRIES IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]	Horsepower
THE PRINTING AND PUBLISHING INDUSTRIES AS A GROUP [2]								
1929	24,360	281,119	$506,290,168	$169,898,605	$660,029,112	$2,760,195,928	$2,100,166,816	544,588
1927	22,558	262,740	474,638,841	173,237,581	604,528,306	2,521,203,269	1,856,679,963	482,295
1925	21,072	252,515	440,427,479	139,698,819	612,059,699	2,283,303,640	1,671,243,941	409,121
1923	20,471	247,384	400,485,636	117,959,774	587,109,283	2,030,614,695	1,443,505,412	358,019
1921	20,336	230,305	357,515,007	106,915,035	590,616,672	1,838,339,928	1,247,723,256	[3]
1919	30,630	244,688	287,125,883	85,744,942	513,893,032	1,537,936,665	1,024,043,633	326,252
1914	31,637	229,442	168,125,218	40,192,950	227,208,391	813,534,097	586,325,706	295,923
1909	29,784	219,018	141,768,720	35,737,172	176,642,324	665,202,673	488,560,349	272,551
1904	26,445	186,262	109,327,177	28,414,451	123,807,826	498,326,482	374,518,656	147,180
1899	22,326	163,827	84,512,213	18,804,125	86,980,964	347,616,783	260,635,819	103,670
Per cent of increase or decrease (−):								
1927–1929	8.0	7.0	6.7	−1.9	−0.7	9.5	13.1	12.9
1925–1927	7.1	4.0	7.8	24.0	8.6	10.4	11.1	17.9
1923–1925	2.9	2.1	10.0	18.4	4.2	12.4	15.8	14.3
1921–1923	0.7	7.4	12.0	10.3	−0.6	10.5	15.7	----------
1919–1921	−33.6	−5.9	24.5	24.7	14.9	19.5	21.8	----------
1919–1929	−20.5	14.9	76.3	98.1	28.4	79.5	105.1	66.9
1909–1919	2.8	11.7	102.5	139.9	190.9	131.2	109.6	19.7
1899–1909	33.4	33.7	67.7	90.0	103.1	91.4	87.4	162.9
BOOK AND JOB [2]								
1929	12,712	150,649	$251,576,692	$91,895,926	$266,749,365	$1,006,656,768	$739,907,403	211,448
1927	11,466	142,347	241,810,478	62,696,328	253,056,059	920,251,123	667,195,064	194,718
1925	10,338	134,559	221,424,851	51,357,820	230,690,867	820,552,827	589,861,960	170,096
1923	10,094	130,819	202,314,555	39,135,286	221,376,622	747,486,319	526,109,697	153,334
1921	9,776	121,871	181,909,679	38,602,303	217,476,068	700,605,428	483,129,360	[3]
1919	13,108	123,408	141,850,722	32,254,994	211,384,064	599,191,610	387,807,546	131,544
1914	12,140	114,194	78,990,985	17,670,422	97,079,543	310,356,883	213,277,340	113,586
1909	10,735	109,608	66,928,199	12,312,464	78,296,517	253,536,048	175,240,131	98,297
1904	8,270	88,828	49,165,513	11,372,455	52,912,132	184,876,845	131,964,713	52,188
1899	6,934	68,445	33,803,960	7,400,177	36,316,386	122,360,829	86,044,443	36,982
Per cent of increase or decrease (−):								
1927–1929	10.9	5.8	4.0	−1.3	5.4	9.4	10.9	8.6
1925–1927	10.9	5.8	9.2	22.1	9.7	12.2	13.1	14.5
1923–1925	2.4	2.9	9.4	31.2	4.2	9.8	12.1	10.9
1921–1923	3.3	7.3	11.2	1.4	1.8	6.7	8.9	----------
1919–1921	−25.4	−1.2	28.2	19.7	2.9	16.9	24.6	----------
1919–1929	−3.0	22.1	77.4	91.9	26.2	68.0	90.8	60.7
1909–1919	22.1	12.6	111.9	162.0	170.0	136.3	121.3	33.8
1899–1909	54.8	60.1	98.0	66.4	115.6	107.2	103.7	165.8
MUSIC								
1929	124	810	$1,314,401	$2,729,134	$1,542,042	$15,240,268	$13,698,226	956
1927	119	994	1,077,680	2,819,352	1,658,367	15,881,634	14,223,267	1,343
1925	109	955	1,461,661	2,763,429	1,828,230	15,089,636	13,261,406	1,383
1923	110	919	1,366,756	3,050,499	2,252,830	14,626,810	12,373,980	1,231
1921	107	900	1,246,863	3,055,930	2,016,311	14,024,672	12,008,361	[3]
1919	160	899	926,988	2,713,899	2,123,781	14,592,177	12,468,396	634
1914	180	873	572,985	1,561,812	1,046,630	7,271,266	6,224,636	594
1909	178	738	438,928	893,352	986,202	5,575,903	4,589,701	365
1904	145	577	340,176	822,915	541,220	4,147,783	3,606,563	160
1899	87	778	375,202	337,361	449,674	2,272,385	1,822,711	206
Per cent of increase or decrease (−):								
1927–1929	4.2	−18.5	−21.7	−3.2	−7.0	−4.0	−3.7	−28.8
1925–1927	9.2	4.1	14.8	2.0	−9.3	5.2	7.3	−1.5
1923–1925	−0.9	3.9	6.9	−9.4	−18.8	3.2	7.2	10.7
1921–1923	2.8	2.1	9.6	−0.2	11.7	4.3	3.0	----------
1919–1921	−33.1	0.1	34.5	12.6	−5.1	−3.9	−3.7	----------
1919–1929	−22.5	−9.9	41.8	0.6	−27.4	4.4	9.9	50.8
1909–1919	−10.1	21.8	111.2	203.8	115.3	161.7	171.7	73.7
1899–1909	[4]	−5.1	17.0	164.8	119.3	145.4	151.8	77.2
NEWSPAPER AND PERIODICAL								
1929	11,524	129,660	$253,399,075	$105,273,545	$391,737,705	$1,738,298,892	$1,346,561,187	332,184
1927	10,973	119,399	231,150,683	107,721,901	409,813,880	1,585,075,512	1,175,261,632	286,234
1925	10,625	117,001	217,540,967	85,577,570	379,540,602	1,447,661,177	1,068,120,575	237,602
1923	10,267	115,646	196,804,325	75,773,989	363,479,831	1,268,501,566	905,021,735	203,454
1921	10,453	107,534	174,358,525	65,256,602	371,124,293	1,123,709,828	752,585,535	[3]
1919	17,362	120,381	144,348,173	50,776,049	300,385,187	924,152,878	623,767,691	194,074
1914	19,317	114,375	88,561,248	20,960,716	129,082,218	495,905,948	366,823,730	181,768
1909	18,871	108,672	74,401,593	22,531,356	97,359,605	406,090,122	308,730,517	173,889
1904	18,033	96,857	59,821,488	16,219,081	70,354,474	309,301,854	238,947,380	94,882
1899	15,305	94,604	50,333,051	11,066,887	50,214,904	222,983,569	172,768,665	66,482
Per cent of increase or decrease (−):								
1927–1929	5.0	8.6	9.6	−2.3	−4.4	9.7	14.6	16.1
1925–1927	3.3	2.0	6.3	25.9	8.0	9.5	10.0	20.4
1923–1925	3.5	1.2	10.5	13.9	4.4	14.1	18.0	16.8
1921–1923	−1.8	7.5	12.9	16.1	−2.1	12.9	20.3	----------
1919–1921	−39.8	−10.7	20.8	28.5	23.5	21.6	20.7	----------
1919–1929	−33.6	7.7	75.5	107.3	30.4	88.1	115.9	71.2
1909–1919	−8.0	10.8	94.0	125.4	208.5	127.6	102.0	11.6
1899–1909	23.3	14.9	47.8	103.6	93.9	82.1	78.7	161.6

[1] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[2] Figures for 1927 and earlier years differ from those formerly published because of the inclusion of data for establishments engaged primarily in the production of paper patterns and fashion plates. (See second paragraph, "Description of the Industries," p. 577.)
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Paid for contract work	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products	Value added by manufacture [1]
THE PRINTING AND PUBLISHING INDUSTRIES AS A GROUP [2]															
								Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
United States	1929	24,360	[3] 190,501	281,119	544,588	31,800	512,788	169,898,605	447,175,641	506,290,168	660,029,112	638,735,184	21,293,928	2,760,195,928	2,100,166,816
	1927	22,558	[3] 176,946	262,740	482,205	33,350	448,936	173,237,581	393,862,431	474,638,841	664,528,306	645,040,675	19,487,631	2,521,208,269	1,856,679,963
	1919	30,630	[3] 131,392	244,688	[4] 326,252	56,174	[4] 270,078	85,744,942	212,778,132	287,125,883	513,893,032	501,675,067	12,217,965	1,537,936,665	1,024,043,633
BOOK AND JOB [2]															
United States	1929	12,712	[5] 46,393	150,649	211,448	9,343	202,105	61,895,926	125,134,513	251,576,692	266,749,365	257,622,973	9,126,392	1,066,656,768	739,907,403
	1927	11,466	[5] 44,342	142,347	194,718	10,696	184,022	62,690,328	111,106,906	241,810,478	253,056,059	244,879,171	8,176,888	920,251,123	667,195,064
	1919	13,108	[5] 36,097	123,408	[4] 131,544	17,038	[4] 114,509	32,254,994	65,880,364	141,850,722	211,384,064	206,396,061	4,988,003	599,191,610	387,807,546
Alabama	1929	73	180	524	787	------	787	105,711	384,291	733,644	824,786	790,604	34,182	2,838,371	2,013,585
	1927	70	167	531	679	------	679	109,882	349,858	811,720	823,083	790,939	32,144	2,789,057	1,965,974
	1919	76	143	502	395	------	395	19,470	247,994	481,819	768,656	749,899	18,757	1,994,661	1,226,005
Arizona	1929	10	38	140	139	------	139	5,693	77,241	229,375	221,473	212,429	9,044	770,461	548,988
	1927	11	23	100	100	------	100	----------	40,394	157,787	173,804	166,891	6,913	516,232	342,428
	1919	15	18	95	91	------	91	----------	24,239	114,508	102,402	98,409	3,993	371,885	269,483
Arkansas	1929	44	144	379	659	------	659	355	348,117	566,543	602,197	576,851	25,346	2,053,093	1,450,896
	1927	33	140	358	526	------	526	10,597	304,008	555,988	554,281	533,945	20,336	1,867,629	1,313,348
	1919	47	113	330	395	4	391	8,351	185,722	316,670	492,460	476,550	15,910	1,341,816	849,356
California	1929	951	1,987	6,535	9,645	14	9,631	1,870,566	5,009,699	11,889,309	14,791,538	14,470,932	320,606	49,321,084	34,529,546
	1927	827	1,858	5,899	9,012	------	9,012	2,162,810	4,383,488	11,051,036	13,640,039	13,372,638	267,401	44,136,988	30,496,949
	1919	661	1,009	3,818	4,368	94	4,274	686,228	1,680,392	4,387,233	7,778,330	7,663,580	114,750	19,871,377	12,093,047
Colorado	1929	109	273	1,034	1,409	60	1,349	156,694	669,273	1,597,046	1,630,725	1,569,522	61,203	5,353,011	3,722,286
	1927	99	314	896	1,211	40	1,171	196,178	681,123	1,366,094	1,540,237	1,490,188	50,099	5,062,522	3,522,235
	1919	120	231	952	785	60	725	88,510	395,249	1,117,478	1,368,854	1,304,864	63,990	3,985,230	2,616,376
Connecticut	1929	203	561	1,950	3,136	12	3,124	256,443	1,273,090	2,958,078	3,294,803	3,146,032	148,831	10,515,671	7,220,778
	1927	162	493	1,721	2,086	34	2,052	369,485	1,068,099	2,437,711	2,512,202	2,395,225	116,977	8,259,845	5,747,643
	1919	255	383	1,600	1,590	212	1,378	182,683	582,551	1,674,471	2,212,977	2,140,023	72,954	6,246,748	4,033,771
Delaware	1929	15	31	186	165	------	165	----------	106,872	243,038	211,445	197,374	14,071	703,489	492,044
	1927	14	32	139	166	------	166	6,869	88,147	177,797	182,070	173,776	8,294	577,625	395,555
	1919	23	21	89	125	15	110	23,526	40,424	86,824	132,491	127,352	5,139	352,607	220,116
Dist. of Columbia	1929	80	233	1,221	1,674	------	1,674	394,056	733,236	1,915,417	1,657,470	1,594,411	73,059	6,368,306	4,710,836
	1927	85	245	1,202	1,243	------	1,243	214,805	715,004	1,956,935	1,805,362	1,745,188	60,174	6,341,453	4,536,091
	1919	102	136	1,034	854	8	846	47,642	323,743	1,182,500	1,425,550	1,384,560	40,990	3,974,976	2,549,426
Florida	1929	116	168	652	958	28	930	35,539	403,428	902,816	1,544,687	1,508,052	36,635	3,794,512	2,249,825
	1927	90	133	560	947	25	922	68,235	383,050	878,615	1,169,813	1,128,851	40,962	3,383,485	2,213,672
	1919	77	96	331	469	18	451	17,054	149,379	342,110	608,274	594,534	13,740	1,517,625	909,351
Georgia	1929	124	483	1,392	1,760	------	1,760	170,200	971,525	1,875,534	2,184,439	2,103,408	81,031	7,032,882	4,848,443
	1927	110	300	1,284	1,894	------	1,894	110,419	633,555	1,808,937	1,953,072	1,878,448	74,624	6,132,857	4,179,785
	1919	152	303	1,110	1,031	35	1,046	30,319	443,894	1,039,436	1,747,617	1,710,219	37,398	4,409,104	2,661,487
Idaho	1929	16	25	99	126	------	126	1,499	69,583	145,635	123,106	116,303	6,803	467,147	344,041
	1927	12	19	88	102	------	102	3,318	49,793	105,236	120,267	114,200	6,037	372,295	252,028
	1919	23	17	67	111	------	111	15	24,300	81,236	108,332	105,218	3,114	321,564	213,202
Illinois	1929	1,251	7,693	26,331	37,666	2,035	35,631	12,986,908	22,233,753	46,014,755	42,621,176	41,046,445	1,574,731	176,222,935	133,601,809
	1927	1,251	7,255	25,447	33,118	3,219	34,899	13,696,020	19,791,725	47,422,493	41,949,187	40,505,785	1,443,402	167,890,587	125,931,400
	1919	1,241	6,201	21,643	23,066	4,672	18,394	5,527,964	12,361,227	27,383,536	42,499,494	41,683,894	815,610	110,903,141	68,403,647
Indiana	1929	282	1,180	3,925	5,373	541	4,832	786,418	2,852,096	5,476,122	6,019,224	5,841,401	207,823	20,781,776	14,732,552
	1927	245	916	3,240	4,901	525	4,376	1,009,551	2,088,201	4,879,377	4,960,630	4,783,804	176,826	17,190,810	12,280,180
	1919	278	704	3,041	3,167	864	2,303	360,204	1,112,504	2,790,208	4,221,036	4,119,008	102,028	10,741,232	6,520,196
Iowa	1929	197	483	1,469	2,370	385	1,994	91,846	1,022,095	1,939,137	2,248,547	2,148,354	100,193	7,591,418	5,312,871
	1927	184	364	1,285	2,033	235	1,828	119,331	785,138	1,866,871	2,036,743	1,925,462	81,281	6,462,201	4,455,468
	1919	207	332	1,244	1,440	29	1,411	85,909	658,213	1,176,739	1,903,890	1,844,838	59,022	5,209,560	3,305,700
Kansas	1929	114	179	606	914	7	907	33,976	359,599	882,517	1,024,118	934,429	39,689	3,432,393	2,408,245
	1927	101	205	659	863	------	863	39,539	432,704	959,920	1,160,173	1,116,000	44,033	3,524,249	2,364,076
	1919	143	185	624	677	37	640	46,493	300,625	535,826	1,019,701	992,468	26,233	2,926,415	1,907,654
Kentucky	1929	100	287	1,332	2,746	5	2,741	27,027	793,665	1,822,744	2,058,797	1,978,374	80,423	6,118,405	4,059,608
	1927	92	265	1,193	1,470	------	1,470	31,352	632,417	1,558,299	1,715,445	1,649,829	65,616	5,188,471	3,473,026
	1919	103	236	1,195	1,181	15	1,166	54,597	451,811	1,054,239	1,501,874	1,457,356	44,518	4,421,926	2,920,052
Louisiana	1929	115	270	762	1,031	------	1,031	77,671	608,713	1,122,709	1,308,257	1,258,942	49,315	4,204,669	2,896,412
	1927	93	297	763	1,074	------	1,074	142,669	604,142	1,100,225	1,265,438	1,217,410	48,028	4,152,133	2,884,695
	1919	109	243	795	772	2	770	83,001	415,764	721,079	1,131,403	1,097,486	33,917	2,940,703	1,803,300
Maine	1929	66	110	432	829	------	829	44,430	250,448	567,851	507,782	482,421	25,361	1,884,835	1,357,053
	1927	56	106	360	617	------	617	75,277	200,139	474,937	502,193	483,560	18,633	1,676,675	1,174,482
	1919	97	81	380	655	42	613	17,827	116,560	344,755	423,617	405,854	17,763	1,193,897	770,280
Maryland	1929	201	595	2,531	4,312	703	3,609	529,937	1,458,206	3,522,257	4,639,382	4,506,138	133,244	13,824,355	9,184,973
	1927	191	759	2,497	3,256	717	2,539	541,257	1,606,791	3,576,530	5,116,293	4,997,525	118,768	14,111,176	8,994,883
	1919	210	572	2,243	2,453	699	1,754	521,391	1,142,366	2,492,302	4,065,557	3,973,495	92,072	10,690,650	6,625,093

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Paid for contract work	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products	Value added by manufacture [1]
					Total	Prime movers	Motors run by purchased energy				Total	Materials	Fuel and purchased energy		
BOOK AND JOB—continued [2]															
								Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Massachusetts	1929	673	2,928	9,341	12,994	2,045	10,949	4,452,119	7,713,186	14,741,670	14,590,909	14,112,469	478,440	61,892,665	47,301,756
	1927	681	2,976	8,569	11,171	1,525	9,646	4,603,986	7,152,075	13,294,125	13,090,221	12,680,356	409,865	57,852,084	44,761,863
	1919	769	2,763	7,638	8,213	2,025	6,188	3,735,861	4,710,479	8,248,217	12,943,830	12,615,388	328,442	41,043,542	28,699,712
Michigan	1929	482	1,573	6,074	7,987	300	7,687	1,997,617	4,481,409	10,703,368	12,535,680	12,147,930	387,750	40,905,467	28,369,787
	1927	393	1,365	4,685	6,442	380	6,062	1,885,311	3,568,509	8,163,992	9,590,759	9,290,306	300,453	30,576,882	20,986,123
	1919	436	1,086	3,717	4,261	608	3,653	562,319	2,137,193	4,681,124	6,471,796	6,318,942	152,854	17,675,925	11,204,129
Minnesota	1929	241	1,230	3,594	4,593	85	4,508	414,549	2,997,763	4,803,010	5,879,594	5,677,951	201,643	21,078,954	15,199,360
	1927	216	1,109	2,935	3,825	300	3,525	432,222	2,498,217	4,108,933	4,957,568	4,799,433	158,135	15,634,142	10,676,574
	1919	277	1,091	3,062	3,050	102	2,948	480,288	1,673,442	3,088,185	4,350,649	4,232,697	117,952	12,994,804	8,644,155
Mississippi	1929	34	73	221	423	6	417	----------	139,147	326,383	384,143	366,114	18,029	1,169,464	785,321
	1927	25	45	228	296	------	296	1,034	89,874	325,259	333,098	320,724	12,374	1,006,158	673,060
	1919	37	37	183	187	5	182	14,103	54,223	172,587	233,769	226,172	7,597	661,719	427,950
Missouri	1929	456	1,706	5,354	8,198	220	7,978	1,087,109	4,426,232	8,692,252	10,927,463	10,596,429	331,034	34,271,995	23,344,532
	1927	444	1,708	5,345	7,487	245	7,242	1,126,163	4,053,901	8,682,681	10,809,969	10,513,311	296,658	31,647,874	20,837,905
	1919	469	1,653	5,866	6,194	894	5,300	694,285	3,176,543	6,235,986	9,238,484	9,020,897	217,587	25,880,461	16,641,977
Montana	1929	21	69	179	251	------	251	9,573	147,883	277,440	275,444	263,499	11,945	899,294	623,850
	1927	19	48	178	232	------	232	8,720	96,981	262,687	251,331	241,278	10,053	796,683	545,352
	1919	22	61	182	183	------	183	373	98,045	223,458	276,568	268,004	8,564	849,810	573,242
Nebraska	1929	111	253	887	1,607	------	1,607	56,740	663,430	1,458,874	1,786,215	1,722,231	63,984	5,481,445	3,695,230
	1927	101	247	851	1,219	------	1,219	70,450	628,930	1,222,768	1,729,827	1,676,022	53,805	4,859,256	3,129,429
	1919	133	218	954	1,230	31	1,199	199,188	441,516	1,054,291	1,865,486	1,814,399	51,087	4,897,424	3,031,938
Nevada	1929	5	7	30	42	------	42	----------	14,069	62,258	62,264	60,015	2,249	208,900	146,636
	1927	4	7	31	41	------	41	5,536	19,373	62,761	57,895	55,465	2,430	222,125	164,230
	1919	5	5	27	75	------	75	960	13,617	39,342	42,673	41,391	1,282	143,161	100,488
New Hampshire	1929	38	84	833	993	------	993	43,178	185,443	1,389,778	424,409	392,801	31,608	2,597,776	2,173,367
	1927	37	90	829	854	------	854	29,078	201,095	1,219,045	469,072	446,806	22,266	2,554,256	2,085,184
	1919	63	35	361	341	10	331	1,994	74,235	339,958	276,951	265,061	11,890	1,030,955	754,004
New Jersey	1929	402	1,015	4,901	8,170	676	7,494	781,389	3,039,605	8,477,701	6,959,225	6,665,501	293,724	26,479,523	19,520,298
	1927	302	888	4,008	5,220	623	4,597	800,032	2,332,514	7,010,900	6,251,962	5,968,199	283,763	21,674,526	15,422,564
	1919	422	366	2,343	2,533	707	1,826	113,316	801,761	2,625,550	3,837,523	3,711,507	126,016	9,586,027	5,748,504
New Mexico	1929	8	5	36	57	------	57	----------	15,400	46,233	56,851	53,984	2,867	208,863	152,012
	1927	4	3	34	25	------	25	----------	11,400	50,126	45,918	43,499	2,419	150,990	105,072
	1919	7	6	39	20	------	20	100	7,890	30,578	29,598	28,025	1,573	96,637	67,039
New York	1929	2,564	12,670	31,897	38,929	57	38,872	28,633,936	35,618,093	62,169,091	61,021,641	58,895,643	2,125,998	274,041,493	213,019,852
	1927	2,355	12,705	31,716	38,989	305	38,684	28,465,389	32,698,247	61,993,380	57,309,189	55,246,692	2,062,497	252,763,430	195,444,241
	1919	2,551	9,368	26,483	26,630	1,137	25,493	15,011,925	17,857,630	34,608,983	45,709,046	44,589,785	1,119,261	150,585,623	104,876,577
North Carolina	1929	102	203	706	939	5	934	32,503	488,465	1,002,708	1,105,898	1,057,985	47,913	3,605,848	2,499,950
	1927	72	194	697	862	------	862	32,470	459,746	1,020,136	1,029,821	991,454	38,367	3,354,963	2,325,142
	1919	101	162	632	508	9	499	31,615	259,632	572,118	741,560	716,310	25,250	2,063,446	1,321,886
North Dakota	1929	21	48	157	233	------	233	4,662	137,801	207,775	237,090	224,918	12,172	741,063	503,973
	1927	18	42	153	205	------	205	9,524	90,920	229,487	227,196	216,199	10,997	697,056	469,860
	1919	17	29	103	141	2	142	6,811	50,159	106,814	217,235	204,655	12,580	539,158	321,923
Ohio	1929	839	2,826	10,188	14,974	1,086	13,888	2,902,145	7,878,301	16,183,746	19,482,476	18,876,040	606,436	68,999,908	49,517,432
	1927	720	2,587	9,851	14,733	1,095	13,638	2,561,309	6,939,365	15,466,373	19,689,807	19,187,440	502,367	64,203,770	44,513,963
	1919	872	2,001	8,509	9,631	1,583	8,048	1,007,485	3,495,457	9,100,890	15,190,795	14,870,793	320,002	39,218,369	24,027,574
Oklahoma	1929	112	212	681	1,002	------	1,002	39,067	543,352	917,069	1,168,123	1,119,527	48,596	3,899,456	2,731,333
	1927	91	158	502	740	------	740	23,622	378,993	737,518	906,569	868,383	38,186	2,795,067	1,838,498
	1919	97	191	505	513	5	508	35,964	568,404	593,569	857,905	833,043	24,862	2,507,449	1,649,544
Oregon	1929	136	263	665	1,248	------	1,248	143,699	617,306	1,060,303	1,251,840	1,209,113	42,727	4,249,339	2,997,499
	1927	118	196	635	1,142	------	1,142	108,252	445,272	1,075,406	1,295,199	1,262,236	32,963	3,976,410	2,681,211
	1919	122	203	567	793	1	792	23,952	394,160	724,532	1,257,371	1,233,513	23,858	3,395,859	2,138,488
Pennsylvania	1929	1,038	2,732	11,245	15,621	1,037	14,584	2,277,979	7,596,055	17,260,426	20,012,944	19,350,582	662,362	65,360,857	45,347,913
	1927	957	2,770	11,266	15,109	1,428	13,681	1,977,577	7,157,313	17,009,299	20,634,659	20,008,934	625,725	62,349,684	41,715,025
	1919	1,289	2,353	10,461	11,315	2,612	8,703	1,355,029	4,331,936	11,160,613	17,287,490	16,883,029	404,461	46,162,747	28,865,257
Rhode Island	1929	78	228	772	986	------	986	97,087	590,502	1,105,242	1,323,023	1,287,092	35,931	4,116,125	2,793,102
	1927	64	209	782	857	------	857	109,262	565,606	1,067,940	1,201,446	1,170,297	31,149	3,971,003	2,769,557
	1919	105	297	944	805	4	801	25,375	407,140	898,894	1,184,992	1,152,906	32,086	3,233,117	2,048,125
South Carolina	1929	39	103	316	413	------	413	5,671	241,433	394,862	400,017	381,120	18,897	1,334,616	934,599
	1927	30	94	278	402	------	402	5,414	160,254	418,708	424,312	408,422	15,890	1,290,770	866,458
	1919	48	68	279	281	------	281	3,001	105,757	255,703	309,625	300,652	8,973	869,683	560,058
South Dakota	1929	26	73	128	201	------	201	2,144	146,715	183,881	177,186	167,723	9,463	657,684	480,498
	1927	20	81	113	172	------	172	1,593	133,701	164,243	236,990	230,351	6,639	689,615	452,625
	1919	21	42	95	141	3	138	1,908	53,738	119,073	130,690	124,838	5,852	415,958	285,268
Tennessee	1929	127	398	1,418	1,917	25	1,892	151,287	948,905	1,920,644	2,748,200	2,649,996	88,204	7,826,180	5,087,980
	1927	95	433	1,874	2,375	------	2,375	190,691	935,263	2,427,261	2,924,768	2,839,009	85,759	8,737,424	5,812,656
	1919	146	841	1,277	2,538	45	2,493	76,611	794,827	1,250,758	2,169,793	2,079,986	89,807	5,604,176	3,434,383
Texas	1929	321	737	2,375	3,248	2	3,246	240,626	1,699,564	3,469,087	3,659,167	3,523,512	135,655	13,214,351	9,555,184
	1927	276	716	2,310	3,067	------	3,067	340,243	1,503,410	3,333,016	3,615,103	3,493,766	121,337	12,215,523	8,600,420
	1919	308	672	2,258	2,309	18	2,291	286,823	1,257,594	2,305,204	4,814,563	4,736,313	78,250	12,233,688	7,419,125

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Paid for contract work	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products	Value added by manufacture [1]
BOOK AND JOB—continued [2]								*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Utah	1929	50	146	315	413	------	413	119,860	271,400	434,725	462,450	436,266	26,184	1,713,044	1,250,594
	1927	35	84	229	303	------	303	44,306	165,558	319,180	393,718	374,471	19,247	1,175,094	781,376
	1919	51	121	373	314	------	314	13,960	172,491	382,184	523,245	507,223	16,022	1,384,249	861,004
Vermont	1929	29	57	280	314	------	314	21,330	120,139	351,959	265,443	247,772	17,671	997,463	732,020
	1927	24	54	289	392	------	392	15,689	112,705	436,129	366,810	349,832	16,978	1,140,515	773,705
	1919	53	43	329	338	46	292	5,817	62,483	258,402	267,605	255,433	12,172	820,736	553,131
Virginia	1929	135	510	1,830	2,504	------	2,504	313,076	1,337,845	2,386,489	2,919,842	2,834,402	85,440	9,905,825	6,985,983
	1927	118	430	1,674	2,020	------	2,020	392,487	1,042,488	2,112,775	2,726,922	2,644,921	82,001	9,104,108	6,377,246
	1919	174	336	1,695	1,404	159	1,245	684,835	571,471	1,017,355	2,418,473	2,347,700	70,773	7,028,143	4,609,670
Washington	1929	199	389	1,061	1,727	------	1,727	156,827	966,780	1,853,636	1,892,989	1,821,158	71,831	6,780,319	4,896,330
	1927	197	361	1,023	1,632	------	1,632	201,887	851,656	1,780,611	1,923,692	1,869,837	53,855	6,713,430	4,789,738
	1919	232	358	906	1,041	2	1,039	120,771	562,061	1,192,789	1,510,665	1,475,340	35,325	4,710,045	3,199,383
West Virginia	1929	64	101	370	584	------	584	10,797	257,515	602,191	483,479	464,240	19,239	1,822,922	1,339,443
	1927	52	97	367	455	------	455	19,992	229,960	535,663	450,111	432,208	17,903	1,761,442	1,311,331
	1919	71	89	387	378	45	333	8,491	133,074	464,830	526,892	513,841	13,051	1,434,478	907,586
Wisconsin	1929	278	818	3,195	5,030	9	5,021	326,037	2,084,494	4,561,752	6,645,902	6,424,338	221,564	18,692,933	12,047,031
	1927	250	680	2,634	4,032	------	4,032	320,445	1,697,672	3,980,439	6,891,195	6,712,773	178,422	16,446,299	9,555,104
	1919	261	569	2,125	2,943	167	2,776	98,090	952,179	2,026,103	3,135,791	3,048,621	87,170	7,970,336	4,834,545
Wyoming	1929	10	16	46	112	------	112	----------	41,381	93,442	75,416	70,164	5,252	265,163	189,747
	1927	10	19	44	91	------	91	990	48,112	93,139	70,550	66,793	3,757	274,194	203,644
	1919	11	3	24	41	9	32	2,570	4,180	29,539	51,426	49,980	1,446	148,765	97,339
MUSIC															
United States	1929	124	[5] 1,370	810	956	------	956	2,729,134	3,839,360	1,314,401	1,542,042	1,503,356	38,686	15,240,268	13,698,226
	1927	119	[6] 1,518	994	1,343	370	973	2,819,352	3,530,608	1,677,680	1,653,367	1,617,384	40,983	15,881,634	14,223,267
	1919	160	[6] 1,616	899	634	12	622	2,713,899	3,047,240	926,988	2,123,781	2,097,144	26,637	14,592,177	12,468,396
California	1929	4	31	24	41	------	41	118,660	139,452	35,385	19,914	19,154	760	377,374	357,460
	1927	5	139	15	47	------	47	127,188	208,257	31,160	26,228	25,714	514	721,946	695,718
	1919	4	---------	5	7	------	7	19,234	180	7,200	11,216	11,036	180	60,246	49,030
Illinois	1929	25	127	94	99	------	99	303,342	330,922	161,515	226,408	220,513	5,895	1,509,803	1,283,400
	1927	22	153	107	137	------	137	291,109	400,065	190,715	137,196	133,119	4,077	1,625,093	1,487,897
	1919	26	112	111	74	------	74	157,121	175,636	112,172	379,207	375,920	3,287	1,211,810	832,603
Massachusetts	1929	9	159	82	137	------	137	297,168	333,509	121,038	145,013	140,802	4,211	1,748,354	1,603,341
	1927	9	121	149	137	------	137	368,270	259,407	211,054	200,580	195,911	4,669	1,809,192	1,608,612
	1919	15	170	142	147	------	147	546,107	236,220	123,371	307,033	303,183	3,850	1,708,990	1,401,957
New York	1929	62	804	491	515	------	515	1,856,714	2,535,088	844,479	905,763	884,875	20,888	9,818,115	8,912,352
	1927	53	829	454	448	------	448	1,555,234	2,071,763	878,714	941,653	923,977	17,676	9,255,496	8,313,843
	1919	61	1,146	457	288	------	288	1,092,241	2,345,657	563,889	1,010,313	994,658	15,655	9,844,268	8,833,955
Ohio	1929	6	123	4	8	------	8	187,519	250,096	7,540	89,586	89,177	409	637,773	548,187
	1927	6	125	4	1	------	1	186,107	241,111	4,450	----------	----------	----------	584,333	584,333
	1919	11	61	14	10	------	10	128,061	66,338	9,662	61,929	61,682	247	447,037	385,108
Pennsylvania	1929	5	25	13	33	------	33	72,062	52,112	16,721	17,359	15,438	1,921	293,990	276,631
	1927	8	48	145	403	370	33	110,833	102,849	192,875	152,424	142,059	10,365	783,997	631,573
	1919	17	57	128	30	------	36	124,629	71,384	59,396	195,911	195,047	864	732,462	536,551
Groups of States: Iowa, 1 est.; Kans., 1; Ky., 1; Mo., 4; Nebr., 1; Tex., 1	1929	9	89	99	109	------	109	81,009	195,921	125,418	136,624	132,197	4,427	816,666	680,042
Md., 1 est.; N.J., 1; N.C., 1; Va. 1	1929	4	2	3	14	------	14	12,660	2,266	2,305	1,375	1,200	175	38,188	36,813
States not shown separately	[7] 1927	16	103	120	170	------	170	180,611	247,156	168,712	200,286	196,604	3,682	1,101,577	901,291
	[8] 1919	26	70	42	72	12	60	46,506	151,825	51,298	158,172	155,618	2,554	587,364	429,192
NEWSPAPER AND PERIODICAL															
United States	1929	11,524	[9] 142,738	129,660	332,184	22,457	309,727	105,273,545	318,201,762	253,399,075	391,737,705	379,608,855	12,128,850	1,738,298,892	1,346,561,187
	1927	10,973	[9] 131,086	119,399	286,234	22,293	263,941	107,721,901	279,224,917	231,150,683	409,813,880	398,544,120	11,269,760	1,585,075,512	1,175,261,632
	1919	17,362	[9] 93,079	120,381	[4] 194,074	39,127	[4] 154,947	50,776,049	143,850,528	144,348,173	300,385,187	293,181,862	7,203,325	924,152,878	623,767,691
Alabama	1929	121	985	889	2,168	13	2,155	509,084	1,770,571	1,524,838	2,147,347	2,065,077	82,270	9,756,948	7,609,601
	1927	119	990	761	1,726	17	1,709	118,908	1,594,328	1,246,233	3,212,029	3,134,550	77,479	8,734,153	5,522,124
	1919	156	624	697	1,201	139	1,062	70,487	840,017	869,882	1,552,211	1,507,980	44,231	5,054,877	3,502,666
Arizona	1929	43	408	344	565	22	543	94,286	881,503	613,212	584,492	536,069	48,423	3,498,014	2,913,522
	1927	43	288	356	489	7	482	69,204	665,532	674,045	731,396	695,630	35,766	2,776,996	2,045,600
	1919	69	263	417	421	101	320	32,799	354,728	426,210	372,259	345,533	26,726	1,714,510	1,342,251
Arkansas	1929	132	396	755	1,257	42	1,215	25,355	784,241	988,407	981,341	924,780	56,561	4,722,354	3,741,013
	1927	118	364	560	1,190	46	1,144	72,117	691,273	856,757	1,033,565	974,789	58,776	3,945,479	2,911,914
	1919	247	235	772	972	211	761	51,469	339,754	769,668	954,294	908,949	45,345	3,405,163	2,450,869

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Paid for contract work	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products	Value added by manufacture [1]
								Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
NEWSPAPER AND PERIODICAL—continued															
California	1929	755	11,329	6,876	18,206	78	18,128	3,814,060	21,265,357	14,239,754	20,391,749	19,872,362	519,387	94,655,488	74,263,739
	1927	695	9,679	6,107	17,465	105	17,360	3,579,123	17,730,956	13,290,900	20,817,699	20,333,625	484,065	86,945,307	66,127,617
	1919	704	4,567	4,770	8,373	560	7,813	1,127,546	6,261,389	5,922,396	9,677,017	9,446,955	230,062	34,342,963	24,665,946
Colorado	1929	169	1,019	1,121	2,318	3	2,315	483,683	1,966,200	1,871,851	2,649,044	2,540,063	108,981	12,526,112	9,877,068
	1927	166	1,240	1,239	2,175	8	2,167	391,245	1,919,938	2,347,209	3,182,953	3,077,608	105,345	11,039,597	7,856,644
	1919	333	763	1,079	1,518	194	1,324	324,435	1,137,345	1,321,725	2,315,211	2,242,550	72,661	7,533,978	5,218,767
Connecticut	1929	92	2,227	2,277	4,981	51	4,930	625,483	5,268,914	3,946,446	5,227,901	4,993,990	233,911	27,911,577	22,683,676
	1927	89	1,955	1,951	4,494	45	4,449	317,320	4,693,360	3,520,161	5,319,836	5,125,477	194,359	20,695,072	15,375,236
	1919	134	946	1,329	2,480	356	2,124	224,508	1,411,036	1,486,886	2,239,846	2,120,457	119,389	7,513,467	5,273,621
Delaware	1929	19	266	249	649	------	649	30,591	379,656	447,687	406,252	374,933	31,319	1,794,333	1,388,081
	1927	17	196	213	451	------	451	40,751	342,386	365,199	386,660	361,441	25,219	1,758,338	1,371,678
	1919	33	93	281	332	43	289	19,876	133,966	312,358	284,870	268,824	16,046	1,080,600	795,730
Dist. of Columbia	1929	98	2,645	1,338	2,797	------	2,797	3,436,477	5,399,341	2,747,454	5,101,425	4,974,603	126,822	23,491,505	18,390,080
	1927	88	2,389	1,189	2,294	------	2,294	3,226,589	4,934,766	2,520,755	5,344,156	5,243,809	100,347	23,617,701	18,273,545
	1919	67	1,355	803	1,679	385	1,294	2,567,489	2,107,191	1,166,320	2,798,758	2,754,828	43,930	11,897,555	9,098,797
Florida	1929	158	1,359	1,404	6,645	5	6,640	84,857	2,683,232	2,553,440	2,179,315	2,010,309	169,006	11,726,493	9,547,178
	1927	149	1,366	1,553	4,740	16	4,724	112,044	2,966,878	3,150,089	2,859,128	2,656,688	202,440	13,538,545	10,679,417
	1919	160	436	841	1,054	217	837	89,239	636,301	915,491	1,099,629	1,042,512	57,117	4,100,841	3,001,212
Georgia	1929	184	1,376	1,416	2,757	16	2,741	746,200	2,958,623	2,382,718	3,148,201	3,017,448	130,753	14,656,932	11,508,731
	1927	168	1,236	1,401	2,705	33	2,672	454,249	2,293,926	2,222,880	4,046,487	4,544,087	102,400	13,659,700	9,013,213
	1919	202	1,182	1,719	2,189	251	1,938	354,135	1,684,053	1,595,152	3,467,668	3,387,245	80,423	9,683,328	6,215,660
Idaho	1929	80	240	379	770	2	768	14,561	448,228	647,515	435,407	394,870	40,537	2,521,811	2,086,404
	1927	70	219	335	548	2	546	12,482	385,804	621,610	430,657	395,379	35,278	2,205,854	1,775,197
	1919	136	182	371	542	37	505	12,512	253,001	518,532	524,174	491,265	32,909	1,853,587	1,329,413
Illinois	1929	944	13,626	11,660	33,008	2,803	30,205	18,583,389	35,036,512	25,079,074	41,290,818	40,383,679	907,139	178,015,526	136,724,708
	1927	903	12,650	10,679	24,638	2,378	22,260	16,429,662	29,992,331	21,256,494	46,329,913	45,092,976	1,236,937	169,623,924	123,294,011
	1919	1,204	8,593	10,120	14,037	3,204	10,833	6,265,024	15,099,803	11,407,047	29,984,922	29,440,143	544,779	88,945,960	58,961,038
Indiana	1929	331	3,157	3,410	7,523	163	7,360	1,852,594	5,821,763	5,623,323	6,753,491	6,391,302	362,189	32,578,912	25,825,421
	1927	328	3,290	3,154	7,234	113	7,121	1,513,577	5,075,298	5,562,830	7,570,557	7,230,230	334,327	30,343,892	22,773,335
	1919	559	1,946	3,511	6,178	480	5,698	839,240	2,587,553	3,718,805	5,687,835	5,475,746	212,089	19,184,687	13,496,852
Iowa	1929	401	2,634	3,040	10,697	1,017	9,680	831,940	5,118,445	4,638,497	5,776,436	5,495,567	280,869	28,922,914	23,146,478
	1927	403	2,237	2,830	6,567	997	5,570	642,987	4,325,135	4,592,706	6,473,499	6,193,113	280,386	26,941,655	20,468,156
	1919	774	2,185	3,352	5,353	956	4,397	470,076	2,881,100	3,746,003	5,466,398	5,162,464	303,934	20,430,956	14,964,558
Kansas	1929	307	1,744	2,068	3,861	188	3,673	141,736	3,015,206	3,053,468	3,320,304	3,150,786	169,518	16,829,411	13,509,107
	1927	274	1,509	1,684	3,368	159	3,209	237,532	2,576,715	2,665,615	3,937,997	3,773,142	164,855	14,460,206	10,522,209
	1919	590	684	2,414	6,897	569	6,328	173,624	952,552	2,219,400	3,998,527	3,877,492	121,035	9,774,647	5,776,120
Kentucky	1929	167	1,540	1,364	2,908	11	2,897	402,078	2,454,175	2,238,070	3,051,938	2,943,694	108,244	11,958,611	8,906,673
	1927	173	1,219	1,383	2,031	45	1,986	511,885	2,160,505	2,080,199	4,413,584	4,287,637	125,947	11,680,621	7,267,037
	1919	252	791	1,272	2,306	332	1,974	205,794	1,033,596	1,317,140	1,752,172	1,661,454	90,718	6,183,394	4,431,222
Louisiana	1929	93	1,037	951	2,308	33	2,275	142,844	1,964,806	1,547,750	2,539,037	2,457,931	81,106	10,019,412	7,480,375
	1927	75	942	946	2,042	13	2,029	149,419	1,836,263	1,421,100	2,675,895	2,591,652	84,243	9,403,941	6,728,046
	1919	149	677	711	1,252	120	1,132	149,689	967,997	920,250	1,894,309	1,856,859	37,450	4,979,417	3,085,108
Maine	1929	51	681	1,011	1,569	------	1,569	14,971	1,258,406	1,299,254	1,582,671	1,511,969	70,702	6,872,043	5,289,372
	1927	53	601	973	1,365	22	1,343	71,275	983,125	1,204,823	1,854,139	1,807,610	46,529	6,595,921	4,741,782
	1919	69	317	1,154	1,242	343	899	110,418	418,535	900,908	1,880,978	1,828,516	52,462	4,561,473	2,680,495
Maryland	1929	91	1,780	1,595	3,361	10	3,351	853,840	3,695,855	2,901,400	4,456,027	4,328,140	127,887	16,659,239	12,203,212
	1927	93	1,750	1,429	2,868	31	2,837	869,530	3,042,854	2,480,256	4,593,818	4,473,879	119,939	16,682,255	12,088,437
	1919	142	1,009	1,397	2,310	311	1,999	344,363	1,599,532	1,611,779	3,502,458	3,433,986	68,472	9,363,679	5,861,121
Massachusetts	1929	318	6,123	5,775	16,700	1,111	15,589	3,929,277	14,625,272	13,252,459	20,509,747	19,880,461	629,286	76,840,313	56,330,566
	1927	332	5,983	5,664	14,091	754	13,337	5,042,994	12,889,830	11,976,944	22,077,420	21,582,298	495,122	72,813,902	50,236,542
	1919	412	4,332	5,858	10,267	1,345	8,922	1,842,154	7,001,611	8,086,782	16,473,155	16,029,925	443,230	46,801,145	30,327,990
Michigan	1929	408	4,198	3,950	15,142	27	15,115	1,990,830	9,586,915	8,134,681	13,435,601	13,004,577	431,024	59,211,550	45,775,949
	1927	368	3,741	3,735	10,538	81	10,457	1,492,428	8,405,205	7,035,359	12,943,223	12,567,102	376,121	51,577,504	38,034,281
	1919	565	2,984	3,176	6,438	426	6,012	583,320	3,772,047	3,935,040	7,696,145	7,506,072	190,073	24,980,421	17,234,276
Minnesota	1929	408	2,806	2,994	6,146	181	5,965	1,416,477	5,331,881	4,949,711	7,334,759	7,042,016	292,743	31,707,019	24,372,260
	1927	390	2,596	2,857	6,518	204	6,314	1,278,931	4,893,140	4,666,417	7,718,951	7,457,410	261,541	28,929,330	21,210,379
	1919	701	2,014	3,058	4,550	659	3,891	1,169,380	2,578,060	3,531,693	5,878,741	5,676,389	202,352	20,088,590	14,209,849
Mississippi	1929	106	281	516	1,070	23	1,047	27,630	551,494	733,088	623,058	567,054	56,004	3,277,994	2,654,936
	1927	101	233	474	877	54	823	48,289	434,126	685,697	678,497	616,163	63,334	2,874,224	2,195,727
	1919	156	98	412	511	162	349	10,733	156,774	341,665	317,351	292,267	25,084	1,347,777	1,030,426
Missouri	1929	407	3,747	4,284	10,359	1,548	8,811	1,482,727	7,904,811	8,061,557	12,732,143	12,376,882	355,261	49,334,986	36,602,843
	1927	414	3,595	4,055	8,813	1,578	7,235	1,673,002	7,511,355	7,677,965	13,741,159	13,374,582	366,577	45,433,687	31,692,528
	1919	774	2,198	4,183	7,014	2,605	4,409	1,128,253	4,621,874	4,410,609	11,859,573	11,594,122	265,451	30,011,808	18,152,235
Montana	1929	95	304	712	1,872	28	1,844	65,125	831,749	1,233,987	1,003,633	936,727	66,906	4,222,014	3,218,381
	1927	87	359	558	1,030	27	1,003	72,120	783,155	1,046,502	738,975	676,422	62,553	3,731,854	2,992,879
	1919	225	315	829	1,306	276	1,030	54,862	550,306	1,120,993	1,050,061	988,924	61,137	3,912,779	2,802,718
Nebraska	1929	256	1,147	1,564	3,517	242	3,275	418,671	2,422,801	2,414,176	2,755,060	2,618,881	136,179	12,995,956	10,240,896
	1927	224	945	1,320	3,392	260	3,132	386,744	1,997,137	2,091,783	2,847,465	2,711,274	136,191	11,232,566	8,385,101
	1919	554	895	1,522	2,797	695	2,102	488,386	1,330,390	1,626,981	3,003,829	2,886,268	117,561	10,179,309	7,175,480
Nevada	1929	25	66	93	222	------	222	8,449	135,129	179,869	102,743	90,633	12,110	735,926	633,183
	1927	23	52	73	147	11	136	8,013	103,499	157,408	116,841	105,648	11,193	653,352	536,511
	1919	34	20	103	189	36	153	3,635	57,068	147,058	92,934	82,833	10,101	467,631	374,697
New Hampshire	1929	52	229	364	732	5	727	66,938	455,800	630,578	381,005	338,800	42,205	2,397,392	2,016,387
	1927	58	283	377	734	44	690	181,878	505,571	578,451	478,218	439,800	38,418	2,538,355	2,060,137
	1919	65	146	436	522	56	466	38,502	187,080	553,320	456,609	433,524	23,085	1,423,983	967,374

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Paid for contract work	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products	Value added by manufacture[1]
NEWSPAPER AND PERIODICAL—continued								*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
New Jersey	1929	248	3,119	3,076	7,703	1,372	6,331	1,061,323	6,746,391	7,183,663	6,366,974	5,978,010	388,964	31,985,491	25,618,517
	1927	246	2,786	2,889	7,007	1,174	5,833	654,321	6,210,759	6,548,012	6,662,476	6,288,398	374,078	29,744,819	23,142,343
	1919	295	1,145	2,352	3,304	823	2,481	202,572	2,008,950	2,945,543	4,109,322	3,942,083	167,239	12,399,856	8,290,534
New Mexico	1929	42	153	224	454	11	443	1,027	230,134	348,287	261,214	236,887	24,327	1,358,298	1,097,084
	1927	34	108	178	309	6	303	2,703	199,251	296,469	228,956	207,431	21,526	1,035,169	806,213
	1919	80	67	257	284	72	212	7,028	112,557	258,469	211,396	190,279	21,117	803,899	592,503
New York	1929	1,283	33,105	20,002	45,308	2,496	42,812	48,931,567	87,744,507	49,903,317	91,310,898	89,185,316	2,125,582	436,059,127	344,748,229
	1927	1,266	29,246	18,726	37,818	3,257	34,561	55,140,129	76,342,959	44,579,716	88,705,205	86,927,978	1,777,230	390,815,941	302,110,736
	1919	1,582	25,628	23,164	31,551	6,741	24,810	24,008,073	45,541,830	30,813,390	82,802,888	81,589,594	1,213,294	252,109,402	169,306,514
North Carolina	1929	160	1,020	1,137	2,402	19	2,383	182,951	2,074,037	1,819,140	1,941,398	1,826,604	114,794	10,054,400	8,113,002
	1927	157	946	1,059	2,308	22	2,286	162,488	1,838,282	1,819,469	1,946,383	1,821,161	125,222	8,990,521	7,014,138
	1919	215	461	976	1,483	213	1,270	64,591	641,202	1,241,817	1,291,470	1,221,878	69,592	4,340,731	3,049,261
North Dakota	1929	98	244	414	892	19	873	23,768	540,905	717,297	495,431	444,135	51,296	3,139,106	2,643,675
	1927	79	184	310	786	25	761	25,463	461,275	610,119	458,969	418,254	40,715	2,513,152	2,054,183
	1919	301	230	557	1,134	359	775	74,692	331,934	674,011	633,916	564,201	69,715	2,685,869	2,051,953
Ohio	1929	552	8,220	11,069	27,426	4,382	23,044	3,946,447	16,815,685	19,400,115	32,875,892	32,066,105	809,787	132,386,949	99,511,057
	1927	520	8,068	9,445	24,593	3,393	21,200	4,217,007	15,046,949	16,884,398	31,465,479	30,688,491	776,988	113,504,647	82,039,168
	1919	794	5,495	7,627	13,961	3,131	10,830	2,270,258	7,262,186	9,411,413	18,442,025	18,039,722	402,303	58,567,435	40,125,410
Oklahoma	1929	216	1,547	1,806	3,280	14	3,266	96,054	3,008,506	3,075,681	3,502,483	3,349,421	153,062	15,975,131	12,472,648
	1927	205	1,275	1,548	3,042	7	3,035	180,766	2,688,150	2,634,824	2,829,857	2,695,629	134,228	12,985,123	10,155,266
	1919	410	842	1,415	2,136	396	1,740	102,889	948,474	1,728,638	2,182,914	2,098,231	84,683	7,704,823	5,521,909
Oregon	1929	157	1,398	1,093	2,819	15	2,804	310,482	2,388,250	2,062,143	2,447,575	2,329,179	118,396	11,141,320	8,693,745
	1927	130	1,188	1,061	2,466	4	2,462	332,604	1,886,444	2,060,207	2,477,742	2,381,868	95,874	10,465,097	7,987,355
	1919	224	723	929	1,681	67	1,614	284,037	1,118,952	1,363,102	1,644,091	1,582,253	61,838	6,408,348	4,764,257
Pennsylvania	1929	659	12,282	13,284	44,134	4,984	39,150	4,775,934	25,888,870	24,009,480	50,346,758	49,163,090	1,183,668	200,500,834	150,154,076
	1927	680	12,480	13,236	43,747	4,993	38,754	3,652,369	24,237,522	24,053,066	56,865,923	55,812,561	1,053,362	192,199,319	135,333,396
	1919	963	9,380	12,331	22,045	7,694	14,351	2,311,528	12,861,303	15,381,711	39,048,224	38,385,149	663,075	106,666,923	67,618,699
Rhode Island	1929	31	599	734	1,621	600	1,021	80,726	1,337,061	1,478,081	1,593,871	1,531,746	62,125	7,465,921	5,872,050
	1927	27	500	709	2,020	1,150	870	54,899	1,273,556	1,342,251	1,551,399	1,493,748	57,651	6,081,904	5,130,505
	1919	36	339	602	1,268	969	299	35,186	596,027	794,977	956,166	908,242	47,924	3,771,831	2,815,665
South Carolina	1929	70	392	609	1,043	19	1,024	16,619	784,302	797,754	822,509	777,549	44,960	4,153,834	3,331,325
	1927	69	359	444	805	6	799	28,478	730,510	744,897	757,897	709,303	48,594	3,666,154	2,908,257
	1919	126	359	743	976	132	844	40,582	485,494	714,718	893,875	847,177	46,698	3,134,951	2,241,076
South Dakota	1929	149	266	532	1,372	26	1,346	22,591	565,336	808,945	703,443	640,779	62,664	3,603,653	2,960,210
	1927	92	286	421	902	23	879	12,748	584,653	665,845	559,904	505,259	54,645	2,877,628	2,317,724
	1919	337	261	671	1,273	422	851	47,032	376,381	691,946	851,253	782,036	69,217	3,465,969	2,614,716
Tennessee	1929	148	1,309	2,088	3,701	90	3,611	668,075	2,472,639	3,107,217	4,107,213	3,922,719	184,494	17,587,051	13,479,838
	1927	125	1,436	1,713	2,811	88	2,723	1,076,372	2,541,710	2,772,792	4,012,794	3,865,178	147,616	15,661,110	11,648,316
	1919	220	901	1,690	2,197	217	1,980	569,116	1,256,400	1,640,673	3,301,947	3,216,522	85,425	10,228,670	6,926,723
Texas	1929	492	3,863	3,731	9,477	451	9,026	608,059	7,513,595	6,749,424	9,270,063	8,887,591	382,472	38,423,907	29,153,844
	1927	440	3,303	3,225	7,564	451	7,113	710,800	6,072,130	5,949,282	9,134,010	8,806,275	327,735	33,581,617	24,447,607
	1919	765	2,217	3,127	5,708	1,497	4,211	597,195	3,121,951	3,567,216	6,121,910	5,925,638	196,272	19,998,949	13,877,039
Utah	1929	50	517	520	769	------	769	123,061	927,941	755,637	1,009,541	960,377	49,164	4,256,394	3,246,853
	1927	48	447	409	860	8	852	114,955	811,144	693,878	1,282,015	1,241,117	40,898	3,827,362	2,545,347
	1919	101	348	825	746	19	727	200,962	446,420	738,286	865,647	837,581	28,066	3,129,560	2,263,913
Vermont	1929	34	200	293	586	------	586	11,056	364,205	461,036	280,997	248,652	32,345	1,852,658	1,571,661
	1927	35	183	243	436	------	436	10,196	332,911	361,219	254,052	226,125	27,927	1,461,487	1,207,435
	1919	53	138	286	359	45	314	18,259	152,666	219,613	220,449	203,280	17,169	894,527	674,078
Virginia	1929	123	998	1,058	2,767	33	2,734	423,431	1,982,377	1,843,491	2,113,745	2,015,233	98,512	10,202,608	8,088,863
	1927	117	944	1,042	2,916	47	2,869	394,391	1,851,535	1,607,126	2,103,305	2,004,254	99,051	9,778,227	7,674,922
	1919	197	622	964	1,549	161	1,388	124,074	823,660	1,145,044	2,084,252	2,024,426	59,826	5,907,572	3,913,320
Washington	1929	213	2,181	1,748	3,489	10	3,479	979,626	4,729,560	3,480,638	4,005,473	3,862,277	143,196	21,093,525	17,088,052
	1927	213	1,978	1,424	2,933	7	2,926	911,457	3,717,757	3,460,267	4,024,688	3,891,669	133,019	18,855,542	14,830,854
	1919	316	1,307	1,404	2,488	83	2,405	623,478	1,897,034	2,250,200	2,797,893	2,679,459	118,434	11,954,252	9,156,359
West Virginia	1929	113	806	975	1,888	273	1,615	26,043	1,385,969	1,575,959	1,227,340	1,154,897	72,443	6,943,987	5,716,647
	1927	112	719	908	2,122	345	1,777	29,244	1,301,308	1,546,924	1,497,819	1,424,659	73,160	6,549,906	5,052,087
	1919	151	333	952	1,569	554	1,015	35,776	438,341	930,144	1,055,265	997,027	58,238	3,402,541	2,347,276
Wisconsin	1929	329	2,955	2,694	6,500	15	6,485	877,352	6,431,115	4,936,676	5,943,655	5,614,985	328,670	28,921,724	22,978,069
	1927	319	2,622	2,395	5,969	231	5,738	992,389	5,173,181	4,208,151	5,704,657	5,430,872	273,785	24,883,211	19,178,554
	1919	529	1,944	2,680	3,705	367	3,338	397,157	2,318,523	2,937,217	4,367,679	4,202,897	164,782	14,639,902	10,272,223
Wyoming	1929	46	118	174	445	6	439	13,200	244,491	351,430	210,287	189,700	20,587	1,292,189	1,081,902
	1927	38	91	158	290	6	284	13,734	178,940	298,378	195,642	174,872	20,770	1,093,585	897,943
	1919	81	83	210	1,014	96	918	9,616	155,284	299,892	220,671	200,105	20,566	1,078,443	857,772

[1] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[2] See footnote 2, Table 1.

[3] Not including proprietors and firm members, as follows: For 1929, 13,164; 1927, 16,489; 1919, 26,873. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 484,784; 1927, 456,175; 1919, 402,953.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Not including proprietors and firm members, as follows: For 1929, 7,859; 1927, 9,137; 1919, 12,196. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 204,901; 1927, 195,826; 1919, 171,701.

[6] Not including proprietors and firm members, as follows: For 1929, 31; 1927, 67; 1919, 107. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,211; 1927, 2,579; 1919, 2,622.

[7] Connecticut, 1 establishment; Iowa, 1; Kentucky, 1; Maine, 6; Maryland, 1; Michigan, 1; Nebraska, 1; New Jersey, 2; Texas, 2.

[8] Arkansas, 1 establishment; Indiana, 4; Iowa, 1; Louisiana, 1; Maryland, 1; Michigan, 3; Missouri, 7; Nebraska, 1; New Jersey, 2; Texas, 2; Virginia, 1; Washington, 2.

[9] Not including proprietors and firm members, as follows: For 1929, 5,274; 1927, 7,285; 1919, 14,570. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 277,672; 1927, 257,770; 1919, 228,630.

TABLE 3.—PRODUCTS, BY CLASS AND VALUE, FOR THE PRINTING AND PUBLISHING INDUSTRIES, FOR THE UNITED STATES: 1929, 1927, 1925, AND 1923

CLASS	1929	1927	1925	1923	PER CENT OF INCREASE OR DECREASE (—)		
					1927–1929	1925–1927	1923–1925
1. The printing and publishing industries, all products, total value	$2,760,195,928	[1] $2,521,208,269	[1] $2,283,303,640	[1] $2,030,614,695	9.5	10.4	12.4
2. Printing and publishing	2,704,700,980	2,468,361,620	2,231,647,511	[2] 2,016,622,262	9.6	10.6	10.7
3. Products normally belonging to industries allied to printing and publishing [3]	51,546,262	47,171,258	45,895,374		9.3	2.8	----
4. Products not normally belonging either to printing and publishing or to allied industries	3,948,686	5,675,391	5,760,755	13,992,433	−30.4	−1.5	−58.8
5. Printing and publishing reported as secondary products by establishments engaged primarily in industries other than printing and publishing	[4] 6,905,647	[5] 5,540,792	[6] 9,447,963	[5] 4,746,820	24.6	−41.4	99.0
Printing and publishing, all industries: Aggregate value (sum of 2 and 5)	2,711,606,627	2,473,902,412	2,241,095,474	2,021,369,082	9.6	10.4	10.9
Newspapers and periodicals printed and published or published only, total	1,580,564,523	1,459,688,163	1,321,610,733	1,154,786,177	8.3	10.4	14.4
Subscriptions and sales	460,326,428	429,467,144	398,338,060	360,892,708	7.2	7.8	10.4
Advertising	1,120,238,395	1,030,221,019	923,272,673	793,893,469	8.7	11.6	16.3
Newspapers, total	1,073,119,362	977,648,187	892,094,122	803,497,387	9.8	9.6	11.0
Subscriptions and sales	275,781,131	252,811,104	230,580,880	222,559,646	9.1	9.6	3.6
Advertising	797,338,231	724,837,083	661,513,242	580,937,741	10.0	9.6	13.9
Periodicals other than newspapers, total	507,445,461	482,039,976	429,516,611	351,288,790	5.3	12.2	22.3
Subscriptions and sales	184,545,297	176,656,040	167,757,180	138,333,062	4.5	5.3	21.3
Advertising	322,900,164	305,383,936	261,759,431	212,955,728	5.7	16.7	22.9
Books and pamphlets printed and published or published only	199,014,700	178,102,753	154,991,493	135,278,737	11.7	15.0	14.6
Commercial printing, total [7]	902,523,400	805,122,425	736,647,087	707,881,798	12.1	9.3	4.1
General job printing	738,246,106	[8] 665,292,676	[8] 610,094,234	[9] 627,793,660	11.0	9.0	−2.8
Newspapers and periodicals printed for publication by others [7]	71,520,971	54,974,959	50,488,175	36,892,993	30.1	−2.7	53.1
Books and pamphlets printed for publication by others [7]	57,997,516	54,756,859	46,716,315	43,195,145	5.9	17.2	8.2
Composition sold to the trade	30,647,365	26,336,549	19,072,482	([10])	16.4	38.1	----
Ready prints	4,111,532	3,761,382	4,275,851	([10])	9.3	−12.0	----
Sheet music and books of music	16,537,747	17,140,715	14,133,306	14,103,414	−3.6	21.3	−0.2
Paper patterns	12,965,867	13,782,356	13,712,855	9,258,956	−5.9	0.5	48.1

[1] See footnote 2, Table 1.
[2] Includes receipts for blank-book making, composition sold to the trade, and "ready prints." No such data are included in items 2 and 3 for later years.
[3] Receipts for bookbinding, electrotyping, lithographing, photo-engraving, etc., done in establishments engaged primarily in printing and publishing.
[4] General job printing, $6,020,215; paper patterns, $885,432.
[5] General job printing.
[6] General job printing, $9,400,518; paper patterns, $47,445.
[7] The inclusion of the items for "Newspapers and periodicals printed for publication by others" and "Books and pamphlets printed for publication by others" results in duplication in the 1929 total value of products to the amount of $129,518,487; in the 1927 total, $109,731,818; in the 1925 total, $103,204,520; and in the 1923 total, $80,088,138. These items represent amounts paid by publishers for work done for them by printing establishments operated by others, and consequently enter into both the production cost and the "Value of products" (receipts from subscriptions and sales and advertising) for newspapers and periodicals and books and pamphlets published but not printed by the same establishments.
[8] The "General job printing" items for 1927 and 1925 as published in the report for 1927 did not include receipts for general job printing reported by establishments outside the printing and publishing industries (see item 5, for the respective years and footnotes 5 and 6), but did include data for "ready prints" shown separately in this table, and for "Products normally belonging to industries allied to printing and publishing" (see item 3 and footnote 3).
[9] The "General job printing" item for 1923 as published in the report for 1927 did not include $4,746,820, receipts for general job printing reported by establishments outside the printing and publishing industry. (See item 5, for 1923, and footnote 5.)
[10] No separate data.

TABLE 4.—PRODUCTS, BY CLASS AND VALUE, FOR THE UNITED STATES, 1929 AND 1927, AND BY GEOGRAPHIC DIVISIONS AND STATES, 1929

DIVISION AND STATE	Number of establishments	Total value	NEWSPAPERS PRINTED AND PUBLISHED OR PUBLISHED ONLY		PERIODICALS PRINTED AND PUBLISHED OR PUBLISHED ONLY		Books and pamphlets printed and published or published only	Sheet music and books of music	COMMERCIAL PRINTING			Other products
			Subscriptions and sales	Advertising	Subscriptions and sales	Advertising			Newspapers and periodicals printed for publication by others	Books and pamphlets printed for publication by others	General job printing, composition sold to the trade, and ready prints	
		Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
United States.1929	24,360	2,760,195,928	275,781,131	797,338,231	184,545,297	322,900,164	199,014,700	16,537,747	71,520,971	57,997,516	[1]766,984,788	67,575,383
1927	22,558	2,521,208,269	252,811,104	724,837,083	176,656,040	305,383,936	178,162,753	17,146,715	54,974,959	54,756,859	[2]689,849,815	66,629,005
NEW ENGLAND	1,674	207,072,793	22,620,510	63,179,713	10,731,430	15,147,170	23,151,445	2,208,116	3,899,067	4,263,463	57,460,727	4,411,152
Maine	117	8,736,878	1,075,200	3,209,246	933,574	1,168,367	84,784		60,481	85,562	2,064,472	55,192
New Hampshire	90	4,995,168	884,635	1,329,410	48,860	118,660	33,647		1,632,796	354,398	1,037,646	55,116
Vermont	63	2,850,121	333,720	1,148,749	250	4,361			201,844	314,262	816,363	30,563
Massachusetts	1,000	140,481,332	16,273,437	40,944,245	7,864,575	7,316,865	22,386,654	2,203,114	1,524,721	3,102,613	36,401,544	2,463,534
Rhode Island	109	11,582,046	1,369,844	5,609,431	35,401	81,446	29,138	458	19,517	73,818	4,249,637	113,356
Connecticut	295	38,427,248	3,183,665	10,938,632	1,848,770	6,457,471	617,192	4,544	459,708	332,810	12,891,065	1,003,391
MIDDLE ATLANTIC	6,262	1,044,545,946	88,829,508	229,552,743	100,425,182	197,332,575	110,683,819	10,712,306	24,399,479	23,125,501	237,140,450	21,844,383
New York	3,909	719,918,735	60,120,107	139,157,655	83,179,380	116,382,463	97,193,584	9,648,155	17,547,631	17,709,192	161,796,452	17,234,116
New Jersey	651	58,471,530	4,706,512	22,757,468	457,710	1,027,271	1,524,535	6,516	2,888,094	3,573,956	19,917,051	1,552,417
Pennsylvania	1,702	266,155,681	23,942,889	67,637,620	16,788,092	80,472,841	11,965,700	1,057,635	3,963,754	1,842,353	55,426,947	3,057,850
EAST NORTH CENTRAL	5,727	758,865,311	72,629,695	201,203,042	46,277,208	66,653,798	47,935,584	2,395,663	20,954,828	19,134,336	251,783,441	23,897,716
Ohio	1,397	202,024,630	17,008,671	55,475,779	18,411,535	27,187,543	6,269,392	879,964	4,015,158	2,016,893	61,280,673	9,419,022
Indiana	613	53,360,688	5,504,241	18,632,383	2,648,639	2,708,523	2,185,113	825	1,078,145	1,748,187	16,132,142	2,062,490
Illinois	2,220	355,748,319	31,165,131	72,637,446	22,855,632	30,718,748	37,424,418	1,500,441	18,595,443	11,093,439	121,477,789	8,273,832
Michigan	890	100,117,017	12,476,480	38,593,292	1,392,882	3,684,452	1,303,488	7,800	1,710,752	2,272,831	36,281,085	2,393,955
Wisconsin	607	47,614,657	6,355,172	15,864,142	968,520	2,354,532	753,173	633	955,330	2,002,986	16,611,752	1,748,417
WEST NORTH CENTRAL	3,199	220,142,467	24,068,695	78,084,913	8,958,117	16,615,516	7,411,036	369,951	2,937,389	2,941,404	73,630,125	5,125,330
Minnesota	649	52,785,973	4,746,574	15,755,300	2,515,951	2,675,718	3,818,948	60	980,485	1,586,316	19,120,632	1,585,989
Iowa	599	36,542,793	4,736,143	12,618,204	1,486,876	6,503,081	489,335	58,461	516,995	297,544	9,384,829	451,325
Missouri	867	83,859,033	8,303,262	30,583,990	3,472,093	3,451,382	2,497,821	297,934	946,056	859,495	31,121,069	2,326,531
North Dakota	119	3,880,169	652,340	1,820,499	20,460	9,670	1,000		87,486	7,222	1,214,786	66,697
South Dakota	175	4,321,337	673,631	1,873,353	89,199	313,844	9,096	159	32,759	14,949	1,135,604	178,743
Nebraska	368	18,485,725	2,633,817	7,107,724	474,025	831,011	252,987	8,324	146,819	103,059	6,671,974	255,985
Kansas	422	20,266,787	2,322,919	8,325,843	899,513	2,830,810	341,849	5,013	226,780	72,819	4,981,231	260,010
SOUTH ATLANTIC	1,895	148,107,758	17,774,011	56,403,365	10,227,654	7,515,725	3,577,522	95,676	5,041,121	3,624,471	39,603,177	4,245,036
Delaware	34	2,497,822	280,799	1,218,405	43,385	29,064			114,430	36,374	766,466	8,899
Maryland	293	30,500,766	3,100,841	10,496,595	800,142	955,598	1,081,533	17,172	841,043	1,603,660	10,223,465	1,380,717
District of Columbia	178	29,859,811	2,381,617	8,541,746	7,919,286	3,503,600	827,526		2,528,562	353,514	3,794,966	8,934
Virginia	259	20,115,433	1,830,803	6,743,669	582,752	275,785	1,137,705	58,600	473,687	624,682	6,975,051	1,412,690
West Virginia	177	8,760,909	1,602,620	4,644,781	27,724	31,008			78,271	19,539	2,173,941	189,025
North Carolina	203	13,667,748	2,250,821	6,475,222	201,862	296,398	97,495	7,500	108,803	183,408	3,792,316	244,923
South Carolina	109	5,488,450	1,005,251	2,398,044	80,727	232,896	4,067		47,501	40,333	1,478,733	200,898
Georgia	308	21,689,814	3,317,789	7,815,490	492,499	1,958,083	271,604	12,404	750,566	485,596	5,990,596	595,127
Florida	274	15,521,005	1,994,470	8,069,413	79,277	233,233	157,532		98,258	277,365	4,407,643	203,814
EAST SOUTH CENTRAL	877	60,914,699	7,922,913	24,697,916	3,170,616	2,475,609	1,712,491	251,060	2,001,840	732,139	16,496,945	1,453,170
Kentucky	268	18,458,691	2,679,220	7,424,791	386,467	560,722	86,461	251,060	703,762	54,979	6,171,893	139,336
Tennessee	275	25,413,231	2,997,641	8,985,849	2,310,862	897,839	1,520,773		975,754	439,566	6,343,957	940,985
Alabama	194	12,595,319	1,743,490	6,133,960	447,660	1,002,899	105,252		256,486	180,225	2,469,373	255,974
Mississippi	140	4,447,458	502,562	2,153,316	25,627	14,149			65,838	57,369	1,511,722	116,875
WEST SOUTH CENTRAL	1,526	92,622,864	11,623,950	45,545,131	1,367,465	4,401,505	780,427	127,601	1,171,946	940,663	24,727,589	1,936,587
Arkansas	176	6,775,447	990,818	3,065,322	34,655	73,792		6,000	65,285	42,509	2,478,527	18,539
Louisiana	208	14,224,081	2,161,385	6,755,035	219,417	292,831	163,521		220,181	257,749	4,009,564	144,398
Oklahoma	328	19,874,587	2,399,320	10,117,324	366,166	1,451,442	93,260		237,642	96,378	4,609,837	503,218
Texas	814	51,748,749	6,072,427	25,607,450	747,227	2,583,440	523,646	121,601	648,838	544,027	13,629,661	1,270,432
MOUNTAIN	785	40,296,641	6,005,653	18,986,327	628,679	990,050	322,278		594,844	404,961	11,673,281	690,568
Montana	116	5,121,308	897,487	2,454,784	15,811	37,872	33,334		75,982	18,221	1,479,707	108,110
Idaho	96	2,988,958	448,050	1,372,302	7,800	7,456	3,135		28,352	36,799	1,051,449	33,615
Wyoming	56	1,557,352	171,694	845,052	5,919	22,069			15,710		485,649	11,259
Colorado	278	17,879,123	2,751,630	7,969,789	413,166	621,778	145,654		313,161	202,728	5,039,543	421,674
New Mexico	50	1,567,161	209,747	857,541					5,775	7,530	486,368	200
Arizona	59	4,268,475	541,436	2,324,266	32,253	189,854			61,154	40,500	1,063,188	15,524
Utah	100	5,969,438	829,206	2,702,074	150,182	98,416	140,155		88,117	88,467	1,789,316	83,505
Nevada	30	944,826	156,403	460,519	3,548	12,605			6,593	10,716	278,061	16,381
PACIFIC	2,415	187,627,449	24,306,196	79,685,081	2,758,946	11,268,216	3,440,098	377,374	4,520,496	2,830,578	54,469,053	3,971,441
Washington	412	27,882,844	4,043,789	13,597,887	253,837	1,664,865	176,109		597,678	252,591	7,026,356	269,732
Oregon	293	15,390,659	2,121,986	7,226,951	268,750	752,365	83,712		353,880	147,103	3,923,897	512,015
California	1,710	144,353,946	18,140,421	58,860,243	2,236,359	8,850,986	3,180,277	377,374	3,568,908	2,430,884	43,518,800	3,189,694

[1] This total is somewhat smaller than the sum of the items for general job printing, composition sold to the trade, and "ready prints," as given in Table 3, for the reason that it does not include $6,020,215, receipts for general job printing reported as a secondary product by establishments outside the printing and publishing industry. (See Table 3, item 5 for 1929, and footnote 4.)

[2] This total is somewhat smaller than the sum of the items for general job printing, composition sold to the trade, and "ready prints," as given in Table 3, for the reason that it does not include $5,540,792, receipts for general job printing reported as a secondary product by establishments outside the printing and publishing industry. (See Table 3, item 5 for 1927, and footnote 5.)

TABLE 5.—BOOKS AND PAMPHLETS—NUMBER OF COPIES PUBLISHED, BY CLASSES, FOR THE UNITED STATES: 1929 AND 1927

CHARACTER	NUMBER OF COPIES	
	1929	1927
Aggregate	435,199,433	470,374,947
BOOKS		
Total	235,363,632	219,275,544
Textbooks (for school use)	80,189,935	83,849,664
Juvenile	36,885,167	31,047,094
Agriculture	688,810	249,981
Biography	2,714,090	2,302,441
Fiction	45,880,062	34,087,507
Fine arts	1,133,855	837,092
History	3,979,704	1,232,033
Law	2,942,176	2,493,510
Medicine	1,932,909	1,168,755
Poetry and drama	4,048,227	4,472,765
BOOKS—continued		
Religion and philosophy	17,625,949	21,045,076
Science and technology	2,294,660	2,030,364
Sociology and economics	1,052,049	834,091
Travel	1,725,561	1,190,569
All other	32,270,478	32,434,002
PAMPHLETS		
Total	199,835,801	251,099,403
Texts (for school use)	39,696,158	22,824,621
Juvenile	8,273,065	2,739,166
General literature	151,866,578	225,535,616

TABLE 6.—BOOKS—NUMBER OF COPIES PUBLISHED, FOR PRINCIPAL CLASSES, BY STATES: 1929

STATE	Textbooks (for school use)	Juvenile	Fiction	History	Poetry and drama	Religion and philosophy
California	184,116	19,486	1,550	13,200	3,145	77,650
Connecticut	20,573	3,538		35,208	1,039	6,595
Dist. of Columbia	53,682	59,167	600	15,900	800	247,661
Georgia	135,727					
Idaho	3,000					
Illinois	19,558,912	5,312,172	1,137,527	545,006	1,324,096	1,056,495
Indiana	794,347	100,077	330,162	1,969	7,565	176,828
Iowa	1,716,407		24,750			
Kansas					11,850	200
Maine					2,950	
Maryland	379,760		47,451	6,250		74,650
Massachusetts	13,577,007	6,868,580	707,222	52,130	94,553	750,739
Michigan	149,350				730	27,085
Minnesota	29,088	6,539	3,000			65,100
Missouri	230,175		15,700		2,500	651,718
Montana						
Nebraska				100		
New Jersey	998,095		378,841	611,204	10,000	18,900
New York	3,708,645	14,401,353	31,241,362	3,212,882	1,864,858	32,000
North Carolina	25,779,584					8,006,818
Ohio						4,500
Oklahoma	4,717,597	8,192,406	11,098,855	8,118	563,300	401,549
Pennsylvania	32,373					
South Dakota	5,404,063	1,152,357	602,098	60,058	168,585	2,231,301
Tennessee	2,413	5,500				34,000
Texas	81,167	32,059				2,995,252
Utah	345,264		50,000		256	2,560
Virginia				1,000		138,000
Wisconsin	2,016,850			1,838		34,500
	271,740	353,092	7,621	16,045	2,000	591,848

TABLE 7.—MUSIC, IN SHEETS AND BOOKS—VALUE, BY STATES: 1929, 1927, 1925, AND 1923

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments]

STATE	1929	1927	1925	1923
United States	$16,537,747	$17,146,715	$14,133,306	$14,163,414
California	377,374	722,970	290,760	275,969
Illinois	1,506,441	1,617,119	1,430,949	1,204,818
Massachusetts	2,203,114	1,803,993	1,532,349	1,574,524
New York	$9,648,155	$9,353,628	$8,332,133	$8,083,557
Ohio	879,904	829,230	982,012	581,644
Pennsylvania	1,057,635	1,520,880	407,258	1,260,895
Other States [1]	865,064	1,298,895	1,157,845	1,182,007

[1] For 1929: Arkansas, Connecticut, Georgia, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, North Carolina, Rhode Island, South Dakota, Texas, Virginia, and Wisconsin.

TABLE 8.—COMPOSITION SOLD TO THE TRADE—RECEIPTS, BY STATES: 1929, 1927, AND 1925

STATE	1929	1927	1925	STATE	1929	1927	1925
United States	$30,047,305	$26,330,549	$10,072,482	Missouri	$1,457,230	$1,307,950	$911,411
Alabama	162,582	116,003	77,896	Nebraska	132,616	120,822	116,208
California	1,612,656	1,505,200	1,257,146	New Jersey	831,902	714,841	692,609
Colorado	141,201	118,355	142,474	New York	7,938,458	6,404,461	4,549,685
Connecticut	158,146	50,714	140,205	Ohio	1,731,058	1,285,926	1,089,335
Georgia	142,147	79,407	70,909	Oregon	146,813	141,664	142,073
Illinois	6,155,391	6,768,994	4,011,193	Pennsylvania	1,782,758	1,456,756	1,083,257
Indiana	780,648	606,740	320,443	Rhode Island	111,089	56,372	53,568
Iowa	167,374	140,659	177,258	Tennessee	204,817	316,862	206,158
Maryland	455,253	225,203	234,983	Texas	344,667	350,645	269,674
Massachusetts	2,100,488	1,057,203	965,614	Virginia	151,192	89,434	71,447
Michigan	2,174,797	1,170,375	907,295	Washington	250,101	206,640	195,417
Minnesota	714,201	511,613	612,361	Wisconsin	294,470	433,263	216,964
				Other States [1]	496,220	410,447	556,899

[1] For 1929: Arizona, Arkansas, Delaware, District of Columbia, Florida, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, New Hampshire, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Utah, Vermont, and West Virginia.

TABLE 9.—NEWSPAPERS AND PERIODICALS PUBLISHED, BY CLASS, NUMBER, AND CIRCULATION, FOR THE UNITED STATES: 1929, 1927, 1925, AND 1923

CLASS	1929	1927	1925	1923	PER CENT OF INCREASE OR DECREASE (—)			PER CENT DISTRIBUTION			
					1927–1923	1925–1927	1923–1925	1929	1927	1925	1923
All classes, number	15,333	14,352	14,065	13,077	6.8	2.0	7.6	100.0	100.0	100.0	100.0
Daily (excluding Sunday):											
Number	2,203	2,265	2,280	2,314	1.2	−0.7	−1.5	14.9	15.8	16.2	17.7
Circulation [1]	42,947,824	42,343,210	38,030,682	35,733,107	1.4	11.3	6.5	14.6	15.2	14.6	15.4
Newspapers—											
Number	2,086	2,091	2,116	2,271	−0.2	−1.2	−6.8	13.6	14.6	15.0	17.4
Circulation [1]	42,015,461	41,368,320	37,406,615	35,471,070	1.6	10.6	5.5	14.3	14.9	14.4	15.3
Periodicals—											
Number	207	174	164	43	19.0	6.1	(2)	1.3	1.2	1.2	0.3
Circulation [1]	932,363	974,890	633,067	262,037	−4.4	54.0	141.6	0.3	0.3	0.2	0.1
Sunday:											
Number	578	511	597	602	13.1	−14.4	−0.8	3.8	3.6	4.2	4.6
Circulation [1]	29,011,648	27,695,859	25,630,056	24,511,693	4.8	8.1	4.6	9.9	9.9	9.9	10.5
Triweekly:											
Number	64	71	74	79	(2)	(2)	(2)	0.4	0.5	0.5	0.6
Circulation [1]	311,777	468,534	400,730	431,504	−33.5	16.9	−7.1	0.1	0.2	0.2	0.2
Semiweekly:											
Number	408	395	383	407	3.3	3.1	−5.9	2.7	2.7	2.7	3.1
Circulation [1]	2,982,184	2,026,760	1,934,095	2,024,683	47.1	4.8	−4.5	1.0	0.7	0.7	0.9
Weekly:											
Number	8,233	7,760	7,568	6,887	6.1	2.5	9.9	53.7	54.1	53.8	52.7
Circulation [1]	53,378,350	55,935,413	50,815,443	47,860,508	−4.7	10.2	6.2	18.2	20.1	19.5	20.6
Newspapers—											
Number	7,075	6,661	6,435	5,903	6.2	3.5	9.0	46.1	46.4	45.7	45.2
Circulation [1]	18,883,551	16,878,783	15,989,700	16,424,819	11.9	5.6	−2.7	6.4	6.1	6.2	7.1
Periodicals—											
Number	1,158	1,099	1,133	984	5.4	−3.0	15.1	7.6	7.7	8.1	7.5
Circulation [1]	34,494,799	39,106,630	34,825,743	31,435,689	−11.8	12.3	10.8	11.8	14.0	13.4	13.5
Semimonthly: [3]											
Number	224	238	232	193	−5.9	2.6	20.2	1.5	1.6	1.7	1.5
Circulation [1]	9,168,458	5,955,858	6,773,105	5,531,731	53.9	−12.1	22.4	3.1	2.2	2.6	2.4
Monthly:											
Number	2,799	2,522	2,271	1,907	11.0	11.1	19.1	18.2	17.6	16.2	14.6
Circulation [1]	133,048,488	120,693,490	111,875,957	91,654,028	10.2	7.9	22.1	45.3	43.3	43.0	39.5
Quarterly:											
Number	562	477	553	555	17.8	−13.7	−0.4	3.7	3.3	3.9	4.2
Circulation [1]	20,605,002	21,247,360	22,840,136	22,197,918	−3.0	−7.0	2.9	7.0	7.6	8.8	9.6
Other classes:											
Number	172	113	107	133	52.2	5.6	−19.5	1.1	0.8	0.8	1.0
Circulation [1]	2,345,897	2,200,541	1,677,203	2,097,442	6.6	31.2	−20.0	0.8	0.8	0.6	0.9

[1] Aggregate circulation per issue, averaged for the year.
[2] Per cent not computed where base is less than 100.
[3] Includes data for publications reported as biweekly

TABLE 10.—DAILY NEWSPAPERS—NUMBER, BY STATES: 1929, 1927, 1925, AND 1923

STATE	TOTAL [1]				MORNING				EVENING			
	1929	1927	1925	1923	1929	1927	1925	1923	1929	1927	1925	1923
United States	2,086	2,091	2,116	2,271	459	518	504	631	1,627	1,573	1,612	1,640
Alabama	21	21	23	24	3	3	4	5	18	18	19	19
Arizona	17	16	16	18	7	9	8	8	10	7	8	10
Arkansas	33	32	32	32	5	5	5	5	28	27	27	27
California	169	166	156	180	52	54	53	67	117	112	103	113
Colorado	29	34	32	38	5	8	6	10	24	26	26	28
Connecticut	32	33	33	35	6	6	6	8	26	27	27	27
Delaware	3	3	3	3	1	1	1	1	2	2	2	2
District of Columbia	8	7	6	6	4	3	3	3	4	4	3	3
Florida	40	46	53	34	10	17	18	13	30	29	35	21
Georgia	25	26	26	28	5	7	5	6	20	19	21	22
Idaho	16	16	12	14	6	4	6	7	10	12	6	7
Illinois	120	125	129	151	22	28	26	45	98	97	103	106
Indiana	105	111	113	119	16	22	19	21	89	89	94	98
Iowa	43	45	48	54	5	6	7	8	38	39	41	46
Kansas	59	60	58	62	7	9	8	11	52	51	50	51
Kentucky	30	31	30	33	8	10	9	15	22	21	21	18
Louisiana	15	15	14	18	5	5	4	6	10	10	10	12
Maine	11	11	11	11	5	5	5	5	6	6	6	6
Maryland	15	15	15	15	5	5	5	7	10	10	10	8
Massachusetts	74	75	79	83	14	15	13	17	60	60	66	66
Michigan	64	62	60	65	6	9	7	18	58	53	53	47
Minnesota	38	37	38	46	4	7	6	10	34	30	32	36
Mississippi	14	14	13	14	3	3	3	3	11	11	10	11
Missouri	61	59	69	71	10	17	14	17	51	42	55	54
Montana	20	18	18	16	11	9	10	9	9	9	8	7
Nebraska	24	23	26	29	7	7	6	8	17	16	20	21
Nevada	9	9	9	8	2	3	3	3	7	6	6	5
New Hampshire	11	13	11	14	1	2	1	2	10	11	10	12
New Jersey	38	39	39	40	7	9	9	9	31	30	30	31
New Mexico	9	7	8	7	2	1	1	1	7	6	7	6
New York	158	156	158	188	51	53	54	69	107	103	104	119
North Carolina	37	39	37	40	10	12	11	12	27	27	26	28
North Dakota	11	9	10	9	3	1	1	2	8	8	9	7
Ohio	134	138	148	158	20	24	24	34	114	114	124	124
Oklahoma	58	55	47	51	10	11	11	12	48	44	36	39
Oregon	28	30	30	32	7	8	8	11	21	22	22	21
Pennsylvania	155	153	172	178	35	41	44	49	120	112	128	129
Rhode Island	11	11	11	12	2	2	2	3	9	9	9	9
South Carolina	16	16	14	17	6	6	6	8	10	10	8	9
South Dakota	14	15	16	15	2	3	3	5	12	12	13	10
Tennessee	22	22	21	21	5	5	7	8	17	17	14	13
Texas	117	114	104	106	26	27	25	28	91	87	79	78
Utah	8	7	7	7	1	1	1	1	7	6	6	6
Vermont	9	9	10	10	2	2	2	2	7	7	8	8
Virginia	29	28	30	30	8	9	9	10	21	19	21	20
Washington	36	36	36	40	10	10	11	13	26	26	25	27
West Virginia	31	31	29	28	10	9	9	10	21	22	20	18
Wisconsin	53	48	50	54	6	4	4	5	47	44	46	49
Wyoming	6	5	6	7	1	1	1	1	5	4	5	6

[1] See "Number of publications and aggregate circulation per issue," p. 577.

TABLE 11.—DAILY NEWSPAPERS—CIRCULATION, EXCLUDING SUNDAY EDITIONS, BY STATES: 1929, 1927, AND 1925

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

STATE	AGGREGATE CIRCULATION PER ISSUE, EXCLUSIVE OF SUNDAY EDITIONS [1]								
	Total			Morning			Evening		
	1929	1927	1925	1929	1927	1925	1929	1927	1925
United States	42,015,461	41,368,320	37,406,615	15,741,769	15,726,950	14,284,198	26,273,692	25,641,370	23,122,417
Alabama	353,092	323,006	277,416	92,000	88,471	72,563	261,092	234,535	204,853
Arizona [2]	99,729	82,229	66,906	53,906	48,447	47,157	45,823	33,782	19,749
Arkansas [2]	172,358	159,070	150,064	74,041	67,832	67,160	98,317	91,238	82,904
California	2,564,808	2,453,367	2,221,580	1,076,417	1,072,909	1,041,480	1,488,391	1,380,458	1,180,100
Colorado	298,528	305,768	302,078	64,887	84,030	48,564	233,641	281,738	253,514
Connecticut	464,831	440,937	464,854	112,522	106,638	99,383	352,309	334,299	365,471
District of Columbia	444,249	382,037	344,858	171,985	148,914	125,390	272,264	233,123	219,468
Florida	304,461	384,576	355,570	158,124	195,679	180,718	236,337	188,897	174,852
Georgia	436,802	394,981	362,267	170,206	151,956	132,224	266,596	243,025	230,043
Idaho [2]	83,185	63,630	55,065	45,307	28,251	33,015	37,878	35,379	22,050
Illinois	3,773,070	3,496,180	3,117,407	1,715,456	1,611,174	1,386,653	2,057,614	1,885,006	1,730,754
Indiana	1,101,739	1,048,829	971,983	334,439	357,794	306,002	767,300	691,035	665,981
Iowa	734,823	690,316	720,010	193,978	179,620	183,560	540,845	510,696	545,450
Kansas	436,836	414,951	403,031	126,093	130,055	121,088	310,743	284,896	281,943
Kentucky	456,059	392,034	378,159	148,384	144,036	161,395	307,675	247,998	216,764
Louisiana	376,603	339,286	307,575	193,882	166,778	145,212	182,721	172,508	162,363
Maine [2]	192,643	180,216	169,391	109,546	102,630	95,917	83,097	77,586	73,474
Maryland	294,851	614,385	560,730	167,936	205,661	197,512	126,915	408,724	363,218
Massachusetts	2,537,458	2,520,418	2,435,763	1,091,665	1,089,766	992,809	1,445,793	1,430,652	1,442,954
Michigan	1,042,654	1,523,648	1,361,707	308,150	305,653	267,347	1,334,504	1,217,995	1,094,360
Minnesota	779,669	803,461	759,052	188,690	213,688	168,831	590,979	589,773	590,221
Mississippi [2]	97,757	94,319	65,795	23,616	22,880	13,384	74,141	71,439	52,411
Missouri	1,727,048	1,794,315	1,742,976	635,893	752,486	711,833	1,091,155	1,041,829	1,031,143
Montana [2]	108,654	107,919	95,028	70,678	73,097	58,665	37,976	34,822	36,363
Nebraska	413,319	390,940	408,967	168,316	200,285	133,923	245,003	190,655	275,044
New Jersey	897,698	937,962	730,950	183,214	160,369	125,960	714,484	777,593	604,990
New York	8,112,572	7,607,343	7,133,670	4,122,395	3,884,123	3,636,130	3,990,177	3,723,220	3,497,540
North Carolina	383,631	333,983	278,873	197,773	185,055	146,898	185,858	148,928	131,975
North Dakota [2]	81,617	70,880	57,303	32,443	12,093	6,438	49,174	58,787	50,865
Ohio	2,908,794	2,948,483	2,738,254	608,867	660,946	630,750	2,299,927	2,287,537	2,107,504
Oklahoma	510,263	489,368	421,783	154,389	192,489	176,073	355,874	296,879	245,710
Oregon	417,969	396,659	387,281	136,858	133,735	121,454	281,111	262,924	265,827
Pennsylvania	3,635,652	4,123,497	3,467,447	1,237,360	1,494,488	1,374,877	2,398,292	2,629,009	2,082,570
South Carolina [2]	178,493	145,794	131,010	92,495	78,513	73,036	85,998	67,281	57,974
Tennessee	601,846	542,673	473,773	229,826	194,095	200,323	372,020	348,578	273,450
Texas	1,319,388	1,133,078	975,127	467,124	397,217	343,048	852,264	735,861	632,079
Virginia	399,077	355,749	317,789	128,091	151,416	125,703	270,986	204,333	192,086
Washington	670,117	653,245	572,691	212,444	212,941	170,709	457,673	440,304	401,982
West Virginia	271,258	258,564	218,294	121,567	112,737	106,475	149,691	145,827	111,819
Wisconsin	897,530	820,401	742,446	130,557	120,913	81,614	766,973	699,488	660,832
Other States [3]	744,330	1,089,823	662,692	190,249	187,090	172,926	554,081	902,733	489,767

[1] See "Number of publications and aggregate circulation per issue," p. 577.
[2] This State is outranked, with reference to circulation in 1929, by one or more of the "Other States."
[3] For 1929: Delaware, Nevada, New Hampshire, New Mexico, Rhode Island, South Dakota, Utah, Vermont, and Wyoming.

TABLE 12.—DAILY NEWSPAPERS PRINTED IN FOREIGN LANGUAGES [1]—NUMBER AND CIRCULATION, BY STATES: 1929, 1927, 1925, AND 1923

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

STATE	NUMBER [2]				AGGREGATE CIRCULATION PER ISSUE, EXCLUSIVE OF SUNDAY EDITIONS [2]				STATE	NUMBER [2]				AGGREGATE CIRCULATION PER ISSUE, EXCLUSIVE OF SUNDAY EDITIONS [2]			
	1929	1927	1925	1923	1929	1927	1925	1923		1929	1927	1925	1923	1929	1927	1925	1923
United States	127	131	128	146	2,325,490	2,293,746	2,308,544	2,357,802	New York	32	37	36	38	913,720	1,005,794	1,104,411	1,027,341
									Ohio	14	12	14	16	219,221	174,169	212,564	246,902
California	20	17	14	15	152,653	129,888	104,741	102,688	Pennsylvania	7	8	8	8	98,278	124,450	126,551	105,708
Illinois	19	19	15	24	500,318	455,913	359,412	442,500	Texas	2	2	3	3	31,500	22,913	25,366	25,830
Massachusetts	10	11	12	12	108,256	102,020	90,673	89,200	Washington [3]	2	2	2	2	15,450	12,457	15,093	14,922
Michigan	3	3	3	6	45,373	49,788	48,955	93,250	Wisconsin	4	4	5	5	133,042	102,996	95,800	75,390
Minnesota	3	3	3	4	28,930	30,543	31,730	36,882	Other States [4]	9	11	11	11	46,749	52,165	64,048	71,989
New Jersey	2	2	2	2	32,000	30,650	27,200	25,200									

[1] Includes data for publications in both a foreign language and English.
[2] See "Number of publications and aggregate circulation per issue," p. 577.
[3] This State is outranked by one of the "Other States."
[4] For 1929: Florida, Kentucky, Missouri, Nebraska, New Hampshire, Oregon, Rhode Island, and Utah.

TABLE 13.—DAILY NEWSPAPERS PRINTED IN FOREIGN LANGUAGES [1]—NUMBER AND CIRCULATION, FOR PRINCIPAL LANGUAGES, FOR THE UNITED STATES: 1929, 1927, 1925, AND 1923

LANGUAGE	NUMBER [2]				AGGREGATE CIRCULATION PER ISSUE, EXCLUSIVE OF SUNDAY EDITIONS [2]				LANGUAGE	NUMBER [2]				AGGREGATE CIRCULATION PER ISSUE EXCLUSIVE OF SUNDAY EDITIONS [2]			
	1929	1927	1925	1923	1929	1927	1925	1923		1929	1927	1925	1923	1929	1927	1925	1923
United States	127	131	128	146	2,325,490	2,293,746	2,308,544	2,357,802	Lithuanian	3	4	3	3	90,017	50,550	37,000	32,859
									Polish	14	17	16	26	351,984	382,591	332,024	411,529
Bohemian	6	7	6	7	152,531	145,780	86,227	91,326	Russian	4	3	3	3	39,856	32,890	32,342	25,125
Chinese	6	6	3	4	37,950	30,500	17,100	19,000	Slovak	3	3	3	7	30,341	29,800	40,000	53,024
Finnish	4	5	5	7	27,802	34,109	40,369	46,215									
French	8	8	10	9	44,360	43,713	59,381	36,402	Slovenian	3	3			19,750	20,100		
German	20	19	21	22	328,151	334,093	372,979	304,200	Spanish	8	7	9	6	73,876	55,569	55,348	44,030
									Yiddish	10	9	10	9	550,317	536,404	559,903	541,252
Greek	3	3	3	3	68,000	35,000	73,000	70,000	Other languages [3]	15	17	15	20	87,780	109,701	101,482	136,750
Hungarian	3	3	3	3	89,500	70,000	86,000	94,000									
Italian	7	7	9	8	273,400	312,098	353,959	333,533									
Japanese	10	10	8	9	68,975	64,758	61,370	57,357									

[1] Includes data for publications in both a foreign language and English.
[2] See "Number of publications and aggregate circulation per issue," p. 577.
[3] Comprises, for 1929, Arabic, Armenian, Croatian, Danish-Norwegian, Norwegian, Portuguese, Rumanian, Ruthenian, and Serbian.

TABLE 14.—DAILY NEWSPAPERS PUBLISHED IN CITIES HAVING 500,000 INHABITANTS OR MORE—NUMBER, 1929, AND CIRCULATION, 1929, 1927, 1925, AND 1923

CITY [1]	NUMBER,[2] 1929		AGGREGATE CIRCULATION PER ISSUE, EXCLUSIVE OF SUNDAY EDITIONS [2]							
			Morning				Evening			
	Morning	Evening	1929	1927	1925	1923	1929	1927	1925	1923
United States	459	1,627	15,741,769	15,726,950	14,284,198	13,567,611	26,273,092	25,041,370	23,122,417	21,903,459
Total	89	105	9,120,364	9,172,898	8,333,383	7,350,913	9,041,889	9,843,202	8,962,400	8,102,033
New York	30	25	3,661,136	3,380,762	3,168,596	2,597,914	2,723,380	2,513,946	2,405,620	2,348,571
Chicago	14	12	1,592,216	1,477,563	1,221,554	1,219,417	1,365,535	1,267,411	1,178,161	1,155,575
Philadelphia	7	4	637,451	708,471	731,522	689,783	942,204	901,913	753,185	719,058
Los Angeles	7	12	496,438	514,647	441,845	309,776	502,183	453,573	362,755	345,065
Cleveland	4	10	254,820	300,460	284,056	332,043	527,386	522,548	493,539	440,931
Boston	6	8	950,556	953,843	870,141	803,901	827,985	799,920	858,949	956,488
San Francisco	11	8	369,954	345,298	398,642	327,078	314,767	306,813	265,794	241,804
Detroit	1	7								
St. Louis	2	3								
Baltimore	2	3	[3] 1,157,793	[3] 1,491,854	[3] 1,217,027	[3] 1,070,401	[3] 2,738,449	[3] 3,076,778	[3] 2,644,406	[3] 1,894,541
Pittsburgh	2	3								
Milwaukee	2	6								
Buffalo	1	4								

[1] For 1929, 13 cities; for 1927 and 1925, 14 cities; for 1923, 12 cities. The population of Washington and Milwaukee, as estimated, was below 500,000 in 1923 and was more than 500,000 in 1925 and 1927; but the population of Washington as enumerated in 1930 was below 500,000.
[2] See "Number of publications and aggregate circulation per issue," p. 577.
[3] Combined to avoid disclosing data for individual publishers. Data for Washington are included in the figures for 1927 and 1925 but not in those for 1923 and 1929. Data for Milwaukee are included for all years except 1923. (See footnote 1.)

TABLE 15.—SUNDAY NEWSPAPERS PUBLISHED IN CITIES HAVING 500,000 INHABITANTS OR MORE—NUMBER AND CIRCULATION: 1929, 1927, 1925, AND 1923

CITY [1]	NUMBER [2]				AGGREGATE CIRCULATION PER ISSUE [2]			
	1929	1927	1925	1923	1929	1927	1925	1923
United States	578	511	597	602	29,011,648	27,695,859	25,030,056	24,511,693
Total	97	96	102	97	16,469,982	16,553,600	15,077,224	13,468,575
New York	33	29	30	30	5,697,234	5,342,519	4,822,063	4,592,604
Chicago	11	9	10	16	2,614,425	2,514,420	2,274,888	2,130,221
Philadelphia	7	7	13	11	1,217,209	1,182,561	1,201,958	1,040,611
Detroit	5	5	5	5	1,129,943	998,694	883,324	737,798
Los Angeles	6	8	4	3	745,453	776,555	688,789	570,767
Cleveland	5	7	9	4	548,970	581,454	586,557	471,905
St. Louis	3	[3] 5	[3] 8	5	608,460	[3] 1,015,014	[3] 1,137,218	874,404
Boston	7	5	4	4	1,437,247	1,388,814	1,358,166	1,349,027
Pittsburgh	3	5	4	6	633,154	1,034,702	646,929	615,753
San Francisco	9	8	6	6	608,958	692,175	546,607	489,993
Milwaukee	4	[3]	[3]		460,352	[3]	[3]	
Baltimore	2	[4] 8	[4] 9	[4] 7	[4] 768,577	[4] 1,026,692	[4] 930,725	[4] 595,492
Buffalo	2							

[1] For 1929, 13 cities; for 1927 and 1925, 14 cities; for 1923, 12 cities. The population of Washington and Milwaukee, as estimated, was below 500,000 in 1923 and was more than 500,000 in 1925 and 1927, but the population of Washington as enumerated in 1930 was below 500,000.
[2] See "Number of publications and aggregate circulation per issue," p. 577.
[3] Figures for St. Louis and Milwaukee combined in order to avoid disclosing data for individual publishers.
[4] Combined to avoid disclosing data for individual publishers. Data for Washington are included in the figures for 1927 and 1925 but not in those for 1923 and 1929. (See footnote 1.)

TABLE 16.—SUNDAY NEWSPAPERS—NUMBER AND CIRCULATION, BY STATES: 1929, 1927, 1925, AND 1923

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

STATE	NUMBER [1]				AGGREGATE CIRCULATION PER ISSUE [1]			
	1929	1927	1925	1923	1929	1927	1925	1923
United States	578	511	597	602	29,011,648	27,695,859	25,030,056	24,511,693
Alabama	10	8	10	9	239,905	214,287	214,007	206,359
Arizona	9	9	8	9	62,606	51,527	41,870	40,406
Arkansas	9	8	7	7	141,367	136,559	118,904	114,150
California	48	47	44	47	1,737,582	1,825,794	1,548,290	1,335,327
Colorado	8	9	11	11	400,913	404,193	344,358	311,263
Connecticut	4	5	8	7	162,998	160,849	187,151	174,805
Dist. of Columbia	3	3	3		333,441	326,708	300,801	
Florida	19	20	21	13	284,304	284,982	268,318	147,112
Georgia	19	12	17	15	577,834	501,975	473,771	422,781
Idaho	6	9	9	9	56,313	56,587	51,423	50,407
Illinois	26	27	28	35	2,904,831	2,764,790	2,541,990	2,390,290
Indiana	17	16	17	18	447,398	407,117	379,115	844,145
Iowa	8	5	11	12	383,284	284,902	342,348	310,038
Kansas	9	8	12	11	240,053	153,022	218,431	217,453
Kentucky	12	9	11	11	369,010	309,716	284,695	211,198
Louisiana	6	4	4	5	383,769	348,509	333,261	326,687
Maryland	3	3	3	4	384,559	387,084	335,097	304,120
Massachusetts	14	10	15	16	1,605,003	1,568,115	1,583,565	1,559,667
Michigan	15	12	13	13	1,361,399	1,185,449	1,035,082	890,589
Minnesota	7	7	9	7	578,136	577,948	576,811	562,429
Mississippi	6	5	5	4	57,869	52,829	34,762	29,165
Missouri	13	12	16	17	1,147,909	1,180,251	1,319,649	1,379,695
Montana	10	7	11	11	87,596	74,454	83,880	94,247
Nebraska	9	6	6	5	337,457	307,452	318,396	321,962
New Jersey	9	8	9	10	221,695	141,760	196,347	184,183
New York	44	41	48	53	6,645,280	6,162,595	5,655,217	5,409,648
North Carolina	14	13	16	17	266,195	169,396	208,003	179,747
Ohio	34	33	35	33	1,487,840	1,838,567	1,340,352	1,308,593
Oklahoma	28	17	22	22	380,121	297,560	279,736	250,041
Oregon	9	9	9	11	337,597	308,665	201,126	263,756
Pennsylvania	15	16	32	30	1,956,536	2,314,716	2,076,295	1,840,254
Rhode Island	4	3	3		135,613	88,823	80,412	
South Carolina	7	6	9	9	108,850	95,095	102,317	88,524
South Dakota	3	3	5		46,690	29,438	38,114	
Tennessee	9	8	11	10	387,819	339,699	367,253	346,411
Texas	56	46	46	41	1,052,287	929,634	760,041	673,090
Utah	5	4	4	3	115,436	112,402	112,367	102,313
Virginia	11	10	10	12	210,758	179,072	158,017	208,861
Washington	12	10	11	13	454,874	411,752	368,476	372,908
West Virginia	10	9	11	13	184,684	167,052	152,386	149,467
Wisconsin	9	6	7	9	544,395	459,814	412,424	360,802
Other States [2]	9	8	10	20	117,336	83,520	95,598	528,240

[1] See "Number of publications and aggregate circulation per issue," p. 577.
[2] For 1929: Maine, Nevada, New Mexico, North Dakota, and Wyoming.

TABLE 17.—TRIWEEKLY AND SEMIWEEKLY NEWSPAPERS—NUMBER AND CIRCULATION, BY STATES: 1929, 1927, 1925, AND 1923

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

STATE	NUMBER [1]				AGGREGATE CIRCULATION PER ISSUE [1]			
	1929	1927	1925	1923	1929	1927	1925	1923
United States [2]	472	466	457	486	3,293,961	2,495,294	2,334,825	2,456,187
Arkansas	6	8	7	8	20,030	20,707	22,158	19,078
California	39	38	38	41	723,504	399,789	562,644	251,377
Connecticut	5	6	4		16,285	15,400	12,150	
Florida	11	18	13	5	23,764	28,842	27,450	7,250
Georgia	6	7	6	10	58,138	230,972	166,797	199,409
Idaho	5	4	3		13,735	11,256	8,385	
Illinois	33	31	30	41	223,393	165,659	177,064	218,538
Indiana	20	18	16	14	45,348	38,251	35,045	20,388
Iowa	15	20	21	28	77,618	87,602	90,222	109,494
Kansas	11	9	9	5	18,707	16,400	22,218	7,330
Kentucky	11	12	11	11	35,502	43,387	23,891	18,235
Massachusetts	7	5	5		89,470	13,383	9,250	
Michigan	20	12	14	15	54,691	35,487	48,520	34,366
Minnesota	6	7	6	7	285,187	72,963	30,302	152,474
Mississippi	9	5	6	7	20,227	12,693	14,470	12,820
Missouri	19	17	16	18	135,425	75,358	307,246	352,773
Nebraska	8	7	9	8	21,925	16,254	21,800	17,180
New Jersey	8	10	7	6	26,992	30,538	22,514	18,800
New York	25	21	23	28	218,645	87,770	68,058	272,416
North Carolina	23	21	24	27	50,261	56,909	64,617	68,080
North Dakota	3	2	2		21,300	12,500	10,200	
Ohio	36	29	29	34	348,097	341,806	63,550	72,506
Oklahoma	6	5	7		13,600	9,520	12,546	
Pennsylvania	27	33	30	29	228,768	284,231	140,138	175,534
South Carolina	10	10	14	13	22,000	22,510	26,534	23,512
Tennessee	5	5	5		12,600	11,336	10,311	
Texas	19	27	27	26	198,690	179,253	176,436	196,147
Virginia	9	8	9	10	21,400	15,700	19,436	22,445
Washington	7	6	8	10	137,305	35,014	28,813	31,653
West Virginia	4	4	5		13,000	12,934	11,000	
Other States [3]	59	61	53	85	112,354	110,920	89,062	153,782

[1] See "Number of publications and aggregate circulation per issue," p. 577.
[2] Includes data for semiweekly and triweekly publications reported as periodicals: For 1929, 34, with aggregate circulation of 1,170,584 per issue; 1927, 36, with aggregate of 820,739; 1925, 27, with aggregate of 631,453; 1923, 11, with aggregate of 29,576.
[3] For 1929: Alabama, Arizona, Colorado, Louisiana, Maine, Maryland, Montana, Nevada, New Hampshire, New Mexico, Oregon, Rhode Island, South Dakota, Utah, Vermont, Wisconsin, and Wyoming.

TABLE 18.—WEEKLY NEWSPAPERS [1]—NUMBER AND CIRCULATION, BY STATES: 1929, 1927, 1925, AND 1923

STATE	NUMBER [2]				AGGREGATE CIRCULATION PER ISSUE [2]			
	1929	1927	1925	1923	1929	1927	1925	1923
United States	7,075	6,661	6,435	5,903	13,883,551	16,878,783	15,989,700	16,424,819
Alabama	95	90	80	63	410,836	362,652	253,750	237,486
Arizona	21	20	23	----	37,259	22,860	20,248	----
Arkansas	106	89	86	75	157,061	124,659	114,275	92,844
California	366	363	273	260	780,836	737,504	390,648	414,298
Colorado	121	117	112	100	185,472	183,874	206,537	124,852
Connecticut	48	41	41	40	173,102	132,388	97,060	90,477
Delaware	13	11	11	----	43,145	42,559	26,366	----
District of Columbia	6	5	6	12	26,500	158,100	183,300	839,183
Florida	103	99	84	70	192,276	172,099	122,228	107,765
Georgia	128	124	90	78	226,857	226,680	144,315	112,237
Idaho	70	62	65	----	69,471	66,990	77,274	----
Illinois	437	421	425	416	1,644,620	1,516,212	1,992,885	2,007,604
Indiana	179	178	175	168	347,638	344,252	287,595	290,330
Iowa	293	307	320	300	526,476	501,830	507,482	479,968
Kansas	249	224	224	194	797,950	659,021	860,849	1,020,096
Kentucky	113	112	96	77	231,643	235,755	188,231	173,886
Louisiana	62	47	52	48	141,823	73,959	83,247	68,539
Maine	40	39	36	----	78,549	73,282	66,653	----
Maryland	54	65	52	44	155,374	145,860	136,868	106,370
Massachusetts	146	151	162	155	498,544	454,891	411,663	486,046
Michigan	274	242	257	214	818,049	1,000,243	562,052	1,025,546
Minnesota	311	310	298	279	721,970	760,319	883,815	772,474
Mississippi	86	86	80	----	136,149	136,711	98,924	----
Missouri	258	262	255	206	967,067	1,090,137	958,112	903,705
Montana	79	69	76	----	183,108	81,287	89,711	----
Nebraska	208	181	184	165	345,849	280,157	281,152	375,060
Nevada	13	13	12	----	11,595	13,215	9,476	----
New Hampshire	37	41	40	----	68,390	70,685	65,895	----
New Jersey	192	197	190	163	530,531	503,744	405,773	360,855
New Mexico	37	28	29	----	55,507	37,012	36,686	----
New York	501	485	465	468	2,644,066	1,572,498	1,403,410	1,460,312
North Carolina	98	85	78	72	193,583	173,640	171,532	168,165
North Dakota	89	70	76	----	177,960	96,377	105,081	----
Ohio	271	255	265	265	782,443	718,993	1,151,487	805,973
Oklahoma	175	157	154	127	264,106	240,669	234,249	201,741
Oregon	92	73	76	69	136,108	115,144	116,975	115,671
Pennsylvania	335	356	343	344	1,509,776	1,484,614	1,271,072	1,259,914
Rhode Island	12	11	10	----	53,800	51,204	42,737	----
South Carolina	46	41	40	----	73,872	68,386	68,660	----
South Dakota	139	79	109	----	173,893	107,885	131,849	----
Tennessee	104	78	76	58	229,234	225,133	190,059	179,519
Texas	378	324	300	251	595,576	558,192	493,218	388,326
Utah	29	35	25	----	48,120	121,105	30,435	----
Vermont	35	30	35	----	50,633	51,473	66,367	----
Virginia	85	74	69	72	176,283	159,588	144,510	144,753
Washington	176	159	121	123	266,159	231,311	103,144	137,092
West Virginia	91	89	83	69	213,139	177,391	154,905	133,982
Wisconsin	243	236	245	233	685,037	449,739	415,388	450,766
Wyoming	36	30	31	----	46,116	36,504	41,362	----
Other States	----	----	----	631	----	----	----	888,963

[1] Not including periodicals, for which see Table 22.
[2] See "Number of publications and aggregate circulation per issue," p. 577.

TABLE 19.—WEEKLY NEWSPAPERS AND PERIODICALS PRINTED IN FOREIGN LANGUAGES—NUMBER AND CIRCULATION, BY STATES: 1929, 1927, 1925, AND 1923

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

STATE	NUMBER [1]				AGGREGATE CIRCULATION PER ISSUE [1]			
	1929	1927	1925	1923	1929	1927	1925	1923
United States	383	425	378	366	3,486,652	3,294,931	2,819,147	2,842,542
California	27	31	26	22	72,768	73,019	54,350	57,453
Colorado [2]	3	5	5	3	5,150	3,650	24,112	29,685
Connecticut	6	10	4	4	13,700	29,950	16,000	29,360
Illinois	42	43	45	45	1,270,547	528,775	554,635	553,271
Indiana [3]	3	2	2	3	5,220	6,000	5,900	20,180
Iowa	7	7	8	7	22,638	21,281	20,098	15,775
Kansas	3	3	2	3	10,100	9,000	4,700	9,900
Massachusetts	20	21	21	20	140,567	106,294	106,050	97,740
Michigan	20	22	15	12	91,500	113,325	49,863	36,425
Minnesota	21	37	25	21	324,697	501,361	334,945	208,917
Missouri	8	10	8	7	43,583	115,297	36,557	34,949
Nebraska	7	7	8	11	40,900	32,050	38,230	256,500
New Jersey	17	18	16	12	80,056	78,730	70,325	50,300
New Mexico [2]	3	5	----	----	6,200	9,800	----	----
New York	64	71	61	64	409,517	806,556	503,059	469,967
Ohio	32	23	19	18	245,756	158,834	159,936	114,910
Oregon	4	6	4	5	33,200	54,638	36,400	54,637
Pennsylvania	40	44	44	44	324,214	314,038	310,655	277,251
Texas	18	16	16	14	209,030	173,854	286,695	292,325
Utah [3]	4	5	----	----	5,179	8,800	----	----
Washington	9	8	5	7	29,325	17,200	8,140	14,500
Wisconsin	13	17	15	22	72,865	80,704	69,078	163,861
Other States [3]	12	14	29	22	29,940	49,775	79,369	54,636

[1] See "Number of publications and aggregate circulation per issue," p. 577.
[2] This State is outranked by one of the "Other States."
[3] For 1929: District of Columbia, Florida, Louisiana, Maine, Maryland, Nevada, New Hampshire, North Dakota, Rhode Island, and Vermont.

TABLE 20.—WEEKLY NEWSPAPERS AND PERIODICALS PRINTED IN FOREIGN LANGUAGES—NUMBER AND CIRCULATION, FOR PRINCIPAL LANGUAGES, FOR THE UNITED STATES: 1929, 1927, 1925, AND 1923

[Includes data for publications in both a foreign language and English]

LANGUAGE	NUMBER [1]				AGGREGATE CIRCULATION PER ISSUE [1]			
	1929	1927	1925	1923	1929	1927	1925	1923
United States	383	425	378	366	3,486,652	3,294,931	2,819,147	2,842,542
Bohemian (Czech) [2]	19	23	18	18	89,193	63,036	50,361	54,245
Danish [3]	24	37	28	28	169,325	307,359	135,742	148,374
Dutch [4]	11	18	12	9	38,015	75,820	42,058	32,943
Finnish	5	4	4	4	24,500	16,995	27,100	21,662
French	16	15	14	16	59,081	59,419	62,066	35,111
German	84	98	85	95	534,181	711,528	610,365	727,478
Greek	8	7	7	7	52,350	19,350	18,100	28,397
Hungarian	23	19	14	14	81,451	54,422	36,274	42,066
Italian	42	50	40	44	158,815	470,800	129,502	193,480
Lithuanian	5	5	7	7	79,493	50,360	50,700	73,039
Polish	45	42	38	35	1,004,707	427,466	444,429	410,997
Russian	8	5	----	----	44,153	39,350	----	----
Slovak	9	8	9	10	182,474	135,350	177,131	84,461
Slovenian	7	5	3	3	59,100	37,400	32,000	18,493
Spanish	18	19	16	5	248,800	243,374	306,298	269,000
Swedish	28	27	32	29	488,331	378,084	337,232	321,208
Yiddish	11	15	18	18	111,000	130,800	204,889	230,900
Other languages [5]	20	28	33	24	60,723	68,018	154,900	150,688

[1] See "Number of publications and aggregate circulation per issue," p. 577.
[2] Includes, for 1929, 4 publications reported as Czechoslovak.
[3] Includes, for 1929, 14 publications, with an aggregate circulation of 102,149, reported as Norwegian and 1 reported as Danish-Norwegian.
[4] Includes, for 1929, 1 publication reported as Flemish and 1 as Belgian-Flemish.
[5] Comprises, for 1929, Armenian, Chinese, Croatian, Japanese, Ladino, Portuguese, Rumanian, Ruthenian, Serbian, and Welsh.

TABLE 21.—PERIODICALS, BY CLASS, NUMBER, AND CIRCULATION, BY STATES: 1929

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

CLASS OF PUBLICATION AND STATE	Number	Aggregate circulation per issue
AGRICULTURE, STOCK RAISING, ETC.		
United States	257	20,285,407
California [1]	13	185,898
Colorado [1]	3	94,177
Florida [1]	3	88,839
Georgia	3	1,097,093
Illinois	44	3,564,482
Indiana	10	853,263
Iowa	18	1,897,783
Kansas	7	1,047,500
Kentucky [1]	3	32,759
Massachusetts [1]	6	146,474
Michigan [1]	8	396,300
Minnesota	12	610,517
Missouri	20	641,497
Montana [1]	4	30,650
Nebraska [1]	4	202,882
New York	20	592,908
Ohio	11	1,870,788
Oklahoma [1]	4	370,690
Oregon [1]	6	55,065
Pennsylvania	11	3,085,218
Tennessee	3	691,976
Texas [1]	10	199,974
Washington [1]	8	160,588
Wisconsin [1]	8	436,861
Other States	18	1,330,535
ART, MUSIC, AND DRAMA		
United States	83	1,296,558
California [1]	7	84,800
Illinois [1]	7	41,504
Massachusetts [1]	9	142,598
New York	38	465,870
Ohio	6	205,191
Other States	16	356,595
AUTOMOBILE, MOTOR BOAT, ETC.		
United States	103	2,104,084
California	14	214,393
Illinois	13	497,228
Michigan [1]	4	113,333
Minnesota [1]	3	140,500
New York	28	463,070
Ohio [1]	6	127,675
Pennsylvania	13	212,976
Wisconsin [1]	3	20,800
Other States	19	305,709
COLLEGE AND SCHOOL		
United States	234	972,989
Alabama	4	23,000
California	15	79,905
Connecticut	9	35,200
Illinois	13	107,990
Indiana	8	33,125
Iowa [1]	7	10,700
Kansas [1]	5	9,630
Maryland [1]	6	14,144
Massachusetts	24	77,970
Michigan	9	32,300
Minnesota	8	20,500
Nebraska	5	22,000
New Hampshire [1]	3	10,100
New Jersey	6	25,300
New York	11	31,350
North Carolina	8	52,550
Ohio	17	43,700
Oregon	9	22,980
Pennsylvania	19	82,970
Texas	9	57,200
Washington	8	69,075
Wisconsin	7	44,200
Other States	20	66,200
COMMERCE, FINANCE, AND INSURANCE		
United States	273	3,130,414
California [1]	25	87,466
Illinois	36	744,015
Indiana [1]	3	35,400
Iowa [1]	5	9,576
Louisiana [1]	3	9,220
Massachusetts [1]	14	68,357
Michigan [1]	5	30,236
Minnesota [1]	3	7,753
Missouri [1]	12	65,250
Nebraska	3	52,800
New York	100	1,410,617
Ohio [1]	7	60,399
Pennsylvania [1]	21	113,814
Texas [1]	6	27,800
Washington [1]	4	11,800
Wisconsin [1]	3	23,700
Other States	23	372,151
EDUCATIONAL		
United States	96	2,847,710
California	7	59,000
District of Columbia	7	1,615,133
Illinois	15	198,959
Massachusetts	7	157,850
New York	18	304,364
Ohio	4	54,625
Pennsylvania	5	133,425
Wisconsin	5	55,755
Other States	28	268,599
FRATERNAL		
United States	168	9,412,356
California [1]	13	68,594
Colorado [1]	3	100,800
District of Columbia [1]	8	505,550
Illinois	26	3,178,532
Indiana	4	1,399,858
Iowa [1]	3	64,100
Kansas [1]	5	192,600
Louisiana [1]	4	25,800
Michigan [1]	9	326,050
Minnesota [1]	7	205,200
Missouri [1]	7	160,982
Nebraska [1]	4	509,650
New Jersey [1]	4	17,300
New York	20	1,083,912
Ohio [1]	10	261,782
Pennsylvania [1]	12	166,421
Texas [1]	7	65,900
Wisconsin [1]	5	148,750
Other States	17	929,975
LABOR (BY LABOR ORGANIZATIONS)		
United States	172	3,343,767
California [1]	10	26,370
District of Columbia	11	792,703
Illinois [1]	18	85,882
Indiana	11	687,543
Iowa [1]	4	62,400
Massachusetts [1]	4	43,500
Michigan	7	214,000
Minnesota [1]	9	52,160
Missouri	6	147,800
New York	31	304,515
Ohio	14	575,300
Oregon [1]	3	21,000
Pennsylvania [1]	11	92,486
Texas [1]	5	12,300
Washington [1]	4	12,800
Other States	24	213,008
LEGAL		
United States	77	177,299
California	4	6,113
Illinois	7	56,695
Michigan	3	11,000
Minnesota	4	9,830
Nebraska	5	6,000
New York	10	31,398
Ohio	7	7,630
Pennsylvania	10	9,686
Texas	4	5,000
Other States	23	33,857
MEDICINE, SURGERY, AND DENTISTRY		
United States	154	1,901,140
California	7	47,507
District of Columbia	3	86,127
Illinois	41	627,875
Maryland	9	31,082
Michigan	4	38,300
Minnesota	6	115,900
Missouri	11	45,540
New Jersey	4	197,047
New York	29	543,700
Ohio	3	24,300
Pennsylvania	13	145,640
Other States	24	58,116
MOTION PICTURES		
United States	47	2,315,703
California [1]	10	111,938
Illinois	4	632,792
Missouri [1]	10	18,827
New York	17	1,388,281
Other States	6	163,865
NEWS SUMMARIES, GENERAL LITERATURE, FAMILY READING, AND FICTION		
United States	300	62,880,435
California [1]	6	184,500
Georgia [1]	4	18,139
Illinois	27	7,733,770
Iowa	3	3,279,701
Kansas	5	1,673,150
Maine	3	2,583,864
Massachusetts	6	542,775
Minnesota	11	1,003,700
Missouri	5	1,457,708
New York	173	26,558,430
Ohio	21	10,058,581
Pennsylvania	4	5,638,733
Texas [1]	6	503,822
Wisconsin [1]	5	136,300
Other States	21	1,507,172
RELIGION		
United States	1,436	41,629,493
Alabama [1]	6	60,084
Arkansas [1]	4	32,100
California	11	292,555
Connecticut	3	37,800
District of Columbia	16	483,051
Georgia	3	34,000
Illinois	459	5,249,488
Indiana	41	985,619
Iowa [1]	4	27,122
Kansas [1]	3	10,700
Kentucky [1]	6	94,875
Louisiana	4	40,580
Massachusetts	50	1,753,144
Michigan	17	126,021
Minnesota	16	280,989
Missouri	107	2,904,869
Nebraska [1]	6	21,781
New Jersey	7	176,300
New York	84	4,605,851
North Carolina	16	152,436
Ohio	129	6,053,827
Oklahoma [1]	4	69,300
Oregon [1]	7	74,950
Pennsylvania	249	7,582,075
South Carolina [1]	5	40,653
Tennessee	95	8,235,723
Texas	18	277,900
Utah	9	115,879
Virginia	30	1,381,191
Washington [1]	3	13,750
Wisconsin	14	161,003
Other States	10	184,811
SCIENCE AND TECHNOLOGY		
United States	176	2,989,187
California [1]	5	13,300
District of Columbia	13	82,148
Illinois	16	656,105
Maryland [1]	21	18,768
Massachusetts	7	66,025
New York	86	2,039,476
Ohio [1]	4	35,250
Pennsylvania [1]	12	23,340
Other States	12	54,775
SOCIETY, FASHION, BEAUTY CULTURE, ETC.		
United States	79	22,599,743
California [1]	5	20,500
Illinois [1]	22	280,867
New York	28	14,899,290
Ohio	7	5,355,545
Pennsylvania [1]	3	56,726
Other States	14	1,986,815
SPORTS, GAMES, AND AMUSEMENTS		
United States	122	2,302,371
California [1]	15	49,974
Illinois	23	323,530
Maryland [1]	3	24,750
Massachusetts	4	542,801
Michigan [1]	3	14,300
Minnesota [1]	3	27,500
Missouri [1]	4	75,050
New York	28	634,534
Ohio	12	103,350
Pennsylvania	10	156,100
Other States	17	290,482

See footnote at end of table.

TABLE 21.—PERIODICALS, BY CLASS, NUMBER, AND CIRCULATION, BY STATES: 1929—Continued

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

CLASS OF PUBLICATION AND STATE	Number	Aggregate circulation per issue
TRADE JOURNALS (NOT ELSEWHERE CLASSIFIED)		
United States	954	7,806,117
California	75	275,636
Colorado [1]	6	13,500
District of Columbia	10	66,682
Florida [1]	3	14,500
Georgia	24	108,742
Illinois	183	1,644,087
Indiana	12	208,960
Iowa	6	147,950
Louisiana [1]	4	17,200
Maryland	4	18,716
Massachusetts	33	196,708
Michigan	19	172,975
Minnesota	23	108,384
Missouri	24	233,685
Nebraska [1]	5	16,678
New Jersey [1]	5	11,575
New York	326	3,140,118
North Carolina	6	24,265
Ohio	40	544,085
Oklahoma	3	19,900
Oregon	16	80,030
Pennsylvania	46	242,285
Tennessee	5	26,500
Texas	18	76,764
Washington	16	42,532
Wisconsin	23	222,277
Other States	19	71,383
MISCELLANEOUS		
United States	424	13,704,518
California	56	1,374,660
Colorado [1]	4	16,500
District of Columbia	24	648,302
Georgia [1]	6	23,800
Illinois	77	5,087,589
Indiana [1]	8	89,301
Iowa	18	267,930
Kansas [1]	4	13,900
Maryland	10	744,510
Massachusetts [1]	14	199,706
Michigan	14	833,370
Minnesota [1]	5	191,544
Missouri [1]	10	76,350
New York	88	2,190,441
Ohio	19	770,889
Oklahoma [1]	3	19,040
Oregon [1]	3	13,050
Pennsylvania [1]	18	214,880
Texas	5	20,955
Virginia [1]	3	47,400
Washington	9	161,910
Wisconsin	6	251,289
Other States	20	447,182

[1] This State is outranked, with reference to circulation in 1929, by one or more of the "Other States."

TABLE 22.—PERIODICALS, BY PERIOD OF ISSUE, NUMBER, AND CIRCULATION, BY STATES: 1929, 1927, 1925, AND 1923

[This table presents statistics for all States for which separate figures can be given without disclosing data for individual publishers]

STATE	NUMBER [1]				AGGREGATE CIRCULATION PER ISSUE [1]			
	1929	1927	1925	1923	1929	1927	1925	1923
WEEKLY (Not including newspapers, for which see Table 18)								
United States	1,158	1,099	1,133	984	34,494,799	32,106,630	34,825,743	31,435,689
Alabama	7	7	7	5	602,230	516,258	496,980	378,960
Arkansas	6	7	5	5	41,166	39,110	39,000	19,200
California	87	65	68	59	950,734	761,178	506,574	353,650
Colorado	6	11	12	8	120,900	69,488	36,483	52,055
Connecticut	6	9	6	7	54,500	58,675	49,948	50,500
Dist. of Columbia	16	13	15	11	1,847,815	1,739,744	1,764,883	838,006
Florida	9	3	6	5	41,150	13,000	37,837	29,351
Georgia	10	9	8	8	45,800	29,100	62,582	70,850
Illinois	137	153	155	118	3,686,468	5,436,970	4,853,384	2,906,395
Indiana	34	28	46	23	878,493	819,566	1,427,626	222,209
Iowa	12	13	13	8	294,650	339,991	389,314	363,431
Kansas	12	13	12	13	177,611	215,968	178,450	175,376
Kentucky	10	14	14	13	101,355	128,705	120,900	133,908
Louisiana	11	9	10	11	58,600	47,205	45,148	47,485
Maryland	12	12	12	13	120,692	96,136	88,372	79,652
Massachusetts	52	47	52	40	726,952	587,321	880,930	754,769
Michigan	37	30	30	25	798,965	281,694	829,594	271,235
Minnesota	31	28	27	20	631,925	404,985	374,924	294,154
Missouri	67	61	57	66	986,118	846,933	783,440	817,762
Montana	4	5			10,650	21,000		
Nebraska	14	9	11	13	166,058	137,390	143,625	211,206
New Jersey	6	9	10	6	101,400	76,500	111,685	91,050
New York	208	216	218	212	8,633,146	13,797,274	11,743,919	13,257,536
North Carolina	11	11	6	7	91,002	119,028	79,695	78,444
Ohio	88	85	76	75	3,790,732	3,428,974	2,550,996	2,576,485
Oklahoma	9	6	7	8	46,220	38,632	38,609	35,142
Oregon	12	7	14	13	66,800	52,631	110,920	161,102
Pennsylvania	109	89	104	86	5,227,472	5,206,117	4,791,153	5,024,786
South Carolina	5	3	4	2	35,253	24,375	28,400	11,590
Tennessee	31	23	28	29	1,775,774	1,444,050	803,840	764,864
Texas	33	31	30	28	516,947	448,104	539,545	556,304
Utah	5	4			25,179	7,300		
Virginia	10	10	15	10	1,135,366	1,152,877	293,550	410,068
Washington	24	29	23	13	234,020	415,670	260,961	32,133
Wisconsin	18	15	19	12	437,684	313,846	323,595	306,311
Other States [2]	12	15	13	19	34,972	50,835	32,880	59,714
SEMIMONTHLY AND BIWEEKLY								
United States	224	238	232	143	9,168,458	5,955,858	6,773,105	5,531,731
Arkansas [2]	3	3	4	3	65,500	83,940	110,491	100,670
California [2]	10	14	12	9	28,795	45,356	50,650	36,300
Colorado [2]	3				85,527			
Dist. of Columbia [2]	3	7	8	8	193,573	243,922	398,532	193,953
Georgia	3		4		1,101,763		476,667	
Illinois	36	24	30	28	2,187,456	235,559	289,159	280,672
Indiana [2]	5	5	4	5	167,518	220,400	312,300	328,300
Iowa [2]	5	4	6	4	47,293	53,350	315,199	181,880
Kentucky [2]	3	3	3	5	78,500	85,500	120,000	107,847
Massachusetts [2]	5	6			27,403	37,800		
Michigan [2]	6	5	6	5	115,700	105,775	74,061	123,486
Minnesota [2]	3	4	5	5	113,072	171,700	207,650	156,683
Missouri [2]	10	18	19	15	259,223	177,830	347,414	310,598
Nebraska [2]	3	4	4	3	57,250	52,625	35,074	51,474
New Jersey [2]	3				17,385			
New York	56	49	55	36	2,482,856	1,751,700	2,011,558	1,622,317
Ohio [2]	9	10	10	15	196,631	127,814	206,369	182,948
Oklahoma [2]	3				243,050			
Oregon [2]	6	3	3	3	49,800	11,100	115,789	105,150
Pennsylvania [2]	17	22	22	6	338,311	393,281	269,990	33,741
Texas [2]	4	5	5	3	22,097	18,866	74,000	13,095
Wisconsin [2]	5	4	5	3	203,947	238,885	63,200	28,123
Other States [4]	23	43	27	37	1,085,768	1,000,455	1,289,002	1,674,494
MONTHLY								
United States	2,799	2,522	2,271	1,907	133,048,488	120,693,490	111,875,057	91,654,028
Alabama	7	6	4	4	85,455	112,249	131,983	75,255
California	161	142	109	106	1,342,411	1,070,410	852,887	897,713
Colorado	21	22	19	16	276,303	339,750	257,354	115,310
Connecticut	9	9	10	6	925,868	990,420	1,052,726	830,100
Delaware [2]	3	3	3		46,985	45,485	45,500	
Dist. of Columbia	67	61	60	50	3,642,022	2,100,880	3,071,513	2,013,883
Florida	9	15	8	6	113,576	96,923	29,097	35,992
Georgia	39	21	23	31	199,864	189,979	101,692	151,989
Illinois	745	698	589	333	21,664,106	17,971,020	16,128,295	13,126,020
Indiana	46	43	33	37	3,140,417	3,796,010	2,722,265	2,520,782
Iowa	47	32	35	28	5,427,347	4,174,140	3,490,805	2,576,233
Kansas	16	13	21	15	2,766,977	2,838,080	2,764,293	2,576,309
Kentucky	13	13	13	12	618,359	589,750	583,150	440,380
Louisiana [2]	8	4	8	6	54,440	8,165	106,248	79,935
Maine	5	6	6	5	3,618,020	3,888,386	3,658,250	3,658,449
Maryland	24	21	23	15	749,449	156,175	116,939	33,909
Massachusetts	77	83	85	66	2,855,571	2,632,719	2,934,306	2,552,100
Michigan	51	42	45	51	1,333,542	1,069,005	1,430,235	1,578,640
Minnesota	62	52	40	34	2,047,531	1,756,570	1,471,037	1,319,521
Missouri	91	92	79	69	3,215,899	2,706,000	2,176,122	1,971,253

See footnotes at end of table.

TABLE 22.—PERIODICALS, BY PERIOD OF ISSUE, NUMBER, AND CIRCULATION, BY STATES: 1929, 1927, 1925, AND 1923—Continued

[See note at head of this table]

STATE	NUMBER [1]				AGGREGATE CIRCULATION PER ISSUE [1]			
	1929	1927	1925	1923	1929	1927	1925	1923
	MONTHLY—continued							
Montana [2]	3	4	3	2	7,275	13,030	11,805	3,900
Nebraska	15	12	13	14	632,078	997,340	1,001,752	988,877
New Hampshire [2]	5	8	4	2	26,750	40,024	12,226	15,452
New Jersey	25	15	13	19	846,488	356,471	354,205	309,469
New York	700	581	546	518	46,083,025	43,990,170	45,639,181	37,793,343
North Carolina	10	14	10	7	63,570	82,022	156,350	55,725
Ohio	141	116	101	106	18,151,518	16,781,588	10,302,873	7,417,337
Oklahoma	7	13	10	6	203,550	350,875	312,650	51,800
Oregon	28	28	26	21	174,355	214,786	144,569	130,864
Pennsylvania	175	169	164	154	9,795,862	8,498,646	7,759,566	5,848,012
Rhode Island	7	4	3	-----	72,700	28,300	24,440	----------
South Dakota [2]	3	0	-----	-----	17,710	24,060	----------	----------
Tennessee	24	20	23	20	881,153	1,240,595	1,408,675	870,849
Texas	44	45	34	35	670,863	655,288	580,614	551,826
Utah	7	7	10	7	121,000	81,650	86,700	58,350
Virginia	10	14	16	9	186,798	198,402	247,926	159,768
Washington	20	21	24	26	90,016	89,733	123,997	151,286
West Virginia [2]	4	4	-----	-----	18,095	12,945	----------	----------
Wisconsin	52	48	43	40	765,211	404,808	439,607	431,248
Other States [3]	12	15	15	31	115,820	91,041	150,024	262,149

STATE	NUMBER [1]				AGGREGATE CIRCULATION PER ISSUE [1]			
	1929	1927	1925	1923	1929	1927	1925	1923
	QUARTERLY							
United States	562	477	553	555	20,605,002	21,247,360	22,840,186	22,197,918
California	8	10	3	-----	146,739	129,900	113,500	----------
Dist. of Columbia	10	12	11	5	180,576	171,847	125,594	81,347
Illinois	73	64	61	60	2,512,036	2,279,074	2,016,669	3,524,297
Indiana	9	5	12	6	179,225	132,600	94,000	93,000
Maryland [1]	12	6	10	6	13,543	8,055	8,419	4,410
Massachusetts	35	20	18	20	961,920	757,051	670,847	657,170
Minnesota [2]	4	4	-----	-----	29,200	21,675	----------	----------
Missouri	43	21	62	47	1,280,219	1,137,089	965,456	521,972
New York	46	49	47	49	2,107,549	1,782,326	2,718,427	2,876,531
North Carolina	13	7	4	5	89,729	36,076	73,050	356,800
Ohio	59	93	93	100	3,775,117	4,643,648	5,478,754	3,429,703
Oregon [2]	4	3	-----	-----	6,870	4,500	----------	----------
Pennsylvania	141	140	143	150	3,181,346	3,762,944	3,590,078	4,009,383
Tennessee	57	14	36	37	5,680,016	5,972,500	6,398,920	4,346,291
Texas [2]	4	6	4	-----	41,900	54,575	2,300	----------
Virginia	21	3	20	-----	139,100	138,800	295,645	----------
Wisconsin [2]	5	3	3	3	78,050	40,100	48,300	2,605
Other States [4]	18	17	26	67	201,267	168,600	245,227	2,293,504

[1] See "Number of publications and aggregate circulation per issue," p. 577.
[2] This State is outranked, with reference to circulation in 1929, by one or more of the "Other States."
[3] For 1929: Arizona, Delaware, Maine, Mississippi, Nevada, Rhode Island, Vermont, and Wyoming.
[4] For 1929: Alabama, Arizona, Connecticut, Florida, Kansas, Louisiana, Maryland, Montana, New Hampshire, North Dakota, South Dakota, Tennessee, Utah, Virginia, and Washington.
[5] For 1929: Arizona, Arkansas, Idaho, Mississippi, North Dakota, South Carolina, and Wyoming.
[6] For 1929: Connecticut, Georgia, Iowa, Kansas, Michigan, New Jersey, Oklahoma, Rhode Island, South Carolina, Vermont, and Washington.

TABLE 23.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE PRINTING AND PUBLISHING INDUSTRIES IN COMBINATION AND SEPARATELY

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
THE PRINTING AND PUBLISHING INDUSTRIES AS A GROUP [1]												
Prime movers and electric motors driven by purchased energy, aggregate	213,274	*Horse-power* 544,588	188,300	*Horse-power* 482,295	161,203	*Horse-power* 409,121	120,914	*Horse-power* 326,252	90,593	*Horse-power* 295,923	100.0	100.0
Prime movers, total	522	31,800	580	33,359	863	39,390	4,885	56,174	7,733	74,772	5.8	17.2
Steam, total	253	28,737	153	29,209	184	34,628	370	38,931	608	47,041	5.3	11.9
Engines	241	27,120	149	28,677	174	33,993	351	38,036	(2)	(2)	5.0	11.6
Turbines	12	1,617	4	532	10	635	19	895	(2)	(2)	0.3	0.3
Internal-combustion engines	269	3,063	427	4,150	617	4,511	4,329	16,384	6,798	26,406	0.5	5.0
Water wheels and water turbines	----------	----------	----------	----------	62	251	186	859	327	1,325	----------	0.2
Electric motors driven by purchased energy	212,752	512,788	187,720	448,936	160,340	369,731	116,029	270,078	82,860	221,151	94.2	82.9
Electric motors, total	218,876	536,509	194,007	474,262	166,826	392,099	123,570	297,217	89,860	249,256	100.0	100.0
Driven by purchased energy	212,752	512,788	187,720	448,936	160,340	369,731	116,029	270,078	82,860	221,151	95.6	90.9
Driven by energy generated in establishments reporting	6,124	23,721	6,287	25,326	6,486	22,368	7,541	27,139	7,000	28,105	—4.4	9.1
Electric generators	123	*Kilowatts* 20,783	177	*Kilowatts* 19,982	146	*Kilowatts* 21,578	(3)	(3)	(3)	(3)	----------	----------
Electric energy purchased [4]	----------	*Kilowatt-hours* 599,120,647	----------	(3)	----------	(3)	----------	(3)	----------	(3)	----------	----------

See footnotes at end of table.

TABLE 23.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929; FOR THE PRINTING AND PUBLISHING INDUSTRIES IN COMBINATION AND SEPARATELY—Contd.

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
BOOK AND JOB[1]												
Prime movers and electric motors driven by purchased energy, aggregate	126,643	*Horsepower* 211,448	108,346	*Horsepower* 194,718	91,604	*Horsepower* 170,096	67,337	*Horsepower* 131,544	48,155	*Horsepower* 113,566	100.0	100.0
Prime movers, total	148	9,343	102	10,696	159	15,590	567	17,035	948	22,831	4.4	13.0
Steam, total	125	8,964	68	9,801	95	14,475	141	13,865	209	17,706	4.2	10.6
Engines	121	8,599	68	9,801	94	14,445	133	13,337	(2)	(2)	4.1	10.2
Turbines	4	365			1	30	8	528	(2)	(2)	0.1	0.4
Internal-combustion engines	23	379	34	895	58	1,110	400	3,095	705	5,010	0.2	2.4
Water wheels and water turbines					6	5	26	75	34	115		
Electric motors driven by purchased energy	120,495	202,105	108,244	184,022	91,445	154,506	66,770	114,509	47,207	90,735	95.6	87.0
Electric motors, total	123,511	210,412	111,048	192,061	94,512	163,083	69,702	123,905	50,980	103,550	100.0	100.0
Driven by purchased energy	120,495	202,105	108,244	184,022	91,445	154,506	66,770	114,509	47,207	90,735	96.1	92.4
Driven by energy generated in establishments reporting	3,016	8,307	2,804	8,039	3,067	8,577	2,932	9,396	3,773	12,815	3.9	7.6
Electric generators	58	*Kilowatts* 5,413	78	*Kilowatts* 6,080	64	*Kilowatts* 6,568	(3)	(3)	(3)	(3)		
Electric energy purchased [4]		*Kilowatt-hours* 272,412,963		(5)		(5)		(3)		(3)		
MUSIC												
Prime movers and electric motors driven by purchased energy, aggregate	317	*Horsepower* 956	323	*Horsepower* 1,343	300	*Horsepower* 1,303	274	*Horsepower* 634	234	*Horsepower* 594	100.0	100.0
Prime movers, total			3	370	3	370	2	12	1	11		1.9
Steam, total			2	250	2	250						
Engines			2	250	2	250						
Turbines												
Internal-combustion engines			1	120	1	120	2	12	1	11		1.9
Electric motors driven by purchased energy	317	956	320	973	297	993	272	622	233	583	100.0	98.1
Electric motors, total	317	956	375	1,176	340	1,208	272	622	233	583	100.0	100.0
Driven by purchased energy	317	956	320	973	297	993	272	622	233	583	100.0	100.0
Driven by energy generated in establishments reporting			55	203	43	215						
Electric generators		*Kilowatts*	3	*Kilowatts* 250	3	*Kilowatts* 275	(3)	(3)	(3)	(3)		
Electric energy purchased [4]		*Kilowatt-hours* 816,564		(5)		(5)		(3)		(3)		
NEWSPAPER AND PERIODICAL												
Prime movers and electric motors driven by purchased energy, aggregate	92,314	*Horsepower* 332,184	79,631	*Horsepower* 286,234	69,299	*Horsepower* 237,662	53,303	*Horsepower* 194,074	42,204	*Horsepower* 181,703	100.0	100.0
Prime movers, total	374	22,457	475	22,293	701	23,430	4,316	39,127	6,784	51,930	6.8	20.2
Steam, total	128	19,773	83	19,158	87	19,903	229	25,066	399	29,335	6.0	12.9
Engines	120	18,521	79	18,626	78	19,298	218	24,699	(2)	(2)	5.6	12.7
Turbines	8	1,252	4	532	9	605	11	367	(2)	(2)	0.4	0.2
Internal-combustion engines	246	2,684	392	3,135	558	3,261	3,927	13,277	6,092	21,385	0.8	6.9
Water wheels and water turbines					56	246	160	784	293	1,210		0.4
Electric motors driven by purchased energy	91,940	309,727	79,156	263,941	68,598	214,232	48,987	154,947	35,420	129,833	93.2	79.8
Electric motors, total	95,048	325,141	82,584	281,025	71,974	227,808	53,596	172,090	38,647	145,123	100.0	100.0
Driven by purchased energy	91,940	309,727	79,156	263,941	68,598	214,232	48,987	154,947	35,420	129,833	95.3	89.7
Driven by energy generated in establishments reporting	3,108	15,414	3,428	17,084	3,376	13,576	4,609	17,743	3,227	15,290	4.7	10.3
Electric generators	65	*Kilowatts* 15,370	96	*Kilowatts* 13,652	79	*Kilowatts* 14,735	(3)	(3)	(3)	(3)		
Electric energy purchased [4]		*Kilowatt-hours* 325,891,120		(5)		(5)		(3)		(3)		

[1] The figures for 1927 and earlier years differ from those originally published because of the inclusion of data for establishments engaged primarily in the production of paper patterns and fashion plates. (See second paragraph, "Description of the industries," p. 577.)
[2] Not called for separately on schedule.
[3] Not called for on schedule.
[4] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[5] Data incomplete.

TABLE 24.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929, FOR THE PRINTING AND PUBLISHING INDUSTRIES

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, in all cases, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. No comparable data are available for years prior to 1914]

STATE	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	
PRINTING AND PUBLISHING INDUSTRIES AS A GROUP [1]														
United States:														
1929	281,119	279,024	280,676	281,804	278,406	279,086	278,431	*277,784*	279,802	283,094	283,723	285,412	**286,185**	97.1
1925	252,515	252,788	252,494	252,574	251,332	251,424	248,390	*247,056*	248,908	251,408	254,827	257,434	**260,657**	95.1
1919	244,688	*236,264*	238,164	240,114	240,303	241,631	243,216	245,157	247,917	250,040	243,532	248,863	**261,055**	90.5
1914	229,442	231,266	231,637	233,303	230,790	229,994	228,329	224,982	*224,951*	227,672	229,840	229,912	**230,628**	96.4
BOOK AND JOB [1]														
United States:														
1929	150,649	149,949	151,215	151,429	*148,987*	149,068	148,892	149,103	150,803	152,413	151,269	152,375	**152,889**	97.1
1925	134,559	136,133	136,005	135,378	134,167	133,824	*131,637*	132,081	133,003	133,454	134,829	136,172	**138,033**	95.4
1919	123,408	*119,498*	120,399	120,715	120,689	120,924	122,218	123,643	125,514	126,859	121,398	124,907	**134,132**	89.1
1914	114,194	115,881	116,253	117,564	116,091	114,276	113,334	*111,582*	111,598	113,105	113,922	113,780	**113,942**	94.9
Alabama	524	524	529	531	528	524	520	527	521	523	*519*	522	**522**	97.7
Arizona	140	138	139	137	143	141	136	136	*131*	137	145	145	**147**	89.1
Arkansas	379	385	401	383	381	374	371	366	378	395	370	383	*365*	91.0
California	6,535	6,417	6,406	6,488	6,490	6,484	*6,404*	6,488	6,435	6,584	6,703	6,788	**6,736**	94.3
Colorado	1,034	1,022	1,005	1,023	1,020	1,020	1,013	*997*	1,022	1,036	1,071	1,083	**1,088**	91.6
Connecticut	1,950	1,967	1,996	1,987	1,989	1,958	1,955	1,916	*1,887*	1,908	1,933	1,959	**1,950**	94.5
Delaware	186	*176*	*176*	178	193	205	194	191	179	181	194	181	183	85.9
District of Columbia	1,221	1,221	1,228	1,236	1,282	1,274	1,230	1,183	1,207	1,211	1,203	*1,175*	**1,207**	91.6
Florida	652	675	688	677	662	664	617	*609*	621	625	640	656	**694**	87.8
Georgia	1,392	1,400	1,395	1,400	1,411	1,399	1,383	*1,364*	1,373	1,389	1,390	1,399	**1,398**	96.7
Idaho	99	*94*	95	97	100	99	98	95	104	108	100	99	**102**	87.0
Illinois	26,331	26,539	27,488	26,994	*24,232*	24,855	25,264	26,471	28,315	27,958	25,351	25,809	**26,701**	85.6
Indiana	3,928	*3,696*	3,702	3,823	3,877	3,927	3,950	3,986	4,015	3,973	4,135	4,119	**3,938**	89.4
Iowa	1,469	1,435	1,447	1,468	1,478	1,478	1,433	1,435	*1,422*	1,487	1,493	1,516	**1,534**	92.7
Kansas	606	621	624	627	614	615	610	*585*	587	586	596	597	**605**	93.3
Kentucky	1,302	1,433	1,406	1,417	1,359	1,348	1,362	*1,319*	1,353	1,409	1,402	1,450	**1,441**	91.0
Louisiana	762	780	762	760	762	763	763	759	*756*	758	769	*756*	**761**	96.9
Maine	432	443	451	449	440	433	420	425	425	*412*	424	432	**431**	91.4
Maryland	2,531	2,535	2,525	2,518	2,555	2,531	2,494	*2,493*	2,518	2,561	2,543	2,539	**2,559**	97.3
Massachusetts	9,341	9,229	9,294	9,205	9,251	9,217	9,322	9,126	*9,057*	9,474	9,546	9,778	**9,592**	92.6
Michigan	6,074	6,067	6,020	6,175	6,137	6,131	6,116	6,033	6,096	6,118	6,039	5,994	*5,968*	96.6
Minnesota	3,594	*3,500*	3,581	3,606	3,570	3,594	3,585	3,519	3,536	3,560	3,699	3,736	**3,646**	93.7
Mississippi	221	222	220	219	220	219	222	224	224	227	226	218	*217*	95.6
Missouri	5,354	*5,103*	5,219	5,312	5,275	5,231	5,214	5,285	5,321	5,487	5,549	5,563	**5,500**	92.7
Montana	170	179	174	*161*	163	172	174	172	172	173	168	169	**163**	89.9
Nebraska	887	896	893	901	893	886	*868*	869	873	888	886	888	**895**	96.3
Nevada	30	29	*28*	*28*	29	29	31	30	30	30	30	31	**30**	90.3
New Hampshire	833	829	*822*	834	837	833	835	*822*	831	830	830	838	**850**	96.7
New Jersey	4,901	4,927	4,516	*4,515*	4,671	4,992	5,143	5,136	4,886	4,648	4,880	5,272	**5,224**	85.6
New Mexico	36	*33*	*33*	37	37	37	37	37	37	37	37	37	**37**	89.2
New York	31,897	31,876	32,242	32,440	32,039	31,700	31,364	31,130	*31,035*	31,831	32,534	32,366	**32,202**	95.4
North Carolina	706	711	715	728	719	719	710	700	696	695	*688*	693	**694**	94.5
North Dakota	157	*152*	154	159	156	161	158	157	155	164	156	156	**153**	92.7
Ohio	10,188	*10,025*	10,214	10,170	10,261	10,330	10,196	10,120	10,210	10,249	10,184	10,127	**10,164**	97.0
Oklahoma	681	673	675	677	681	675	*664*	668	669	698	700	691	**700**	94.9
Oregon	665	667	*641*	647	659	677	649	669	658	676	675	683	**682**	93.9
Pennsylvania	11,245	11,236	11,220	11,279	11,294	11,365	11,239	11,061	*10,989*	11,224	11,227	11,344	**11,459**	95.9
Rhode Island	772	774	780	777	776	773	776	*752*	*752*	758	775	779	**794**	94.7
South Carolina	316	318	327	328	319	315	315	*304*	308	312	315	316	**315**	92.7
South Dakota	128	*127*	*127*	129	129	132	130	128	*127*	*127*	128	*127*	**127**	96.2
Tennessee	1,418	1,407	1,425	1,449	1,466	1,452	1,412	*1,394*	1,398	1,399	1,403	1,413	**1,397**	95.1
Texas	2,375	*2,324*	2,351	2,366	2,399	2,423	2,377	2,363	2,398	2,387	2,372	2,353	**2,388**	95.9
Utah	315	*306*	312	320	314	315	316	316	320	316	312	313	**316**	95.6
Vermont	280	279	284	280	282	278	278	277	*260*	291	290	279	**286**	89.3
Virginia	1,830	1,787	*1,779*	1,796	1,815	1,843	1,850	1,823	1,843	1,848	1,854	1,864	**1,857**	95.4
Washington	1,061	1,052	1,060	1,069	1,052	1,064	1,063	1,050	*1,046*	1,062	1,060	1,075	**1,083**	96.6
West Virginia	370	375	376	373	368	367	369	367	365	*364*	371	371	**372**	96.8
Wisconsin	3,195	3,209	3,226	3,209	3,003	*2,997*	3,216	3,180	3,217	3,254	3,310	3,247	**3,271**	90.5
Wyoming	46	46	*44*	47	47	49	46	46	45	45	*44*	46	**45**	89.8
MUSIC														
United States:														
1929	810	842	843	836	815	793	780	*762*	783	796	814	828	**822**	90.4
1925	955	965	967	970	953	946	*924*	925	932	947	972	973	**985**	93.8
1919	890	*840*	863	850	890	909	920	897	892	902	919	950	**956**	87.9
1914	873	893	889	901	887	876	850	*845*	849	873	877	884	**852**	93.8
California	24	24	24	24	24	24	24	24	24	24	24	*23*	**23**	95.8
Illinois	94	103	98	96	97	93	83	*75*	80	91	95	100	**104**	72.1
Massachusetts	82	90	98	95	82	*71*	72	75	75	74	79	83	**84**	71.7
New York	491	498	505	503	493	486	482	*468*	475	486	495	504	**493**	92.7
Ohio	4	4	4	4	4	4	4	4	4	4	4	4	4	----
Pennsylvania	13	13	13	13	13	13	13	13	13	13	13	13	13	----

[1] The figures for 1925 and earlier years differ from those originally published because of the inclusion of data for establishments engaged primarily in the production of paper patterns and fashion plates. (See second paragraph, "Description of the industries," p. 577.)

TABLE 24.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929, FOR THE PRINTING AND PUBLISHING INDUSTRIES—Continued

[See note at head of this table]

STATE	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	
PRINTING AND PUBLISHING INDUSTRIES AS A GROUP—Continued.														
NEWSPAPER AND PERIODICAL														
United States:														
1929	129,660	128,233	128,618	129,539	129,204	129,225	128,759	*127,919*	128,216	129,885	131,640	132,209	132,474	96.6
1925	117,001	115,690	115,522	116,226	116,212	116,654	115,829	*114,950*	114,973	117,007	119,026	120,289	121,639	94.5
1919	120,381	*115,926*	116,902	118,549	118,724	119,798	120,078	120,617	121,511	122,279	121,215	123,006	125,967	92.0
1914	114,375	114,492	114,495	114,838	114,812	114,842	114,145	112,555	*113,504*	113,694	115,041	115,248	115,884	97.1
Alabama	889	*885*	886	891	892	889	891	887	888	890	890	892	893	99.1
Arizona	344	335	343	339	345	344	328	*325*	335	339	356	363	374	86.9
Arkansas	755	749	763	759	755	753	*747*	750	749	750	760	763	764	97.8
California	6,876	6,773	6,813	6,859	6,865	6,844	6,847	6,809	*6,766*	6,895	7,017	6,973	7,045	96.0
Colorado	1,121	1,117	1,115	1,130	1,119	1,123	1,107	*1,088*	1,102	1,117	1,138	1,138	1,159	93.9
Connecticut	2,277	2,252	2,260	2,263	2,266	2,230	*2,221*	2,245	2,254	2,306	2,336	2,337	2,359	94.2
Delaware	249	249	248	249	247	250	248	249	247	*245*	250	254	248	96.5
District of Columbia	1,338	1,352	1,348	1,345	1,329	1,319	*1,308*	1,310	1,316	1,335	1,355	1,364	1,370	95.5
Florida	1,404	1,493	1,484	1,493	1,438	1,378	1,357	1,330	1,329	*1,327*	1,360	1,401	1,448	88.9
Georgia	1,416	1,423	1,411	1,411	1,413	1,406	1,402	*1,390*	1,415	1,413	1,439	1,423	1,447	96.1
Idaho	379	372	380	381	382	376	376	*370*	375	374	384	388	385	95.4
Illinois	11,660	11,605	11,703	11,652	11,679	11,641	11,632	*11,555*	11,617	11,625	11,734	11,733	11,740	98.4
Indiana	3,410	3,379	3,406	3,411	3,427	3,438	3,417	3,385	*3,375*	3,381	3,425	3,438	3,439	98.1
Iowa	3,040	3,088	3,091	3,085	3,066	3,038	*2,955*	2,989	2,959	2,996	3,050	3,083	3,080	95.6
Kansas	2,068	2,060	2,070	2,075	2,050	2,058	2,044	2,042	*2,030*	2,046	2,062	2,116	2,159	94.0
Kentucky	1,364	1,383	1,365	1,370	1,365	1,349	1,363	1,364	*1,341*	1,359	1,377	1,371	1,365	97.0
Louisiana	951	935	*928*	*928*	929	936	953	949	961	953	969	982	993	93.5
Maine	1,011	1,049	1,050	1,042	993	979	978	*973*	*973*	1,009	1,054	1,064	1,064	91.4
Maryland	1,595	1,602	1,591	1,606	1,580	1,584	1,589	*1,570*	1,585	1,598	1,610	1,618	1,608	97.6
Massachusetts	5,775	5,690	5,732	5,782	5,748	5,800	5,753	5,628	*5,597*	5,763	5,902	5,945	5,985	93.8
Michigan	3,950	*3,901*	3,904	3,924	3,911	3,934	3,944	3,907	3,939	3,979	4,012	4,024	4,017	96.9
Minnesota	2,994	3,027	3,009	2,972	2,944	2,947	2,972	*2,919*	2,932	2,928	3,080	3,065	3,128	93.3
Mississippi	516	519	518	517	518	514	514	516	513	*512*	518	520	519	98.5
Missouri	4,284	4,230	*4,207*	4,294	4,281	4,261	4,244	4,241	4,233	4,305	4,364	4,360	4,386	95.9
Montana	712	732	736	733	735	740	695	696	698	698	*690*	692	695	93.2
Nebraska	1,564	1,566	1,560	1,556	1,553	1,571	1,564	1,549	*1,545*	1,566	1,588	1,583	1,575	97.3
Nevada	93	*89*	*89*	91	92	94	94	93	93	94	*95*	99	97	91.8
New Hampshire	364	*361*	*361*	363	364	367	366	368	368	365	363	364	363	98.1
New Jersey	3,076	3,054	*3,016*	3,047	3,026	3,042	3,036	3,059	3,066	3,124	3,162	3,126	3,150	95.4
New Mexico	224	225	221	224	222	226	*220*	221	221	226	227	228	227	96.5
New York	20,002	*19,529*	19,747	19,969	19,860	19,999	19,873	19,607	19,801	20,060	20,364	20,606	20,607	94.8
North Carolina	1,137	1,138	1,138	1,137	1,134	1,133	1,128	*1,122*	1,124	1,129	1,147	1,155	1,157	97.0
North Dakota	414	*400*	408	*406*	413	415	415	417	413	420	418	418	416	96.7
Ohio	11,069	*10,544*	10,553	10,957	10,934	10,974	10,955	10,910	11,043	11,371	11,508	11,649	11,425	90.5
Oklahoma	1,806	1,762	1,771	1,800	1,807	1,817	1,787	*1,752*	1,761	1,805	1,852	1,872	1,892	92.6
Oregon	1,093	*1,063*	1,072	1,081	1,092	1,098	1,088	1,091	1,085	1,093	1,108	1,124	1,127	94.3
Pennsylvania	13,284	13,299	13,328	13,358	13,372	13,279	13,242	13,174	*13,105*	13,272	13,372	13,319	13,285	98.0
Rhode Island	734	726	*737*	739	735	741	748	727	*710*	735	739	735	738	94.9
South Carolina	609	602	*598*	601	603	604	607	611	609	614	615	623	618	96.0
South Dakota	532	536	530	530	*528*	535	530	*528*	532	537	535	533	533	98.3
Tennessee	2,088	2,098	2,099	2,107	2,073	2,089	2,089	2,075	*2,054*	2,070	2,083	2,093	2,120	96.9
Texas	3,731	3,700	*3,680*	3,690	3,724	3,689	3,697	3,690	3,692	3,767	3,811	3,803	3,834	96.0
Utah	520	531	520	515	519	515	*508*	522	519	525	519	*525*	528	95.7
Vermont	293	*290*	291	*290*	291	291	293	295	298	297	293	*290*	294	97.3
Virginia	1,058	1,054	*1,047*	1,050	1,056	1,056	1,050	1,062	1,056	1,062	1,065	1,065	1,069	97.9
Washington	1,748	*1,697*	1,711	*1,725*	1,748	1,750	1,761	1,729	1,756	1,785	1,782	1,761	1,773	95.1
West Virginia	975	*964*	965	969	970	974	972	*975*	967	972	*980*	*996*	993	96.8
Wisconsin	2,694	*2,650*	2,631	2,652	2,642	2,666	2,681	2,674	2,695	2,715	2,742	2,771	2,829	93.0
Wyoming	174	175	184	171	*169*	*169*	170	175	174	174	176	177	174	91.8

BOOKBINDING AND BLANK-BOOK MAKING

Description of the industry.—This industry embraces establishments engaged primarily in the binding of books and pamphlets; the manufacture of blank books, such as ledgers, account books, sales books, receipts, checks, loose-leaf devices, inventory and similar blanks, and indexes; and related work, such as paper ruling and cutting, embossing, paper and card etching, map and sample mounting, etc. The work done in binderies operated by publishers for their own publications is not included.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	1,108	24,754	$31,779,037	$30,754,777	$102,783,405	$72,028,628	21,741
1927	1,063	21,909	28,281,066	25,875,185	87,327,392	61,452,207	19,038
1925	970	20,836	26,005,621	24,127,012	81,600,302	57,473,290	16,147
1923	965	20,728	25,216,055	23,073,048	76,959,420	53,886,372	15,539
1921	869	17,465	20,317,877	19,836,243	63,854,402	43,968,159	[3]
1919	1,113	20,361	18,058,821	23,235,171	66,020,677	42,785,506	11,037
1914	1,124	21,693	11,574,723	13,334,207	38,104,368	24,770,161	10,842
1909	1,054	19,938	9,676,270	11,629,906	31,742,416	20,112,510	10,099
1904	908	17,713	7,886,945	9,139,937	25,223,650	16,083,713	4,908
1899	954	15,971	6,671,666	7,702,543	20,790,858	13,088,315	3,442
	PER CENT OF INCREASE OR DECREASE (—)						
1927-1929	4.2	13.0	12.4	18.9	17.7	17.2	14.2
1925-1927	9.6	5.1	8.7	7.2	7.0	6.9	17.9
1923-1925	0.5	0.5	3.1	4.6	6.0	6.7	3.9
1921-1923	11.0	18.7	24.1	16.0	20.5	22.6	----
1919-1921	—21.9	—14.2	8.9	—14.4	—3.3	2.8	----
1919-1929	—0.4	21.6	76.3	32.4	55.7	68.3	97.0
1909-1919	5.6	2.1	92.8	99.8	108.0	112.7	9.3
1899-1909	10.5	24.8	45.0	51.0	52.7	53.7	193.4

[1] The values of miscellaneous products normally belonging to other industries, made as secondary products by establishments engaged primarily in bookbinding and blank-book making, are included, as follows: For 1929, $1,053,166; 1927, $957,881; 1925, $862,035. The corresponding amounts for earlier years are not available. Receipts for book binding and blank-book making done as secondary activities by establishments classified in other industries are not included. Such receipts were reported as follows: For 1929, $21,296,296; 1927, $22,051,738; 1925, $18,506,791; 1923, $17,130,856. No comparable figures for earlier years are available.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. One of the "Other States," however, reported a larger value of products than some of the States shown separately. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products [2]	Value added by manufacture [2]
United States	1929	1,108	4,065	24,754	21,741	1,499	20,242	$10,854,665	$31,779,037	$30,754,777	$29,839,474	$915,303	$102,783,405	$72,028,628
	1927	1,063	3,641	21,909	19,038	1,445	17,593	8,832,184	28,281,066	25,875,185	25,127,567	747,618	87,327,392	61,452,207
	1919	1,113	3,815	20,361	[1]11,037	688	[1]10,349	7,453,912	18,658,821	23,235,171	22,750,119	485,052	66,020,677	42,785,506
California	1929	56	239	935	1,087	-------	1,087	580,506	1,266,094	1,695,126	1,669,267	25,859	5,611,616	3,916,490
	1927	51	145	830	945	-------	945	501,704	1,226,261	1,510,925	1,488,488	22,437	4,955,432	3,444,507
	1919	40	168	623	463	-------	463	229,253	627,505	887,037	873,747	13,290	2,462,669	1,575,632
Colorado	1929	6	11	52	42	-------	42	26,738	52,410	44,209	41,879	2,330	204,101	159,892
	1927	6	11	47	36	-------	36	26,357	50,276	40,191	38,975	1,216	167,509	127,318
	1919	4	2	31	20	-------	20	2,640	35,839	28,736	28,287	449	87,832	59,096
Connecticut	1929	8	2	28	23	-------	23	3,210	29,741	21,192	20,365	827	105,608	84,416
	1927	11	5	44	25	-------	25	9,846	57,099	38,225	37,491	734	160,951	122,726
	1919	16	8	66	66	-------	66	11,305	60,903	63,480	62,305	1,175	194,612	131,132
District of Columbia	1929	4	5	64	85	-------	85	8,888	83,979	27,147	25,484	1,663	169,556	142,409
	1927	4	5	59	27	-------	27	4,299	75,572	33,933	32,450	1,483	137,675	103,742
	1919	6	4	71	28	-------	28	5,662	67,244	54,562	53,127	1,435	169,780	115,218
Georgia	1929	5	12	34	24	-------	24	22,381	36,303	22,782	21,286	1,496	102,818	80,036
	1927	4	5	32	11	-------	11	6,182	36,377	12,920	12,036	884	75,597	62,677
	1919	4	-------	15	3	-------	3	----------	17,327	6,959	6,221	738	37,262	30,303
Illinois	1929	120	557	3,193	2,869	-------	2,869	1,617,690	4,117,641	4,020,731	3,895,537	125,194	13,663,477	9,642,746
	1927	124	398	3,013	2,643	-------	2,643	1,119,888	4,048,729	4,042,407	3,940,188	102,219	12,373,094	8,330,687
	1919	113	379	2,395	1,263	77	1,186	766,663	2,170,659	2,638,291	2,581,130	57,161	7,477,722	4,839,431
Indiana	1929	13	26	110	139	-------	139	51,502	147,858	161,138	156,035	5,103	469,968	308,830
	1927	14	30	130	93	-------	93	58,783	142,505	137,479	131,453	6,026	505,964	368,485
	1919	14	10	68	60	-------	60	10,851	55,005	54,788	53,232	1,556	164,415	109,627

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products [2]	Value added by manufacture [3]
Iowa	1929	10	20	149	187	-------	187	$51,278	$158,321	$197,966	$190,382	$7,584	$637,896	$439,930
	1927	11	85	161	190	-------	190	136,636	191,389	238,634	231,308	7,326	723,106	484,472
	1919	12	63	85	92	-------	92	99,490	64,865	136,407	133,442	2,965	421,508	285,101
Kentucky	1929	5	11	39	32	-------	32	22,151	32,421	21,827	19,835	1,992	113,602	91,775
	1927	3	6	34	24	-------	24	8,940	38,208	15,883	15,296	587	87,272	71,389
Louisiana	1929	9	3	43	43	-------	43	4,678	49,958	20,520	19,397	1,123	129,674	109,154
	1927	9	4	46	40	-------	40	7,512	57,921	20,629	19,324	1,305	133,090	112,461
	1919	7	6	40	22	-------	22	5,910	35,288	18,081	17,453	628	91,045	72,964
Maine	1929	5	7	44	39	-------	39	14,692	46,648	46,057	44,274	1,783	173,825	127,768
	1927	5	7	46	64	-------	64	13,048	51,817	53,745	52,112	1,633	182,053	128,308
	1919	9	6	65	46	-------	46	10,522	47,169	96,168	95,000	1,168	176,722	80,554
Maryland	1929	13	19	261	191	-------	191	60,667	263,677	185,221	176,938	8,283	678,644	493,423
	1927	15	36	247	179	-------	179	59,174	247,826	160,924	155,139	5,785	640,493	479,569
	1919	15	14	172	77	-------	77	18,123	182,669	244,902	240,213	4,689	546,371	301,469
Massachusetts	1929	83	382	2,645	1,843	125	1,718	944,813	3,316,020	2,757,248	2,675,673	81,575	9,801,970	7,044,722
	1927	81	357	2,509	1,806	425	1,381	793,456	3,021,732	2,515,919	2,447,765	68,154	9,112,175	6,596,256
	1919	94	315	2,936	1,368	392	976	651,679	2,595,018	3,033,009	2,975,746	57,263	8,179,841	5,146,832
Michigan	1929	27	237	1,192	1,278	-------	1,278	653,353	1,641,154	2,057,903	1,993,091	64,512	6,761,200	4,703,597
	1927	23	224	1,014	1,121	-------	1,121	502,096	1,263,351	1,692,424	1,644,408	48,016	5,985,714	4,293,290
	1919	24	186	482	174	-------	174	360,220	405,144	543,548	531,725	11,823	2,091,826	1,548,278
Minnesota	1929	13	32	149	158	-------	158	51,573	181,222	195,946	189,168	6,778	603,715	407,769
	1927	14	32	164	113	-------	113	65,331	185,467	250,659	244,346	6,313	717,790	467,131
	1919	18	9	119	50	-------	50	8,396	94,239	71,806	69,144	2,662	245,277	173,471
Missouri	1929	43	222	953	1,242	800	442	476,471	1,185,415	1,519,301	1,489,008	30,293	4,548,214	3,028,913
	1927	39	254	921	1,212	700	512	469,865	1,104,890	1,026,323	997,131	29,192	3,382,804	2,356,481
	1919	39	228	977	518	-------	518	385,762	822,656	1,331,264	1,310,074	21,190	3,194,651	1,863,387
Nebraska	1929	6	13	25	31	-------	31	35,683	29,679	69,838	68,355	1,483	240,259	170,421
	1927	4	2	18	24	-------	24	5,283	21,965	16,892	16,336	556	81,226	64,334
	1919	4	6	24	17	-------	17	7,717	23,156	17,370	16,007	1,363	61,315	43,945
New Jersey	1929	20	57	729	348	-------	348	182,715	638,529	581,987	567,067	14,920	1,874,437	1,292,450
	1927	25	48	419	345	-------	345	141,325	466,211	467,972	451,904	16,068	1,598,178	1,130,206
	1919	34	92	315	192	22	170	140,027	296,631	461,973	446,981	14,992	1,180,032	718,059
New York	1929	428	1,586	10,126	8,039	274	7,765	4,382,425	13,912,337	12,512,844	12,123,170	389,674	42,017,692	29,504,848
	1927	403	1,365	8,868	7,295	20	7,275	3,484,993	12,156,865	9,573,328	9,259,500	313,828	33,429,697	23,856,369
	1919	397	1,521	8,513	4,589	181	4,408	3,217,698	8,228,273	9,793,606	9,587,720	205,886	27,892,678	18,099,072
Ohio	1929	57	121	891	991	-------	991	372,211	1,136,315	1,364,662	1,327,797	36,865	4,062,171	2,697,509
	1927	52	207	800	924	-------	924	406,906	1,052,779	1,161,136	1,128,283	32,853	3,609,557	2,448,421
	1919	54	411	834	846	-------	846	816,250	824,540	908,220	882,094	26,126	3,836,561	2,928,341
Oklahoma	1929	5	3	20	15	-------	15	6,380	20,654	20,315	19,543	772	89,576	69,261
	1927	4	1	18	13	-------	13	960	23,799	14,076	13,406	670	57,185	43,109
Oregon	1929	6	12	37	47	-------	47	30,179	58,671	21,049	19,117	1,932	148,722	127,673
	1927	7	9	49	62	-------	62	19,886	74,282	62,303	60,181	2,122	206,337	144,034
	1919	6	10	55	38	-------	38	24,658	52,843	76,323	74,618	1,705	195,734	119,411
Pennsylvania	1929	87	197	1,530	1,373	300	1,073	571,828	1,662,133	1,385,889	1,336,676	49,213	5,015,189	3,629,300
	1927	86	192	1,604	1,228	300	928	523,694	1,714,807	1,616,230	1,566,865	49,365	5,195,049	3,578,819
	1919	109	147	1,519	741	16	725	328,606	1,236,541	1,720,960	1,687,019	33,941	4,537,388	2,816,428
Texas	1929	9	18	49	68	-------	68	46,292	55,920	57,102	54,496	2,606	278,794	221,692
	1927	12	21	97	75	-------	75	50,392	82,990	110,473	108,441	2,032	444,431	333,958
	1919	8	10	159	64	-------	64	29,450	85,027	142,788	141,063	1,725	309,902	167,114
Utah	1929	3	2	10	24	-------	24	1,440	13,893	16,623	16,073	550	53,843	37,220
	1927	(5)	(5)	(5)	(5)	-------	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	4	6	20	9	-------	9	7,800	17,690	26,907	25,881	1,026	67,059	40,152
Virginia	1929	5	5	52	43	-------	43	9,780	50,097	29,789	28,248	1,541	120,209	90,420
	1927	6	3	55	45	-------	45	6,700	56,823	31,653	29,935	1,718	128,804	97,151
	1919	4	2	42	23	-------	23	2,200	35,297	22,286	20,838	1,448	83,205	60,919
Washington	1929	16	16	90	153	-------	153	34,391	99,894	129,360	124,025	5,335	486,035	356,675
	1927	13	1	45	38	-------	38	5,500	63,917	48,712	47,151	1,561	189,113	140,401
	1919	14	1	37	19	-------	19	1,300	42,604	35,765	34,390	1,375	133,622	97,857
Wisconsin	1929	21	135	508	364	-------	364	278,202	608,269	753,599	734,985	18,614	2,189,971	1,436,372
	1927	20	151	460	293	-------	293	285,212	537,500	814,974	799,748	15,226	2,217,970	1,402,996
	1919	32	148	480	189	-------	189	178,381	355,309	611,517	602,248	9,269	1,406,875	795,358
Other States	[6]1929	19	115	796	963	-------	963	312,548	883,784	817,706	792,303	25,403	2,430,623	1,612,917
	[7]1927	17	37	179	167	-------	167	118,316	229,708	166,216	157,907	8,309	820,126	662,910
	[8]1919	32	63	218	146	-------	146	133,349	179,380	208,418	200,414	8,004	774,773	566,355

[1] Not including proprietors and firm members, as follows: For 1929, 676; 1927, 927; 1919, 1,111. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 29,495; 1927, 26,477; 1919, 25,287.

[2] See footnote 1, Table 1.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Withheld from publication in order to avoid disclosing data for individual establishments.

[6] Alabama, 1 establishment; Arizona, 1; Delaware, 1; Florida, 2; Kansas, 1; New Hampshire, 3; North Carolina, 1; Rhode Island, 2; South Carolina, 1; South Dakota, 1; Tennessee, 5.

[7] Alabama, 2 establishments; Arizona, 1; Delaware, 1; Kansas, 1; New Hampshire, 3; North Dakota, 1; Rhode Island, 1; South Carolina, 1; Tennessee, 3; Utah, 3.

[8] Alabama, 2 establishments; Arizona, 1; Arkansas, 1; Delaware, 2; Idaho, 1; Kansas, 5; Kentucky, 3; New Hampshire, 2; North Carolina, 1; Oklahoma, 2; Rhode Island, 6; South Carolina, 1; Tennessee, 3; Vermont, 2.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	14,245	*Horsepower* 21,741	11,977	*Horsepower* 19,038	10,158	*Horsepower* 16,147	6,558	*Horsepower* 11,037	4,421	*Horsepower* 10,842	100.0	100.0
Prime movers, total	10	1,499	7	1,445	16	1,774	22	688	55	2,560	6.9	6.2
Steam, total	7	1,375	6	1,425	13	1,730	10	555	28	2,282	6.3	5.0
Engines	7	1,375	6	1,425	13	1,730	10	555	(1)	(1)	6.3	5.0
Turbines												
Internal-combustion engines	3	124	1	20	3	44	12	133	24	215	0.6	1.2
Water wheels and water turbines									3	63		
Electric motors driven by purchased energy	14,235	20,242	11,970	17,593	10,142	14,373	6,536	10,349	4,366	8,282	93.1	93.8
Electric motors, total	14,638	20,912	12,400	18,678	10,510	15,191	6,536	10,349	4,542	8,867	100.0	100.0
Driven by purchased energy	14,235	20,242	11,970	17,593	10,142	14,373	6,536	10,349	4,366	8,282	96.8	100.0
Driven by energy generated in establishments reporting	403	670	430	1,085	368	818			176	585	3.2	
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	6	881	8	841	10	915	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		22,050,983		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced figures** and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	24,754	24,286	24,556	24,830	24,700	24,367	*24,146*	24,635	25,180	25,167	25,217	24,974	24,986	95.8
1925	20,836	20,714	20,895	20,906	20,896	20,402	*20,295*	20,486	20,727	20,855	21,053	21,236	21,573	94.1
1919	20,361	*19,354*	19,505	19,858	19,789	19,756	20,016	20,488	20,734	20,773	20,845	21,379	21,775	88.9
1914 [1]	21,603	22,166	22,311	22,536	22,099	21,706	21,781	21,853	21,272	21,376	21,191	*20,878*	21,147	92.6
California	935	*856*	861	906	915	925	926	970	1,009	926	965	961	990	84.8
Colorado	52	*45*	47	51	50	51	*54*	57	57	53	53	50	53	78.9
Connecticut	28	*28*	*28*	*28*	*28*	*28*	*28*	*28*	*28*	29	29	30	30	93.3
Dist. of Columbia	64	63	67	68	70	63	61	*60*	*60*	64	*60*	61	68	85.7
Georgia	34	34	34	33	34	33	33	*32*	*34*	34	*32*	34	35	91.4
Illinois	3,193	*3,074*	3,087	3,154	3,176	3,114	3,096	3,151	3,262	3,293	3,394	3,262	3,257	90.6
Indiana	110	*105*	110	110	108	106	*105*	112	111	116	119	111	111	88.2
Iowa	149	145	141	*139*	143	148	149	155	158	153	151	150	151	88.0
Kentucky	39	42	43	42	36	*35*	37	37	38	40	37	40	42	81.4
Louisiana	43	*43*	44	44	*43*	44	44	*43*	*43*	44	*43*	*43*	*43*	97.7
Maine	44	43	45	44	43	41	44	47	49	44	46	*40*	43	81.6
Maryland	261	*256*	258	260	262	261	261	259	261	264	263	263	265	96.6
Massachusetts	2,645	*2,549*	2,572	2,570	2,602	2,602	2,610	2,720	2,758	2,715	2,676	2,703	2,668	92.4
Michigan	1,192	1,184	1,173	1,206	1,214	1,231	1,196	1,199	1,197	1,217	1,172	1,194	*1,124*	91.3
Minnesota	149	148	147	149	*146*	147	149	150	148	149	151	152	152	96.1
Missouri	963	921	953	1,005	1,030	974	948	936	950	919	888	955	957	85.7
Nebraska	25	26	25	25	24	25	25	26	27	*23*	25	25	25	85.2
New Jersey	729	772	773	783	778	736	692	697	698	754	700	*681*	*681*	87.0
New York	10,126	10,016	10,221	10,212	10,038	9,802	*9,781*	9,905	10,253	10,314	10,443	10,290	10,242	93.7
Ohio	891	*862*	879	893	889	950	877	875	883	903	891	902	883	90.7
Oklahoma	20	*18*	*18*	*18*	*18*	*18*	*18*	23	23	23	19	19	19	78.3
Oregon	37	39	37	38	38	40	37	35	34	35	36	35	35	85.0
Pennsylvania	1,530	1,515	*1,473*	1,510	1,495	1,525	1,507	1,601	1,592	1,504	1,519	1,506	1,614	91.3
Texas	49	47	49	47	50	57	51	47	49	50	48	48	*46*	80.7
Utah	10	*10*	*10*	11	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	11	90.9
Virginia	52	52	52	52	52	52	*51*	*51*	*51*	*51*	52	52	52	98.1
Washington	90	90	89	89	*86*	87	*86*	88	89	91	94	92	93	91.5
Wisconsin	508	504	*494*	507	500	499	497	529	510	501	506	518	534	92.5

[1] No comparable data available for years prior to 1914.

ENGRAVERS' MATERIALS

Description of the industry.—The establishments classified in this industry are engaged primarily in the preparation of boxwood for engravers' use, of cherry and maple for photo-engravers' mounts, and of steel, brass, copper, and zinc plates for the use of engravers, photo-engravers, and etchers; and in the grinding, finishing, and polishing of lithographic stone for the use of lithographers.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	19	313	$448,385	$1,794,804	$3,129,483	$1,334,679	1,493
1927	17	178	293,962	1,289,261	2,168,737	879,476	864
1925	16	177	276,204	1,202,203	2,014,036	811,833	921
1923	24	224	391,557	1,359,350	2,302,627	943,277	832
1921	22	184	302,206	1,046,403	1,816,873	770,470	[3]
1919	21	174	212,171	1,484,269	2,248,122	763,853	733
1914	13	106	73,391	550,659	768,258	217,599	491
1909	18	129	95,505	609,053	920,727	311,674	486
1904	10	49	31,062	95,887	170,710	74,823	85
1899	11	76	44,939	141,785	282,489	140,704	20
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	[4]	75.8	52.5	39.2	44.3	51.8	72.8
1925–1927	[4]	0.6	6.4	7.2	7.7	8.3	—6.2
1923–1925	[4]	—21.0	—29.5	—11.6	—12.5	—13.9	10.7
1921–1923	[4]	21.7	29.6	29.9	26.7	22.4	----------
1919–1921	[4]	5.7	42.4	—29.5	—19.2	0.9	----------
1919–1929	[4]	79.9	111.3	20.9	39.2	74.7	103.7
1909–1919	[4]	34.9	122.2	143.7	144.2	145.1	50.8
1899–1909	[4]	[4]	112.5	329.6	225.9	121.5	[4]

[1] The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products. The following values of engravers' materials made as secondary products by establishments classified in other industries are not included: For 1929, $23,457; 1927, $104,410; 1925, $33,094; 1923, no comparable data; 1921, $40,840; 1919, $90,807.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Not called for on schedule.

[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for the only two States for which separate figures can be given without disclosing data reported by individual establishments. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	19	67	313	1,493	-------	1,493	$270,807	$448,385	$1,794,804	$1,745,900	$48,904	$3,129,483	$1,334,679
	1927	17	64	178	864	-------	864	186,464	293,962	1,289,261	1,262,299	26,962	2,168,737	879,476
	1919	21	67	174	[4] 733	259	[4] 474	166,179	212,171	1,484,269	1,456,279	27,990	2,248,122	763,853
Illinois	1929	4	17	75	396	-------	396	100,851	131,490	599,198	585,828	13,370	1,041,483	442,285
	1927	4	33	70	398	-------	398	102,318	130,666	546,966	537,472	9,494	956,829	409,863
	1919	5	37	59	282	100	182	77,758	86,547	643,103	634,108	9,055	1,040,805	397,642
New York	1929	9	28	69	257	-------	257	74,039	99,325	552,931	540,832	12,099	921,174	368,243
	1927	7	21	61	236	-------	236	60,841	93,019	415,265	406,600	8,665	662,928	247,663
	1919	4	11	26	26	-------	26	33,543	20,292	254,298	251,197	3,101	322,478	68,180
Other States	[5] 1929	6	22	169	840	-------	840	95,917	217,570	642,675	619,240	23,435	1,166,826	524,151
	[6] 1927	6	10	47	230	-------	230	23,305	70,277	327,030	318,227	8,803	548,980	221,950
	[7] 1919	12	19	89	451	159	292	54,878	99,332	586,808	570,974	15,834	884,839	298,031

[1] Not including proprietors and firm members, as follows: For 1929, 3; 1927, 3; 1919, 11. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 383; 1927, 245; 1919, 252.

[2] See footnote 1, Table 1.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] California, 1 establishment; Massachusetts, 1; New Jersey, 2; Ohio, 1; Pennsylvania, 1.

[6] California, 1 establishment; Massachusetts, 1; Missouri, 1; New Jersey, 1; Ohio, 1; Pennsylvania, 1.

[7] Connecticut, 1 establishment; Massachusetts, 3; Missouri, 2; New Jersey, 2; Ohio, 2; Pennsylvania, 2.

TABLE 3.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, 1929, 1927, 1925, 1919, AND 1914, AND QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSE POWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	118	*Horsepower* 1,493	105	*Horsepower* 864	110	*Horsepower* 921	55	*Horsepower* 733	45	*Horsepower* 491	100.0	100.0
Prime movers, total					1	125	5	259	2	235		35.3
Steam, total					1	125	1	150	1	200		20.4
Engines					1	125	1	150	(1)	(1)		
Turbines									(1)	(1)		
Internal-combustion engines							4	109	1	35		14.9
Electric motors driven by purchased energy	118	1,493	105	864	109	796	50	474	43	256	100.0	64.7
Electric motors, total	118	1,493	105	864	109	796	50	474	43	256	100.0	100.0
Driven by purchased energy	118	1,493	105	864	109	796	50	474	43	256	100.0	100.0
Driven by energy generated in establishments reporting												
Electric energy purchased [2]		*Kilowatt-hours* 1,120,119		(3)		(3)		(4)		(4)		

[1] Not called for separately on schedule.
[2] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[3] Data incomplete.
[4] Not called for on schedule.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	313	317	328	321	318	317	312	307	308	*304*	309	308	306	93.8
1925	177	177	180	181	181	177	*173*	177	177	*173*	*173*	176	177	95.6
1919	174	*148*	154	159	158	167	168	173	185	182	192	194	208	71.2
1914	106	103	104	104	105	107	105	*100*	102	110	110	110	112	89.3
1909	129	126	125	*118*	127	121	131	131	130	134	139	143	140	78.3
Illinois	75	76	78	79	78	77	74	76	74	74	74	72	*71*	89.9
New York	69	70	74	73	74	73	72	67	66	*65*	66	67	66	87.8

ENGRAVING (OTHER THAN STEEL, COPPERPLATE, OR WOOD), CHASING, ETCHING, AND DIESINKING

Description of the industry.—This industry embraces establishments engaged primarily in engraving (for purposes other than printing), etching, and diesinking. The engraving on silverware and jewelry is done mainly on a custom basis for the trade. The products include name plates, badges, signs, etc., and metal dies and stamps.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	189	2,240	$3,211,743	$2,583,039	$10,933,741	$8,350,702	2,965
1927	173	1,805	2,612,434	2,078,160	7,930,688	5,852,528	2,028
1925	188	1,827	2,690,803	2,177,251	8,622,823	6,445,572	1,753
1923	210	1,887	2,853,125	2,820,179	9,121,446	6,301,267	2,345
1921	193	1,276	1,760,335	1,397,020	4,849,882	3,452,862	[3]
1919	478	1,878	2,391,504	1,927,323	7,350,602	5,423,279	1,750
1914	486	1,536	1,075,721	596,107	3,133,791	2,537,684	1,035
1909	253	1,308	821,472	350,764	2,249,861	1,899,097	701
1904	305	1,573	1,032,232	376,409	2,422,487	2,046,078	904
1899	277	964	543,004	203,046	1,468,202	1,265,156	440
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	9.2	24.1	22.9	24.3	37.9	42.7	46.2
1925–1927	—8.0	—1.2	—2.9	—4.6	—8.0	—9.2	15.7
1923–1925	—10.5	—3.2	—5.7	—22.8	—5.5	2.3	—25.2
1921–1923	8.8	47.9	62.1	101.9	88.1	82.5	----------
1919–1921	—59.6	—32.1	—26.4	—27.5	—34.0	—36.3	----------
1919–1929	—60.5	19.3	34.3	34.0	48.7	54.0	69.4
1909–1919	88.9	43.6	191.1	449.5	226.7	185.6	149.6
1899–1909	—8.7	35.7	51.3	72.8	53.2	50.1	59.3

[1] The values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in engraving, chasing, etching, and diesinking, are included, as follows: For 1929, $543,671; 1927, $261,394; 1925, $669,907; corresponding amounts for earlier years not available. The following values of engraving, chasing, etc., reported by establishments engaged primarily in other industries are not included: For 1929, $124,528; 1927, $174,624; 1925, $80,665; 1923, $39,493; 1921, $145,224; 1919, $144,776.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	189	411	2,240	2,965	-------	2,965	$1,328,075	$3,211,743	$2,583,039	$2,463,863	$119,176	$10,933,741	$8,350,702
	1927	173	326	1,805	2,028	100	1,928	949,841	2,612,434	2,078,169	1,977,689	100,471	7,930,688	5,852,528
	1919	478	245	1,878	[4] 1,750	238	[4] 1,512	491,951	2,391,504	1,927,323	1,813,422	113,901	7,350,602	5,423,279
California	1929	11	12	45	32	-------	32	19,350	74,966	53,315	51,967	1,348	278,809	225,494
	1927	7	9	39	30	-------	30	15,955	67,323	29,312	28,140	1,172	172,403	143,091
	1919	22	5	58	31	-------	31	5,955	68,261	30,943	29,316	1,627	173,736	142,793
Illinois	1929	24	130	630	871	-------	871	533,675	900,331	770,889	734,802	36,087	3,386,017	2,615,128
	1927	25	99	502	682	-------	682	405,916	693,805	598,915	563,413	35,502	2,303,094	1,704,179
	1919	36	89	713	882	35	847	242,098	947,510	1,233,807	1,162,232	71,575	3,235,604	2,001,797
Maryland	1929	5	2	18	10	-------	10	4,519	25,483	8,527	8,245	282	71,087	62,560
	1927	5	2	16	7	-------	7	3,204	20,756	5,120	4,712	408	48,812	43,692
	1919	10	1	14	13	-------	13	780	19,126	13,786	13,377	409	52,904	39,118
Massachusetts	1929	32	48	329	270	-------	270	120,977	510,522	178,831	164,335	14,496	1,233,069	1,054,238
	1927	28	41	170	179	-------	179	94,413	281,091	148,228	140,886	7,342	756,495	608,267
	1919	47	17	144	78	-------	78	20,130	169,217	49,801	46,296	3,505	434,583	384,782
New Jersey	1929	12	10	59	38	-------	38	37,226	110,318	10,592	9,047	1,545	247,900	237,308
	1927	8	5	46	23	-------	23	15,340	92,037	8,212	7,770	442	188,929	180,717
	1919	31	17	109	68	24	44	15,334	142,572	59,390	56,556	2,834	357,135	297,745
New York	1929	62	156	790	1,079	-------	1,079	480,082	1,126,615	1,154,333	1,107,357	46,976	4,318,492	3,164,159
	1927	62	128	751	861	100	761	330,812	1,116,953	1,093,937	1,051,065	42,922	3,490,814	2,396,827
	1919	181	79	511	390	142	248	146,155	666,080	381,735	362,271	19,464	1,981,623	1,599,888
Ohio	1929	7	6	20	23	-------	23	12,911	36,737	23,545	22,318	1,227	135,535	111,990
	1927	4	3	26	30	-------	30	2,768	39,710	10,355	8,922	1,433	71,473	61,118
	1919	13	9	31	58	-------	58	11,120	40,375	19,066	18,177	889	118,025	98,959
Pennsylvania	1929	10	2	39	46	-------	46	3,590	59,126	40,451	39,041	1,410	179,185	138,734
	1927	12	4	45	46	-------	46	5,814	73,483	33,800	32,528	1,272	194,264	160,464
	1919	57	11	96	107	37	70	22,057	111,107	51,865	44,768	7,097	379,702	327,837
Rhode Island	1929	8	4	37	13	-------	13	6,490	63,032	10,227	9,938	289	115,480	105,253
	1927	7	5	37	6	-------	6	9,584	55,731	10,594	9,849	745	111,908	101,314
	1919	30	9	139	53	-------	53	19,049	156,762	40,631	37,258	3,373	362,407	321,776
Other States	[5] 1929	18	41	273	583	-------	583	109,249	304,613	332,329	316,813	15,516	968,167	635,838
	[6] 1927	15	30	173	164	-------	164	66,035	191,545	139,637	130,404	9,233	592,496	452,859
	[7] 1919	51	8	63	80	-------	80	9,273	70,494	46,299	43,171	3,128	254,883	208,584

[1] Not including proprietors and firm members, as follows: For 1929, 182; 1927, 164; 1919, 533. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,833; 1927, 2,295; 1919, 2,656.

[2] See footnote 1, Table 1.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Connecticut, 1 establishment; District of Columbia, 1; Michigan, 3; Minnesota, 2; Missouri, 1; North Carolina, 1; Oregon, 1; Texas, 1; Washington, 1; Wisconsin, 6.

[6] Connecticut, 1 establishment; District of Columbia, 1; Michigan, 3; Minnesota, 1; Missouri, 1; Oregon, 1; Texas, 2; Wisconsin, 5.

[7] Arkansas, 1 establishment; Colorado, 3; Connecticut, 15; Delaware, 1; District of Columbia, 4; Florida, 1; Kentucky, 1; Louisiana, 1; Maine, 1; Michigan, 2; Minnesota, 5; Missouri, 5; Nebraska, 2; South Carolina, 1; Tennessee, 1; Texas, 2; Virginia, 1; Washington, 1; Wisconsin, 3.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	1,295	*Horsepower* 2,965	765	*Horsepower* 2,028	648	*Horsepower* 1,753	471	*Horsepower* 1,750	304	*Horsepower* 1,035	100.0	100.0
Prime movers, total			1	100	1	100	9	238	20	236		13.6
Steam, total			1	100	1	100	4	195	3	50		11.1
Engines			1	100	1	100	4	195	(1)	(1)		11.1
Turbines												
Internal-combustion engines							5	43	17	186		2.5
Electric motors driven by purchased energy	1,295	2,965	764	1,928	647	1,653	462	1,512	344	799	100.0	86.4
Electric motors, total	1,295	2,965	772	1,948	656	1,678	462	1,512	348	803	100.0	100.0
Driven by purchased energy	1,295	2,965	764	1,928	647	1,653	462	1,512	344	799	100.0	100.0
Driven by energy generated in establishments reporting			8	20	9	25			4	4		
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators			2	55	3	60	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		1,981,792		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	2,240	2,169	2,215	2,230	2,257	2,261	2,241	2,305	2,272	2,284	2,262	2,214	*2,165*	93.9
1925	1,827	1,747	1,761	1,773	1,772	1,782	1,737	*1,736*	1,838	1,874	1,922	1,982	1,997	86.9
1919	1,878	*1,628*	1,694	1,711	1,727	1,744	1,817	1,904	2,036	2,026	2,030	2,098	2,121	76.8
1914	1,536	1,527	1,520	1,539	1,515	1,531	*1,504*	1,511	1,530	1,514	1,555	1,560	1,626	92.5
1909	1,308	1,270	1,285	1,294	1,291	1,323	1,281	*1,259*	1,275	1,307	1,343	1,372	1,408	89.4
California	45	44	*43*	45	45	45	45	44	45	46	46	47	50	86.0
Illinois	630	590	630	625	638	626	631	645	648	666	676	620	*565*	83.6
Maryland	18	*18*	*18*	*18*	*18*	*18*	*18*	*18*	*18*	*18*	*18*	*18*	19	94.7
Massachusetts	329	*305*	317	313	317	326	323	325	340	352	347	337	340	86.6
New Jersey	59	*58*	*58*	*58*	*58*	*58*	59	59	*58*	59	60	60	60	96.7
New York	790	781	778	794	810	807	801	855	839	817	767	*703*	724	82.2
Ohio	20	*19*	20	20	21	21	20	20	*19*	21	20	20	20	90.5
Pennsylvania	39	39	39	39	39	39	39	39	39	39	39	39	39	
Rhode Island	37	39	40	37	33	*32*	36	35	35	36	41	44	37	72.7

ENGRAVING, STEEL AND COPPERPLATE, AND PLATE PRINTING

Description of the industry.—The establishments assigned to this industry are engaged primarily in engraving steel and copper plates for printing stationery, visiting and other cards, invitations, announcements, securities, bonds, stock certificates, music, maps, half tones, etc., and in printing from these plates.

The distinction between this industry and "Engraving (other than steel, copperplate, or wood), chasing, etching, and diesinking" lies in the fact that the plates engraved in this industry are all intended for use in printing.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	456	10,130	$14,489,730	$11,864,764	$47,161,641	$35,296,877	8,506
1927	393	8,549	11,885,737	10,236,216	39,071,105	28,834,889	6,894
1925	368	7,259	10,168,600	7,628,311	32,106,150	24,477,839	5,764
1923	377	7,529	10,185,393	7,957,756	32,551,209	24,593,453	5,738
1921	367	7,156	9,612,206	7,608,520	28,778,665	21,170,145	[3]
1919	421	7,014	7,908,109	6,980,747	24,209,154	17,228,407	5,353
1914	399	6,859	4,526,684	3,914,508	13,786,385	9,871,877	5,670
1909	316	5,326	3,387,889	2,217,599	9,432,479	7,214,880	2,732
1904	215	3,580	2,227,850	1,553,618	5,943,080	4,389,462	1,223
1899	286	3,303	2,012,327	1,209,536	5,100,662	3,891,126	556
	PER CENT OF INCREASE OR DECREASE (—)						
1927-1929	16.0	18.5	21.9	15.9	20.7	22.4	23.4
1925-1927	6.8	17.8	16.9	34.2	21.7	17.8	19.6
1923-1925	—2.4	—3.6	—0.2	—4.1	—1.4	—0.5	0.5
1921-1923	2.7	5.2	6.0	4.6	13.1	16.2	----------
1919-1921	—12.8	2.0	21.5	9.0	18.9	22.9	----------
1919-1929	8.3	44.4	83.2	70.0	94.8	104.9	58.9
1909-1919	33.2	31.7	133.4	214.8	156.7	138.8	95.9
1899-1909	10.5	61.2	68.4	83.3	84.9	85.4	391.4

[1] The values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in engraving and plate printing, are included as follows: For 1929, $601,660; 1927, $178,452; 1925, $444,621. The corresponding amounts for earlier years are not available. Receipts for engraving and plate printing done as secondary activities for establishments classified in other industries are not included. Such receipts were reported as follows: For 1929, $5,974,005; 1927, $5,377,827; no comparable data for earlier years.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [2]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	456	2,051	10,130	8,506	273	8,233	$5,936,587	$14,489,730	$11,864,764	$11,524,281	$340,483	$47,161,641	$35,296,877
	1927	393	1,707	8,549	6,894	386	6,508	4,350,765	11,885,737	10,236,216	9,962,901	273,315	39,071,105	28,834,889
	1919	421	1,395	7,014	[4] 5,353	844	[4] 4,509	2,879,317	7,908,109	6,980,747	6,777,505	203,242	24,209,154	17,228,407
Individual States:														
Alabama	1929	4	10	33	27	-------	27	33,869	31,993	38,763	37,206	1,557	135,316	96,553
	1927	3	5	12	10	-------	10	7,680	15,953	19,265	18,265	1,000	63,617	44,352
California	1929	42	74	261	267	-------	267	146,175	348,036	360,713	354,378	6,335	1,282,159	921,446
	1927	29	55	182	120	-------	120	107,489	271,867	190,812	185,882	4,930	828,354	637,542
	1919	24	28	135	72	-------	72	44,639	154,971	118,777	116,425	2,352	494,544	375,767
Colorado	1929	4	5	53	27	-------	27	6,469	51,953	44,392	43,411	981	159,719	115,327
	1927	4	5	43	27	-------	27	15,746	46,605	51,679	50,813	866	154,214	102,535
	1919	3	7	47	20	-------	20	6,474	34,765	27,837	27,354	483	91,150	63,313
Connecticut	1929	7	23	102	53	-------	53	70,543	86,298	122,402	120,343	2,059	370,660	248,258
	1927	5	13	57	32	-------	32	30,595	68,971	86,084	84,314	1,770	240,257	154,173
	1919	7	12	26	14	6	8	11,124	21,775	23,826	23,440	386	81,088	57,262

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
Individual States—Continued.														
District of Columbia.	1929	9	35	90	41	-------	41	$87,735	$116,132	$161,079	$156,784	$4,295	$528,149	$367,070
	1927	8	34	85	51	-------	51	71,340	102,721	166,353	162,394	3,959	479,481	313,128
	1919	5	8	44	7	-------	7	8,729	49,799	30,058	29,006	1,052	129,480	99,422
Illinois	1929	50	235	1,105	1,121	208	913	864,088	1,546,607	1,492,295	1,445,975	46,320	6,110,197	4,617,902
	1927	49	252	1,018	1,145	213	932	570,041	1,442,565	1,462,087	1,426,857	35,230	4,996,394	3,534,307
	1919	33	252	1,189	1,372	725	647	579,650	1,386,968	1,570,804	1,530,363	40,441	4,794,095	3,223,291
Indiana	1929	9	31	154	93	-------	93	51,884	141,206	191,040	187,157	3,883	526,196	335,156
	1927	9	16	137	62	-------	62	32,527	100,115	142,886	138,980	3,906	360,198	217,312
	1919	7	19	103	92	-------	92	35,141	130,671	78,116	73,563	4,553	362,724	284,008
Kentucky	1929	9	52	181	86	-------	86	107,860	169,853	306,232	302,828	3,404	801,684	495,452
	1927	9	45	182	79	-------	79	112,394	188,940	284,091	279,295	4,796	771,097	487,006
	1919	8	47	207	38	2	36	78,604	116,316	154,712	150,602	4,110	480,121	325,409
Louisiana	1929	4	4	20	23	-------	23	6,400	21,487	25,930	24,920	1,010	73,516	47,586
	1927	3	2	12	10	-------	10	6,240	18,298	23,732	23,253	479	65,192	41,460
	1919	5	10	35	19	-------	19	8,232	30,408	37,204	35,711	1,493	98,596	61,392
Maryland	1929	6	10	47	48	-------	48	19,314	45,936	25,300	24,229	1,071	125,638	100,338
	1927	6	13	43	35	-------	35	18,174	44,649	31,815	30,773	1,042	132,802	100,987
	1919	12	3	37	13	-------	13	2,468	34,557	37,711	36,896	815	110,069	72,958
Massachusetts	1929	26	158	769	361	-------	361	401,799	830,035	1,101,627	1,082,181	19,446	3,492,330	2,390,703
	1927	22	211	994	353	-------	353	526,433	1,104,156	1,484,248	1,471,218	13,030	4,312,932	2,828,684
	1919	24	76	432	110	10	100	178,231	407,250	261,602	254,262	7,340	1,318,098	1,056,496
Michigan	1929	8	16	72	77	-------	77	43,193	123,868	72,024	69,778	2,246	334,783	262,759
	1927	5	12	33	25	-------	25	20,249	44,519	74,215	73,208	1,007	178,264	104,049
	1919	10	10	67	27	-------	27	9,088	81,748	39,779	38,572	1,207	201,395	161,616
Minnesota	1929	7	23	88	63	-------	63	35,320	94,125	95,610	93,701	1,909	350,497	254,887
	1927	9	19	100	46	-------	46	35,340	108,761	106,358	104,786	1,572	354,667	248,309
	1919	7	14	80	30	-------	30	9,318	63,923	52,180	51,242	938	151,126	98,946
Missouri	1929	16	134	476	162	-------	162	217,878	401,212	540,725	530,259	10,466	2,153,249	1,612,524
	1927	15	80	414	133	-------	133	152,136	377,107	374,328	362,813	11,515	1,525,368	1,151,040
	1919	15	29	165	70	-------	70	52,592	141,576	120,427	118,398	2,029	405,082	284,655
New Jersey	1929	22	88	664	335	55	280	478,697	944,169	269,925	241,833	28,092	2,462,099	2,192,174
	1927	18	58	354	266	63	203	228,081	663,517	194,967	176,436	18,531	1,438,951	1,243,984
	1919	16	20	177	118	8	110	45,422	242,571	69,145	61,321	7,824	546,197	477,052
New York	1929	126	596	3,757	4,040	10	4,030	1,847,769	6,554,922	4,266,982	4,134,715	132,267	18,197,405	13,930,423
	1927	102	440	3,034	3,273	-------	3,273	1,399,889	4,808,644	3,420,354	3,305,265	115,089	15,475,885	12,055,531
	1919	119	500	2,586	2,558	72	2,486	1,146,753	3,299,803	2,793,116	2,705,292	87,824	9,384,258	6,591,142
Ohio	1929	25	112	478	413	-------	413	283,192	608,007	499,439	484,235	15,204	1,894,677	1,395,238
	1927	18	57	307	200	-------	200	136,250	381,539	299,079	292,288	6,791	1,114,419	815,340
	1919	22	34	255	103	-------	103	75,890	313,953	178,841	173,905	4,936	825,800	646,959
Oregon	1929	4	1	13	86	-------	86	2,575	15,374	21,102	20,479	623	85,963	64,861
	1927	5	10	40	26	-------	26	15,000	56,832	91,736	90,779	957	200,981	109,245
	1919	6	8	44	72	-------	72	10,847	54,818	27,937	25,919	2,018	154,837	126,900
Pennsylvania	1929	33	316	1,195	882	-------	882	890,538	1,617,077	1,644,211	1,604,282	39,929	5,698,537	4,054,326
	1927	36	265	934	717	110	607	639,070	1,288,101	1,064,860	1,036,444	28,416	4,251,801	3,186,941
	1919	54	235	938	464	16	448	426,577	872,306	986,102	964,688	21,414	3,213,669	2,227,567
Rhode Island	1929	7	13	152	72	-------	72	49,428	229,564	20,047	17,004	3,043	375,106	355,059
	1927	4	12	113	60	-------	60	23,174	196,432	25,097	21,707	3,390	299,892	274,795
	1919	8	8	83	55	5	50	12,035	100,159	43,297	41,560	1,737	217,100	173,803
Tennessee	1929	4	13	17	11	-------	11	14,131	22,549	17,756	16,686	1,070	72,559	54,803
Texas	1929	9	51	170	86	-------	86	133,052	218,186	256,478	249,272	7,206	926,082	669,604
	1927	6	29	154	62	-------	62	77,966	181,507	256,841	252,037	4,804	742,533	485,692
	1919	6	7	50	15	-------	15	4,740	45,678	47,108	46,464	644	144,199	97,091
Virginia	1929	4	3	18	8	-------	8	6,800	18,787	19,318	18,464	854	67,411	48,093
	1927	4	6	23	16	-------	16	7,640	22,021	17,896	17,271	625	73,186	55,290
	1919	5	2	18	10	-------	10	2,580	19,262	11,417	11,055	362	53,435	42,018
Washington	1929	4	16	39	31	-------	31	32,014	64,071	61,379	59,683	1,696	191,703	130,324
	1927	(5)	(5)	(5)	(5)	-------	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	3	7	24	9	-------	9	10,610	26,446	18,751	18,255	496	79,884	61,133
Wisconsin	1929	4	12	56	22	-------	22	42,452	52,706	57,883	56,763	1,120	270,867	212,984
	1927	5	16	63	37	-------	37	40,268	67,951	104,663	102,226	2,437	311,111	206,448
	1919	8	30	115	36	-------	36	59,847	116,686	82,295	78,867	3,428	370,353	288,058
Groups of States: Fla., 2 est.; Ga., 3; N. C., 1	1929	6	16	60	33	-------	33	47,622	68,581	91,527	88,648	2,879	286,323	194,796
Nebr., 2 est.; Utah, 2	1929	4	3	48	27	-------	27	14,360	54,584	46,330	45,160	1,170	139,920	93,590
Other States (Ark., 1 est.; Maine, 1; Okla., 1)	1929	3	1	12	11	-------	11	1,430	12,412	14,255	13,907	348	48,896	34,641
States not shown separately.	[6]1927	19	52	165	109	-------	109	107,043	223,966	262,770	255,597	7,173	699,509	436,739
	[7]1919	14	29	157	96	-------	96	59,726	161,700	169,705	164,345	5,360	501,254	331,549

[1] Not including proprietors and firm members, as follows: For 1929, 317; 1927, 311; 1919, 370. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 12,498; 1927, 10,567; 1919, 8,779.

[2] See footnote 1, Table 1.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Withheld from publication in order to avoid disclosing data for individual establishments.

[6] Florida, 1 establishment; Georgia, 2; Kansas, 2; Maine, 1; Mississippi, 1; Nebraska, 2; Oklahoma, 3; Tennessee, 2; Utah, 2; Washington, 3.

[7] Alabama, 2 establishments; Arkansas, 1; Georgia, 1; Iowa, 1; Kansas, 1; Maine, 1; Nebraska, 1; North Carolina, 1; Oklahoma, 1; Tennessee, 1; Utah, 3.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	3,717	*Horsepower* 8,566	2,957	*Horsepower* 6,894	2,384	*Horsepower* 5,764	1,903	*Horsepower* 5,353	1,529	*Horsepower* 5,670	100.0	100.0
Prime movers, total	11	273	8	386	4	84	19	844	20	1,113	3.2	15.7
Steam, total	6	266	7	378	2	70	13	799	12	1,055	3.1	14.9
Engines	6	266	7	378	2	70	13	799	(1)	(1)	3.1	14.9
Turbines									(1)	(1)		
Internal-combustion engines			1	8	2	14	5	40	8	58		0.7
Water wheels and water turbines	5	7					1	5			0.1	0.1
Electric motors driven by purchased energy	3,706	8,233	2,949	6,508	2,380	5,680	1,884	4,509	1,509	4,557	96.8	84.3
Electric motors, total	3,706	8,233	2,949	6,508	2,380	5,680	2,038	5,045	1,799	5,301	100.0	100.0
Driven by purchased energy	3,706	8,233	2,949	6,508	2,380	5,680	1,884	4,509	1,509	4,557	100.0	89.4
Driven by energy generated in establishments reporting			2,949	6,508			154	536	290	744		10.6
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	1	2					(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		6,373,496		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	10,130	*9,411*	9,448	9,522	9,621	9,802	9,837	10,047	10,261	10,656	10,977	**11,108**	10,867	84.7
1925	7,259	7,056	7,035	7,026	7,074	7,149	7,060	*6,849*	6,959	7,140	7,702	7,916	**8,144**	84.1
1919	7,014	*6,482*	6,551	6,530	6,776	6,927	6,998	7,040	6,978	7,103	7,288	7,572	**7,943**	81.4
1914 [1]	6,859	7,020	6,977	6,917	6,951	7,022	6,971	6,710	*6,624*	6,724	6,761	6,704	6,927	94.3
Alabama	33	33	32	*31*	34	34	35	31	*31*	*31*	33	35	35	88.6
California	261	259	257	245	*231*	247	239	236	244	249	293	314	**325**	71.1
Colorado	53	51	*41*	53	59	60	43	44	47	50	56	59	**74**	55.4
Connecticut	102	*101*	*101*	102	102	102	102	*101*	102	102	103	103	**105**	96.2
District of Columbia	90	89	88	86	85	89	89	85	*81*	87	97	102	**106**	76.4
Illinois	1,105	1,076	1,058	*1,057*	1,039	1,054	1,065	1,060	1,081	1,102	1,169	1,212	**1,304**	79.5
Indiana	154	*130*	131	135	140	133	146	148	153	165	173	201	**198**	64.7
Kentucky	181	184	185	186	184	182	177	*169*	175	177	185	184	**187**	90.4
Louisiana	20	20	20	20	20	20	20	20	20	20	20	20	20	----
Maryland	47	46	48	*45*	*45*	45	48	49	45	47	49	49	**51**	84.3
Massachusetts	769	557	589	547	*552*	580	636	753	923	**1,137**	1,112	1,060	787	48.5
Michigan	72	73	67	70	73	68	67	90	68	80	71	71	*62*	68.9
Minnesota	88	73	72	*71*	78	78	76	73	76	89	115	139	**118**	51.1
Missouri	476	446	*444*	454	465	483	474	472	477	487	498	495	**511**	86.9
New Jersey	664	594	*590*	607	605	613	652	700	714	724	732	745	**688**	79.2
New York	3,757	*3,482*	3,518	3,608	3,657	3,720	3,704	3,841	3,812	3,869	**3,960**	3,933	3,915	87.9
Ohio	478	455	453	467	*457*	451	462	471	493	487	517	526	**522**	83.2
Oregon	13	12	11	12	14	14	12	11	*10*	*10*	*10*	17	17	58.8
Pennsylvania	1,195	1,181	1,189	1,187	1,208	1,213	1,181	1,165	*1,164*	1,186	1,203	**1,242**	1,222	93.7
Rhode Island	152	148	*140*	148	150	152	153	147	152	156	**163**	156	156	85.9
Tennessee	17	*14*	*14*	15	15	15	15	16	16	16	21	25	27	51.9
Texas	170	158	168	173	198	211	162	*143*	148	157	166	174	177	67.8
Virginia	18	*17*	*17*	*17*	*17*	*17*	*17*	*17*	*17*	*17*	20	20	19	85.0
Washington	39	37	38	38	41	45	*34*	35	42	41	38	42	43	75.6
Wisconsin	56	58	59	53	54	*51*	52	53	54	54	57	57	68	75.0

[1] No comparable data for years prior to 1914.

ENGRAVING, WOOD

Description of the industry.—This industry classification covers establishments engaged primarily in making woodcuts for use in printing illustrations, posters, etc. Woodcuts are also made to some extent by establishments classified in the printing and publishing industry, but the value of such work was not separately reported.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	27	142	$323,211	$82,250	$738,951	$656,701	54
1927	23	132	290,777	76,354	641,437	565,083	45
1925	22	117	233,849	46,499	525,240	478,741	32
1923	24	141	213,824	42,099	523,752	481,653	26
1921	24	131	219,033	138,991	628,368	489,377	[3]
1919	55	235	407,215	219,268	1,153,618	934,350	67
1914	72	302	310,318	96,384	719,234	622,850	68
1909	82	318	258,578	126,101	711,279	585,178	29
1904	114	338	245,032	60,283	647,909	587,626	38
1899	144	336	205,757	63,007	613,936	550,929	47
	PER CENT OF INCREASE OR DECREASE (−)						
1927–1929	[4]	7.6	11.2	7.7	15.2	16.2	[4]
1925–1927	[4]	12.8	24.3	64.2	22.1	18.0	[4]
1923–1925	[4]	−17.0	9.4	10.5	0.3	−0.6	[4]
1921–1923		7.6	−2.4	−69.7	−16.6	−1.6	
1919–1921	[4]	−44.3	−46.2	−36.6	−45.5	−47.6	
1919–1929	[4]	−39.6	−20.6	−62.5	−35.9	−29.7	[4]
1909–1919	[4]	−26.1	57.5	73.9	62.2	59.7	[4]
1899–1909	−43.1	−5.4	25.7	100.1	15.9	6.2	[4]

[1] The following values of wood engraving reported by establishments engaged primarily in other industries are not included: For 1929, $171,701; 1927, $136,085; 1925, $313,297; 1923, $100,527; 1921, $7,883; 1919, $7,597.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	27	28	142	54	----	54	$73,860	$323,211	$82,250	$79,178	$3,072	$738,951	$656,701
	1927	23	36	132	45	----	45	77,316	290,777	76,354	73,826	2,528	641,437	565,083
	1919	55	90	235	67	----	67	152,162	407,215	219,268	214,645	4,623	1,153,618	934,350
Connecticut	1929	3	----	7	2	----	2	----	13,284	3,674	3,564	110	45,666	41,992
	1927	3	----	7	4	----	4	----	13,311	4,900	4,732	168	35,617	30,717
	1919	4	----	9	9	----	9	----	18,028	6,897	6,654	243	43,970	37,073
Illinois	1929	8	11	72	10	----	10	39,196	208,934	41,037	39,303	1,734	405,537	364,500
	1927	7	15	67	17	----	17	38,965	187,723	36,020	34,811	1,209	365,251	329,231
	1919	11	78	171	27	----	27	129,434	311,349	160,959	155,066	1,893	826,342	659,383
Missouri	1929	5	5	18	4	----	4	7,160	27,194	14,100	13,867	233	84,087	70,587
	1927	5	2	21	2	----	2	3,811	31,981	6,734	6,443	291	79,626	72,892
	1919	7	----	12	8	----	8	----	15,684	3,695	3,424	271	44,050	40,355
New York	1929	7	12	39	33	----	33	27,504	66,662	17,097	16,165	932	164,589	147,492
	1927	4	18	34	19	----	19	34,300	53,022	19,665	18,838	827	127,146	107,481
	1919	15	10	31	7	----	7	19,728	38,256	6,441	6,034	407	132,484	126,043
Other States	[4] 1929	4	----	6	5	----	5	----	7,137	6,342	6,279	63	38,472	32,130
	[5] 1927	4	1	3	3	----	3	240	4,740	9,035	9,002	33	33,797	24,762
	[6] 1919	18	2	12	16	----	16	3,000	23,898	35,276	33,467	1,809	106,772	71,496

[1] Not including proprietors and firm members, as follows: For 1929, 30; 1927, 26; 1919, 62. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 200; 1927, 194; 1919, 387.
[2] See footnote 1, Table 1.
[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] California, 2 establishments; Minnesota, 1; Ohio, 1.
[5] California, 1 establishment; Minnesota, 1; Ohio, 1; Pennsylvania, 1.
[6] Indiana, 4 establishments; Massachusetts, 1; Michigan, 1; Minnesota, 1; Ohio, 5; Pennsylvania, 4; Rhode Island, 2.

TABLE 3.—ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, 1929, 1927, 1925, 1919, AND 1914, AND QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

[No power equipment other than electric motors has been reported for this industry at any census since that for 1914. (See footnote 1)]

	Number	Horsepower
Electric motors driven by purchased energy:		
1929	68	54
1927	51	45
1925	26	32
1919	39	67
Electric motors driven by purchased energy—Continued.		
1914 [1]	28	28
		Kilowatt-hours
Electric energy purchased, 1929 [2]		59,290

[1] In addition, 1 steam engine of 40 horsepower and 2 electric motors having a combined capacity of 1 horsepower, driven by energy generated in the same establishment, were reported for 1914.
[2] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	142	136	*135*	136	147	147	146	146	146	147	142	141	141	91.8
1925	117	115	116	119	119	120	117	115	118	117	118	*113*	116	94.2
1919	235	*223*	227	226	238	242	242	246	234	234	239	234	235	90.7
1914	302	296	*285*	295	298	322	321	335	289	296	299	291	297	85.1
1909	318	315	315	312	310	*309*	320	325	321	327	318	312	330	93.6
Connecticut	7	7	7	7	7	7	7	7	7	7	7	7	7	
Illinois	72	71	*70*	*70*	73	72	73	74	74	74	71	*70*	*70*	94.6
Missouri	18	*18*	*18*	*18*	20	20	20	20	20	20	20	20	20	65.0
New York	39	39	39	40	41	42	40	39	39	40	*38*	*38*	*38*	90.5

LITHOGRAPHING

Description of the industry.—The establishments in this industry are engaged primarily in drawing or transferring designs and preparing lithograph plates of stone or metal, and in printing from such plates. The products include calendars, bank notes, commercial and bank forms, maps, picture post cards, advertising signs and pictures, billheads, circulars, etc. Cigar bands, blank checks and drafts, bonds, letterheads, passbooks, etc., are reported as products both of this and of the "Engraving, steel and copper-plate, and plate printing" industry. Some of the establishments in the lithographing industry draw designs and prepare lithograph plates for use by others in printing.

The "Value of products" of this industry is, therefore, made up in part of the actual values of the calendars, bank notes, etc., printed from lithograph plates, and in part of the value of plates made for others.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]	Horsepower
1929	376	18,979	$32,021,919	$38,992,142	$121,014,321	$82,022,179	35,471
1927	309	16,348	27,465,552	32,703,772	97,050,124	64,346,352	28,541
1925	331	16,957	27,106,883	32,171,152	98,721,268	66,550,116	28,623
1923	328	16,317	25,067,427	31,008,765	91,670,752	60,661,987	26,869
1921	296	13,971	21,085,435	30,522,209	79,472,260	48,950,051	(2)
1919	331	15,618	18,201,089	27,718,217	73,151,115	45,432,898	18,550
1914	336	15,171	11,861,018	14,017,181	39,135,973	25,118,792	16,024
1909	318	15,073	10,202,184	11,930,731	34,109,233	22,178,502	13,132
1904	248	12,614	8,198,676	8,349,823	25,245,266	16,895,443	7,514
1899	263	12,994	6,882,168	7,886,045	22,240,679	14,354,634	5,624
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	21.7	16.1	16.6	19.2	24.7	27.5	24.3
1925–1927	—6.6	—3.6	1.3	1.7	—1.7	—3.3	—0.3
1923–1925	0.9	3.9	8.1	3.7	7.7	9.7	6.5
1921–1923	10.8	16.8	18.9	1.6	15.3	23.9	----------
1919–1921	—10.6	—16.5	15.8	10.1	8.6	7.7	----------
1919–1929	13.6	21.5	75.9	40.7	65.4	80.5	91.2
1909–1919	4.1	3.6	78.4	132.3	114.5	104.9	41.3
1899–1909	20.9	16.0	48.2	51.3	53.4	54.5	133.5

[1] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[2] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products	Value added by manufacture [2]
United States	1929	376	4,648	18,979	35,471	8,113	27,358	$15,510,752	$32,021,919	$38,992,142	$37,906,319	$1,085,823	$121,014,321	$82,022,179
	1927	309	3,703	16,348	28,541	7,057	21,484	12,060,439	27,465,552	32,703,772	31,734,732	969,040	97,050,124	64,346,352
	1919	331	3,537	15,618	[3]18,550	7,017	[3]11,533	9,112,951	18,201,089	27,718,217	27,128,998	589,219	73,151,115	45,432,898
Individual States:														
California	1929	15	274	926	2,442	10	2,432	888,422	1,706,756	2,476,162	2,431,319	44,843	7,061,777	4,585,615
	1927	17	261	824	2,059	10	2,049	867,262	1,467,939	2,070,749	2,030,050	40,699	5,762,868	3,692,119
	1919	11	191	696	1,413	10	1,403	469,913	960,111	1,867,149	1,849,067	18,082	4,583,473	2,716,324
District of Columbia	1929	8	74	149	177	-------	177	188,176	220,720	151,102	141,259	9,843	750,651	599,549
	1927	7	31	130	147	-------	147	107,741	209,626	126,336	119,270	7,066	572,244	445,908
	1919	6	45	197	178	-------	178	141,282	224,575	239,222	230,190	9,032	687,447	448,225
Illinois	1929	47	570	2,501	3,770	1	3,769	2,130,863	4,314,234	4,599,945	4,461,043	138,902	16,239,192	11,639,247
	1927	41	483	1,939	2,461	-------	2,461	1,636,431	3,357,297	3,703,088	3,604,925	98,163	12,617,582	8,914,494
	1919	31	287	1,083	1,176	157	1,019	857,120	1,373,085	2,243,841	2,199,558	44,283	6,914,666	3,770,825
Iowa	1929	4	45	115	255	-------	255	133,229	181,172	302,270	293,792	8,478	790,154	487,884
	1927	3	26	84	153	-------	153	69,862	144,394	235,178	229,647	5,531	643,248	408,070
	1919	4	37	127	138	-------	138	111,562	146,719	344,414	339,557	4,857	744,462	400,048
Kentucky	1929	5	86	347	426	-------	426	224,305	466,527	471,036	458,534	12,502	2,840,228	2,369,192
	1927	4	119	317	340	-------	340	367,764	437,474	418,154	405,654	12,500	1,572,621	1,154,467
	1919	5	72	176	149	100	49	170,991	197,783	205,264	199,495	5,769	649,098	443,834
Maryland	1929	11	192	805	1,766	250	1,516	522,753	1,193,844	1,794,502	1,750,551	43,951	4,915,873	3,121,371
	1927	7	107	530	1,468	250	1,218	313,062	756,256	1,174,186	1,143,724	30,462	3,072,246	1,898,060
	1919	6	111	542	687	300	387	239,336	615,209	1,264,617	1,237,337	27,280	3,123,735	1,859,118
Massachusetts	1929	12	320	1,052	3,218	1,935	1,283	956,093	1,530,928	1,759,506	1,718,492	41,014	5,320,136	3,560,630
	1927	10	287	984	2,717	1,935	782	884,527	1,501,084	1,753,674	1,701,751	51,923	5,048,184	3,294,510
	1919	14	300	1,218	1,025	788	237	717,043	1,347,811	1,896,427	1,845,058	51,369	4,916,351	3,019,924
Michigan	1929	11	130	505	1,171	656	515	493,896	902,481	1,224,895	1,178,759	46,136	3,616,617	2,391,722
	1927	9	115	545	1,228	656	572	370,028	919,021	1,130,596	1,078,263	52,333	3,289,410	2,158,820
	1919	10	108	438	687	542	145	256,398	467,455	784,859	766,042	18,817	1,929,149	1,144,290
Missouri	1929	16	117	312	572	-------	572	420,978	544,395	1,017,286	1,000,320	16,966	2,544,489	1,527,203
	1927	14	111	342	570	-------	570	381,187	536,743	1,061,849	1,045,263	16,586	2,448,136	1,386,287
	1919	15	113	262	329	-------	329	303,083	333,062	594,417	584,372	10,045	1,472,240	877,823
New Jersey	1929	10	47	342	359	-------	359	163,554	511,230	580,002	563,183	16,819	1,619,254	1,039,252
	1927	7	47	314	370	-------	370	117,042	404,353	468,130	453,890	14,240	1,141,223	673,093
	1919	6	12	173	134	-------	134	22,155	175,360	181,308	176,180	5,128	522,304	340,996
New York	1929	123	1,444	6,229	11,621	2,830	8,791	5,347,554	11,503,351	13,626,021	13,194,667	431,354	40,964,395	27,338,374
	1927	104	1,320	6,154	10,931	3,261	7,670	4,500,707	11,230,797	12,550,709	12,105,528	445,181	37,386,367	24,835,658
	1919	136	1,471	6,675	7,867	3,420	4,447	3,900,098	8,204,500	10,700,771	10,434,998	265,773	30,643,890	19,843,119
Ohio	1929	38	585	2,478	4,794	1,521	3,273	1,544,752	3,946,847	4,330,278	4,237,431	92,847	14,848,182	10,517,904
	1927	26	320	1,708	2,570	395	2,175	856,828	2,894,537	3,057,358	2,981,682	75,676	9,756,656	6,699,298
	1919	28	363	1,939	2,720	1,280	1,440	881,261	2,007,817	3,543,757	3,491,174	52,583	9,150,614	5,606,857
Pennsylvania	1929	27	275	1,368	2,149	910	1,239	958,181	2,160,349	2,529,811	2,459,495	70,316	7,835,987	5,306,176
	1927	20	190	1,012	1,386	550	836	650,761	1,436,316	1,786,877	1,730,092	56,785	5,456,080	3,669,203
	1919	25	195	1,079	818	420	398	425,173	1,071,137	1,783,500	1,751,533	31,967	4,040,955	2,257,455
Texas	1929	6	62	111	170	-------	170	177,362	167,699	303,702	296,883	6,819	835,636	531,934
Washington	1929	7	42	163	250	-------	250	148,121	277,708	472,282	463,798	8,484	1,247,638	775,356
	1927	6	40	131	275	-------	275	122,553	191,078	400,174	394,112	6,062	939,546	539,372
	1919	4	26	82	153	-------	153	58,661	95,475	189,608	185,164	4,444	470,724	281,116
Wisconsin	1929	11	150	621	831	-------	831	513,570	993,349	1,365,844	1,329,226	36,618	3,951,742	2,585,898
	1927	11	114	553	775	-------	775	422,182	961,066	1,259,857	1,231,023	28,834	3,506,928	2,247,071
	1919	12	90	438	569	-------	569	228,293	496,527	892,461	872,731	19,730	2,079,440	1,186,979
Groups of States:														
Ala., 1 est.; Ga., 1; La., 2; Tenn., 1	1929	5	33	118	125	-------	125	100,205	162,631	261,376	253,862	7,514	740,659	479,283
Colo., 1 est.; Nebr., 1; Utah, 2	1929	4	27	102	95	-------	95	93,512	144,300	369,066	361,428	7,638	863,285	494,219
Other States (Conn., 2 est.; Ind., 3; Kans., 2; Minn., 4; Oreg., 1; R. I., 1; Va., 1; W. Va., 2)	1929	16	175	735	1,280	-------	1,280	504,726	1,081,398	1,357,056	1,312,277	44,779	4,028,426	2,671,370
States not shown separately	[4]1927	23	142	691	1,091	-------	1,091	392,502	957,571	1,506,857	1,473,858	32,999	3,836,779	2,329,922
	[5]1919	18	116	493	581	-------	581	270,582	484,463	986,602	966,542	20,060	2,222,567	1,235,965

[1] Not including proprietors and firm members, as follows: For 1929, 92; 1927, 76; 1919, 150. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 23,719; 1927, 20,127; 1919, 19,305.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[4] Alabama, 1 establishment; Colorado, 3; Connecticut, 2; Georgia, 1; Indiana, 3; Louisiana, 1; Minnesota, 2; Nebraska, 1; Rhode Island, 1; Tennessee, 1; Texas, 2; Utah 2; Virginia, 2; West Virginia, 1.

[5] Alabama, 1 establishment; Colorado, 4; Connecticut, 2; Indiana, 3; Louisiana, 1; Minnesota, 3; Nebraska, 1; Tennessee, 1; Virginia, 1; West Virginia, 1.

TABLE 3.—LITHOGRAPHING—VALUE, BY STATES: 1929

	1929
1. Lithographing industry, all products	$121,014,321
2. Lithographing	115,547,307
3. Other products (not normally belonging to the industry)	5,467,014
4. Lithographing done in other industries	15,125,091
Printing and publishing, book and job	11,501,023
Printing and publishing, newspaper and periodical	914,653
Other industries (engraving and diesinking, etc.)	2,709,415
Lithographing, all industries, total (sum of 2 and 4)	130,672,398
California	8,067,588
District of Columbia	750,696
Illinois	16,333,697
Iowa	$796,375
Kentucky	2,660,973
Maryland	5,217,292
Massachusetts	5,598,700
Michigan	3,677,128
Missouri	3,386,724
New Jersey	2,096,529
New York	41,528,194
Ohio	18,669,452
Pennsylvania	8,166,765
Texas	1,338,330
Washington	1,134,322
Wisconsin	4,298,773
Other States [1]	6,950,860

[1] Alabama, Colorado, Connecticut, Georgia, Indiana, Kansas, Louisiana, Minnesota, Nebraska, Oregon, Rhode Island, Tennessee, Utah, Virginia, and West Virginia.

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	8,529	*Horsepower* 35,471	6,558	*Horsepower* 28,541	6,444	*Horsepower* 28,623	3,536	*Horsepower* 18,550	2,171	*Horsepower* 15,024	100.0	100.0
Prime movers, total	37	8,113	37	7,057	38	6,873	61	7,017	84	8,187	22.9	37.8
Steam, total	36	7,993	29	6,916	33	6,518	50	6,442	64	7,430	22.5	34.7
Engines	34	6,843	27	5,766	32	6,368	48	6,188	(1)	(1)	19.3	33.3
Turbines	2	1,150	2	1,150	1	150	2	254	(1)	(1)	3.2	1.4
Internal-combustion engines	1	120	8	141	4	325	11	575	20	757	0.3	3.1
Water wheels and water turbines					1	30						
Electric motors driven by purchased energy	8,492	27,358	6,521	21,484	6,406	21,750	3,475	11,533	2,087	6,837	77.1	62.2
Electric motors, total	9,823	32,964	7,579	26,154	7,309	25,189	5,361	18,957	3,861	14,037	100.0	100.0
Driven by purchased energy	8,492	27,358	6,521	21,484	6,406	21,750	3,475	11,533	2,087	6,837	83.0	60.8
Driven by energy generated in establishments reporting.	1,331	5,606	1,058	4,670	903	3,439	1,886	7,424	1,774	7,200	17.0	39.2
Electric generators	27	*Kilowatts* 3,863	23	*Kilowatts* 3,555	37	*Kilowatts* 4,307	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 22,254,750		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	18,979	*18,776*	18,777	18,877	18,917	19,048	18,897	18,902	18,990	19,118	19,241	19,182	19,018	97.6
1925	16,957	*16,608*	16,640	16,821	16,844	16,810	16,852	16,833	16,901	16,990	17,347	17,386	17,449	95.2
1919	15,618	*14,743*	14,746	14,962	15,046	15,141	15,420	15,844	16,000	16,121	16,179	16,364	16,850	87.5
1914 [1]	15,171	15,080	*15,039*	15,160	15,178	15,240	15,343	15,209	15,208	15,176	15,187	15,158	15,074	98.0
California	926	901	*896*	914	900	910	905	920	921	978	969	955	947	91.6
District of Columbia	149	*145*	150	154	150	148	152	151	148	148	149	147	149	94.2
Illinois	2,501	2,428	*2,417*	2,444	2,492	2,469	2,495	2,472	2,508	2,551	2,573	2,594	2,573	93.2
Iowa	115	112	115	115	114	113	115	119	**126**	115	116	111	*110*	87.3
Kentucky	347	*339*	340	340	340	355	**356**	**356**	356	356	341	342	346	95.2
Maryland	805	803	803	809	**813**	810	810	807	808	*796*	800	802	799	97.9
Massachusetts	1,052	*1,032*	1,046	1,055	1,040	1,054	1,049	1,047	1,057	1,052	1,075	1,071	1,040	96.0
Michigan	505	512	496	492	490	506	517	**535**	528	513	498	*481*	491	89.9
Missouri	312	303	*302*	320	305	**321**	318	314	316	313	308	310	319	94.1
New Jersey	342	345	349	334	336	334	337	333	336	*329*	356	358	351	91.9
New York	6,229	6,227	6,322	**6,375**	6,257	6,313	6,178	6,156	6,175	6,170	6,277	6,205	*6,098*	95.6
Ohio	2,478	2,511	2,430	*2,394*	2,473	2,481	2,451	2,448	2,488	2,513	2,510	**2,523**	2,514	94.9
Pennsylvania	1,368	1,364	1,370	1,366	**1,398**	1,396	1,354	1,358	*1,327*	1,379	1,365	1,372	1,361	94.9
Texas	111	111	108	110	111	113	111	114	115	114	118	*106*	107	91.4
Washington	163	*146*	149	149	155	168	165	173	168	167	175	167	171	83.4
Wisconsin	621	556	*550*	563	594	615	621	643	662	659	653	666	**669**	82.2

[1] No comparable data for years prior to 1914.

PHOTO-ENGRAVING, NOT DONE IN PRINTING ESTABLISHMENTS

Description of the industry.—The establishments in this industry are engaged primarily in making photo-engraved plates for printing illustrations, art work, post cards, greeting cards, magazine covers, half-tone engravings, etc. Such establishments do not, as a rule, print from the plates which they make, but prepare them for use by others.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	654	12,353	$31,831,176	$11,003,121	$77,382,259	$66,379,138	9,349
1927	611	11,033	28,381,480	10,790,128	69,207,376	58,417,248	9,366
1925	577	9,868	24,320,884	8,392,623	58,640,247	50,247,624	6,735
1923	450	8,521	18,668,866	6,606,207	43,660,021	37,053,814	5,786
1921	421	6,971	15,046,323	5,928,493	36,215,570	30,287,077	(3)
1919	422	6,769	10,423,541	5,038,382	29,389,386	24,351,004	3,800
1914	376	6,211	6,166,638	2,798,132	15,358,604	12,560,472	3,724
1909	313	5,343	4,750,046	2,133,980	11,624,000	9,490,020	2,595
1904	223	3,876	2,916,073	1,303,147	7,268,262	5,965,115	1,688
1899	203	2,691	1,749,578	725,069	4,190,002	3,464,933	706
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	7.0	12.0	12.2	2.0	11.8	13.6	—0.2
1925–1927	5.9	11.8	16.7	28.6	18.0	16.3	39.1
1923–1925	28.2	15.8	30.3	27.0	34.3	35.6	16.4
1921–1923	6.9	22.2	24.1	11.4	20.6	22.3	----------
1919–1921	—0.2	3.0	44.3	17.7	23.2	24.4	----------
1919–1929	55.0	82.5	205.4	118.4	163.3	172.6	146.0
1909–1919	34.8	26.7	119.4	136.1	152.8	156.6	46.4
1899–1909	54.2	98.6	171.5	194.3	177.4	173.9	267.6

[1] The values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in photo-engraving, are included, as follows: For 1929, $1,768,201; 1927, $2,156,886; 1925, $1,743,631; corresponding amounts for earlier years not available. The following values of photo-engraving reported by establishments engaged primarily in other industries are not included: Printing and publishing establishments—1929, $3,703,010; 1927, $4,045,121; 1925, $3,563,033; 1923, $3,853,473; no comparable data for 1921 or 1919. Establishments other than printing and publishing—1929, $972,281; 1927, $355,354; 1925, $882,457; 1923, $716,265; 1921, $641,384; 1919, $298,067.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1929 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	654	4,266	12,353	9,349	-------	9,349	$14,576,905	$31,831,176	$11,003,121	$10,113,898	$889,223	$77,382,259	$66,379,138
	1927	611	3,693	11,033	9,366	-------	9,366	11,930,351	28,381,480	10,790,128	10,012,144	777,984	69,207,376	58,417,248
	1919	422	2,165	6,769	3,800	84	3,716	4,802,387	10,423,541	5,038,382	4,756,114	282,268	29,389,386	24,351,004
Individual States:														
Alabama	1929	4	6	34	15	-------	15	21,807	71,327	21,622	20,410	1,212	161,506	139,884
	1927	4	12	25	18	-------	18	26,366	60,173	20,947	19,661	1,286	121,097	100,150
	1919	3	4	10	13	-------	13	12,604	11,750	7,553	6,763	790	44,482	36,929
California	1929	54	219	558	694	-------	694	675,772	1,373,311	439,713	402,170	37,543	3,702,806	3,263,093
	1927	50	184	452	648	-------	648	491,070	1,238,392	418,895	387,273	31,622	3,208,175	2,789,280
	1919	26	52	159	164	-------	164	116,233	247,976	184,563	175,480	9,083	809,368	624,805
Colorado	1929	8	30	66	93	-------	93	84,294	115,552	61,565	56,701	4,864	421,247	359,682
	1927	7	35	70	89	-------	89	106,054	123,449	71,247	65,319	5,928	390,005	318,758
Connecticut	1929	15	68	140	130	-------	130	271,909	300,432	134,080	121,261	13,419	967,312	832,632
	1927	14	60	152	91	-------	91	221,632	334,270	118,878	108,509	10,369	977,394	858,516
	1919	11	23	79	75	25	50	42,378	102,190	52,691	46,392	6,299	305,561	252,870
District of Columbia	1929	7	35	90	43	-------	43	101,132	234,645	63,092	55,942	7,150	545,759	482,667
	1927	6	29	74	40	-------	40	80,491	213,059	52,469	47,865	4,604	415,361	362,892
	1919	4	21	61	23	-------	23	50,851	109,574	38,523	35,820	2,703	267,192	228,669
Florida	1929	6	10	28	54	-------	54	35,682	70,304	22,054	19,900	2,154	188,873	166,819
	1927	9	20	36	125	-------	125	36,153	93,506	27,859	23,772	4,087	203,725	175,866
Georgia	1929	10	47	125	112	-------	112	150,811	281,615	93,570	85,192	8,378	755,772	662,202
	1927	9	35	120	82	-------	82	79,900	249,171	165,279	155,814	9,465	679,606	514,327
	1919	3	14	24	24	-------	24	25,305	43,650	31,761	29,967	1,794	156,099	124,338
Illinois	1929	57	771	2,173	1,784	-------	1,784	2,633,959	5,706,438	2,418,489	2,273,771	144,718	14,539,928	12,121,439
	1927	53	618	1,649	2,051	-------	2,051	2,344,131	4,544,447	2,127,619	2,031,652	95,967	11,689,330	9,561,711
	1919	31	326	962	570	-------	570	757,758	1,464,361	669,557	631,305	38,252	4,159,636	3,490,079
Indiana	1929	11	96	282	266	-------	266	320,782	664,644	212,222	197,487	14,735	1,497,208	1,284,986
	1927	12	107	288	373	-------	373	252,641	712,687	216,367	201,065	15,302	1,523,008	1,306,641
	1919	6	40	91	101	-------	101	58,696	136,790	48,873	45,185	3,688	367,908	319,035
Iowa	1929	8	46	86	83	-------	83	150,147	198,622	57,285	49,079	8,206	557,753	500,468
	1927	6	26	64	72	-------	72	75,764	162,808	37,923	34,055	3,868	401,196	363,273
	1919	3	9	19	16	-------	16	18,683	24,415	11,586	10,826	760	82,146	70,560
Kansas	1929	4	17	44	23	-------	23	53,878	87,747	24,985	23,171	1,814	239,315	214,330
	1927	(4)	(4)	(4)	(4)	-------	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
	1919	5	4	12	20	-------	20	5,205	12,486	13,884	13,253	631	51,158	37,274

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials	Fuel and purchased energy	Value of products [2]	Value added by manufacture [3]
Individual States—Con.														
Kentucky	1929	6	36	116	180	-------	180	$68,560	$192,887	$260,139	$247,142	$12,997	$629,741	$369,602
	1927	5	29	98	159	-------	159	63,932	160,669	215,395	206,999	8,396	531,755	316,360
Maine	1929	6	8	23	43	-------	43	16,890	35,673	21,337	19,574	1,763	110,987	89,650
	1927	5	4	18	36	-------	36	2,855	32,635	14,550	12,992	1,558	89,841	75,291
	1919	3	-------	8	6	-------	6	----------	6,072	11,544	10,885	659	27,932	16,388
Maryland	1929	7	38	127	117	-------	117	145,933	333,618	146,087	133,803	12,284	854,653	708,566
	1927	7	33	131	131	-------	131	87,546	300,743	134,129	121,221	12,908	800,843	666,714
	1919	6	31	86	70	-------	70	60,229	138,163	78,727	74,670	4,057	380,972	302,245
Massachusetts	1929	43	236	679	280	-------	280	721,551	1,550,429	395,651	354,546	41,105	3,435,961	3,040,310
	1927	42	287	672	335	-------	335	772,617	1,407,282	482,320	444,771	37,549	3,591,989	3,109,669
	1919	26	139	422	164	-------	164	251,343	594,681	234,660	216,553	18,107	1,589,729	1,355,069
Michigan	1929	28	194	696	616	-------	616	824,513	1,547,955	626,288	565,104	61,184	4,331,073	3,704,785
	1927	24	176	576	400	-------	400	622,544	1,278,011	462,250	420,710	41,540	3,464,534	3,002,284
	1919	18	85	169	143	-------	143	168,337	308,257	121,122	113,777	7,345	964,044	843,822
Minnesota	1929	13	85	230	120	-------	120	279,081	454,465	160,140	148,448	11,692	1,262,634	1,102,494
	1927	14	113	351	246	-------	246	253,041	656,890	301,398	281,468	19,930	2,082,585	1,781,187
	1919	11	95	299	82	-------	82	185,145	361,039	232,631	227,791	4,840	969,063	736,432
Missouri	1929	24	168	466	286	-------	286	616,828	1,121,320	610,561	587,647	22,914	3,157,529	2,546,968
	1927	23	181	381	256	-------	256	505,551	962,243	563,333	543,324	20,009	2,620,093	2,056,760
	1919	20	96	246	170	-------	170	233,615	423,135	151,839	142,574	9,265	1,133,049	981,210
Nebraska	1929	6	18	36	38	-------	38	60,914	71,604	26,824	24,497	2,327	215,166	188,342
	1927	6	18	33	40	-------	40	43,138	90,202	51,475	49,080	2,395	224,279	172,804
New Jersey	1929	10	50	218	87	-------	87	158,712	547,235	206,605	190,746	15,859	1,273,395	1,066,790
	1927	6	24	68	111	-------	111	58,262	221,914	80,973	72,986	7,987	414,003	333,030
	1919	9	38	171	98	-------	98	52,750	181,800	231,970	223,448	8,522	680,519	448,549
New York	1929	116	1,040	3,191	1,845	-------	1,845	3,810,661	9,584,226	2,793,981	2,524,660	269,321	20,772,668	17,978,687
	1927	116	774	3,184	1,941	-------	1,941	2,895,842	8,988,068	3,186,220	2,930,040	256,180	20,023,765	16,837,545
	1919	97	674	2,405	890	21	869	1,824,508	3,748,032	1,642,874	1,553,172	89,702	10,194,232	8,551,358
North Carolina	1929	7	16	34	41	-------	41	36,764	79,055	26,337	23,648	2,689	196,395	170,058
	1927	6	9	33	21	-------	21	20,759	77,980	24,124	21,090	3,034	165,297	141,173
Ohio	1929	54	336	1,020	825	-------	825	1,214,780	2,478,666	662,315	603,667	58,648	5,898,066	5,235,751
	1927	47	288	837	747	-------	747	941,199	2,107,300	533,790	479,503	54,287	5,053,748	4,519,958
	1919	30	150	417	280	35	245	292,227	646,869	277,102	261,184	15,918	1,813,310	1,536,208
Oklahoma	1929	5	18	36	64	-------	64	87,408	97,526	39,451	33,981	5,470	336,251	296,800
	1927	4	11	29	96	-------	96	30,543	75,362	31,884	28,092	3,792	259,037	227,153
	1919	4	13	22	21	-------	21	19,510	40,886	12,405	10,222	2,183	98,930	86,525
Oregon	1929	10	35	60	95	-------	95	105,880	113,584	47,479	42,874	4,605	391,631	344,152
	1927	8	24	62	97	-------	97	101,693	111,470	51,569	46,747	4,822	363,187	311,618
	1919	4	4	21	10	-------	10	4,850	34,402	17,197	16,282	915	106,196	88,999
Pennsylvania	1929	44	330	959	644	-------	644	1,008,806	2,614,625	784,184	725,193	58,991	6,077,067	5,292,883
	1927	42	296	866	477	-------	477	1,033,615	2,336,937	802,265	745,795	56,470	5,412,538	4,610,273
	1919	29	183	591	347	-------	347	420,436	1,022,689	618,043	588,475	29,568	2,954,671	2,336,628
Rhode Island	1929	4	11	61	77	-------	77	25,511	116,927	31,023	26,868	4,155	258,592	227,569
	1927	(4)	(4)	(4)	(4)	-------	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
	1919	4	3	10	5	-------	5	2,628	10,061	6,121	5,361	760	36,909	30,788
Tennessee	1929	8	17	76	95	-------	95	54,833	175,675	44,859	38,356	6,503	403,757	358,898
	1927	9	27	88	109	-------	109	77,505	206,650	62,050	52,232	9,824	494,934	432,878
	1919	5	13	39	36	-------	36	25,474	51,191	24,338	22,835	1,503	161,279	136,941
Texas	1929	16	71	127	147	-------	147	200,483	316,298	89,415	78,142	11,273	943,826	854,411
	1927	15	64	118	131	-------	131	130,570	343,163	111,602	100,112	11,490	884,985	773,383
	1919	10	39	89	93	-------	93	53,691	144,704	62,493	56,505	5,988	466,685	404,192
Utah	1929	4	2	20	17	-------	17	4,576	40,246	35,792	33,720	2,072	134,496	98,704
	1927	3	1	9	16	-------	16	2,600	11,788	5,773	4,266	1,507	42,451	36,678
	1919	3	3	8	11	-------	11	3,975	10,959	6,364	5,223	1,141	38,633	32,269
Virginia	1929	8	22	68	47	-------	47	56,857	143,911	66,532	61,870	4,662	348,061	281,529
	1927	5	19	54	23	-------	23	50,955	129,185	41,028	36,850	4,178	287,802	246,774
	1919	5	10	27	26	-------	26	10,222	45,516	21,732	19,552	2,180	105,971	84,239
Washington	1929	16	38	92	111	-------	111	108,984	214,413	88,302	81,127	7,175	623,563	535,261
	1927	14	42	63	99	-------	99	106,707	170,739	71,058	65,688	5,370	475,275	404,217
	1919	8	19	44	46	-------	46	45,442	90,630	39,737	37,693	2,044	287,592	247,855
West Virginia	1929	3	3	12	9	-------	9	10,192	20,927	8,273	7,337	936	50,212	41,939
	1927	3	6	11	18	-------	18	11,720	15,399	5,886	5,106	780	40,380	40,494
Wisconsin	1929	19	115	317	179	-------	179	364,874	759,056	223,096	203,467	19,629	1,712,184	1,489,088
	1927	17	89	281	143	-------	143	308,554	650,633	187,241	172,381	14,860	1,503,777	1,316,536
	1919	10	25	115	76	-------	76	42,958	181,500	70,873	67,470	3,403	467,688	396,815
Groups of States:														
Ark., 2 est.; La., 2; Miss., 1	1929	5	14	31	29	-------	29	39,641	53,211	20,888	18,252	2,636	179,076	158,788
Mont., 2 est.; N. Dak., 1; S. Dak., 1	1929	4	4	14	17	-------	17	16,884	27,079	16,624	14,866	1,758	81,518	64,894
Other States (Ariz., 1 est.; Del. 1; N. H., 1; S. C., 1)	1929	4	16	18	43	-------	43	36,421	35,868	21,661	19,279	2,382	125,678	104,017
States not shown separately	[5] 1927	20	52	140	145	-------	145	104,401	314,285	112,326	95,706	16,620	765,381	653,055
	[6] 1919	28	52	163	220	3	217	77,334	229,763	117,619	107,451	10,168	667,532	549,913

[1] Not including proprietors and firm members, as follows: For 1929, 232; 1927, 288; 1919, 264. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 16,851; 1927, 15,014; 1919, 9,198.

[2] See footnote 1, Table 1.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Withheld from publication in order to avoid disclosing data for individual establishments.

[5] Arizona, 1 establishment; Arkansas, 2; Delaware, 1; Kansas, 3; Louisiana, 4; Montana, 2; North Dakota, 1; Rhode Island, 4; South Carolina, 1; South Dakota, 1.

[6] Arizona, 1 establishment; Arkansas, 2; Colorado, 4; Delaware, 1; Florida, 2; Idaho, 1; Kentucky, 3; Louisiana, 4; Montana, 2; Nebraska, 3; North Carolina, 2; North Dakota, 1; South Dakota, 1; West Virginia, 1.

TABLE 3.—PRIME MOVERS AND ELECTRIC MOTORS, BY NUMBER AND RATED CAPACITY, 1929, 1927, 1925, 1919, AND 1914, AND QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	7,355	*Horsepower* 9,349	6,501	*Horsepower* 9,366	5,382	*Horsepower* 6,735	2,904	*Horsepower* 3,800	2,224	*Horsepower* 3,724	100.0	100.0
Prime movers, total					2	12	5	84	10	448		2.2
Steam, total					1	6	1	25	4	385		0.7
Engines					1	6	1	25	(1)	(1)		0.7
Turbines									(1)	(1)		
Internal-combustion engines					1	6	3	58	5	62		1.5
Water wheels and water turbines							1	1	1	1		
Electric motors driven by purchased energy	7,355	9,349	6,501	9,366	5,380	6,723	2,899	3,716	2,214	3,276	100.0	97.8
Electric motors, total	7,355	9,349	6,501	9,366	5,380	6,723	2,913	3,729	2,347	3,685	100.0	100.0
Driven by purchased energy	7,355	9,349	6,501	9,366	5,380	6,723	2,899	3,716	2,214	3,276	100.0	99.7
Driven by energy generated in establishments reporting							14	13	133	409		0.3
Electric energy purchased [2]		*Kilowatt-hours* 15,969,534		(3)		(3)		(4)		(4)		

[1] Not called for separately on schedule.
[2] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[3] Data incomplete.
[4] Not called for on schedule.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	12,353	*12,159*	12,218	12,343	12,407	12,364	12,305	12,301	12,312	12,381	12,450	12,482	12,517	97.1
1925	9,868	*9,716*	9,823	9,849	9,957	9,890	9,803	9,777	9,721	9,807	9,910	9,980	10,181	95.4
1919	6,769	*6,164*	6,261	6,409	6,588	6,611	6,726	6,871	6,886	7,001	7,194	7,180	7,337	84.0
1914	6,211	6,317	6,268	6,306	6,339	6,298	6,207	6,136	6,121	*6,080*	6,132	6,137	6,191	95.9
1909	5,343	*5,103*	5,114	5,231	5,246	5,276	5,327	5,261	5,305	5,488	5,484	5,541	5,653	90.3
Alabama	34	*32*	33	35	34	35	34	35	33	34	35	35	34	91.4
California	558	544	541	549	557	*529*	541	562	568	575	580	579	576	91.2
Colorado	66	62	*60*	61	67	70	66	65	64	68	66	69	70	85.7
Connecticut	140	139	*138*	*138*	140	139	139	141	142	141	141	144	144	95.8
District of Columbia	90	84	*83*	85	94	93	91	92	89	89	92	92	94	88.3
Florida	28	29	30	31	29	28	27	27	*24*	27	27	28	33	72.7
Georgia	125	125	125	126	126	124	*120*	122	125	126	128	129	130	92.3
Illinois	2,173	*2,158*	2,161	2,165	2,173	2,158	2,198	2,152	2,191	2,161	2,185	2,194	2,200	97.2
Indiana	282	287	293	299	297	293	271	*266*	268	268	278	280	283	89.0
Iowa	86	*84*	86	92	91	86	86	87	*84*	86	86	86	*84*	91.3
Kansas	44	46	46	46	46	46	*42*	*42*	44	43	43	44	44	91.3
Kentucky	116	113	113	114	116	115	*108*	109	119	120	122	123	124	87.1
Maine	23	23	23	23	23	23	23	23	23	23	23	23	23	91.7
Maryland	127	122	125	125	126	127	*121*	128	129	129	132	130	128	93.7
Massachusetts	679	*654*	662	669	671	676	669	684	677	695	698	695	696	94.6
Michigan	696	686	*671*	689	693	706	709	702	705	705	706	695	681	
Minnesota	230	*216*	220	224	220	218	231	239	237	241	239	238	234	89.6
Missouri	466	470	469	473	473	457	*452*	458	461	464	466	471	475	95.2
Nebraska	36	*35*	*35*	*35*	36	*35*	36	37	36	37	37	37	37	94.6
New Jersey	218	218	215	*213*	221	220	218	226	219	215	214	217	225	94.2
New York	3,191	*3,145*	3,150	3,193	3,172	3,196	3,184	3,165	3,162	3,173	3,228	3,255	3,266	96.3
North Carolina	34	37	40	40	40	38	31	*30*	*30*	*30*	31	32	33	75.0
Ohio	1,020	*1,005*	*1,005*	1,019	1,033	1,032	1,013	1,015	1,008	1,020	1,026	1,027	1,033	97.3
Oklahoma	36	38	39	39	38	35	*33*	*33*	33	33	34	35	37	84.6
Oregon	60	59	59	60	61	65	65	61	60	59	*58*	59	60	89.2
Pennsylvania	959	953	963	962	965	967	964	964	957	966	952	*951*	*951*	98.3
Rhode Island	61	*58*	60	61	62	65	63	60	*58*	62	64	64	60	89.2
Tennessee	76	76	77	78	78	76	78	78	75	75	*74*	76	77	94.9
Texas	127	134	140	140	139	131	116	114	*113*	119	122	126	126	80.7
Utah	20	20	20	20	20	20	20	20	20	20	20	20	20	97.1
Virginia	68	68	68	*67*	*67*	*67*	*67*	69	69	69	69	*67*	*67*	68.5
Washington	92	77	77	80	106	107	109	102	100	111	78	*76*	77	
West Virginia	12	12	12	12	12	12	12	12	12	12	12	12	12	94.4
Wisconsin	317	*305*	314	315	316	311	307	321	315	323	323	314	323	

PRINTING MATERIALS, NOT INCLUDING TYPE OR INK

Description of the industry.—The establishments in this industry are those whose products of chief value are composing rules and sticks, mallets, planes, chases, quoins, type cases, galleys, printers' rollers, blocks, plate hooks, and locking devices.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	84	1,004	$1,649,276	$2,184,544	$8,579,006	$6,394,462	2,709
1927	70	882	1,402,256	2,034,348	7,022,343	4,987,995	2,339
1925	71	888	1,378,748	1,786,570	6,525,379	4,738,809	1,981
1923	68	560	843,963	1,162,531	4,805,648	3,643,117	1,062
1921	74	816	1,153,276	1,713,736	5,319,261	3,605,525	(3)
1919	82	723	799,402	1,619,718	4,918,799	3,299,081	1,351
1914	94	423	340,041	763,212	2,110,814	1,347,602	638
1909	93	535	354,838	760,886	1,982,416	1,221,530	663
1904	77	357	239,036	372,480	1,207,163	834,683	436
1899	70	560	232,799	406,357	1,088,432	682,075	528
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	(4)	13.8	17.6	7.4	22.2	28.2	15.8
1925–1927	(4)	—0.7	1.7	13.9	7.6	5.3	18.1
1923–1925	(4)	58.6	63.4	53.7	35.8	30.1	86.5
1921–1923	(4)	—31.4	—26.8	—32.2	—9.7	1.0	----------
1919–1921	(4)	12.9	44.3	5.8	8.1	9.3	----------
1919–1929	(4)	38.9	106.3	34.9	74.4	93.8	100.5
1909–1919	(4)	35.1	125.3	112.9	148.1	170.1	103.8
1899–1909	(4)	—4.5	52.4	87.2	82.1	79.1	25.6

[1] The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products. The values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of printing materials, are included, as follows: For 1929, $19,547; 1927, $7,810; 1925, $97,506; corresponding amounts for earlier years not available. The following values of printing materials made as secondary products by establishments classified in other industries are not included: For 1929, $644,853; 1927, $505,385; 1925, $109,386; 1923, $373,498; 1921, $61,906; 1919, $159,700.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Not called for on schedule.

[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	84	295	1,004	2,709	172	2,537	$973,729	$1,649,276	$2,184,544	$2,062,952	$121,592	$8,579,006	$6,394,462
	1927	70	272	882	2,339	216	2,123	867,738	1,402,256	2,034,348	1,912,182	122,166	7,022,343	4,987,995
	1919	82	271	723	[4] 1,351	296	[4] 1,055	678,493	799,402	1,619,718	1,558,852	60,866	4,918,799	3,299,081
California	1929	4	13	7	43	-------	43	26,807	10,677	52,146	50,159	1,987	141,237	89,091
Illinois	1929	13	109	471	1,116	-------	1,116	340,056	783,974	973,092	929,858	43,234	3,512,302	2,539,210
	1927	12	106	399	986	-------	986	336,117	638,241	870,330	816,112	54,218	2,736,110	1,865,780
	1919	11	95	339	719	45	674	251,853	360,157	619,401	590,448	28,953	1,812,376	1,192,975
Maryland	1929	4	3	14	20	2	18	8,208	19,884	22,494	20,949	1,545	122,366	99,872
Massachusetts	1929	4	11	41	54	-------	54	51,682	61,540	61,802	58,821	2,981	308,441	246,639
	1927	4	12	37	52	-------	52	58,807	56,625	67,942	65,130	2,812	286,236	218,294
	1919	4	17	25	21	-------	21	45,686	28,931	130,171	128,021	2,150	275,054	144,883
Michigan	1929	6	17	46	288	-------	288	44,004	62,468	101,681	91,612	10,069	386,615	284,934
	1927	(5)	(5)	(5)	(5)	-------	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	3	5	7	6	-------	6	9,409	8,739	8,514	8,060	454	50,884	42,370
Minnesota	1929	3	6	10	13	-------	13	14,320	16,360	16,468	15,081	1,387	81,149	64,681
	1927	3	5	9	12	-------	12	15,265	12,176	20,591	19,424	1,167	60,775	40,184
	1919	4	7	10	8	-------	8	16,223	10,412	17,142	16,349	793	83,035	65,893
New Jersey	1929	3	9	42	233	-------	233	31,639	89,907	83,678	78,551	5,127	315,320	231,642
	1927	(5)	(5)	(5)	(5)	-------	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
	1919	4	3	16	68	-------	68	4,840	23,968	12,864	11,377	1,487	74,328	61,464
New York	1929	17	60	188	530	160	370	208,703	324,317	421,704	392,018	29,686	1,666,387	1,244,683
	1927	18	71	205	442	160	282	208,596	330,388	427,199	400,577	26,622	1,493,343	1,066,144
	1919	18	72	179	237	158	79	153,501	198,369	476,250	461,416	14,834	1,253,997	777,747
Ohio	1929	9	14	41	100	-------	100	44,665	61,451	70,975	65,870	5,105	343,831	272,856
	1927	6	12	24	77	28	49	33,181	45,125	76,000	71,336	4,664	313,523	237,523
	1919	9	18	26	68	28	40	38,629	31,118	66,078	63,859	2,219	271,456	205,378
Pennsylvania	1929	4	20	68	99	10	89	90,436	104,591	183,026	176,042	6,984	830,256	647,230
	1927	5	20	65	85	10	75	64,479	95,603	219,847	212,385	7,462	868,881	649,034
	1919	7	18	44	67	15	52	52,767	53,553	116,764	114,040	2,724	443,544	326,780
Other States	[6] 1929	17	33	76	213	-------	213	113,209	114,107	197,478	183,991	13,487	871,102	673,624
	[7] 1927	22	46	143	685	18	667	151,293	224,098	352,439	327,218	25,221	1,257,475	905,036
	[8] 1919	22	36	77	163	50	113	105,585	84,155	172,534	165,282	7,252	654,125	481,591

[1] Not including proprietors and firm members, as follows: For 1929, 18; 1927, 27; 1919, 41. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,317; 1927, 1,181; 1919, 1,035.

[2] See footnote 1, Table 1.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Withheld from publication in order to avoid disclosing data for individual establishments.

[6] Colorado, 1 establishment; District of Columbia, 1; Georgia, 2; Indiana, 1; Iowa, 1; Kentucky, 1; Louisiana, 1; Missouri, 3; North Carolina, 1; Tennessee, 2; Texas, 2; Wisconsin, 1.

[7] California, 1 establishment; Colorado, 1; District of Columbia, 1; Georgia, 2; Indiana, 1; Iowa, 1; Louisiana, 1; Maryland, 2; Michigan, 3; Missouri, 3 New Jersey, 3; Texas, 2; Wisconsin, 1.

[8] California, 1 establishment; Colorado, 1; Connecticut, 1; District of Columbia, 1; Georgia, 3; Indiana, 1; Iowa, 1; Louisiana, 1; Maryland, 3; Missouri, 4; Nebraska, 1; Texas, 2; Utah, 1; Wisconsin, 1.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horsepower		*Horsepower*		*Horsepower*		*Horsepower*		*Horsepower*		
Prime movers and electric motors driven by purchased energy, aggregate	848	2,709	683	2,339	550	1,981	335	1,351	145	638	100.0	100.0
Prime movers, total	5	172	7	216	9	225	15	296	17	259	6.3	21.9
Steam, total	5	172	6	213	8	223	11	213	11	163	6.3	15.8
Engines	5	172	6	213	8	223	11	213	(1)	(1)	6.3	15.8
Turbines									(1)	(1)		
Internal-combustion engines			1	3	1	2	4	83	6	96		6.1
Electric motors driven by purchased energy	843	2,537	676	2,123	550	1,756	320	1,055	128	379	93.7	78.1
Electric motors, total	849	2,545	682	2,131	565	1,796	329	1,073	137	386	100.0	100.0
Driven by purchased energy	843	2,537	676	2,123	550	1,756	320	1,055	128	379	99.7	98.3
Driven by energy generated in establishments reporting	6	8	6	8	15	40	9	18	9	7	0.3	1.7
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	2	35	2	35	2	35	(2)	(2)	(2)	(2)		
		Kilowatt hours										
Electric energy purchased [3]		1,739,438		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	1,004	1,011	998	1,006	1,026	982	967	982	1,021	1,025	1,079	1,038	*916*	84.9
1925	888	945	877	856	855	857	862	845	*855*	865	963	901	934	86.7
1919	723	*620*	667	661	640	670	723	740	795	777	805	852	726	72.8
1914 [1]	423	411	409	411	429	436	413	410	*405*	422	451	445	434	89.8
California	7	*6*	*6*	*6*	*6*	*6*	7	8	8	8	9	10	9	60.0
Illinois	471	494	483	486	487	447	432	455	501	500	518	482	*366*	70.7
Maryland	14	14	14	14	14	14	14	14	14	14	14	14	14	
Massachusetts	41	41	*40*	*40*	*40*	42	42	41	*40*	*40*	42	43	41	93.0
Michigan	46	45	44	46	46	48	46	*43*	47	49	50	47	47	86.0
Minnesota	10	11	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	90.9
New Jersey	42	*34*	*34*	35	43	40	40	43	42	42	49	49	49	69.4
New York	188	185	186	183	187	185	191	190	186	*182*	193	192	191	94.3
Ohio	41	39	40	40	44	44	43	41	39	*38*	41	41	41	86.4
Pennsylvania	68	69	68	68	70	68	65	64	*62*	65	71	71	72	86.1

[1] No comparable data for years prior to 1914.

STEREOTYPING AND ELECTROTYPING, NOT DONE IN PRINTING ESTABLISHMENTS

Description of the industry.—This industry classification embraces establishments engaged primarily in making stereotype and electrotype plates, and therefore does not cover stereotyping and electrotyping done by printing and publishing establishments.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	230	6,487	$13,770,676	$6,546,881	$35,617,297	$29,070,416	21,347
1927	197	4,502	10,272,775	4,676,853	25,549,214	20,872,361	16,888
1925	193	4,283	9,206,042	4,280,244	22,361,187	18,080,943	13,774
1923	179	4,096	8,333,721	3,805,550	20,596,208	16,790,658	12,313
1921	157	3,617	7,081,705	3,745,595	17,358,994	13,613,399	(3)
1919	171	3,664	5,002,545	4,234,479	15,919,014	11,684,535	9,498
1914	189	3,457	3,001,369	2,254,926	8,154,171	5,899,245	6,743
1909	174	2,850	2,312,104	1,765,102	6,383,694	4,618,592	3,526
1904	146	2,679	1,993,067	1,032,053	5,005,338	3,973,285	2,180
1899	140	2,408	1,458,977	766,603	3,772,025	3,005,422	1,036
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	16.8	44.1	34.1	40.0	39.4	39.3	26.4
1925–1927	2.1	5.1	11.6	9.3	14.3	15.4	22.6
1923–1925	7.8	4.6	10.5	12.5	8.6	7.7	11.9
1921–1923	14.0	13.2	17.7	1.6	18.6	23.3	----------
1919–1921	—8.2	—1.3	41.6	—11.5	9.0	16.5	----------
1919–1929	34.5	77.0	175.3	54.6	123.7	148.8	124.8
1909–1919	—1.7	28.6	116.4	139.9	149.4	153.0	169.4
1899–1909	24.3	18.4	58.5	130.2	69.2	53.7	240.3

[1] The values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in stereotyping and electrotyping, are included, as follows: For 1929, $285,302; 1927, $677,020; 1925, $837,333; corresponding amounts for earlier years not available. The following receipts for stereotyping and electrotyping done by establishments engaged primarily in other industries are not included: Printing and publishing establishments—1929, $4,506,847; 1927, $4,094,179; 1925, $4,794,278. Establishments other than printing and publishing—1929, $988,200; 1927, $1,054,674; 1925, $768,662; no comparable data for earlier years.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for all States for which separate figures can be given without disclosing data reported by individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	230	1,386	6,487	21,347	402	20,945	$4,852,832	$13,770,676	$6,546,881	$5,678,371	$868,510	$35,617,297	$29,070,416
	1927	197	1,140	4,502	16,888	405	16,483	3,430,110	10,272,775	4,676,853	3,973,797	703,056	25,549,214	20,872,361
	1919	171	874	3,664	[4] 9,498	466	[4] 9,032	2,029,906	5,002,545	4,234,479	3,881,041	353,438	15,019,014	11,684,535
California	1929	7	37	143	505	-------	505	107,851	294,557	87,343	72,013	15,330	782,360	695,017
	1927	5	23	124	343	-------	343	85,367	260,575	68,238	56,269	11,969	656,794	588,556
	1919	4	10	80	167	-------	167	34,663	105,027	50,859	43,730	7,129	274,922	224,063
Connecticut	1929	7	26	147	439	-------	439	127,174	278,737	147,470	125,537	21,933	731,027	583,557
	1927	6	25	96	265	-------	265	71,645	158,825	66,831	55,067	11,764	408,277	341,446
	1919	6	20	103	198	35	163	35,502	111,308	77,109	70,037	7,072	312,756	235,647
Illinois	1929	33	233	924	3,368	-------	3,368	846,332	2,415,155	792,083	684,758	107,325	5,696,862	4,904,779
	1927	30	234	823	2,706	-------	2,706	731,967	2,077,395	691,535	589,795	101,740	4,662,202	3,970,667
	1919	26	168	706	1,740	-------	1,740	490,104	1,055,175	637,685	576,264	61,421	3,283,617	2,645,932
Indiana	1929	7	24	123	465	-------	465	78,291	227,099	91,674	78,679	12,995	555,590	463,916
	1927	4	13	65	368	-------	368	43,607	110,409	57,117	49,647	7,470	278,063	220,946
	1919	4	18	89	281	-------	281	35,102	93,072	107,949	99,478	8,471	288,908	180,959
Maryland	1929	4	22	51	211	-------	211	79,827	80,880	42,030	34,697	7,333	287,871	245,841
	1927	4	24	48	171	-------	171	71,425	79,770	28,114	22,479	5,635	293,478	265,364
	1919	4	13	41	98	14	84	26,920	51,412	61,296	57,436	3,860	172,398	111,102
Massachusetts	1929	16	69	362	1,427	-------	1,427	257,295	584,525	216,057	168,984	47,073	1,460,553	1,244,496
	1927	14	49	271	1,046	-------	1,046	155,543	485,539	207,431	172,382	35,049	1,165,244	957,813
	1919	9	39	204	584	-------	584	82,714	245,310	144,261	125,734	18,527	646,364	502,103
Michigan	1929	11	103	374	1,207	-------	1,207	310,776	893,728	536,896	470,949	65,947	2,597,189	2,060,293
	1927	9	92	312	1,048	-------	1,048	262,969	743,261	358,636	315,046	43,590	1,886,501	1,527,865
	1919	8	48	177	444	-------	444	106,768	247,783	132,348	117,878	14,470	760,600	618,252
Minnesota	1929	5	15	60	368	-------	368	33,654	128,897	48,610	39,415	9,195	340,796	292,186
	1927	5	10	51	322	-------	322	34,560	111,098	43,502	34,887	8,615	303,074	259,572
	1919	4	11	44	232	-------	232	24,156	58,009	31,703	28,523	3,180	200,231	168,528
Missouri	1929	7	43	157	574	-------	574	122,150	324,721	130,743	111,271	19,472	740,917	610,174
	1927	7	38	168	512	-------	512	126,093	332,500	128,827	113,419	15,408	766,118	637,291
	1919	5	34	125	351	-------	351	56,457	174,997	135,597	123,651	11,946	539,688	404,091
New Jersey	1929	6	21	112	348	-------	348	78,033	240,529	105,055	87,988	17,067	607,337	502,282
	1927	5	21	76	326	-------	326	54,864	197,948	81,446	66,311	15,135	472,518	391,072
	1919	4	7	50	113	-------	113	12,672	64,095	59,737	53,887	5,850	160,296	100,559
New York	1929	47	453	2,471	6,559	145	6,414	1,663,023	5,225,328	2,762,920	2,426,240	336,680	13,111,046	10,348,126
	1927	41	309	1,192	4,918	405	4,513	954,010	2,885,768	1,463,829	1,204,765	259,064	7,216,840	5,753,011
	1919	47	277	1,048	2,635	402	2,233	661,356	1,534,430	1,477,248	1,357,463	119,785	4,922,419	3,445,171
Ohio	1929	31	165	819	3,414	240	3,174	541,572	1,593,274	1,015,619	905,387	110,232	4,612,769	3,597,150
	1927	25	106	571	2,293	-------	2,293	325,208	1,174,772	812,762	726,063	86,699	3,183,706	2,370,944
	1919	17	72	488	1,350	15	1,335	137,625	544,449	821,860	781,232	40,628	1,975,178	1,153,318
Pennsylvania	1929	15	84	411	969	-------	969	231,967	881,967	283,553	231,383	52,170	2,245,096	1,961,543
	1927	16	124	466	1,466	-------	1,466	301,784	1,144,355	436,784	372,474	64,310	2,878,260	2,441,476
	1919	15	109	345	752	-------	752	235,832	528,333	350,962	318,410	32,552	1,757,008	1,406,046
Tennessee	1929	3	7	44	135	15	120	28,770	64,748	31,760	28,407	3,353	191,163	159,403
	1927	[5]	[5]	[4]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]	[5]
	1919	4	6	24	74	-------	74	13,903	33,175	15,232	13,028	2,204	99,802	84,570
Texas	1929	4	2	23	106	-------	106	3,305	37,025	22,324	18,103	4,221	102,254	79,930
Washington	1929	4	9	21	168	-------	168	21,262	62,850	17,952	15,047	2,905	141,451	123,499
	1927	4	12	14	133	-------	133	36,498	32,408	13,670	10,594	3,076	132,015	118,345
Wisconsin	1929	6	24	72	268	-------	268	105,130	131,696	66,921	55,573	11,348	444,722	377,801
	1927	4	17	59	261	-------	261	74,379	117,175	56,095	46,963	9,132	323,741	267,646
	1919	4	13	42	207	-------	207	30,030	52,378	44,377	39,494	4,883	182,892	138,515
Other States	[6] 1929	17	49	173	816	2	814	166,420	304,960	147,871	123,940	23,931	968,294	820,423
	[7] 1927	18	43	166	710	-------	710	100,191	300,977	162,036	137,636	24,400	922,383	760,347
	[8] 1919	10	29	98	387	-------	387	46,102	102,992	86,256	74,796	11,460	351,935	265,679

[1] Not including proprietors and firm members, as follows: For 1929, 68; 1927, 80; 1919, 85. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for this industry, are as follows: For 1929, 7,941; 1927, 5,722; 1919, 4,623.

[2] See footnote 1, Table 1.

[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.

[5] Withheld from publication in order to avoid disclosing data for individual establishments.

[6] Colorado, 2 establishments; District of Columbia, 2; Florida, 1; Iowa, 2; Kentucky, 1; Louisiana, 2; Maine, 1; Nebraska, 1; Oregon, 2; Rhode Island, 1; Virginia, 2.

[7] District of Columbia, 2 establishments; Florida, 1; Iowa, 2; Kentucky, 1; Louisiana, 1; Maine, 1; Nebraska, 1; Oregon, 2; Rhode Island, 1; Tennessee, 2; Texas, 2; Virginia, 2.

[8] District of Columbia, 2 establishments; Iowa, 1; Kentucky, 2; Maine, 1; Oregon, 1; Rhode Island, 1; Virginia, 1; Washington, 1.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	6,713	*Horsepower* 21,347	5,697	*Horsepower* 16,888	5,098	*Horsepower* 13,774	3,322	*Horsepower* 9,498	2,398	*Horsepower* 6,743	100.0	100.0
Prime movers, total	6	402	6	405	7	348	12	466	17	250	1.9	4.9
Steam, total	6	402	2	225	1	8	1	35	4	107	1.9	0.4
Engines	4	162	2	225	1	8	1	35	(1)	(1)	0.8	0.4
Turbines	2	240							(1)	(1)	1.1	
Internal-combustion engines							3	31	12	138		0.3
Water wheels and water turbines			4	180	6	340	8	400	1	5		4.2
Electric motors driven by purchased energy	6,707	20,945	5,691	16,483	5,091	13,426	3,310	9,032	2,381	6,493	98.1	95.1
Electric motors, total	6,762	21,215	5,691	16,483	5,091	13,426	3,310	9,032	2,403	6,565	100.0	100.0
Driven by purchased energy	6,707	20,945	5,691	16,483	5,091	13,426	3,310	9,032	2,381	6,493	98.7	100.0
Driven by energy generated in establishments reporting	55	270							22	72	1.3	
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	3	140					(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		15,505,699		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	6,487	*6,319*	6,410	6,480	6,524	6,532	6,528	6,448	6,442	6,410	6,503	6,556	**6,690**	94.5
1925	4,283	*4,222*	4,262	4,303	4,307	4,288	4,260	4,234	4,237	4,282	4,327	4,331	**4,343**	97.2
1919	3,064	*2,565*	3,446	3,504	3,405	3,650	3,700	3,778	3,753	3,833	3,804	3,819	**3,911**	86.0
1914	3,457	3,470	3,511	3,493	3,494	3,487	3,465	3,437	3,438	3,426	3,425	*3,413*	**3,425**	97.2
1909	2,850	2,797	2,817	2,850	2,856	2,838	2,821	2,802	*2,792*	2,873	2,920	2,928	**2,923**	95.4
California	143	142	147	149	154	133	*132*	137	145	146	144	145	**146**	85.7
Connecticut	147	*145*	150	144	151	146	147	148	146	148	148	147	**151**	94.7
Illinois	924	*878*	913	919	927	934	929	921	916	924	939	947	**943**	92.2
Indiana	123	120	*119*	*119*	120	128	126	128	125	124	125	124	**123**	93.0
Maryland	51	53	53	53	53	50	50	50	50	49	*48*	*48*	**48**	90.6
Massachusetts	362	359	*355*	358	366	367	366	362	360	363	358	365	**364**	96.7
Michigan	374	*338*	342	382	389	388	383	378	381	380	376	377	**384**	85.6
Minnesota	60	*59*	*59*	*59*	60	*59*	60	60	60	61	61	61	**61**	96.7
Missouri	157	157	157	157	158	157	157	157	157	159	158	*156*	**156**	98.1
New Jersey	112	112	112	112	112	112	112	112	112	112	112	112	**112**	
New York	2,471	2,449	2,459	2,458	2,446	2,470	2,483	2,455	2,439	*2,394*	2,475	2,502	**2,622**	91.3
Ohio	819	*778*	789	814	835	827	827	818	825	820	823	830	**837**	93.0
Pennsylvania	411	410	421	422	422	430	427	*592*	396	398	402	406	**407**	91.2
Tennessee	44	44	44	44	44	44	44	44	44	44	44	44	**44**	
Texas	23	23	23	25	*22*	24	23	23	23	25	24	24	**23**	88.0
Washington	21	21	21	21	21	21	21	21	21	21	21	21	**21**	
Wisconsin	72	71	73	72	71	*71*	70	72	72	71	72	72	**71**	95.9

TYPE FOUNDING

Description of the industry.—This classification covers establishments engaged primarily in the manufacture of metal type, including that for typewriters and adding machines; and of brass rules, leads, slugs, and related items.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	19	467	$556,051	$648,114	$2,603,619	$1,955,505	1,218
1927	19	525	658,381	749,085	2,683,704	1,934,619	1,230
1925	18	537	603,163	705,416	2,450,503	1,745,087	1,236
1923	18	606	646,380	709,468	2,512,328	1,802,860	1,438
1921	18	608	634,131	696,256	2,129,636	1,433,380	[3]
1919	23	810	867,517	943,245	2,089,757	1,146,512	845
1914	31	1,054	665,861	901,331	2,319,781	1,418,450	1,647
1909	29	1,491	835,882	1,011,345	2,721,090	1,709,745	1,203
1904	21	1,446	883,595	746,176	2,727,759	1,981,583	963
1899	22	1,424	803,470	863,089	2,842,384	1,978,095	683
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	----------	−11.0	−15.5	−13.5	−3.0	1.1	−1.0
1925–1927	----------	−2.2	9.2	6.2	9.5	10.9	−0.5
1923–1925	----------	−11.4	−6.7	−0.6	−2.5	−3.2	−14.0
1921–1923	----------	−0.3	1.9	1.9	18.0	25.8	----------
1919–1921	[4]	−24.9	−26.9	−26.2	1.9	25.0	----------
1919–1929	[4]	−42.3	−35.9	−31.3	24.6	70.6	44.1
1909–1919	[4]	−45.7	3.8	−6.7	−23.2	−32.9	−29.8
1899–1909	[4]	4.7	4.0	17.1	−4.3	−13.6	76.1

[1] The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products. The following receipts for type founding done by establishments engaged primarily in other industries are not included: For 1929, $145,893. No comparable data for earlier years.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics for the only two States for which separate figures can be given without disclosing data reported by individual establishments. Certain of the "Other States," however, reported larger values of products than the States shown separately. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials	Fuel and purchased energy		
United States	1929	19	61	467	1,218	986	232	$160,562	$556,051	$648,114	$598,969	$49,145	$2,603,619	$1,955,505
	1927	19	75	525	1,230	986	244	180,426	658,381	749,085	697,825	51,260	2,683,704	1,934,619
	1919	23	49	810	[4] 845	668	[4] 177	77,151	867,517	943,245	893,780	49,465	2,089,757	1,146,512
Illinois	1929	5	2	17	19	--------	19	1,565	17,841	30,644	29,956	688	82,414	51,770
	1927	4	5	16	17	--------	17	14,525	30,340	18,842	17,454	1,388	78,640	59,798
	1919	3	1	12	9	--------	9	2,008	10,232	9,845	9,244	601	35,773	25,928
New York	1929	5	14	92	150	--------	150	45,831	106,461	98,165	92,559	5,606	320,964	222,799
	1927	5	25	67	172	--------	172	35,853	93,728	120,785	114,778	6,007	284,959	164,174
Other States	[5] 1929	9	45	358	1,049	986	63	113,166	431,749	519,305	476,454	42,851	2,200,241	1,680,936
	[6] 1927	10	45	442	1,041	986	55	130,048	534,313	609,458	565,593	43,865	2,320,105	1,710,647
	[7] 1919	20	48	798	841	668	173	75,143	857,285	933,400	884,536	48,864	2,053,984	1,120,584

[1] Not including proprietors and firm members, as follows: For 1929, 12; 1927, 11; 1919, 11. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 540; 1927, 611; 1919, 870.
[2] The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.
[5] Kansas, 1 establishment; Minnesota, 1; Missouri, 1; New Jersey, 1; Oregon, 1; Pennsylvania, 3; Washington, 1.
[6] California, 1 establishment; Kansas, 1; Maryland, 1; Massachusetts, 1; Missouri, 1; New Jersey, 1; Oregon, 1; Pennsylvania, 3.
[7] California, 1 establishment; Connecticut, 1; Kansas, 1; Maine, 1; Massachusetts, 3; Missouri, 1; New Jersey, 1; New York, 5; Ohio, 3; Pennsylvania, 3.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	128	*Horsepower* 1,218	126	*Horsepower* 1,230	111	*Horsepower* 1,236	91	*Horsepower* 845	350	*Horsepower* 1,647	100.0	100.0
Prime movers, total	3	986	3	986	3	961	6	668	12	997	81.0	79.1
Steam, total	3	986	3	986	3	961	4	648	6	598	81.0	76.7
Engines	3	986	3	986	3	961	4	648	(1)	(1)	81.0	76.7
Turbines									(1)	(1)		
Internal-combustion engines							2	20	6	399		2.4
Electric motors driven by purchased energy	125	232	123	244	108	275	85	177	338	650	19.0	20.9
Electric motors, total	689	959	633	918	629	963	597	1,145	836	1,261	100.0	100.0
Driven by purchased energy	125	232	123	244	108	275	85	177	338	650	24.2	15.5
Driven by energy generated in establishments reporting	564	727	510	674	521	688	512	968	498	611	75.8	84.5
Electric generators	3	*Kilowatts* 575	3	*Kilowatts* 575	3	*Kilowatts* 575	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 420,000		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	467	446	*441*	450	470	475	489	483	486	472	475	462	449	90.2
1925	537	549	545	549	550	538	525	504	*497*	545	545	550	551	90.2
1919	810	774	796	832	868	900	884	917	*620*	791	763	770	805	67.6
1914 [1]	1,054	1,060	1,094	1,112	1,114	1,056	1,039	1,002	*989*	1,065	1,048	1,036	1,033	88.8
Illinois	17	17	17	*16*	*16*	*16*	17	17	*16*	*16*	*16*	*16*	18	88.9
New York	92	86	*76*	86	87	87	101	101	104	105	103	88	85	72.4

[1] No comparable data for years prior to 1914.

Group 6.—CHEMICALS AND ALLIED PRODUCTS

THE GROUP AS A WHOLE

Group 6 includes not only the industries whose products are chemicals in the ordinary sense, but also those which employ to a large extent chemical processes in their manufacturing operations. The group is complex in character, and its several products differ widely, both in kind and in the uses to which they are put. Considerable duplication occurs in the aggregate cost of materials and the aggregate value of products for the group, because of the use of the products of certain industries as materials for others.

This group differs slightly from the corresponding one as constituted at the census for 1927, the changes being as follows:

(1) The combination of the "Sulphuric, nitric, and mixed acids" industry with the "Chemicals, not elsewhere classified" industry.

(2) The transfer of establishments engaged primarily in the manufacture of lubricating oils from the "Oils, not elsewhere classified" industry to the "Lubricating oils and greases, not made in petroleum refineries" industry, in Group 7. (See "Change in classification," p. 716.)

Summary statistics for the group and its component subgroups and industries are given in the table below, and detailed reports for the individual industries, all of which have previously been published in pamphlet form, appear on pages 630 to 746.

SUMMARY FOR GROUP 6.—CHEMICALS AND ALLIED PRODUCTS: 1914 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and 1914 but not for subsequent years. See General Explanations—Establishments Covered—Size]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]	Horsepower
Aggregate for the group	1929	8,278	280,868	$354,393,308	$1,970,713,269	$3,759,404,640	$1,788,691,371	2,312,295
	1927	7,541	253,436	317,908,093	1,803,084,544	3,351,892,059	1,548,807,515	1,848,309
	1925	7,232	244,812	296,525,641	1,830,501,898	3,211,230,498	1,380,638,600	1,748,481
	1923	7,197	246,527	288,833,729	1,702,944,290	2,933,561,637	1,230,617,347	1,654,228
	1921	7,348	199,596	224,332,535	1,352,904,081	2,225,917,456	873,013,375	(2)
	[3] 1919	10,732	329,053	364,884,045	2,269,338,413	3,803,752,737	1,534,414,324	1,720,521
	[3] 1914	11,461	258,413	164,420,708	1,611,125,288	1,964,630,406	953,505,118	1,459,062
Chemicals and allied products, other than animal, vegetable, and compounded oil, total	1929	7,599	260,820	336,816,056	1,579,430,948	3,289,288,556	1,709,857,608	1,980,145
	1927	6,760	228,674	294,089,964	1,409,190,016	2,855,979,420	1,446,789,404	1,528,092
	1925	6,509	222,112	275,579,472	1,374,949,810	2,651,374,528	1,276,424,718	1,404,454
	1923	6,424	226,710	271,444,048	1,316,282,391	2,472,610,167	1,156,327,776	1,388,993
	1921	6,438	177,525	204,711,605	1,022,488,500	1,840,963,888	818,475,388	(2)
	[3] 1919	9,637	293,863	334,684,225	1,550,304,578	2,939,691,782	1,389,297,204	1,381,021
	[3] 1914	10,268	232,817	153,307,274	762,608,357	1,667,267,086	904,658,729	1,181,322
Alcohol, ethyl, and distilled liquors	1929	30	1,484	2,131,188	35,046,063	54,284,665	19,238,602	13,577
	1927	28	1,180	1,704,518	19,309,772	33,971,150	14,661,378	7,261
	1925	31	1,395	1,838,318	38,564,481	57,705,704	19,141,223	10,268
	1923	30	1,062	1,474,166	17,770,264	33,000,099	15,229,835	8,129
	1921	33	1,141	1,626,949	22,269,046	28,788,965	6,519,919	(2)
	1919	34	1,380	1,716,699	19,655,522	31,854,085	12,198,563	16,494
	1914	434	6,295	3,904,489	40,996,781	206,778,708	165,781,927	51,670
Ammunition and related products	1929	21	7,223	8,272,618	19,841,665	43,808,520	23,966,855	17,061
	1927	20	7,002	8,265,963	20,945,130	45,602,184	24,657,054	17,175
	1925	27	7,777	7,986,834	22,819,987	41,707,396	18,887,409	23,316
	1923	27	10,470	10,816,647	27,741,517	51,508,622	23,767,105	23,172
	1921	28	8,370	7,896,382	16,006,385	32,350,445	16,344,060	(2)
	1919	42	22,816	23,587,692	38,101,602	88,038,223	49,936,621	39,128
	1914	32	11,493	6,750,986	16,276,575	30,840,472	14,563,897	11,354
Baking powders, yeast, and other leavening compounds	1929	48	3,006	4,846,730	22,598,378	52,336,812	29,738,434	42,788
	1927	47	3,032	4,793,624	24,619,450	[4] 55,716,025	[4] 31,096,575	42,816
	1925	49	2,931	4,063,260	23,375,795	[4] 53,347,406	[4] 29,971,611	36,633
	1923	57	3,507	4,919,858	21,656,521	51,691,123	30,034,602	35,845
	1921	62	3,557	4,479,099	24,666,261	52,885,888	28,219,627	(2)
	1919	88	3,331	3,554,534	26,635,429	46,230,312	19,594,883	20,071
	1914	124	2,270	1,241,316	10,894,844	22,339,347	11,444,503	7,862
Blacking, stains, and dressings	1929	170	1,617	1,959,443	8,345,234	24,681,836	16,336,602	3,317
	1927	176	1,716	2,180,733	9,185,543	22,548,235	13,362,692	4,005
	1925	171	1,869	2,164,430	9,733,455	25,054,969	15,321,514	2,659
	1923	175	2,165	2,170,138	10,253,195	25,821,709	15,568,514	2,792
	1921	173	1,666	1,522,333	9,362,119	18,452,864	9,090,745	(2)
	1919	220	2,455	2,109,103	14,041,840	25,284,072	11,242,232	2,446
	1914	197	1,766	877,434	5,128,014	9,881,594	4,752,980	2,442

See footnotes at end of summary.

SUMMARY FOR GROUP 6.—CHEMICALS AND ALLIED PRODUCTS: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]	Horsepower
Chemicals and allied products, etc.—Continued.								
Bluing	1929	20	105	$106,917	$468,867	$1,364,510	$895,643	169
	1927	20	155	151,364	593,725	1,674,140	1,080,415	363
	1925	23	176	185,310	1,017,221	2,167,013	1,149,792	366
	1923	25	188	187,901	800,293	1,643,186	842,893	296
	1921	33	226	203,460	1,017,713	1,883,225	865,512	(2)
	1919	57	360	285,063	1,542,954	2,731,277	1,188,323	423
	1914	66	254	104,853	489,431	1,184,045	694,614	216
Bone black, carbon black, and lampblack	1929	77	1,915	2,583,253	9,096,098	20,169,722	11,073,624	11,268
	1927	67	1,553	2,047,044	6,571,019	14,261,775	7,690,756	8,065
	1925	66	1,505	1,721,779	5,654,965	14,564,982	8,910,017	7,289
	1923	68	1,303	1,460,868	5,294,567	14,599,872	9,305,305	5,567
	1921	45	826	979,845	3,745,146	8,180,844	4,435,698	(2)
	1919	35	675	808,332	2,849,059	6,186,204	3,338,145	1,857
	1914	27	339	230,821	686,240	1,463,569	777,329	1,786
Candles	1929	20	781	923,039	3,250,627	6,686,194	3,435,567	1,971
	1927	17	709	761,464	2,958,987	6,350,931	3,391,944	996
	1925	20	626	672,691	2,786,247	5,114,292	2,328,045	922
	1923	21	746	753,919	2,392,948	5,079,884	2,686,936	912
	1921	20	609	589,737	2,090,807	3,776,911	1,686,104	(2)
	1919	19	541	437,581	2,178,528	3,350,806	1,172,278	597
	1914	15	387	183,007	1,118,575	1,730,723	612,148	359
Chemicals, not elsewhere classified [5]	1929	551	62,199	94,680,013	363,576,811	738,048,386	374,471,575	854,358
	1927	492	52,347	78,274,975	296,677,164	572,060,732	275,413,568	576,285
	1925	751	57,890	83,537,432	282,712,468	570,310,106	287,597,638	546,797
	1923	773	77,254	103,300,991	328,506,621	655,274,829	326,678,208	592,023
	1921	728	49,138	62,161,005	200,272,506	412,231,354	211,958,848	(2)
	1919	836	76,918	105,062,261	301,519,182	614,278,849	312,759,667	480,435
	1914	427	35,375	24,278,759	96,185,122	173,269,076	77,083,954	288,909
Cleaning and polishing preparations	1929	429	3,713	3,356,161	19,399,041	50,779,632	31,380,591	10,609
	1927	341	2,403	2,988,430	15,219,635	41,234,466	26,014,831	8,485
	1925	299	2,161	2,659,767	12,707,370	34,020,384	21,313,014	6,279
	1923	298	2,376	2,746,082	13,600,082	35,443,130	21,843,048	6,698
	1921	279	1,687	1,884,922	10,959,174	23,177,721	12,218,547	(2)
	1919	499	1,955	1,898,447	12,925,518	26,703,109	13,779,591	4,510
	1914	308	1,239	618,783	3,895,199	9,151,718	5,256,519	2,543
Compressed and liquefied gases [6]	1929	354	3,390	5,378,211	14,528,603	52,189,779	37,661,176	85,293
	1927	318	3,212	4,947,577	11,748,839	50,547,395	38,798,556	70,489
Druggists' preparations	1929	429	10,688	12,452,066	43,775,986	124,778,487	81,002,501	19,448
	1927	373	10,138	11,942,469	40,490,302	110,300,139	69,809,747	15,919
	1925	370	9,685	11,078,384	36,063,719	95,419,824	59,356,105	12,553
	1923	389	8,966	9,185,975	33,303,859	79,142,668	45,778,809	11,255
	1921	408	10,838	11,936,658	34,573,664	81,697,922	47,124,258	(2)
	1919	524	15,568	12,161,925	55,138,475	114,593,486	59,455,011	12,670
	1914	416	9,277	4,754,508	22,934,723	48,009,654	25,074,931	8,308
Drug grinding	1929	26	677	840,935	5,675,079	9,669,220	3,994,141	5,277
	1927	25	659	820,187	5,683,720	9,205,243	3,521,523	4,662
	1925	22	622	709,903	4,921,118	8,446,361	3,525,243	4,389
	1923	24	750	893,318	6,555,193	10,561,580	4,006,387	4,958
	1921	28	840	1,005,155	6,804,453	10,085,691	3,281,238	(2)
	1919	31	1,347	1,520,137	11,556,480	16,937,698	5,381,218	6,725
	1914	29	1,059	583,361	5,215,287	8,080,118	2,864,831	4,072
Explosives	1929	95	5,614	8,487,890	31,764,307	72,539,724	40,775,417	51,612
	1927	100	5,803	8,131,234	36,893,576	72,489,668	35,596,092	38,239
	1925	103	5,697	7,731,369	37,877,418	69,668,837	31,791,419	37,808
	1923	106	6,388	9,112,027	39,495,972	75,029,127	35,533,155	35,231
	1921	109	4,478	6,610,206	30,644,327	59,174,598	28,530,271	(2)
	1919	118	9,249	12,504,986	45,911,049	92,474,813	46,563,764	51,635
	1914	111	6,306	4,488,288	25,626,539	41,432,970	15,806,431	45,778
Fertilizers	1929	638	20,926	17,883,925	159,801,195	232,510,936	72,709,741	166,984
	1927	621	18,612	17,649,661	138,142,925	190,384,890	52,241,965	156,274
	1925	587	19,644	17,743,327	137,808,185	206,772,904	68,964,719	152,193
	1923	573	18,572	16,365,324	127,980,450	183,088,751	55,108,301	161,774
	1921	588	16,898	16,025,728	144,978,255	180,374,789	35,396,534	(2)
	1919	600	26,296	25,363,132	185,040,522	281,143,587	96,103,065	125,939
	1914	784	22,815	10,532,005	107,954,644	153,196,152	45,241,508	113,926
Fireworks	1929	50	1,811	1,930,595	2,464,617	6,583,502	4,118,885	1,746
	1927	36	1,564	1,395,024	2,623,672	5,884,939	3,261,267	1,800
	1925	41	1,446	1,420,093	2,309,200	6,031,435	3,632,235	1,148
	1923	38	1,224	1,156,120	1,830,933	4,977,008	3,146,075	941
	1921	37	1,229	1,116,075	1,917,104	4,726,870	2,809,766	(2)
	1919	57	1,222	994,851	2,108,150	4,629,984	2,521,828	1,005
	1914	41	1,324	616,279	1,206,006	2,296,236	1,090,230	707
Glue and gelatin	1929	74	2,993	4,236,092	18,978,027	32,458,019	13,479,992	23,584
	1927	61	3,226	4,524,232	19,222,384	31,195,807	11,973,423	24,763
	1925	55	3,325	3,976,383	15,337,870	25,763,977	10,426,107	22,807
	1923	50	3,651	4,075,904	14,590,638	24,366,097	9,775,459	24,708
	1921	47	2,915	3,573,149	13,401,855	21,342,004	7,940,146	(2)
	1919	62	4,264	4,776,724	19,279,905	32,134,067	12,854,162	16,979
	1914	57	3,129	1,853,548	9,367,922	13,732,824	4,364,902	13,299
Grease and tallow, not including lubricating greases	1929	297	5,475	7,862,149	40,142,447	61,607,990	21,465,543	41,686
	1927	247	5,052	7,402,936	38,272,446	56,279,958	18,007,512	34,069
	1925	263	5,303	7,508,013	33,713,150	51,442,186	17,729,036	30,840
	1923	254	5,248	7,004,170	31,274,806	48,633,681	17,358,875	26,275
	1921	265	4,428	5,428,939	17,786,592	27,206,011	9,419,419	(2)
	1919	482	6,647	7,954,378	47,756,341	67,265,206	19,508,865	25,544
	1914	369	5,106	3,512,085	17,060,872	24,900,519	7,839,647	17,935

See footnotes at end of summary.

SUMMARY FOR GROUP 6.—CHEMICALS AND ALLIED PRODUCTS: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]	Horsepower
Chemicals and allied products, etc.—Continued.								
Ink, printing	1929	147	2,448	$3,957,185	$19,204,715	$42,749,992	$23,545,277	20,300
	1927	123	2,288	3,665,199	16,054,110	37,734,493	21,680,383	18,901
	1925	109	2,150	3,346,071	16,252,786	34,753,329	18,500,543	17,041
	1923	99	1,975	2,858,742	14,779,280	29,412,122	14,632,833	14,703
	1921	97	1,676	2,470,097	10,644,453	20,869,477	10,225,024	(2)
	1919	90	1,988	2,574,920	14,661,115	26,244,470	11,583,355	10,229
	1914	70	1,391	1,063,959	6,805,874	13,830,312	7,024,438	7,648
Ink, writing	1929	29	416	479,995	1,992,573	4,594,974	2,602,401	847
	1927	24	491	576,091	2,208,835	5,342,027	3,133,192	743
	1925	28	524	596,200	2,424,311	6,084,315	3,660,004	700
	1923	31	578	634,874	2,653,486	6,107,379	3,453,893	695
	1921	33	504	546,058	2,062,291	4,980,148	2,917,857	(2)
	1919	61	702	596,168	3,320,346	6,433,941	3,113,595	610
	1914	54	512	262,786	1,236,227	2,783,642	1,547,415	561
Liquors, malt	1919	729	34,259	45,170,432	94,792,659	379,905,085	285,112,426	322,130
	1914	1,250	62,070	53,243,743	129,724,396	442,148,597	312,424,201	405,049
Liquors, vinous	1929	24	186	277,963	608,857	2,447,912	1,839,055	1,188
	1927	13	150	177,073	1,206,217	2,692,856	1,486,639	999
	1925	27	265	262,343	1,764,623	3,435,657	1,671,034	1,499
	1923	38	515	524,029	2,958,555	5,830,883	2,872,328	2,935
	1921	72	415	417,005	1,602,750	4,757,334	3,064,584	(2)
	1919	342	1,011	1,013,898	8,115,841	17,454,194	9,338,353	5,189
	1914	318	2,292	1,194,433	9,489,428	16,618,378	7,128,950	9,339
Mucilage, paste, and other adhesives, except glue and rubber cement	1929	84	414	546,926	3,668,707	6,638,387	2,969,680	2,564
	1927	80	502	679,468	4,270,361	7,945,403	3,675,042	2,219
	[7] 1925	84	561	766,251	5,562,740	9,853,302	4,290,562	2,574
Paints and varnishes	1929	1,063	20,211	42,244,695	334,132,065	568,975,838	234,843,773	180,315
	1927	1,006	28,061	40,184,732	307,724,370	519,009,842	211,285,472	163,187
	1925	923	25,490	35,419,552	293,943,040	470,736,264	176,793,224	143,111
	1923	826	22,818	29,871,195	248,954,692	404,134,231	155,179,539	114,281
	1921	804	18,015	23,293,275	171,397,822	274,310,314	102,912,492	(2)
	1919	830	21,507	24,118,159	217,112,372	340,346,803	123,234,431	84,827
	1914	800	16,083	10,180,288	88,465,757	145,623,691	57,157,934	67,568
Patent or proprietary medicines and compounds	1929	1,522	16,434	18,780,980	94,769,833	318,906,928	224,137,095	44,538
	1927	1,282	15,071	16,667,425	84,640,850	278,242,929	193,602,079	34,082
	1925	1,279	14,802	15,592,017	84,789,647	247,564,046	162,774,399	33,840
	1923	1,363	17,353	16,914,859	88,802,058	237,494,447	148,692,389	29,998
	1921	1,436	13,800	13,654,434	69,571,327	175,898,330	106,327,003	(2)
	1919	2,467	17,444	13,748,813	88,819,417	212,162,255	123,342,838	25,409
	1914	2,903	13,328	6,675,168	35,940,434	102,463,374	66,522,940	18,326
Perfumes, cosmetics, and other toilet preparations	1929	815	13,109	13,762,961	58,298,879	193,440,550	135,141,671	12,150
	1927	705	10,463	10,965,085	52,705,346	161,245,659	108,480,313	10,431
	1925	594	8,714	8,536,510	46,932,099	120,510,453	82,577,754	7,381
	1923	465	7,761	7,102,044	37,635,988	100,241,486	62,605,498	6,502
	1921	422	5,838	5,358,337	28,012,720	72,540,904	44,528,184	(2)
	1919	569	5,405	3,983,016	26,147,026	59,613,391	33,466,365	2,196
	1914	496	2,597	1,279,899	7,464,786	16,899,101	9,434,315	1,815
Rayon and allied products [6]	1929	29	39,106	44,697,129	33,334,753	149,540,107	116,211,354	195,844
	1927	19	26,341	28,649,441	25,747,792	109,888,336	84,140,544	122,406
	1925	14	19,128	22,975,605	18,477,965	88,060,062	69,532,097	66,906
Salt	1929	58	5,458	6,735,484	14,187,797	37,868,697	23,680,900	57,711
	1927	58	5,961	7,117,454	14,664,126	34,329,236	19,665,110	55,928
	1925	70	6,308	7,260,552	13,848,644	34,253,056	20,404,412	54,647
	1923	75	6,809	8,129,492	16,476,623	36,837,162	20,360,539	58,101
	1921	79	5,993	7,147,512	16,407,355	33,158,558	16,751,203	(2)
	1919	86	6,495	7,353,420	16,027,791	37,513,821	21,486,030	42,051
	1914	98	5,089	3,041,294	6,273,030	14,070,333	7,797,303	29,007
Soap	1929	282	14,363	18,994,656	180,352,984	310,191,530	129,838,546	65,856
	1927	256	13,432	19,715,931	172,244,130	287,059,935	114,815,805	62,025
	1925	272	15,406	18,526,104	184,873,537	278,273,107	93,399,570	56,697
	1923	270	17,002	20,776,443	173,545,981	276,402,838	102,856,857	74,820
	1921	283	16,558	18,864,713	150,355,643	240,194,619	89,838,976	(2)
	1919	348	20,436	21,228,063	238,518,858	316,740,115	78,221,257	33,700
	1914	371	14,172	8,087,937	88,866,786	127,942,441	39,075,655	34,105
Tanning materials, natural dyestuffs, mordants and assistants, and sizes	1929	126	2,419	3,113,617	25,335,629	39,836,035	14,500,406	22,575
	1927	122	2,414	2,971,477	23,073,925	35,077,033	12,003,108	29,172
	1925	125	2,495	2,987,070	22,763,114	34,783,703	12,020,589	32,634
	1923	125	3,243	3,800,783	24,033,018	35,971,012	11,938,594	32,833
	1921	123	2,993	3,007,547	20,105,517	28,310,708	8,205,191	(2)
	1919	144	4,342	4,734,614	34,592,608	53,744,283	19,151,585	34,295
	1914	112	2,839	1,613,116	13,237,995	20,620,336	7,382,341	23,288
Wood distillation and charcoal manufacture	1929	91	4,648	5,203,240	14,791,111	20,593,672	14,802,561	25,509
	1927	88	4,537	4,739,153	15,422,575	27,630,487	12,207,912	16,833
	1925	106	4,217	4,304,904	15,824,055	25,283,432	9,459,377	17,907
	1923	123	4,123	4,324,848	17,268,950	29,695,423	12,426,473	14,910
	1921	108	2,130	1,913,503	6,727,787	9,677,552	2,949,765	(2)
	1919	156	5,155	5,465,761	20,319,973	33,134,732	12,814,759	15,320
	1914	142	3,010	1,645,335	6,725,188	10,284,597	3,559,409	10,179

See footnotes at end of summary.

SUMMARY FOR GROUP 6.—CHEMICALS AND ALLIED PRODUCTS: 1914 TO 1929—Continued

[See note at head of this table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products	Value added by manufacture[1]	Horsepower
Animal, vegetable, and compounded oils, total	1929	679	20,039	$17,577,252	$391,282,321	$470,116,084	$78,833,763	332,150
	1927	761	24,762	23,818,129	393,894,528	495,912,639	102,018,111	320,217
	1925	773	22,700	20,946,169	455,642,088	559,855,970	104,213,882	284,027
	1923	773	19,817	17,389,681	386,661,899	460,951,470	74,289,571	265,235
	1921	910	22,071	19,620,840	330,415,581	384,953,568	54,537,987	(2)
	1919	1,095	35,190	30,199,820	718,943,835	864,060,955	145,117,120	339,502
	1914	1,193	25,596	11,113,434	248,516,931	297,363,320	48,846,389	277,740
Oil, cake, and meal, cottonseed	1929	553	15,825	11,203,227	249,019,800	298,376,039	49,356,239	284,395
	1927	547	18,434	14,258,555	220,038,437	276,338,488	56,300,051	270,500
	1925	535	16,215	11,411,854	244,315,214	295,084,526	51,369,312	239,005
	1923	511	12,745	7,908,305	197,514,913	226,387,758	28,872,845	223,742
	1921	610	16,163	12,339,895	194,864,331	217,225,030	22,360,699	(2)
	1919	711	26,786	20,615,193	495,192,294	581,244,798	86,052,504	289,981
	1914	882	21,810	8,489,692	180,976,413	212,127,024	31,150,611	249,781
Oil, cake, and meal, linseed	1929	29	2,715	4,097,712	101,562,787	119,926,867	18,364,080	31,191
	1927	33	2,718	4,324,938	97,750,350	111,543,845	13,793,495	28,273
	1925	33	2,692	4,290,063	121,762,284	140,513,542	18,751,258	25,869
	1923	34	2,631	3,783,516	102,689,799	113,221,318	10,531,519	21,674
	1921	28	2,073	3,019,376	58,452,351	71,032,261	12,579,910	(2)
	1919	26	2,173	3,052,269	100,577,538	120,638,100	20,060,562	17,621
	1914	25	1,488	1,127,169	39,555,408	44,882,538	5,327,130	15,511
Oils, essential	1929	22	265	325,881	3,804,228	6,653,353	2,849,125	1,894
	1927	14	169	258,036	3,427,334	4,041,861	1,214,527	758
	1925	14	178	281,395	4,362,512	5,881,689	1,519,177	[4] 1,164
	1923	17	170	237,409	2,255,772	3,184,124	928,352	1,388
	1921	27	299	363,879	2,548,439	3,421,690	873,251	(2)
	1919	78	321	391,213	3,903,417	5,698,403	1,794,986	1,833
	1914	105	249	133,272	1,564,835	2,313,606	748,771	1,959
Oils, not elsewhere classified [5]	1929	75	1,234	1,950,432	36,895,506	45,159,825	8,264,319	14,670

[1] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

[2] Not called for on schedule.

[3] The comparableness of the figures for 1914 and 1919 with those for later years is affected by the decrease in the legal manufacture of alcoholic beverages resulting from the enactment of the national prohibition act.

[4] Revised; revision not carried into total for subgroup or aggregate for group.

The figures for "Chemicals, not elsewhere classified" for 1923 and prior years include data for establishments engaged primarily in the manufacture of rayon; and for 1925 and prior years they include data for establishments whose principal products were compressed and liquefied gases. The manufacture of sulphuric, nitric, and mixed acids is now included in the "Chemicals, not elsewhere classified" industry, but was classified as a separate industry at the censuses for 1927 and prior years. The figures for the earlier years as presented in this table have been adjusted so as to make them comparable with those for 1929.

[5] See note 5.

[6] No comparable statistics available for earlier years.

[7] At previous censuses the "Oils, not elsewhere classified" industry included the manufacture of lubricating oils other than those made in petroleum refineries, but at the census for 1929 such oils have been treated as products of the "Lubricating oils and greases, not made in petroleum refineries" industry, Group 7. Because of this change in classification no comparative figures for years prior to 1920 are available. No adjustments have been made in the totals for earlier years for the subgroup or the aggregate for the group because of the omission of these data.

ALCOHOL, ETHYL, AND DISTILLED LIQUORS

Description of the industry.—This industry embraces those establishments engaged primarily in the production of ethyl alcohol, pure or denatured, whisky, and nonbeverage rum. (Methanol, or wood alcohol, is a product of the "Wood distillation and charcoal manufacture" industry.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	30	1,484	$2,131,188	$35,046,063	[3] $54,284,665	$19,238,602	13,577
1927	28	1,180	1,704,518	19,309,772	33,971,150	14,661,378	7,261
1925	31	1,395	1,838,318	38,564,481	57,705,704	19,141,223	10,268
1923	30	1,062	1,474,166	17,770,264	33,000,099	15,229,835	8,129
1921	33	1,141	1,626,949	22,269,046	28,788,965	6,519,919	(4)
1919	34	1,380	1,716,699	19,655,522	31,854,085	12,198,563	16,494
1914	434	6,295	3,994,469	40,996,781	206,778,708	165,781,927	51,670
1909	613	6,430	3,074,395	35,976,893	204,699,412	168,722,519	46,054
1904	805	5,355	2,657,025	25,625,858	131,269,886	105,644,028	42,296
1899	965	3,720	1,732,798	15,145,363	96,793,681	81,648,318	31,378
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	(5)	25.8	25.0	81.5	59.8	31.2	87.0
1925–1927	(5)	−15.4	−7.3	−49.9	−41.1	−23.4	−29.3
1923–1925	(5)	31.4	24.7	117.0	74.9	25.7	26.3
1921–1923	(5)	−6.9	−9.4	−20.2	14.6	133.6	----------
1919–1921	(5)	−17.3	−5.2	13.3	−9.6	−46.6	----------
1919–1929	(5)	7.5	24.1	78.3	70.4	57.7	−17.7
1909–1919	−94.4	−78.5	−44.2	−45.4	−84.4	−92.8	−64.2
1899–1909	−36.5	72.8	77.4	137.5	111.5	106.6	46.8

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Includes $6,351,788, representing value of commodities other than ethyl alcohol or distilled liquors, made as secondary products by establishments in this industry; does not include $2,270,248, value of ethyl alcohol and distilled liquors made as secondary products by establishments in other industries.
[4] Not called for on schedule.
[5] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States for which statistics are shown in combination with those for others, however, reported larger values of products than California. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	30	368	1,484	13,577	7,484	6,093	$1,195,111	$2,131,188	$35,046,063	$33,442,291	$1,603,772	$54,284,665	$19,238,602
	1927	28	296	1,180	7,261	4,338	2,923	866,813	1,704,518	19,309,772	17,886,505	1,423,267	33,971,150	14,661,378
	1919	34	359	1,380	16,494	8,231	8,263	1,137,784	1,716,699	19,655,522	18,560,658	1,094,864	31,854,085	12,198,563
Individual States:														
California	1929	4	32	120	2,616	1,405	1,211	100,755	191,674	1,238,057	1,130,284	107,773	2,311,280	1,073,223
	1927	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
	1919	3	55	234	5,969	454	5,515	150,054	329,032	2,442,790	2,222,951	219,839	3,968,431	1,525,641
Louisiana	1929	9	79	342	2,061	1,782	279	199,855	381,848	9,050,342	8,648,697	401,645	13,592,515	4,542,173
	1927	8	62	270	1,862	1,813	49	127,200	335,802	3,977,825	3,658,802	319,023	6,292,750	2,314,925
	1919	6	86	279	1,692	310	1,382	257,728	330,482	4,177,976	3,934,106	243,870	8,246,496	4,068,520
Pennsylvania	1929	3	72	302	3,818	1,876	1,942	239,530	551,225	8,870,899	8,531,714	339,185	12,615,816	3,744,917
	1927	3	50	124	844	215	629	152,410	287,461	2,378,315	2,243,205	135,110	3,904,268	1,525,953
Groups of States:														
Ill., 3 est.; Ind., 1	1929	4	40	225	2,010	1,366	644	188,491	295,974	5,192,068	5,033,332	158,736	8,690,643	3,498,575
Md., 1 est.; Mass., 3; N. Y., 1	1929	5	87	317	1,225	515	710	241,961	466,192	6,707,931	6,401,258	306,673	11,456,619	4,748,688
Other States (Ky., 2 est.; N. J., 3)	1929	5	58	178	1,847	540	1,307	224,519	244,275	3,986,766	3,697,006	289,760	5,617,792	1,631,026
States not shown separately.	[5] 1927	17	184	786	4,555	2,310	2,245	587,203	1,081,255	12,953,632	11,984,498	969,134	23,774,132	10,820,500
	[6] 1919	25	218	867	8,833	7,467	1,366	730,002	1,057,185	13,034,756	12,403,601	631,155	19,639,158	6,604,402

[1] Not including proprietors and firm members, as follows: For 1929, 1; 1927, 3; 1919, 2. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 1,853; 1927, 1,479; 1919, 1,741.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Withheld from publication in order to avoid disclosing data for individual establishments.
[5] California, 2 establishments; Illinois, 2; Indiana, 2; Kentucky, 1; Maryland, 1; Massachusetts, 3; New Jersey, 3; New York, 2; Ohio, 1.
[6] Connecticut, 1 establishment; Illinois, 6; Indiana, 1; Kentucky, 1; Maryland, 1; Massachusetts, 4; New Jersey, 2; New York, 4; Ohio, 1; Pennsylvania, 3; South Carolina, 1.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	610	*Horsepower* 13,577	323	*Horsepower* 7,261	349	*Horsepower* 10,268	268	*Horsepower* 16,494	1,331	*Horsepower* 51,670	100.0	100.0
Prime movers, total	125	7,484	80	4,338	104	7,848	91	8,231	1,114	50,143	55.1	49.9
Steam, total	119	7,292	80	4,338	104	7,848	87	7,599	1,054	49,567	53.7	46.1
Engines	91	5,725	67	3,821	101	7,833	82	7,039	(1)	(1)	42.2	42.7
Turbines	28	1,567	13	517	3	15	5	560	(1)	(1)	11.5	3.4
Internal-combustion engines	3	57					3	32	49	442	0.4	0.2
Water wheels and water turbines	3	135					1	600	11	134	1.0	3.6
Electric motors driven by purchased energy	485	6,093	243	2,923	245	2,420	177	8,263	217	1,527	44.9	50.1
Electric motors, total	582	7,842	394	5,065	314	3,629	356	10,581	834	7,361	100.0	100.0
Driven by purchased energy	485	6,093	243	2,923	245	2,420	177	8,263	217	1,527	77.7	78.1
Driven by energy generated in establishments reporting	97	1,749	151	2,142	69	1,209	179	2,318	617	5,834	22.3	21.9
Electric generators	19	*Kilowatts* 1,769	19	*Kilowatts* 1,375	18	*Kilowatts* 1,287	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 8,818,328		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	1,484	*1,313*	1,339	1,414	1,326	1,447	1,522	1,432	1,602	1,677	1,739	1,577	1,419	75.5
1925	1,395	1,526	1,436	1,178	*1,177*	1,218	1,185	1,328	1,418	1,474	1,606	1,604	1,588	73.3
1919	1,380	1,672	1,489	1,285	1,157	1,121	*1,058*	1,122	1,293	1,458	1,569	1,652	1,834	57.7
1914	6,295	6,899	6,841	7,072	6,849	6,370	5,691	*5,261*	5,378	6,095	6,164	6,240	6,690	74.3
1909	6,430	7,235	7,313	7,179	6,997	6,590	5,513	*5,232*	5,303	5,576	6,115	6,540	7,554	69.3
California	120	*109*	111	117	131	117	124	120	121	121	130	129	111	83.2
Louisiana	342	306	297	284	*265*	349	367	310	383	418	435	397	293	60.0
Pennsylvania	302	*221*	256	282	280	301	331	313	360	358	359	276	283	61.4

AMMUNITION AND RELATED PRODUCTS

Description of the industry.—This industry, as defined for census purposes, consists in the manufacture of ammunition and of such related products as fuses, blasting and detonating caps, miners' squibs, railroad torpedoes, etc. It does not, however, include the manufacture of dynamite and other explosives for use in blasting, of nitroglycerin for "shooting" oil wells, or of fireworks. Commercial manufacturers only are classified in the ammunition industry, no data having been collected from Government establishments.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	21	7,223	$8,272,618	$19,841,665	$43,808,520	$23,966,855	17,061
1927	20	7,602	8,265,963	20,945,130	45,602,184	24,657,054	17,175
1925	27	7,777	7,986,834	22,819,987	41,707,396	18,887,409	23,316
1923	27	10,470	10,816,647	27,741,517	51,508,622	23,767,105	23,172
1921	28	8,370	7,896,382	16,006,385	32,350,445	16,344,060	(3)
1919	42	22,816	23,587,692	38,101,602	88,038,223	49,936,621	39,128
1914	32	11,493	6,750,986	16,276,575	30,840,472	14,563,897	11,354
1909	39	8,713	4,508,597	15,451,929	26,053,065	10,601,136	10,317
1904	32	7,410	4,032,310	10,600,929	19,930,821	9,329,892	4,961
1899	33	5,231	2,560,954	7,436,748	13,027,635	5,590,887	2,802
	PER CENT OF INCREASE OR DECREASE (−)						
1927–1929	(4)	−5.0	0.1	−5.3	−3.9	−2.8	−0.7
1925–1927	(4)	−2.3	3.5	−8.2	9.3	30.5	−26.3
1923–1925		−25.7	−26.2	−17.7	−19.0	−20.5	0.6
1921–1923	(4)	25.1	37.0	73.3	59.2	45.4	
1919–1921	(4)	−63.3	−66.5	−58.0	−63.3	−67.3	
1919–1929	(4)	−68.3	−64.9	−47.9	−50.2	−52.0	−56.4
1909–1919	(4)	161.9	423.2	146.6	237.9	371.0	279.3
1899–1909	(4)	66.6	76.1	107.8	100.0	89.6	268.2

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS FOR THE UNITED STATES, 1929, 1927, AND 1919, AND BY STATES, 1929 AND 1919

[Connecticut is the only State for which separate figures can be given without disclosing an approximation of the data for individual establishments]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	21	739	7,223	17,061	9,800	7,261	$1,785,523	$8,272,618	$19,841,665	$19,185,624	$656,041	$43,808,520	$23,966,855
	[4] 1927	20	873	7,602	17,175	9,453	7,722	2,003,673	8,265,963	20,945,130	20,073,993	871,137	45,602,184	24,657,054
	1919	42	4,645	22,816	39,128	21,542	17,586	7,607,151	23,587,692	38,101,602	36,548,160	1,553,442	88,038,223	49,936,621
Connecticut	1929	3	296	3,232	13,288	7,970	5,318	680,219	4,137,811	11,105,024	10,687,359	417,665	22,519,731	11,414,707
	1919	3	2,896	12,489	21,542	15,881	5,661	3,886,412	12,253,790	15,933,721	15,073,855	859,866	39,996,945	24,063,224
Groups of States: Calif., 3 est.; Colo., 1	1929	4	33	292	727	.....	727	120,430	322,559	932,355	911,205	21,150	2,604,149	1,671,794
Other States (Ill., 1 est.; Ind., 1; Mass., 1; Mich., 1; Minn., 2; N. J., 2; N. Y., 1; Ohio, 2; Pa., 3)	1929	14	410	3,699	3,046	1,830	1,216	984,874	3,812,248	7,804,286	7,587,060	217,226	18,684,640	10,880,354
States not shown separately	[5] 1919	39	1,749	10,327	17,586	5,661	11,925	3,720,739	11,333,902	22,107,881	21,474,305	693,576	48,041,278	25,373,397

[1] Not including proprietors and firm members, as follows: For 1929, 3; 1927, none; 1919, 10. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 7,965; 1927, 8,475; 1919, 27,471.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] California, 2 establishments; Colorado, 1; Connecticut, 3; Illinois, 1; Indiana, 1; Massachusetts, 1; Michigan, 1; Minnesota, 2; New Jersey, 2; New York, 1; Ohio, 2; Pennsylvania, 3. No separate figures can be given for any one of these States without disclosing an approximation of the data for individual establishments.
[5] California, 3 establishments; Colorado, 1; Illinois, 1; Indiana, 2; Maryland, 1; Massachusetts, 6; Michigan, 1; Minnesota, 2; New Jersey, 5; New York, 3; Ohio, 3; Pennsylvania, 10; Rhode Island, 1.

TABLE 3.—PRODUCTS, BY KIND AND VALUE, 1923 TO 1929, AND SELECTED MATERIALS CONSUMED, BY KIND, QUANTITY, AND COST, 1929

[The figures for products for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

	1929	1927	1925	1923
PRODUCTS				
1. Ammunition and related products industry, all products, total value	$43,808,520	$45,602,154	$41,707,396	$51,508,622
2. Ammunition and related products	$42,811,546	$41,230,365	$39,264,274	$46,712,713
3. Other products (not normally belonging to the industry)	$996,974	$4,371,819	$2,443,122	$4,795,909
4. Ammunition and related products made as secondary products in other industries, value	$2,087,012	$2,233,308	$1,862,147	$784,032
Ammunition and related products, all industries: Aggregate value (sum of 2 and 4)	$44,898,558	$43,463,673	$41,126,421	$47,496,745
Ammunition, total value	$31,685,804	$30,934,182	$29,530,904	$36,621,542
Paper shells, loaded— Number of establishments	5	5	8	8
Value	$21,663,280	$19,197,637	$18,874,408	$25,850,963
Cartridges— Number of establishments	5	5	7	7
Total value	$9,382,645	$10,569,588	$8,623,181	$9,645,196
Rifle	$6,814,060	$7,789,757	$4,376,911	
Revolver and pistol	[1] $2,568,585	[1] $2,779,831	[2] $4,246,270	[3]
Other, value	$639,939	$1,166,957	$2,033,315	$1,125,383
Blasting and detonating caps and railroad torpedoes— Number of establishments	8	9	11	9
Value	$9,169,905	$7,302,662	$6,190,127	$5,644,214
Safety fuses, miners' squibs, etc.— Number of establishments	11	11	13	11
Value	$4,042,789	$5,226,829	$5,405,390	$5,230,989
MATERIALS CONSUMED [4]				
Lead (pig, sheet, bar, etc.): Pounds	79,253,223			
Cost	$5,403,425			
Copper (ingots, sheet, bar, etc.): Pounds	3,722,323	[5]	[5]	[5]
Cost	$711,611			
Brass (bar, sheet, etc.): Pounds	19,154,173			
Cost	$3,771,399			

[1] Value reported for blank cartridges included to avoid disclosing production of individual establishments.
[2] Includes $73,533 for blank cartridges.
[3] No data.
[4] The difference between the sum of the costs of the several kinds of materials shown in this table and the total cost of materials as given in Tables 1 and 2 is due to the fact that this table covers only certain specified materials, whereas the others cover all materials.
[5] Not called for on schedule.

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	1,154	*Horsepower* 17,061	1,055	*Horsepower* 17,175	1,125	*Horsepower* 23,316	1,858	*Horsepower* 39,128	238	*Horsepower* 11,354	100.0	100.0
Prime movers, total	38	9,800	17	9,453	69	14,228	94	21,542	83	10,436	57.4	55.1
Steam, total	35	9,649	13	9,323	60	12,635	80	19,160	62	7,149	56.6	49.0
Engines	22	3,048	4	1,480	36	4,259	59	6,990	[1]	[1]	17.9	17.9
Turbines	13	6,601	9	7,843	24	8,376	21	12,170	[1]	[1]	38.7	31.1
Internal-combustion engines			1	5	6	1,468	11	2,241	17	3,135		5.7
Water wheels and water turbines	3	151	3	125	3	125	3	141	4	152	.8	.4
ectric motors driven by purchased energy	1,116	7,261	1,038	7,722	1,056	9,088	1,764	17,586	155	918	42.6	44.9
Electric motors, total	2,472	13,937	2,588	15,291	3,324	17,593	3,641	33,559	893	12,698	100.0	100.0
Driven by purchased energy	1,116	7,261	1,038	7,722	1,056	9,088	1,764	17,586	155	918	52.1	52.4
Driven by energy generated in establishments reporting	1,356	6,676	1,550	*Kilowatts* 7,569	2,268	*Kilowatts* 8,505	1,877	15,973	738	11,780	47.9	47.6
Electric generators	9	*Kilowatts* 3,807	12	*Kilowatts* 6,164	15	*Kilowatts* 6,085	[2]	[2]	[2]	[2]		
Electric energy purchased [3]		*Kilowatt-hours* 10,948,175		[4]		[4]		[2]		[2]		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND FOR CONNECTICUT, 1929

[Connecticut is the only State for which separate figures can be given without disclosing an approximation of the data for individual establishments. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	7,223	7,016	7,205	7,330	7,618	7,608	7,659	7,566	7,479	7,257	6,897	6,617	*6,426*	83.9
1925	7,777	*7,097*	7,501	7,852	8,115	7,946	8,038	8,001	8,023	7,906	7,667	7,644	7,506	87.1
1919	22,816	46,771	33,327	25,965	20,436	19,113	18,809	18,768	17,285	*17,121*	17,713	18,795	19,629	36.6
1914	11,493	10,826	10,768	10,934	10,886	10,814	10,936	10,820	*10,002*	11,366	12,565	13,422	14,577	68.6
Connecticut	3,232	3,367	3,365	3,286	3,299	3,351	3,394	3,429	3,311	3,159	3,012	2,914	*2,897*	84.5

BAKING POWDERS, YEAST, AND OTHER LEAVENING COMPOUNDS

Description of the industry.—This classification covers establishments engaged primarily in the manufacture of baking powders, yeast, and other compounds used for leavening purposes.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products[1]	Value added by manufacture[2]	Horsepower
1929	48	3,006	$4,846,730	$22,598,378	$52,336,812	$29,738,434	42,788
1927	47	3,032	4,793,624	24,619,450	[3] 55,716,025	[3] 31,096,575	42,816
1925	49	2,931	4,063,260	23,375,795	[3] 53,347,406	[3] 29,971,621	36,633
1923	57	3,507	4,919,858	21,656,521	51,691,123	30,034,602	35,845
1921	62	3,557	4,479,099	24,666,261	52,885,888	28,219,627	[4]
1919	88	3,331	3,554,534	26,635,429	46,230,312	19,594,883	20,071
1914	124	2,270	1,241,316	10,894,844	22,339,347	11,444,503	7,862
1909	144	2,155	1,045,544	9,337,985	20,774,588	11,436,603	3,299
1904	164	2,449	1,041,606	8,940,076	19,042,521	10,102,445	2,949
1899	191	1,938	717,000	7,126,907	14,568,380	7,441,413	2,338
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	[5]	—0.9	1.1	—8.2	—6.1	—4.4	—0.1
1925–1927	[5]	3.4	18.0	5.3	4.4	3.8	16.9
1923–1925	[5]	—16.4	—17.4	7.9	3.2	—0.2	2.2
1921–1923	[5]	—1.4	9.8	—12.2	—2.3	6.4	
1919–1921	[5]	6.8	26.0	—7.4	14.4	44.0	
1919–1929	[5]	—9.8	36.4	—15.2	13.2	51.8	113.2
1909–1919	—38.9	54.6	240.0	185.2	122.5	71.3	508.4
1899–1909	—24.6	11.2	45.8	31.0	42.6	53.7	41.1

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS.—Value Added by Manufacture.
[3] Revised.
[4] Not called for on schedule.
[5] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Certain of the States for which statistics are shown in combination with those for others, however, reported larger values of products than Maryland. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees[1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products[2]	Value added by manufacture[3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	48	653	3,006	42,788	27,749	15,039	$2,400,835	$4,846,730	$22,598,378	$21,362,531	$1,235,847	$52,336,812	$29,738,434
	1927	47	992	3,032	42,816	27,002	15,814	2,676,796	4,793,624	24,619,450	23,220,875	1,398,575	[4] 55,716,025	[4] 31,096,575
	1919	88	1,510	3,331	20,071	14,360	5,711	2,807,416	3,554,534	26,635,429	25,352,159	1,283,270	46,230,312	19,594,883
Individual States:														
Illinois	1929	10	287	1,135	12,689	7,161	5,528	1,110,986	1,978,344	9,602,851	9,183,956	418,895	24,902,842	15,299,991
	1927	12	530	1,035	14,198	7,061	7,137	1,319,909	1,863,467	11,064,864	10,609,194	455,670	[4] 26,401,869	[4] 15,337,005
	1919	14	710	922	6,058	3,655	2,403	946,468	942,760	8,939,811	8,687,142	252,669	15,682,387	6,742,576
Maryland	1929	3	20	137	2,651	1,930	721	75,525	225,765	615,251	536,840	78,411	1,292,049	676,798
	1927	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]	[6]
	1919	7	49	169	627	300	327	72,694	163,471	758,849	697,922	60,927	1,195,728	436,879
New York	1929	11	102	571	13,158	12,796	362	318,766	971,203	3,959,861	3,670,155	289,706	6,836,214	2,876,353
Groups of States:														
Calif., 3 est.; N. Dak., 1; Wash., 1; Wis., 2	1929	7	56	331	5,120	750	4,370	230,135	625,918	1,916,070	1,699,294	216,776	3,707,854	1,791,784
Ind., 1 est.; Iowa, 1; Ohio, 4; Mo., 1	1929	7	62	189	2,360	2,192	168	171,490	269,366	2,713,355	2,628,376	84,979	5,903,905	3,190,550
D. C., 1 est.; Tenn., 1; Va., 1	1929	3	33	100	4,992	2,920	2,072	104,364	320,371	824,841	742,677	82,164	1,667,893	843,052
Mass., 1 est.; N. J., 3; Pa., 2; R. I., 1	1929	7	93	453	1,818	----------	1,818	389,569	455,763	2,966,149	2,901,233	64,916	8,026,055	5,059,906
States not shown separately	[7] 1927	35	462	1,997	28,618	19,941	8,677	1,356,887	2,930,157	13,554,586	12,611,681	942,905	[4] 29,314,156	[4] 15,759,570
	[8] 1919	67	751	2,240	13,386	10,405	2,981	1,788,254	2,448,303	16,936,769	15,967,095	969,674	29,352,197	12,415,428

[1] Not including proprietors and firm members, as follows: For 1929, 8; 1927, 15; 1919, 52. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 3,667; 1927, 4,039; 1919, 4,893.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Revised.
[5] Withheld from publication in order to avoid disclosing data for individual establishments.
[6] California, 3 establishments; District of Columbia, 1; Indiana, 1; Iowa, 1; Maryland, 3; Massachusetts, 1; Missouri, 1; New Jersey, 1; New York, 12; North Dakota, 1; Ohio, 3; Pennsylvania, 1; Rhode Island, 1; Virginia, 2; Washington, 1; Wisconsin, 2.
[7] California, 5 establishments; Colorado, 1; Connecticut, 1; District of Columbia, 1; Indiana, 4; Iowa, 1; Kansas, 2; Massachusetts, 2; Michigan, 2; Minnesota, 2; Missouri, 1; New Jersey, 3; New York, 21; Ohio, 4; Oklahoma, 1; Pennsylvania, 7; Rhode Island, 2; South Carolina, 1; Texas, 1; Virginia, 2; Washington, 1; Wisconsin, 2.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1929 TO 1929

[The figures given for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929	1927	1925	1923
1. "Baking powders, yeast, and other leavening compounds" industry, all products, total value	$52,336,812	[1] $55,716,025	[1] $53,347,406	$51,691,123
2. Baking powders, yeast, and other leavening compounds	47,313,407	[1] 49,916,787	[1] 48,845,738	48,305,934
3. Other products (not normally belonging to the industry)	5,023,405	[1] 5,799,238	[1] 4,501,668	3,385,189
4. Baking powders, yeast, and other leavening compounds made as secondary products in other industries, value	2,627,905	1,415,900	2,229,708	3,215,230

KIND	1929	1927	1925	1923
Baking powders, yeast, and other leavening compounds, all industries: Aggregate value (sum of 2 and 4)	$49,941,312	[1] $51,332,687	[1] $51,075,446	$51,521,164
Baking powders— Pounds	[1] 541,144,919	162,907,334	[2]	[2]
Value	[1] $49,941,312	$30,747,909	[2]	$30,676,951
Yeast and other leavening compounds— Pounds		288,195,440	[1,2] $51,075,446	[2]
Value		[1] $20,584,718		$20,844,213

[1] Revised.
[2] No data for quantity.
[3] Combined in order to avoid disclosing data for individual establishments.

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	1,434	*Horsepower* 42,788	1,373	*Horsepower* 42,816	1,019	*Horsepower* 36,633	558	*Horsepower* 20,071	348	*Horsepower* 7,862	100.0	100.0
Prime movers, total	169	27,749	157	27,002	152	25,221	105	14,360	101	6,493	64.9	71.5
Steam, total	166	27,667	153	26,919	150	25,183	99	14,272	88	6,245	64.7	71.1
Engines	138	18,096	127	18,323	118	17,133	83	10,262	(1)	(1)	42.3	51.1
Turbines	28	9,571	26	8,596	32	8,050	16	4,010	(1)	(1)	22.4	20.0
Internal-combustion engines	3	82	4	83	2	38	6	88	13	248	0.2	0.4
Electric motors driven by purchased energy	1,265	15,039	1,216	15,814	867	11,412	453	5,711	247	1,369	35.1	28.5
Electric motors, total	2,487	28,189	2,104	24,387	1,793	20,332	1,047	11,658	578	4,823	100.0	100.0
Driven by purchased energy	1,265	15,039	1,216	15,814	867	11,412	453	5,711	247	1,369	53.4	49.0
Driven by energy generated in establishments reporting	1,222	13,150	888	8,573	926	8,920	594	5,947	331	3,454	46.6	51.0
Electric generators	32	*Kilowatts* 5,569	34	*Kilowatts* 4,846	31	*Kilowatts* 4,200	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 20,159,189		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that o iminimum employment by *italic* figures]

STATE	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	
United States:														
1929	3,006	3,016	3,072	3,108	3,076	3,079	3,035	2,969	2,944	2,935	*2,905*	2,973	2,956	93.5
1925	2,931	2,988	3,088	3,018	2,974	2,920	2,863	2,861	2,821	*2,819*	2,909	2,949	2,966	91.3
1919	3,331	3,544	3,323	3,325	3,188	3,160	3,368	3,348	3,283	3,425	3,489	3,379	*3,140*	88.6
1914	2,270	2,267	2,281	2,323	2,302	2,389	2,382	2,220	2,194	2,278	2,286	*2,159*	*2,159*	90.4
1909	2,155	2,154	2,153	2,140	2,080	2,115	2,165	2,072	*2,040*	2,201	2,226	2,243	2,267	90.0
Illinois	1,135	1,156	1,185	1,189	1,180	1,185	1,140	1,105	1,093	*1,083*	1,086	1,123	1,099	91.1
Maryland	137	134	136	135	*133*	135	139	141	141	137	135	137	136	94.3
New York	571	587	579	594	587	590	572	549	*528*	557	538	577	595	88.7

BLACKING, STAINS, AND DRESSINGS

Description of the industry.—The establishments assigned to this industry classification are those engaged primarily in the manufacture of blackings, waxes, stains, polishes (including stove polish), dressings, etc., for leather, boots and shoes, automobile tops, etc.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products[1]	Value added by manufacture[2]	Horsepower
1929	170	1,617	$1,959,443	$8,345,234	$24,681,836	$16,336,602	3,317
1927	176	1,716	2,180,733	9,185,543	22,548,235	13,362,692	4,005
1925	171	1,869	2,164,430	9,733,455	25,054,969	15,321,514	2,659
1923	175	2,165	2,170,138	10,253,195	25,821,709	15,568,514	2,792
1921	173	1,666	1,522,333	9,362,119	18,452,864	9,090,745	(3)
1919	220	2,455	2,109,103	14,041,840	25,284,072	11,242,232	2,446
1914	197	1,766	877,434	5,128,614	9,881,594	4,752,980	2,442
1909	201	1,438	667,787	4,263,215	8,418,851	4,155,636	2,234
1904	138	1,218	495,963	3,096,807	5,941,042	2,844,235	1,786
1899	121	1,250	424,174	2,186,809	4,504,965	2,318,156	1,072
	PER CENT OF INCREASE OR DECREASE (–)						
1927-1929	–3.4	–5.8	–10.1	–9.1	9.5	22.3	–17.2
1925-1927	2.9	–8.2	0.8	–5.6	–10.0	–12.8	50.6
1923-1925	–2.3	–13.7	–0.3	–5.1	–3.0	–1.6	–4.8
1921-1923	1.2	30.0	42.6	9.5	39.9	71.3	----------
1919-1921	–21.4	–32.1	–27.8	–33.3	–27.0	–19.1	----------
1919-1929	–22.7	–34.1	–7.1	–40.6	–2.4	45.3	35.6
1909-1919	9.5	70.7	215.8	229.4	200.3	170.5	9.5
1899-1909	66.1	15.0	57.4	95.0	86.9	79.3	108.4

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees[1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products[2]	Value added by manufacture[3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	170	766	1,617	3,317	712	2,605	$2,025,838	$1,959,443	$8,345,234	$8,216,553	$128,681	$24,681,836	$16,336,602
	1927	176	754	1,716	4,005	772	3,233	1,771,845	2,180,733	9,185,543	9,067,175	118,368	22,548,235	13,362,692
	1919	220	1,131	2,455	[4] 2,446	1,661	[4] 785	2,619,283	2,109,103	14,041,840	13,909,136	132,704	25,284,072	11,242,232
Individual States:														
California	1929	12	30	41	186	--------	186	62,424	41,410	221,513	218,958	2,555	499,526	278,013
	1927	10	21	27	59	--------	59	66,305	33,517	228,777	227,080	1,697	530,684	301,907
	1919	7	3	12	9	--------	9	3,086	11,460	86,128	85,814	314	131,452	45,324
Illinois	1929	15	43	46	52	--------	52	114,295	67,294	301,600	295,492	6,108	833,816	532,216
	1927	17	42	58	76	8	68	82,894	82,327	318,881	312,748	6,133	807,738	488,857
	1919	25	101	167	151	48	103	198,147	136,425	929,662	921,064	8,598	1,584,746	655,084
Maryland	1929	7	29	53	56	18	38	67,497	41,670	152,558	149,944	2,614	403,324	250,766
	1927	7	26	43	48	18	30	67,847	35,094	170,387	167,329	3,058	412,107	241,720
	1919	6	27	18	9	--------	9	23,048	11,685	66,503	65,643	860	149,969	83,466
Massachusetts	1929	59	204	381	555	281	274	534,040	489,502	2,077,403	2,053,995	23,408	4,846,226	2,768,823
	1927	62	190	429	519	258	261	491,579	558,140	2,309,608	2,277,914	31,694	5,272,363	2,962,755
	1919	56	273	686	605	358	247	623,433	687,197	4,171,805	4,137,123	34,682	7,108,160	2,936,355
Missouri	1929	13	40	79	358	3	355	80,413	106,160	452,916	441,083	11,833	1,375,022	922,106
	1927	15	62	96	380	60	320	101,548	120,441	615,960	607,428	8,532	1,691,059	1,075,099
	1919	14	21	38	87	62	25	22,737	27,974	150,611	149,111	1,500	328,810	178,199

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS, BY STATES; 1929, 1927, AND 1919—Continued

[See note at head of this table]

STATE	Census year	Number of establishments	Salaried officers and employees[1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products[2]	Value added by manufacture[3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
New Jersey	1929	10	212	525	1,355	405	950	$556,631	$625,652	$2,926,208	$2,880,270	$45,938	$7,870,106	$4,943,898
	1927	11	221	498	1,384	405	979	420,165	764,356	2,409,093	2,373,228	35,865	7,686,559	5,277,466
	1919	11	77	301	352	330	22	142,332	242,904	999,053	974,547	24,506	1,754,846	755,793
New York	1929	21	88	133	246	--------	246	256,389	152,100	916,711	908,556	8,155	2,152,404	1,235,693
	1927	22	87	163	192	3	189	230,088	179,635	952,311	944,207	8,104	2,252,685	1,300,374
	1919	41	421	926	921	685	236	1,139,273	711,089	5,444,671	5,400,414	44,257	10,189,221	4,744,550
Ohio	1929	6	9	15	34	--------	34	66,217	17,587	87,416	85,631	1,785	203,647	206,231
	1927	5	10	10	29	--------	29	50,379	11,276	51,115	49,770	1,345	202,407	151,292
	1919	13	25	40	42	--------	42	73,438	32,482	263,188	260,691	2,492	588,551	325,368
Pennsylvania	1929	8	20	32	32	5	27	59,690	35,269	201,427	198,550	2,877	459,104	257,677
	1927	9	25	40	55	20	35	57,100	47,904	256,885	253,771	3,114	493,971	237,086
	1919	16	44	90	135	105	30	83,144	62,410	576,242	569,737	6,505	949,883	373,641
Wisconsin	1929	4	20	29	121	--------	121	61,022	43,809	210,111	206,048	4,063	449,870	239,759
	1927	5	13	29	114	--------	114	53,774	44,980	241,938	236,838	5,100	476,813	234,875
Groups of States: Me., 2 est.; N. H., 1; N. C., 1; R. I., 1; Tenn., 1; Va., 1	1929	7	29	87	137	--------	137	89,950	177,167	300,815	296,520	4,295	842,128	541,313
Other States (Ind., 2 est.; Mich., 2; Nebr., 1; Oreg., 1; Tex., 2)	1929	8	42	196	185	--------	185	77,270	161,823	496,556	481,506	15,050	4,656,663	4,160,107
States not shown separately.	[4] 1927	13	57	323	1,149	--------	1,149	150,166	303,003	1,630,588	1,616,862	13,726	2,721,849	1,091,261
	[5] 1919	31	139	177	179	73	106	310,645	185,477	1,353,982	1,344,992	8,990	2,498,434	1,144,452

[1] Not including proprietors and firm members, as follows: For 1929, 83; 1927, 107; 1919, 179. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,466; 1927, 2,577; 1919, 3,765.
[2] For 1929, manufacturers' sales (shipment or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Data for purchased power other than electric (power transmitted into the plant by belt or shaft) are included in the State items for 1919 but not in the United States totals.
[5] Indiana, 2 establishments; Maine, 1; Michigan, 3; Nebraska, 1; New Hampshire, 1; North Carolina, 1; Rhode Island, 1; Texas, 2; Virginia, 1.
[6] Connecticut, 1 establishment; Florida, 1; Indiana, 3; Iowa, 1; Kentucky, 1; Maine, 2; Michigan, 2; Minnesota, 2; Nebraska, 1; New Hampshire, 2; North Carolina, 2; Oregon, 2; Rhode Island, 1; Texas, 2; Virginia, 1; Washington, 1; West Virginia, 1; Wisconsin, 5.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	817	*Horsepower* 3,317	771	*Horsepower* 4,005	621	*Horsepower* 2,659	260	*Horsepower* 2,446	154	*Horsepower* 2,442	100.0	100.0
Prime movers, total	16	712	17	772	24	1,201	33	1,661	41	1,663	21.5	67.9
Steam, total	14	694	16	769	23	1,198	27	1,599	35	1,626	20.9	65.4
Engines	14	694	16	769	23	1,198	25	1,509	(1)	(1)	20.9	61.7
Turbines							2	90	(1)	(1)		3.7
Internal-combustion engines			1	3	1	3	6	62	6	37		2.5
Water wheels and water turbines	2	18									0.6	
Electric motors driven by purchased energy	801	2,605	754	3,233	597	1,458	227	785	113	779	78.5	32.1
Electric motors, total	888	2,795	839	3,435	678	1,842	293	1,335	161	995	100.0	100.0
Driven by purchased energy	801	2,605	754	3,233	597	1,458	227	785	113	779	93.2	58.8
Driven by energy generated in establishments reporting	87	190	85	202	81	384	66	550	48	216	6.8	41.2
Electric generators	4	*Kilowatts* 157	5	*Kilowatts* 176	7	*Kilowatts* 261	(2)	(2)	(2)	(2)		
Electric energy purchased [3]		*Kilowatt-hours* 1,631,658		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, AND 1914, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	1,617	1,610	1,654	1,679	1,641	1,631	1,639	1,641	1,585	1,581	1,604	1,586	*1,558*	92.8
1925	1,869	*1,747*	1,759	1,923	2,023	2,021	1,974	1,870	1,822	1,830	1,828	1,791	1,837	86.4
1919	2,455	*2,195*	2,301	2,200	2,451	2,445	2,470	2,500	2,568	2,559	2,586	2,625	2,560	83.6
1914	1,766	1,682	1,835	1,933	2,030	2,039	1,825	1,774	1,677	1,614	1,630	1,604	*1,549*	76.0
California	41	*31*	35	41	42	47	48	48	43	41	38	40	40	64.6
Illinois	46	45	*44*	46	46	46	46	46	46	45	45	49	45	89.8
Maryland	53	*46*	*46*	51	58	58	59	59	54	53	53	48	47	78.0
Massachusetts	381	381	385	392	388	389	379	388	381	374	382	379	*360*	91.8
Missouri	79	76	77	*75*	*75*	77	79	82	82	82	80	80	79	91.5
New Jersey	525	573	589	581	531	532	523	510	499	488	487	491	491	82.7
New York	133	*126*	129	133	136	136	135	139	136	131	131	130	130	90.6
Ohio	15	*8*	14	14	16	15	23	30	20	12	10	12	12	26.7
Pennsylvania	32	32	32	32	32	32	32	32	32	32	*31*	*31*	*31*	96.9
Wisconsin	29	*28*	29	*28*	*28*	29	30	29	29	*28*	29	29	29	93.3

BLUING

Description of the industry.—This industry classification covers establishments engaged primarily in the production of laundry bluing, soluble and liquid, aniline blue, etc.

Omission of State statistics.—In order to avoid disclosing data reported by individual establishments, no State statistics are given for this industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1,2]	Value added by manufacture [3]	Horsepower
1929	20	105	$106,917	$468,867	$1,364,510	$895,643	169
1927	20	155	151,364	593,725	1,674,140	1,080,415	363
1925	23	176	185,310	1,017,221	2,167,013	1,149,792	366
1923	25	188	187,901	800,293	1,643,186	842,893	296
1921	33	226	203,460	1,017,713	1,883,225	865,512	[4]
1919	57	360	285,063	1,542,954	2,731,277	1,188,323	423
1914	66	254	104,853	489,431	1,184,045	694,614	216
1909	82	313	113,812	493,742	1,074,231	580,489	242
1904	56	206	77,204	265,800	678,737	412,937	269
1899	65	220	79,380	244,970	575,804	330,834	106
	PER CENT OF INCREASE OR DECREASE (−)						
1927–1929		−32.3	−29.4	−21.0	−18.5	−17.1	−53.4
1925–1927	[5]	−11.9	−18.3	−41.6	−22.7	−6.0	−0.8
1923–1925	[5]	−6.4	−1.4	27.1	31.9	36.4	23.6
1921–1923	[5]	−16.8	−7.6	−21.4	−12.7	−2.6	----------
1919–1921	[5]	−37.2	−28.6	−34.0	−31.0	−27.2	----------
1919–1929	[5]	−70.8	−62.5	−69.6	−50.0	−24.6	−60.0
1909–1919	[5]	15.0	150.5	212.5	154.3	104.7	74.8
1899–1909	[5]	42.3	43.4	101.6	86.6	75.5	128.3

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Includes values of commodities other than bluing made as secondary products by establishments in this industry, as follows: 1929, $240,510; 1927, $297,752; 1925, $354,709. No corresponding figures available for earlier years. Does not include the following values of bluing made as secondary products by establishments classified in other industries: 1929, $258,465; 1927, $255,983; 1925, $208,495. No corresponding figures available for earlier years.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Not called for on schedule.
[5] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS FOR THE UNITED STATES: 1929, 1927, AND 1919

[Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	[6] 20	33	105	169	8	161	$100,136	$106,917	$468,867	$461,426	$7,441	$1,364,510	$895,643
	1927	[7] 20	46	155	363	7	356	113,768	151,364	593,725	576,359	17,366	1,674,140	1,080,415
	1919	[8] 57	110	360	423	30	393	163,492	285,063	1,542,954	1,523,745	19,209	2,731,277	1,188,323

[1] Not including proprietors and firm members, as follows: For 1929, 13; 1927, 9; 1919, 45. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 151; 1927, 210; 1919, 515.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products. See also footnote 2, Table 1.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[6] California, 1 establishment; Illinois, 2; Indiana, 1; Iowa, 1; Louisiana, 1; Massachusetts, 1; Michigan, 1; Minnesota, 1; Missouri, 2; New Jersey, 1; New York, 2; Pennsylvania, 2; Tennessee, 1; Texas, 1; Virginia, 1; Washington, 1.
[7] California, 1 establishment; Illinois, 2; Indiana, 2; Massachusetts, 1; Michigan, 1; Minnesota, 1; Missouri, 2; New Jersey, 1; New York, 2; Pennsylvania, 2; Tennessee, 2; Texas, 1; Virginia, 1; Washington, 1.
[8] California, 3 establishments; Connecticut, 1; Illinois, 5; Indiana, 3; Iowa, 1; Kentucky, 1; Louisiana, 1; Maine, 1; Maryland, 1; Massachusetts, 4; Michigan, 2; Minnesota, 2; Missouri, 3; New Jersey, 3; New York, 8; Ohio, 4; Oregon, 2; Pennsylvania, 6; Tennessee, 2; Virginia, 1; Washington, 1; Wisconsin, 2.

TABLE 3.—PRIME MOVERS, MOTORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horsepower		*Horsepower*		*Horsepower*		*Horsepower*		*Horsepower*		
Prime movers and electric motors driven by purchased energy, aggregate	56	169	82	363	98	366	78	423	38	216	100.0	100.0
Prime movers, total	1	8	1	7	2	16	2	30	4	60	4.7	7.1
Steam engines					1	10			1	25		
Internal-combustion engines	1	8	1	7	1	6	2	30	3	35	4.7	7.1
Electric motors driven by purchased energy	55	161	81	356	96	350	76	393	34	156	95.3	92.9
Electric motors, total	55	161	81	356	96	350	81	405	34	156	100.0	100.0
Driven by purchased energy	55	161	81	356	96	350	76	393	34	156	100.0	97.0
Driven by energy generated in establishments reporting							5	12				3.0
		Kilowatt-hours										
Electric energy purchased [1]		50,515		[2]		[2]		[2]		[2]		

[1] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[2] Data incomplete.
Not called for on schedule.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909

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

STATE	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	
United States:														
1929	105	*100*	101	108	106	103	104	103	106	113	111	106	103	88.5
1925	176	170	175	188	188	184	183	172	179	175	173	169	***158***	80.9
1919	360	330	337	347	332	*318*	324	359	412	419	414	372	356	75.9
1914	254	238	242	250	246	250	256	267	261	272	270	259	*257*	87.1
1909	313	*289*	290	314	307	320	314	306	308	318	331	327	310	87.3

BONE BLACK, CARBON BLACK, AND LAMPBLACK

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of bone black, carbon black, and lampblack. Bone black, also known as "char" or animal charcoal, is produced by the carbonization of bone in retorts; carbon black, by the imperfect combustion of natural gas; and lampblack, by the imperfect combustion of coal or wood tar, petroleum, rosin, etc.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel and purchased electric energy	Value of products [1]	Value added by [2] manufacture	Horsepower
1929	77	1,915	$2,583,253	$9,096,098	$20,169,722	$11,073,624	11,268
1927	67	1,553	2,047,044	6,571,019	14,261,775	7,690,756	8,065
1925	66	1,505	1,721,779	5,654,965	14,564,982	8,910,017	7,289
1923	68	1,303	1,460,868	5,294,567	14,599,872	9,305,305	5,567
1921	45	826	979,845	3,745,146	8,180,844	4,435,698	[3]
1919	35	675	808,332	2,848,059	6,186,204	3,338,145	1,857
1914	27	339	230,821	686,240	1,463,569	777,329	1,786
1909	27	228	149,327	444,608	1,093,494	648,886	1,023
1904	25	200	105,159	203,396	647,717	444,321	1,085
1899	15	85	46,107	105,712	359,787	254,075	365
	PER CENT OF INCREASE OR DECREASE (−)						
1927–1929	[4]	23.3	26.2	38.4	41.4	44.0	39.7
1925–1927	[4]	3.2	18.9	16.2	−2.1	−13.7	10.6
1923–1925	[4]	15.5	17.9	6.8	−.2	−4.2	30.9
1921–1923	[4]	57.7	49.1	41.4	78.5	109.8	----------
1919–1921	[4]	22.4	21.2	31.5	32.2	32.9	----------
1919–1929	[4]	183.7	219.6	219.4	226.0	231.7	506.8
1909–1919	[4]	196.1	441.3	540.6	465.7	414.4	81.5
1899–1909	[4]	168.2	223.9	320.6	203.9	155.4	180.3

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929, 1927, AND 1919

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT: Total	Prime movers	Motors run by purchased energy	Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY: Total	Materials and containers	Fuel and purchased energy	Value of products [2]	Value added by manufacture [3]
United States: The industry	1929	77	222	1,915	11,268	6,732	4,536	$696,444	$2,583,253	$9,096,098	$7,376,423	$1,719,675	$20,169,722	$11,073,624
	1927	67	243	1,553	8,065	6,353	1,712	508,472	2,047,044	6,571,019	6,430,578	140,441	14,261,775	7,690,756
	1919	35	121	675	1,857	1,366	491	312,386	808,332	2,848,059	1,461,364	1,386,695	6,186,204	3,338,145
Carbon black [4]	1929	71	187	1,615	9,609	6,457	3,152	530,220	2,220,615	7,400,065	5,766,309	1,633,756	17,312,214	9,912,149
	1927	61	200	1,287	6,163	5,953	210	373,619	1,676,871	4,985,607	4,922,075	63,532	11,483,686	6,498,079
	1919	29	77	422	712	712	----------	162,928	492,642	1,952,726	618,824	1,333,902	3,934,233	1,981,507
Bone black and lampblack [5]	1929	6	35	300	1,659	275	1,384	166,224	362,638	1,696,033	1,610,114	85,919	2,857,508	1,161,475
	1927	6	43	266	1,902	400	1,502	134,853	370,173	1,585,412	1,508,503	76,909	2,778,089	1,192,677
	1919	6	44	253	1,145	654	491	149,458	315,690	895,333	842,540	52,793	2,251,971	1,356,638
Individual States: Louisiana (carbon black)	1929	30	81	689	4,287	4,207	80	290,922	817,520	3,122,701	2,732,264	390,437	6,869,011	3,746,310
	1927	34	116	800	4,303	4,303	----------	195,589	923,558	3,172,006	3,112,662	59,344	7,182,698	4,010,692
	1919	7	22	129	240	240	----------	40,171	134,968	463,193	178,377	284,816	1,002,490	539,297
Texas (carbon black)	1929	33	93	842	4,682	1,715	2,967	213,388	1,285,911	4,065,214	2,910,221	1,154,993	9,804,128	5,738,914
	1927	13	34	299	1,265	1,215	50	74,598	491,640	1,333,260	1,329,072	4,188	3,312,228	1,978,968
Groups of States: Calif., 2 est.; Mont., 2; Okla., 1; Utah, 1; Wyo., 1	1929	7	27	217	1,156	490	666	71,795	258,146	1,251,238	1,125,170	126,068	1,902,456	651,218
Mass., 1 est.; N. J., 1; Pa., 3; W. Va., 2	1929	7	21	167	1,143	320	823	120,339	221,676	656,945	608,768	48,177	1,594,127	937,182
States not shown separately	[6] 1927	20	93	454	2,497	835	1,662	238,285	631,846	2,065,753	1,988,844	76,909	3,766,849	1,701,096
	[7] 1919	28	99	546	1,617	1,126	491	272,215	673,364	2,384,866	1,282,987	1,101,879	5,183,714	2,798,848

[1] Not including proprietors and firm members, as follows: For 1929, 3; 1927, 2; 1919, 30. The total number of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 2,140; 1927, 1,798; 1919, 826.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Establishments engaged primarily in the manufacture of carbon black.
[5] Establishments engaged primarily in the manufacture of bone black and lampblack.
[6] California, 2 establishments; Kentucky, 3; Massachusetts, 1; Montana, 2; New Jersey, 1; Pennsylvania, 2; Utah, 1; West Virginia, 6; Wyoming, 2.
[7] Kentucky, 1 establishment; Massachusetts, 2; Montana, 1; New Jersey, 1; Oklahoma, 1; Pennsylvania, 5; West Virginia, 16; Wyoming, 1.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1923 TO 1929

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for earlier years represent production. See GENERAL EXPLANATIONS—Value of Products]

KIND	1929	1927	1925	1923
1. Bone black, carbon black, and lampblack industry, all products, total value	$20,169,722	$14,261,775	$14,564,982	$14,599,872
2. Bone black, carbon black, and lampblack	18,462,283	12,411,829	10,990,186	13,406,550
3. Other products (not normally belonging to the industry)	1,707,439	1,849,946	3,574,796	1,193,322
4. Bone black and lampblack made as secondary products in other industries, value	2,241,415	2,106,994	2,624,133	2,160,554
Bone black, carbon black, and lampblack, all industries: Total value (sum of 2 and 4)	20,703,698	14,518,823	13,614,319	15,567,104
Bone black:				
Number of establishments	6	8	7	8
Pounds	54,277,051	59,359,476	64,135,425	49,724,560
Value	$2,490,090	$2,523,582	$2,539,704	$2,417,938
Carbon black:				
Number of establishments	71	61	63	63
Pounds [1]	283,806,000	198,429,000	177,417,378	138,262,648
Value [1]	$17,028,360	$10,955,000	$9,639,585	$11,692,066
Lampblack:				
Number of establishments	6	5	5	4
Pounds	10,765,492	8,800,366	12,031,745	11,117,456
Value	$1,185,248	$1,040,241	$1,435,030	$1,457,100

[1] From reports of the United States Bureau of Mines.

TABLE 4.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1929, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
		Horsepower		*Horsepower*		*Horsepower*		*Horsepower*		*Horsepower*		
Prime movers and electric motors driven by purchased energy, aggregate	499	11,268	353	8,065	263	7,289	85	1,857	76	1,786	100.0	100.0
Prime movers, total	244	6,732	210	6,353	194	6,457	51	1,366	68	1,713	59.7	73.6
Steam, total	135	4,281	139	4,500	124	4,285	9	455	12	502	38.0	24.5
Engines	135	4,281	137	4,450	122	4,235	9	455	(1)	(1)	38.0	24.5
Turbines			2	50	2	50			(1)	(1)		
Internal-combustion engines	108	2,371	71	1,853	70	2,172	42	911	56	1,211	21.0	49.1
Water wheels and water turbines	1	80									0.7	
Electric motors driven by purchased energy	255	4,536	143	1,712	69	832	34	491	8	73	40.3	26.4
Electric motors, total	311	5,120	162	1,944	72	844	34	491	9	81	100.0	100.0
Driven by purchased energy	255	4,536	143	1,712	69	832	34	491	8	73	88.6	100.0
Driven by energy generated in establishments reporting	56	584	19	232	3	12			1	8	11.4	
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	29	1,360	13	502	10	279	(2)	(2)	(2)	(2)		
		Kilowatt-hours										
Electric energy purchased [3]		5,257,130		(4)		(4)		(2)		(2)		

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.

TABLE 5.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND BY STATES, 1929

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	1,915	1,844	*1,804*	1,879	1,861	1,935	1,920	1,946	1,938	**2,018**	1,998	1,927	1,913	89.5
1925	1,505	1,556	1,507	1,502	1,477	1,438	*1,435*	1,523	1,532	1,509	1,508	1,525	1,544	92.2
1919	675	*653*	687	661	669	665	674	669	676	680	**698**	675	688	94.3
1914	339	306	304	*300*	306	306	309	350	369	388	**390**	387	353	76.9
1909	228	219	*215*	*215*	225	228	231	228	233	234	243	235	237	88.5
Louisiana	689	684	641	713	730	765	739	764	677	665	680	621	*599*	78.3
Texas	842	794	791	778	*760*	796	819	822	870	954	**918**	898	907	79.7

CANDLES

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of candles for lighting or for decorative and ornamental purposes.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1904 TO 1929

Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]	Horsepower
1929	20	781	$923,039	$3,250,627	[3] $6,686,194	$3,435,567	1,971
1927	17	709	761,464	2,958,987	[3] 6,350,931	3,391,944	996
1925	20	626	672,691	2,786,247	[3] 5,114,292	2,328,045	922
1923	21	746	753,919	2,392,948	[3] 5,079,884	2,686,936	912
1921	20	609	589,737	2,090,807	2,776,911	1,686,104	(4)
1919	19	541	437,581	2,178,528	3,350,806	1,172,278	597
1914	15	387	183,007	1,118,575	1,730,723	612,148	359
1909	16	539	246,290	2,176,102	3,130,521	954,419	794
1904	17	816	293,935	2,911,215	3,889,362	978,147	926
	PER CENT OF INCREASE OR DECREASE (—)						
1927–1929	(5)	10.2	21.2	9.9	5.3	1.3	97.9
1925–1927	(5)	13.3	13.2	6.2	24.2	45.7	8.0
1923–1925	(5)	−16.1	−10.8	16.4	0.7	−13.4	1.1
1921–1923	(5)	22.5	27.8	14.5	34.5	59.4	----------
1919–1921	(5)	12.6	34.8	−4.0	12.7	43.8	----------
1919–1929	(5)	44.4	110.9	49.2	99.5	193.1	230.2
1909–1919	(5)	0.4	77.7	0.1	7.0	22.8	−24.8

[1] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[2] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[3] Includes values of products other than candles, as follows: 1929, $565,550; 1927, $740,863; 1925, $329,297; 1923, $655,682. Does not include values of candles made as secondary products by establishments in other industries, as follows: 1929, $1,972,792; 1927, $1,969,020; 1925, $2,463,038; 1923, $2,591,262.
[4] Not called for on schedule.
[5] Per cent not computed where base is less than 100.

TABLE 2.—GENERAL STATISTICS FOR THE UNITED STATES AND FOR NEW YORK: 1929, 1927, AND 1919

[New York is the only State for which separate figures can be given without disclosing data for individual establishments. Data for establishments with products under $5,000 in value are included for 1919 but not for subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

STATE	Census year	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
					Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	1929	20	156	781	1,971	1,503	468	$501,787	$923,039	$3,250,627	$3,173,982	$76,645	$6,686,194	$3,435,567
	1927	17	212	709	996	624	372	642,518	761,464	2,958,987	2,875,128	83,859	6,350,931	3,391,944
	1919	19	112	541	597	545	52	287,832	437,581	2,178,528	2,140,502	38,026	3,350,806	1,172,278
New York	1929	13	123	635	1,835	1,470	365	423,046	767,658	2,678,269	2,615,492	62,777	5,534,104	2,855,835
	1927	11	180	614	870	614	256	581,814	654,890	2,596,159	2,519,551	76,608	5,662,608	3,066,509
	1919	15	103	513	515	463	52	283,439	416,829	2,023,272	1,986,974	36,298	3,134,860	1,111,588
Other States	[4] 1929	7	33	146	136	33	103	78,741	155,381	572,358	558,490	13,868	1,152,090	579,732
	[5] 1927	6	32	95	126	10	116	60,704	106,574	362,828	355,577	7,251	688,263	325,435
	[6] 1919	4	9	28	82	82	----------	4,393	20,752	155,256	153,528	1,728	215,946	60,690

[1] Not including proprietors and firm members, as follows: For 1929, 4; 1927, 11; 1919, 13. The total numbers of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—as reported for the industry, are as follows: For 1929, 941; 1927, 932; 1919, 666.
[2] For 1929, manufacturers' sales (shipments or deliveries); for earlier years, production. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] California, 1 establishment; Maryland, 1; Massachusetts, 2; Missouri, 2; New Jersey, 1.
[5] Massachusetts, 2 establishments; Missouri, 2; New Jersey, 1; Ohio, 1.
[6] Indiana, 1 establishment; Massachusetts, 2; New Jersey, 1.

TABLE 3.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, 1919, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

TYPE	1929		1927		1925		1919		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY	
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929	1919
Prime movers and electric motors driven by purchased energy, aggregate	128	*Horsepower* 1,971	75	*Horsepower* 996	64	*Horsepower* 922	21	*Horsepower* 597	22	*Horsepower* 359	100.0	100.0
Prime movers, total	7	1,503	9	624	8	612	11	545	11	341	76.3	91.3
Steam engines	7	1,503	9	624	7	602	11	545	10	331	76.3	91.3
Internal-combustion engines					1	10			1	10		
Electric motors driven by purchased energy	121	468	66	372	56	310	10	52	11	18	23.7	8.7
Electric motors, total	247	1,011	114	587	63	480	42	226	15	34	100.0	100.0
Driven by purchased energy	121	468	66	372	56	310	10	52	11	18	46.3	23.0
Driven by energy generated in establishments reporting	126	543	48	215	7	170	32	174	4	16	53.7	77.0
		Kilowatts		*Kilowatts*		*Kilowatts*						
Electric generators	3	399	3	362	3	327	(1)	(1)	(1)	(1)		
		Kilowatt-hours										
Electric energy purchased [2]		684,765		(3)		(3)		(1)		(1)		

[1] Not called for on schedule.
[2] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[3] Data incomplete.

TABLE 4.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1929, 1925, 1919, 1914, AND 1909, AND FOR NEW YORK, 1929

[New York is the only State for which it is possible to give separate figures without disclosing data for individual establishments. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures]

STATE	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	
United States:														
1929	781	828	823	813	798	771	724	*698*	708	750	807	831	825	84.0
1925	626	617	634	633	607	592	561	*548*	555	599	682	746	744	73.5
1919	541	500	494	*471*	479	472	490	564	561	585	611	632	633	74.4
1914	387	422	412	410	403	379	367	358	*337*	374	399	404	379	79.0
1909	539	540	554	546	536	512	511	*460*	496	523	579	583	605	76.0
New York	635	677	676	666	653	621	584	*567*	*567*	611	659	675	666	83.8

CHEMICALS, NOT ELSEWHERE CLASSIFIED

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of products falling within the nine groups for which statistics for 1927 and 1929 are given in Table 3. It does not include the production of all classes of chemicals in the broad sense of the term, the principal exceptions being (1) explosives, (2) fertilizers, (3) soap, and (4) wood-distillation products. The manufacture of each of these four classes of products is treated as a separate industry.

At former censuses the manufacture of sulphuric, nitric, and mixed acids was classified as a separate industry, but these acids are now treated as products of the "Chemicals, not elsewhere classified" industry, and the statistics for 1927 and earlier years, as presented in this report, have been adjusted accordingly.

Rayon and compressed and liquefied gases.—Statistics for the manufacture of rayon in 1923 and earlier years and for the manufacture of compressed and liquefied gases in 1925 and earlier years were included with those for the "Chemicals, not elsewhere classified" industry, but both these lines of manufacture are now treated as separate industries. Because of these changes in classification, the figures for 1925 and earlier years are not comparable with those for 1927 and 1929, and the figures for 1923 and earlier years are not comparable with those for 1925 and later years; and accordingly no percentages of increase or decrease are given in Table 1 for the periods 1919–1929, 1923–1925, and 1925–1927.

Products made and consumed and for sale.—In most cases where the amounts of chemicals made and consumed in the same establishments were reported, separate figures are given in Tables 4 to 15, for the total production, the amounts made and consumed, and the production for sale. *Where no separate figures are given, the quantities and values shown relate to the amounts made for sale.*

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1929

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See GENERAL EXPLANATIONS—Establishments Covered—Size]

YEAR OR PERIOD [1]	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers for products, fuel, and purchased electric energy	Value of products [2]	Value added by manufacture [3]	Horsepower
1929	551	62,199	$94,680,013	$363,576,811	$738,048,386	$374,471,575	854,358
1927	492	52,347	78,274,975	296,677,164	572,090,732	275,413,568	576,285
1925	751	57,890	83,537,432	282,712,468	570,310,106	287,597,638	546,797
1923	773	77,254	103,300,991	328,596,621	655,274,829	326,678,208	592,023
1921	728	49,138	62,161,005	200,272,506	412,231,354	211,958,848	(4)
1919	836	76,918	105,062,261	301,519,182	614,278,849	312,759,667	480,435
1914	427	35,375	24,278,759	96,185,122	173,269,076	77,083,954	288,909
1909	401	25,981	15,590,817	69,531,257	127,625,160	58,093,903	214,143
1904	329	22,294	12,319,164	47,070,795	84,410,141	37,339,346	93,791
1899	350	17,519	8,717,170	31,125,829	56,754,051	25,628,822	(5)
	PER CENT OF INCREASE OR DECREASE (—) [1]						
1927–1929	12.0	18.8	21.0	22.5	29.0	36.0	48.3
1921–1923	6.2	57.2	66.2	64.1	59.0	54.1	----------
1919–1921	—12.9	—36.1	—40.8	—33.6	—32.9	—32.2	----------
1909–1919	108.5	196.1	573.9	333.6	381.3	438.4	124.4
1899–1909	14.6	48.3	78.9	123.4	124.9	126.7	----------

[1] See "Rayon and compressed and liquefied gases," above.
[2] The figures for all census years refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.
[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.
[4] Not called for on schedule.
[5] No comparable data.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1929

[This table presents statistics for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups]

STATE	Number of establishments	Salaried officers and employees [1]	Wage earners (average for the year)	HORSEPOWER (RATED CAPACITY) OF POWER EQUIPMENT			Salaries	Wages	COST OF MATERIALS, CONTAINERS FOR PRODUCTS, FUEL, AND PURCHASED ELECTRIC ENERGY			Value of products [2]	Value added by manufacture [3]
				Total	Prime movers	Motors run by purchased energy			Total	Materials and containers	Fuel and purchased energy		
United States	551	13,318	62,199	854,358	475,498	378,860	$35,924,786	$94,680,013	$363,576,811	$313,319,328	$50,257,483	$738,048,336	$374,471,525
Individual States:													
Arkansas	4	11	64	1,420	405	1,015	25,427	72,884	600,158	518,327	81,831	802,770	202,612
California	48	473	2,152	28,475	2,037	26,438	1,189,058	3,438,495	11,817,289	9,994,365	1,822,924	24,636,002	12,818,713
Colorado	3	13	52	889	65	824	41,691	62,395	476,235	448,058	28,177	751,138	274,903
Connecticut	7	102	373	1,940	295	1,645	277,686	512,616	2,547,739	2,447,403	100,336	4,465,635	1,917,896
Illinois	36	823	3,626	57,311	43,822	13,489	1,685,793	5,714,261	31,802,761	29,199,314	2,603,447	60,395,800	28,593,039
Indiana	9	277	1,174	10,030	3,905	6,125	582,355	1,901,379	8,040,485	7,412,502	627,983	13,798,041	5,757,556
Iowa	4	35	211	2,518	----------	2,518	105,888	287,928	1,675,961	882,673	793,288	3,061,034	1,385,073
Maryland	9	141	1,236	6,325	1,100	5,225	305,826	1,512,968	7,591,141	6,921,151	669,990	12,942,414	5,351,273
Massachusetts	15	478	2,936	10,620	2,915	7,705	1,317,886	4,016,327	7,153,223	6,658,403	494,820	19,103,023	11,949,800
Michigan	13	715	5,414	115,628	103,968	11,660	2,240,191	9,114,215	25,112,390	18,241,453	6,870,937	53,183,206	28,070,816
Missouri	10	458	761	4,622	958	3,664	1,055,176	1,142,631	7,570,565	7,314,288	256,277	12,370,445	4,799,880
New Jersey	103	3,236	13,504	99,105	56,471	42,634	9,100,265	20,746,134	82,089,258	76,914,825	5,174,433	155,782,630	73,693,372
New York	99	3,123	13,007	142,532	59,666	82,866	8,441,624	20,870,140	72,911,404	58,321,387	14,590,017	168,728,982	95,817,578
Ohio	49	654	4,322	58,025	46,800	11,225	1,895,364	6,807,858	23,397,642	20,417,400	2,980,242	46,286,616	22,888,974
Pennsylvania	52	1,006	3,280	33,735	12,681	21,054	2,478,554	4,792,635	26,319,499	24,410,119	1,909,380	48,111,312	21,791,813
Rhode Island	7	57	319	2,885	378	2,507	161,997	411,314	1,175,607	1,060,150	115,457	2,505,125	1,329,518
Tennessee	8	197	1,360	12,150	530	11,620	509,463	1,901,439	7,575,247	5,465,641	2,109,606	18,819,789	11,244,542
Texas	6	59	414	3,754	1,000	2,754	142,499	601,729	2,686,474	2,486,558	199,916	4,191,015	1,504,541
Virginia	11	297	2,446	87,212	78,051	9,161	1,429,854	3,051,032	8,977,502	6,693,688	2,283,814	20,681,676	11,704,174
Washington	6	51	120	5,010	225	4,785	104,256	195,625	621,454	482,721	138,733	1,308,760	687,306
West Virginia	14	490	1,908	120,929	50,715	70,214	1,254,171	2,947,589	11,492,534	8,877,521	2,615,013	22,858,635	11,366,101
Groups of States:													
Ala., 5 est.; Del., 1; N. C., 1	7	274	2,008	18,692	5,063	13,629	950,556	2,400,162	14,134,018	11,528,058	2,605,960	27,095,859	12,961,841
Ariz., 1 est.; Utah, 2; D. C., 1 est.; Ky., 2; Me., 1; N. H. 3	3	14	75	687	160	527	45,000	116,935	455,383	411,024	44,359	1,038,056	582,673
Fla., 1 est.; Ga., 2; La., 3; S. C., 2	7	57	303	15,041	400	14,641	172,202	415,675	1,495,694	1,142,074	353,620	2,965,903	1,470,209
Kans., 1 est.; Mont., 2; Okla., 1	8	32	147	2,190	250	1,940	52,897	164,310	1,077,146	956,342	120,804	1,718,905	641,759
Minn., 4 est.; Wis., 5	4	144	182	1,774	----------	1,774	154,149	356,125	737,365	622,735	114,630	2,042,716	1,305,351
	9	101	745	10,859	3,638	7,221	198,952	1,125,162	4,042,637	3,491,148	551,489	8,402,899	4,360,262

[1] Not including 41 proprietors and firm members. The total number of persons engaged—proprietors and firm members, salaried officers and employees, and wage earners—was 75,558.

[2] These figures refer to production, not sales. See GENERAL EXPLANATIONS—Value of Products.

[3] Value of products less cost of materials, containers for products, fuel, and purchased electric energy. See GENERAL EXPLANATIONS—Value Added by Manufacture.

TABLE 3.—CHEMICAL PRODUCTS—VALUE, BY CHEMICAL GROUPS: 1923 TO 1929

	1929	1927	1925	1923
1. "Chemicals, not elsewhere classified" industry, all products, total value	$738,048,386	$572,090,732	$570,310,106	[1] $655,274,829
2. Chemicals made in the industry	678,880,157	533,592,538	544,651,190	634,432,927
3. Other products (not normally belonging to the industry)	59,168,229	38,498,194	25,658,916	20,841,902
4. Chemicals made as secondary products in other industries	87,048,026	83,228,766	66,661,789	53,097,421
Chemicals, all industries:				
Aggregate value (sum of 2 and 4)	765,928,183	616,821,304	611,312,979	687,530,348
Intergroup duplication	33,557,881	[2] 21,558,911	49,398,206	34,063,243
Gross total	799,486,064	[2] 638,380,215	660,711,185	721,593,591
CHEMICAL GROUPS				
I.—Acids	98,619,871	88,175,519	79,273,578	79,005,511
II.—Nitrogen and fixed-nitrogen compounds	38,336,799	26,085,661	29,659,414	30,435,909
III.—Sodium compounds	137,654,863	113,880,497	109,522,017	111,848,381
IV.—Potassium compounds	9,998,054	9,306,037	6,071,146	6,318,822
V.—Alums and other aluminum compounds	15,948,773	13,563,095	11,581,290	11,066,611
VI.—Bleaching compounds	19,871,087	[2] 18,674,515	17,167,412	16,729,233
VII.—Coal-tar products	130,651,757	106,056,504	112,201,348	121,893,211
VIII.—Plastics [3]	40,531,257	28,202,865	48,731,957	102,229,807
IX.—Chemicals, miscellaneous	307,873,603	234,435,522	190,970,407	188,682,077
Compressed and liquefied gases	(4)	(4)	55,532,616	53,384,029

[1] Not strictly comparable with figures for subsequent years. (See footnote 3.)

[2] Revised.

[3] Data for rayon included for 1923 but not for subsequent years. Data for pyroxylin solutions included for 1923 and 1925 but not for 1927 and 1929. (See Table 14, footnote 3.)

[4] The manufacture of compressed and liquefied gases has been treated as a separate industry beginning with the census for 1927.

TABLE 4.—GROUP I, ACIDS—PRODUCTION, BY CLASS, KIND, QUANTITY, AND VALUE: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

	1929	1927	1925	1923
Aggregate value	$98,619,871	$88,175,519	$79,273,578	$79,005,511
Inorganic	70,085,328	66,027,312	58,958,357	59,436,428
*Organic	28,534,543	22,148,207	20,315,221	19,569,083
*Acetic:				
Number of establishments	17	18	16	16
Value	$6,890,411	[1] $5,049,285	$4,437,622	$4,154,838
Dilute [2]—				
Total production, pounds	72,737,771	[1] 41,399,599	29,824,953	29,470,045
Made and consumed, pounds	19,822,964	[1] 10,918,361	1,102,650	1,437,661
For sale—Pounds	52,914,807	[1] 30,481,238	28,722,303	28,032,384
Value	$5,487,427	[1] $3,522,196	$775,668	$876,864
Glacial—				
Total production, pounds	13,449,259	[1] 15,917,232	37,108,961	32,663,200
Made and consumed, pounds		[1] 101,885	239,711	3,043,455
For sale—Pounds	13,449,259	[1] 15,815,347	36,869,250	29,619,745
Value	$1,402,984	[1] $1,527,089	$3,661,954	$3,277,974
Boric (boracic):				
Number of establishments	7	6	4	3
Pounds	26,055,132	21,009,603	15,604,654	17,277,801
Value	$1,541,360	$1,582,565	$1,202,382	$1,736,081
Carbonic (carbon dioxide, CO_2):				
Number of establishments	54	49	44	45
Pounds	136,930,311	74,344,287	59,721,309	51,095,965
Value	$6,931,735	$6,048,424	$5,128,441	$4,992,373
Chromic:				
Number of establishments	8	6		
Pounds	4,211,605	898,093		
Value	$710,272	$241,965	(4)	(4)
*Citric:				
Number of establishments	5	4	6	6
Pounds	10,765,798	7,058,215	7,598,213	5,689,473
Value	$4,832,984	$3,160,976	$3,469,740	$2,829,306
Hydrochloric (muriatic):				
Number of establishments	33	40	37	39
Total production, tons	257,857	224,596	227,800	218,521
Made and consumed, tons	61,379	62,154	72,781	62,707
For sale—Tons	196,478	162,442	155,019	155,814
Value	$3,195,415	$3,016,014	$2,976,155	$3,102,172
Production, according to strength, tons—				
20° Baumé	214,728	193,364	201,093	181,131
18° Baumé	40,753	26,803	25,461	32,442
Other	2,376	4,429	1,246	4,948
Total production, basis 100 per cent, tons	81,307	70,848	71,619	69,092
Production, by States, tons—				
New York	13,023	21,001	14,115	16,660
Pennsylvania	23,241	18,752	16,788	18,234
Illinois	36,966	33,284	32,686	183,627
Massachusetts	20,557	151,559	164,211	
Other States	164,070			
Mixed (sulphuric-nitric):				
Number of establishments	36	41	39	51
Total production, tons	184,163	180,142	166,629	156,467
Made and consumed, tons	120,442	119,517	99,339	78,534
For sale—Tons	63,721	60,625	61,290	77,933
Value	$4,214,433	$3,820,564	$3,766,701	$5,502,735
Production, by industries, tons—				
"Chemicals, not elsewhere classified" industry	63,763	73,685	72,600	54,461
"Explosives" industry	120,400	106,457	88,029	102,006
Production, by States, tons—				
Illinois	7,663	4,135	3,648	6,910
New Jersey	86,900	84,407	70,669	52,557
Pennsylvania	19,685	18,862	17,763	20,220
Missouri	10,083	10,716	68,549	76,780
Other States	59,832	62,022		
Nitric:				
Number of establishments	48	50	53	55
Total production, tons	160,253	121,991	119,652	113,116
Made and consumed, tons	125,372	93,285	92,800	91,357
For sale—Tons	34,881	28,706	26,852	21,759
Value	$3,494,577	$3,559,436	$3,559,695	$2,741,370
Production, according to strength, tons—				
36° Baumé	3,390	2,149	2,012	4,928
38° Baumé	733	8,258	6,515	10,758
Nitric—Continued.				
Production, according to strength, tons—Continued.				
40° Baumé	38,874	68,918	92,632	74,682
100 per cent	114,951	41,703	17,677	21,948
C. P	2,305	963	816	800
Total production, basis 100 per cent, tons	143,454	91,077	80,443	77,633
Production, by industries, tons—				
"Chemicals, not elsewhere classified" industry	54,472	42,124	38,831	47,521
"Explosives" industry	105,781	79,867	80,821	65,895
Production, by States, tons—				
Illinois	7,904	4,066	4,073	4,709
New Jersey	65,800	45,507	44,926	44,804
Pennsylvania	12,584	18,600	15,253	15,606
Other States	73,965	53,818	55,400	47,997
*Oleic:				
Number of establishments	13	12	13	15
Pounds	56,947,501	55,686,031	53,275,959	48,786,009
Value	$5,374,587	$4,778,037	$5,171,093	$4,353,654
Phosphoric:				
Number of establishments	9	6	7	11
Pounds	34,673,982	22,397,366	21,330,215	12,829,361
Value	$2,073,066	$1,681,504	$1,488,701	$955,194
*Stearic:				
Number of establishments	12	12	11	[3]
Pounds	39,153,726	37,276,703	26,877,253	22,477,754
Value	$5,488,320	$3,832,433	$3,378,959	$2,752,995
Sulphuric:				
Number of establishments	170	181	177	185
Total production, basis 50° Baumé, tons	8,491,114	7,335,795	7,004,112	6,555,517
Made and consumed, tons	2,674,949	2,364,212	2,303,915	2,210,819
For sale—Tons	5,816,165	4,971,583	4,700,197	4,344,698
Value	$45,573,245	$42,885,573	$38,230,284	$38,274,540
Production, according to strength—				
For sale—				
50° Baumé—Tons	409,782	1,090,866	723,955	259,812
Value	$3,203,371	$8,572,448	$5,430,611	$2,150,439
60° Baumé—Tons	1,397,208	836,622	971,750	1,204,720
Value	$11,725,498	$7,275,022	$7,609,027	$9,890,933
66° Baumé—Tons	258,371	746,423	787,826	674,148
Value	$3,719,973	$11,004,446	$10,316,880	$10,097,966
100 per cent—Tons	1,852,146			
Value	$24,990,115	1,054,055	967,525	961,355
Other—Tons	177,705	$16,033,657	$14,873,766	$16,135,202
Value	$2,234,288			
Made and consumed in the same establishments—				
50° Baumé—Tons	1,469,366	1,474,608	1,430,769	1,304,254
60° Baumé—Tons	130,179	170,069	231,298	308,096
66° Baumé—Tons	95,196	177,933	178,603	126,483
100 per cent—Tons	554,680	251,717	193,845	203,534
Other—Tons	4,119			
Sulphuric, reclaimed (basis 50° Baumé):				
Number of establishments	69	66	66	64
Total production, tons	980,628	757,107	768,765	588,668
Made and consumed in the same establishments, tons	599,470	565,796	559,176	418,530
For sale—Tons	381,156	191,311	209,589	170,138
Value	$1,389,340	$1,068,554	$1,479,145	$1,478,558
Production, by States, tons—				
California	38,196			
Illinois	20,923			
Indiana	67,266			
Ohio	10,225	(4)	(4)	(4)
Pennsylvania	41,176			
Texas	290,495			
Other States	512,345			
*Tannic:				
Number of establishments	4	3	6	5
Pounds	1,449,375	1,297,232	1,439,957	999,541
Value	$503,567	$593,465	$585,951	$357,023
*Tartaric:				
Number of establishments	4	4	4	4
Pounds	4,906,479	5,781,166	5,498,920	5,868,000
Value	$2,059,680	$1,810,890	$1,541,955	$1,544,431
Other inorganic acids, value	[5] $961,885	$2,102,713	$1,126,853	$653,405
*Other organic acids, value	[6] $3,384,994	$2,933,121	$1,729,901	$3,576,836

*Organic.
[1] Revised.
[2] Quantity calculated on basis of 100 per cent for 1929 and 1927.
[3] Included in figure for "Other inorganic acids."
[4] No data by States available for years prior to 1929.
[5] Includes, in order of value, data for hydrofluoric, tungstic, molybdic, hydriodic, hydrofluosilicic, etc.
[6] Includes, in order of value, data for hydrocyanic, oxalic, acetic anhydride, formic, gallic, lactic, etc.

TABLE 5.—SULPHURIC ACID—PRODUCTION, BY INDUSTRY AND BY PROCESS, AND PRODUCTION FROM ZINC AND COPPER ORES: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

	1929	1927	1925	1923
Total production, basis 50° Baumé, tons	8,491,114	7,335,795	7,004,112	6,555,517
Made and consumed in the same establishments, tons	2,674,949	2,364,212	2,303,915	2,210,819
For sale—Tons	5,816,165	4,971,583	4,700,197	4,344,698
Value	$45,573,245	$42,885,573	$38,230,284	$38,274,540
BY INDUSTRY				
(Basis 50° Baumé)				
"Chemicals, not elsewhere classified" industry:				
Total production of sulphuric acid, tons	5,157,835	4,071,458	4,032,248	3,975,435
Made and consumed, tons	1,017,022	805,066	749,059	674,010
For sale—Tons	4,140,813	3,266,392	3,283,189	3,301,425
Value	$32,736,042	$29,684,493	$27,633,446	$30,569,352
"Fertilizers" industry:				
Total production of sulphuric acid, tons	2,002,105	2,045,344	2,008,418	1,631,217
Made and consumed, tons	1,373,033	1,270,007	1,345,442	1,365,884
For sale—Tons	629,072	775,337	662,976	265,333
Value	$4,981,093	$6,158,493	$4,812,152	$2,006,054
"Explosives" industry				
Total production of sulphuric acid, tons	133,656	138,219	162,057	146,938
Made and consumed, tons	88,369	105,961	114,209	107,955
For sale—Tons	45,287	32,258	47,848	38,983
Value	$437,721	$266,564	$414,328	$380,385
BY INDUSTRY—continued				
Other—"Petroleum refining," "Zinc and copper smelting," etc.:				
Total production of sulphuric acid, tons	1,197,518	1,080,774	801,389	801,927
Made and consumed, tons	196,525	183,178	95,205	62,970
For sale—Tons	1,000,993	897,596	706,184	738,957
Value	$7,418,389	$6,776,023	$5,370,358	$5,318,749
BY PROCESS				
(Basis 50° Baumé)				
Chamber process:				
Number of establishments [1]	141	155	153	160
Tons	5,414,874	5,112,649	4,953,582	4,743,176
Contact process:				
Number of establishments [1]	42	37	37	34
Tons	3,076,240	2,223,146	2,050,530	1,812,341
Per cent of total	36.2	30.2	29.2	27.6
Weight of platinum in contact mass, troy ounces	37,512	31,462	30,348	36,650

[1] Both processes were employed by 13 establishments in 1929, 11 in 1927, 13 in 1925, and 9 in 1923.

TABLE 6.—SULPHURIC ACID—PRODUCTION, BY STRENGTH, QUANTITY, AND VALUE, FOR THE UNITED STATES, 1923 TO 1929, AND FOR STATES, 1929

[This table presents statistics separately for each State for which figures can be given without disclosing data for individual establishments, and for the remaining States in groups. The differences between the total production and the production for sale represent the amounts made and consumed in the same establishments]

[Ton, 2,000 pounds]

STATE	PRODUCTION ACCORDING TO STRENGTH, TONS					TOTAL, BASIS 50° BAUMÉ	
	50° Baumé	60° Baumé	66° Baumé	100 per cent	Other strengths	Tons	Value
Total production:							
1929	1,879,148	1,527,387	353,567	2,406,826	181,824	8,491,114	
1927	2,565,474	1,006,691	924,356	1,305,772		7,335,795	
1925	2,154,724	1,203,048	966,429	1,161,370		7,004,112	
1923	1,564,066	1,512,816	800,631	1,164,889		6,555,517	
For sale—							
1929	409,782	1,397,208	258,371	1,852,146	177,705	5,816,165	$45,573,245
1927	1,090,866	836,622	746,423	1,054,055		4,971,583	42,885,573
1925	723,955	971,750	787,826	967,525		4,700,197	38,230,284
1923	259,812	1,204,720	674,148	961,355		4,344,098	38,274,540
Individual States:							
Alabama—							
Total production	54,323	44,444		17,778		138,500	
For sale	679	44,444		11,579		74,876	616,849
Georgia—							
Total production	212,055	32,812				253,060	
For sale	33,321	32,812				74,336	537,491
Illinois—							
Total production	55,887	231,267		255,448	23,778	802,133	
For sale	39,594	224,524		224,121	23,778	726,975	5,891,987
Louisiana—							
Total production	52,277			38,864	16,500	140,918	
For sale	8,835			38,864	16,500	97,476	793,358
Maryland—							
Total production	504,452	126,872	20,907		39,373	756,611	
For sale	70,200	126,872	20,907		39,373	322,359	2,591,344
New Jersey—							
Total production	117,106	11,938	33,266	597,134	12,535	1,164,617	
For sale	48,609	8,464	33,266	310,211	8,416	622,786	4,778,900
North Carolina—							
Total production	127,696	9,764				139,901	
For sale	16,261	9,764				28,466	207,778
Ohio—							
Total production	62,139	34,353	40	320,444		621,055	
For sale	3,534	34,353	40	289,272		512,263	3,913,946
Pennsylvania—							
Total production	51,444	398,312	33,947	232,959	4,929	983,745	
For sale	14,074	338,276	21,734	197,413	4,929	795,783	6,804,062
South Carolina—							
Total production	116,936	4,756				122,881	
For sale	35,427	4,756				41,372	318,353
Tennessee—							
Total production	74,015	503,888	35,360		67	756,969	
For sale	2,602	444,854	34,570		67	610,639	2,910,040
Texas—							
Total production	26,204		57,635	52,230	83,100	328,044	
For sale	14,300			40,705	83,100	225,623	1,785,620
Virginia—							
Total production	107,300			66,453		214,289	
For sale	588			66,453		107,577	928,494
Groups of States:							
Ariz., Calif., Mont., Utah, Wash.—							
Total production	75,154	50,525	14,197	235,552		538,843	
For sale	71,588	50,420	14,197	215,261		502,478	3,973,899
Ark., Colo., Mo., Okla.—							
Total production		15,760	55,316	93,483		253,180	
For sale		15,400	55,316	79,378		230,022	1,930,340
Conn., Del., Mass., N. Y.—							
Total production	153,406		75,639	331,124	611	800,797	
For sale	49,374		51,081	238,213	611	510,341	5,053,905
Fla., Ky., Miss., W. Va.—							
Total production	73,693	45,305		22,192		166,046	
For sale	736	45,305		22,192		93,089	705,348
Ind., Mich., Wis.—							
Total production	15,061	17,391	27,260	143,165	931	309,525	
For sale		16,964	27,260	109,484	931	239,704	1,831,531

TABLE 7.—GROUP II, NITROGEN AND FIXED-NITROGEN COMPOUNDS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929

[No data are included for production of ammonia and ammonia products in the coke and manufactured-gas industries. See Table 8. See also "Products made and consumed and for sale," p. 646]

CLASS AND KIND	1929	1927	1925	1923
Total value	$38,336,799	$26,085,661	$29,659,414	$30,435,909
Ammonium group (see Table 8):				
Ammonia, aqua and liquor—				
Pounds	[1] 30,200,074	46,225,012	66,227,955	38,694,140
Value	$1,784,212	$1,260,426	$3,027,474	$2,453,831
Ammonia, anhydrous—				
Pounds	173,349,355	45,115,020	31,724,858	23,529,382
Value	$10,673,234	$4,011,362	$6,771,876	$6,414,667
Ammonium sulphate—				
Pounds	11,852,867	12,381,506	5,708,984	1,424,448
Value	$240,391	$266,426	$153,134	$70,455
Ammonium iodide—				
Pounds	7,840			
Value	$40,592	$6,058,544	$5,115,521	$3,607,585
Other ammonium compounds, value	[2] $3,225,600			
Cyanogen compounds:				
Ferric ferrocyanide (Prussian blue)—				
Number of establishments	21	19	26	30
Pounds	4,803,419	4,104,233	4,971,486	3,915,777
Value	$1,446,456	$1,364,537	$1,619,509	$1,042,378
Sodium and potassium ferrocyanides and sodium, silver, and other cyanides, and hydrocyanic acid, value	$6,336,719	$4,945,982	$5,044,479	$7,082,535
Nitric acid (see also Table 4), value	$3,494,577	$3,559,436	$3,559,695	$2,741,370
Nitrous oxide (laughing gas):				
Number of establishments	9	10	10	12
Thousands of gallons	109,812	66,392	54,882	45,297
Value	$1,196,392	$809,614	$729,534	$730,644
Other nitrogen compounds and gaseous nitrogen, value	[3] $9,898,626	$3,809,334	$3,638,192	$5,692,444

[1] Ammonia (NH_3) content.
[2] Includes, in order of value, data for chloride, nitrate, carbonates, bromide, molybdate, etc.
[3] Includes, in order of value, data for sodium nitrate, silver nitrate, sodium nitrite, bismuth subnitrate, gaseous nitrogen, strontium nitrate, etc.

TABLE 8.—SUMMARY FOR AMMONIA AND AMMONIA COMPOUNDS—PRODUCTION IN COKE, CHEMICALS, AND MANUFACTURED-GAS INDUSTRIES: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

	1929	1927	1925	1923
Aggregate value	$44,998,960	$39,590,030	$43,734,363	$45,566,237
COKE INDUSTRY				
NH_3 equivalent of sales:				
Pounds	401,440,953	349,619,116	310,744,721	287,681,592
Value	$26,861,440	$26,239,840	$26,850,266	$31,094,119
Number of establishments	67	62	61	57
Liquor (NH_3 equivalent):				
Total production, pounds	52,302,845	49,825,891	57,425,326	51,825,389
Sales—Pounds	51,762,440	49,011,372	47,128,790	[1] 50,986,996
Value	$2,687,053	$2,335,047	$4,385,501	[1] $5,139,706
Ammonium sulphate:				
Total production, pounds	1,396,552,434	1,172,643,719	1,013,277,580	915,926,762
Sales—Pounds	1,350,154,009	1,225,624,762	986,179,337	884,952,912
Value	$24,174,387	$23,904,793	$22,464,765	$25,954,413
CHEMICALS INDUSTRY				
Total value	$15,964,029	$11,596,758	$15,068,005	$12,546,538
Ammonia, aqua and liquor:				
Number of establishments	11	13	17	16
Pounds	[2] 30,200,074	46,225,012	66,227,955	38,694,140
Value	$1,784,212	$1,260,426	$3,027,474	$2,453,831
Anhydrous ammonia:				
Number of establishments	16	15	16	12
Pounds	173,349,355	45,115,020	31,724,858	23,529,382
Value	$10,673,234	$4,011,362	$6,771,876	$6,414,667
Ammonium sulphate:				
Number of establishments	10	11	10	7
Pounds	11,852,867	12,381,506	5,708,984	1,424,448
Value	$240,391	$266,426	$153,134	$70,455
Other forms, value	$3,266,192	$6,058,544	$5,115,521	$3,607,585
MANUFACTURED-GAS INDUSTRY				
NH_3 equivalent of forms reported:				
Pounds	36,216,150	28,814,232	24,339,955	22,749,956
Value	$2,173,491	$1,753,432	$1,816,092	$1,925,580
Number of establishments	55	64	89	102
Reported as:				
Ammonium sulphate—				
Pounds	92,826,531	56,078,150	13,439,204	8,050,598
Value	$1,727,540	$1,255,739	$351,235	$278,158
Ammonia (NH_3)—				
Pounds	13,009,518	14,794,695	20,980,154	[3] 20,737,307
Value	$445,951	$497,693	$1,464,857	[3] $1,647,422

[1] Includes data for an unknown quantity of sulphate sold on basis of NH_3 content.
[2] Ammonia (NH_3) content.
[3] Represents the ammonia content of the following: Ammonia liquors, 5,039,223 gallons, valued at $376,352; anhydrous ammonia, 182,676 pounds, $17,811; and ammonia reported in terms NH_3, 14,634,055 pounds, $1,253,259.

TABLE 9.—GROUP III, SODIUM COMPOUNDS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

CLASS AND KIND	1929	1927	1925	1923
Total value	$137,654,863	$113,880,497	$109,522,017	$111,848,381
Inorganic	131,030,656	110,752,027	106,526,071	106,615,843
*Organic	6,624,207	3,128,470	2,995,946	5,232,538
*Acetate:				
Number of establishments	7	7	7	8
Pounds	592,253	1,854,588	813,834	905,039
Value	$32,846	$80,553	$47,583	$59,941
*Benzoate:				
Number of establishments	5	6	7	----------
Pounds	868,141	937,070	804,240	----------
Value	$349,318	$393,053	$372,286	(1)
Bichromate and chromate:				
Number of establishments	8	5	5	5
Tons	39,301	31,462	27,820	26,879
Value	$5,137,346	$3,780,425	$3,526,568	$3,994,566
Borate (borax):				
Number of establishments	8	7	7	6
Tons	92,250	64,864	49,967	53,092
Value	$3,279,640	$5,079,278	$4,083,209	$5,102,148
Carbonates:				
Bicarbonate, refined—				
Number of establishments	5	6	6	7
Tons	140,234	121,449	123,472	145,316
Value	$4,002,074	$3,647,446	$3,651,848	$3,738,129
Sal soda—				
Number of establishments	19	21	29	26
Tons	57,850	55,220	63,619	68,802
Value	$1,522,895	$1,370,811	$1,332,071	$1,690,084
Soda ash—				
Number of establishments	14	12	12	14
Total production, tons	2,682,216	2,037,808	1,907,791	1,707,987
Made and consumed, tons	868,360	571,429	539,131	449,207
For sale—Tons	1,813,856	1,466,379	1,368,660	1,258,780
Value	$34,648,657	$29,939,291	$32,243,941	$32,427,166
Production, by process—				
Ammonia-soda—				
Number of establishments	6	6	6	6
Total production, tons	2,586,304	1,974,157	1,850,013	1,674,234
Made and consumed, tons	868,360	571,429	539,131	449,207
For sale—Tons	1,717,944	1,402,728	1,310,882	1,225,027
Value	$32,540,942	$28,645,404	$30,914,558	$31,413,210
Natural and electrolytic soda—				
Number of establishments	8	6	6	8
Tons	95,912	63,651	57,778	33,753
Value	$2,107,715	$1,293,887	$1,329,383	$1,013,956
Modified sodas—				
Soda ash and caustic—				
Number of establishments	6			
Tons	9,935			
Value	$632,280			
Soda ash and bicarbonate—		7	5	12
Number of establishments	7	53,866	47,452	47,669
Tons	49,219	$1,827,521	$1,550,772	$1,342,182
Value	$1,150,783			
Caustic (hydroxide):				
Primary production—				
Total, tons [2]	761,792	[3] 573,417	497,261	436,619
Made and consumed, tons	37,118	26,112	10,116	5,658
For sale—Tons	724,674	[3] 547,305	487,145	430,961
Value	$36,089,264	$29,193,003	$27,392,352	$25,056,547
By process—				
Lime-soda—				
Number of establishments	6	6	6	6
Tons	524,985	[3] 387,235	355,783	314,195
Electrolytic—				
Number of establishments	20	17	16	17
Tons	236,807	[3] 186,182	141,478	122,424
Caustic (hydroxide)—Con.				
Repacked caustic (purchased in bulk)—				
Number of establishments	6	6	12	12
Tons	17,474	21,104	26,687	32,828
Value	$3,611,573	$4,128,433	$4,414,836	$5,034,336
*Citrate:				
Number of establishments	4	5	6	7
Pounds	1,432,482	745,249	553,181	423,511
Value	$544,570	$294,088	$249,537	$273,595
Hypochlorite:				
Number of establishments	20	11	7	8
Tons	26,772	[3] 14,697	[4] 15,392	10,939
Value	$2,015,817	$1,140,746	$1,877,257	$758,745
Iodide:				
Number of establishments	6	7	7	8
Pounds	49,796	47,982	49,531	45,450
Value	$214,960	$208,512	$194,803	$189,739
Phosphates:				
Number of establishments	14	11	13	14
Tribasic—				
Tons	82,045	63,531	48,783	26,224
Value	$5,008,815	$4,524,595	$3,288,101	$1,955,632
Monobasic, dibasic, and not specified—				
Tons	64,134	32,950	30,561	10,375
Value	$3,955,723	$2,460,656	$2,467,387	$1,215,922
Silicate (basis 40°):				
Number of establishments	23	24	23	21
Tons	590,277	504,518	394,884	331,309
Value	$7,179,397	$6,826,099	$5,717,420	$5,066,719
Silicofluoride:				
Number of establishments	7	8	8	10
Tons	2,278	1,646	1,384	2,481
Value	$228,093	$191,687	$128,025	$302,758
Sulphates:				
Niter cake (bisulphate)—				
Number of establishments	46	53	42	45
Total production, tons	111,522	153,615	124,296	154,087
Made and consumed, tons	28,839	33,109	22,700	24,640
For sale—				
Tons	82,683	120,506	101,596	129,447
Value	$1,023,136	$625,049	$400,598	$587,897
Salt cake—				
Number of establishments	28	34	38	34
Total production, tons	206,612	208,565	189,293	187,064
Made and consumed, tons	36,436	33,573	48,450	46,047
For sale—				
Tons	170,176	174,992	140,843	141,017
Value	$2,014,838	$2,786,818	$2,339,002	$2,972,013
Glauber's salt—				
Number of establishments	20	20	22	21
Tons	61,953	53,420	57,022	66,192
Value	$1,112,267	$1,081,980	$1,265,260	$1,521,095
Hyposulphite (thiosulphate)—				
Number of establishments	7	8	12	11
Tons	25,020	23,574	23,982	22,538
Value	$906,369	$992,865	$1,051,068	$1,124,351
Sulphide:				
Number of establishments	18	16	15	19
Total production, tons	36,463	46,094	29,169	38,148
Made and consumed, tons	3,431	7,648	5,404	6,310
For sale—				
Tons	33,032	38,446	23,765	31,838
Value	$1,406,606	$1,691,609	$1,203,332	$2,209,499
Sulphite (normal):				
Number of establishments	6	6	7	4
Tons	5,970	5,030	4,492	4,382
Value	$462,072	$399,529	$382,728	$370,601
Other inorganic sodium compounds, value	[5] $15,368,051	$8,855,664	$8,015,487	$9,955,714
*Other organic sodium compounds, value	[6] $5,697,473	$2,360,176	$2,326,540	$4,899,002

* Organic.
[1] Included in item for "Other organic sodium compounds."
[2] Not including caustic soda made and consumed in the wood-pulp and textile industries.
[3] Revised.
[4] Includes data for some hypochlorite packed in small containers.
[5] Includes, in order of value, data for nitrate, hydrosulphite, aluminate, crude bicarbonate, nitrite, bisulphite, peroxide, etc.
[6] Includes, in order of value, data for cyanide, sulphoxylate, glycerophosphate, xanthate, salicylate, etc.

TABLE 10.—GROUP IV, POTASSIUM COMPOUNDS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

KIND	1929	1927	1925	1923
Total value	$9,998,054	$9,306,037	$6,071,146	$6,318,822
Bitartrate (cream of tartar):				
Number of establishments	7	6	5	4
Pounds	7,852,559	7,594,777	7,072,651	5,971,186
Value	$1,930,577	$1,746,793	$1,472,082	$1,746,363
Citrate:				
Number of establishments	5	5	7	7
Pounds	151,074	117,297	147,399	111,334
Value	$80,701	$66,609	$83,540	$72,185
Iodide:				
Number of establishments	7	7	7	9
Pounds	443,557	528,017	494,935	438,092
Value	$1,487,166	$1,896,944	$1,821,259	$1,623,100
Hydroxide:				
Number of establishments	3			
Tons	7,191			
Value	$637,977	$4,765,151	$2,345,849	$2,684,808
Other:				
Inorganic	[1] $4,543,802			
Organic	[2] $1,317,831	$830,540	$348,416	$192,366
Potash from original sources (reported by the Bureau of Mines):				
Number of plants	5	9	9	12
Crude potassium salt, tons	107,820	76,819	51,565	39,029
Content of K_2O, tons	61,590	43,510	25,448	20,215

[1] Includes, in order of value, data for chloride, carbonate, bromide, bichromate, permanganate, etc.
[2] Includes, in order of value, data for xanthate, Rochelle salt, tartar emetic, glycerophosphate, etc.

TABLE 11.—GROUP V, ALUMS AND OTHER ALUMINUM COMPOUNDS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

KIND	1929	1927	1925	1923
Aggregate value	$15,948,773	$13,563,095	$11,581,290	$11,066,611
Alums, total value	9,388,447	9,524,677	8,735,844	7,445,378
Aluminum sulphate (concentrated alum)—				
Number of establishments	27	22	23	21
Tons	344,962	314,018	284,298	234,116
Value	$8,038,730	$8,012,626	$7,396,922	$6,519,350
Ammonia alum—				
Number of establishments	6	6	7	
Tons	5,720	5,411	5,039	
Value	$286,772	$316,220	$330,339	
Soda alum—				
Number of establishments	3	5	5	12
Tons	14,947	19,454	16,718	14,978
Value	$848,299	$1,044,196	$933,478	$926,028
Potash and chrome alums—				
Number of establishments	7	6	5	
Tons	3,447	2,291	841	
Value	$214,646	$151,635	$75,105	
Aluminous abrasives:				
Number of establishments	4	4	4	4
Tons	33,246	19,782	16,410	20,356
Value	$3,446,116	$1,970,000	$1,789,251	$2,125,703
Aluminum chloride (crystals and solutions):				
Number of establishments	7	5	6	8
Tons	[1, 2] 1,521	[2] 2,872	[2] 3,554	4,706
Value	[2] $225,184	[2] $161,613	[2] $203,205	$312,021
Aluminum stearate:				
Number of establishments	6	7	3	
Tons	1,066	801	385	
Value	$440,180	$322,516	$165,473	$1,182,609
Other aluminum compounds, value	[3] $2,448,846	$1,584,289	$687,517	

[1] Quantity representing solutions calculated on basis of 100 per cent.
[2] Production for sale. Total production of aluminum chloride, as reported by the Bureau of Mines, was as follows: For 1929, 16,551 tons, valued at $1,600,826; for 1927, 17,130 tons, valued at $4,054,080; for 1925, 12,830 tons, valued at $4,012,920.
[3] Includes, in order of value, data for sodium aluminate, hydroxide, oleate, resinate, and acetate.

TABLE 12.—GROUP VI, BLEACHING COMPOUNDS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

CLASS AND KIND	1929	1927	1925	1923
Total value	$19,871,087	[1] $18,674,515	$17,167,412	$16,729,233
Chlorine bleaches:				
Chlorine [2]—				
Number of establishments	20	15	14	12
Total production, pounds	398,943,703	234,978,522	166,325,643	125,361,020
Made and consumed, pounds	109,088,853	54,815,084	61,365,457	49,242,780
For sale—				
Pounds	289,854,850	180,163,438	104,960,186	76,118,240
New York	134,098,783	98,458,333	71,520,183	62,310,788
Other States	155,756,067	81,705,105	33,440,003	13,807,452
Value	$7,113,091	$6,678,145	$4,236,307	$2,778,088
Hypochlorites—				
Calcium hypochlorite—				
Number of establishments	15	19	17	16
Tons	93,116	110,524	115,438	146,975
New York	36,390	29,211	50,527	72,760
Other States	56,726	81,313	64,911	74,215
Value	$3,350,537	$4,148,205	$3,964,604	$5,192,385
Sodium hypochlorite—				
Number of establishments	20	11	7	8
Tons	26,772	[1] 14,697	[3] 15,392	10,939
New York	8,693	(4)	(4)	(4)
New Jersey	6,174			
Other States	11,905			
Value	$2,015,817	[1] $1,140,746	$1,877,257	$758,745
Peroxide bleaches:				
Hydrogen peroxide—				
Number of establishments	10	8	10	12
Pounds	[5] 8,508,649	21,442,651	27,160,730	25,006,182
New York	6,437,672	(4)	(4)	(4)
Other States	2,070,977			
Value	$2,371,781	$1,505,739	$1,880,943	$1,763,451
Other—				
Number of establishments	8	6	5	6
Pounds	8,384,753	8,862,000	7,534,890	7,416,100
Value	$1,138,862	$1,573,157	$1,461,200	$1,601,292
Sulphur bleaches:				
Sulphur dioxide—				
Number of establishments	4	5	4	4
Pounds	17,600,936	11,003,719	8,968,453	6,575,995
Value	$973,596	$720,470	$638,175	$414,049
Other sulphur bleaches, value	$2,907,403	$2,908,053	$3,108,926	$4,221,223

[1] Revised.
[2] Not including chlorine made and consumed in the wood-pulp industry.
[3] Includes data for some sodium hypochlorite in small containers.
[4] No data available.
[5] Basis of 100 volumes.

TABLE 13.—GROUP VII, COAL-TAR PRODUCTS—PRODUCTION, BY CLASS AND VALUE: 1923 TO 1929 [1]

CLASS	1929	1927	1925	1923
Total	$130,651,757	$106,056,504	$112,201,348	$121,893,211
Crudes [2]	26,370,143	24,861,831	25,403,177	38,296,898
Intermediates	$25,593,686	$22,844,748	$25,324,456	$23,279,761
Dyes and other finished products	78,687,928	58,349,925	61,473,715	60,316,552

[1] For detailed statistics of production and sales of coal-tar products, see Census of Dyes and Other Synthetic Organic Chemicals, 1929, Tariff Information Series No. 39, United States Tariff Commission.
[2] Does not include by-product crudes of by-product coke plants and gas works, nor the value of crudes made and consumed in the same establishments.

TABLE 14.—GROUP VIII, PLASTICS [1]—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929

[Data for rayon are included for 1923. See "Rayon and compressed and liquefied gases" and "Products made and consumed and for sale," p. 646]

KIND	1929	1927	1925	1923
Total value [2]	$40,531,257	$28,202,865	$48,731,957	$102,229,807
Pyroxylin:				
Plastics—				
Number of establishments	10	8	8	8
Total production, pounds	25,283,235	19,503,710	17,859,469	27,051,910
Made and consumed in the same establishments, pounds	4,856,625	3,205,687	4,156,313	3,671,794
For sale, in form for further manufacture—				
Pounds	20,426,610	16,298,023	13,703,156	23,980,116
Value	$18,063,154	$14,409,668	$13,720,802	$17,682,049
Solutions, value	[3]	[3]	$14,156,889	$4,476,774
Pyroxylin—Continued.				
Finished articles of pyroxylin made in the producing establishments, value [4]	$10,522,214	$6,801,355	$10,984,254	$11,299,538
Rubber substitutes:				
Number of establishments	8			10
Pounds	9,923,231			11,208,115
Value	$1,003,371	$6,991,842	$9,870,012	$2,922,299
Other plastics, value	[5] $10,942,518			$6,797,762
Rayon	[6]	[6]	[6]	$59,051,385

[1] Not including photographic films.
[2] See headnote and footnotes 3 and 4.
[3] Data included in statistics on "Pyroxylin products" in report on "Paints and varnishes."
[4] Toothbrush blanks, toys, novelties, fancy articles, handles for cutlery and umbrellas, etc.
[5] Includes, in order of value, data for phenolic resins, cellulose-acetate plastics, casein plastics, etc.
[6] The manufacture of rayon has been treated as a separate industry at censuses subsequent to that for 1923.

TABLE 15.—GROUP IX, MISCELLANEOUS CHEMICALS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

	1929	1927	1925	1923
Total value	$307,873,603	$234,435,522	$190,970,407	$188,682,077
Inorganic	202,798,329	157,847,318	135,392,353	149,304,526
*Organic	105,075,274	76,588,204	55,578,054	39,377,551
*Alcohols (butyl, synthetic, methanol, etc.), value [1]	$11,840,877	$9,944,445	$7,119,106	$3,103,540
*Amyl acetate:				
Number of establishments	11	12	12	10
Total production, gallons	278,292	316,578	168,251	440,976
Made and consumed, gallons	97,089	97,702	30,768	191,083
For sale—Gallons	181,203	218,876	137,483	249,893
Value	$312,898	$435,656	$414,860	$996,267
Antimony:				
Chloride—				
Number of establishments	6	5	4	
Pounds	261,950	165,890	139,111	
Value	$42,565	$27,437	$20,324	$934,850
Other salts and compounds, value	$508,617	$349,172	$451,416	
Arsenic:				
Oxides—				
Number of establishments	7	11	10	10
Total production, pounds	42,926,400	35,315,999	30,653,261	33,015,107
Made and consumed, pounds	14,283,784	4,682,271	7,776,096	3,621,360
For sale—Pounds	28,642,616	30,633,728	22,877,165	29,393,747
Value	$851,858	$1,028,244	$781,328	$2,007,829
Arsenate of calcium [2]—				
Number of establishments	16	18	8	9
Pounds	33,064,426	27,282,326	15,199,387	13,261,233
Value	$1,859,735	$1,605,000	$1,074,960	$1,703,119
Arsenate of lead [3]—				
Number of establishments	20	22	13	9
Pounds	30,682,379	21,527,838	11,938,032	10,755,137
Value	$3,523,427	$3,190,257	$1,777,552	$2,229,431
Other (magnesium arsenate, sodium arsenate, etc.), value	$107,819	$127,142	$113,945	$826,467
Barium:				
Sulphate, precipitated ("blanc fixé")—				
Number of establishments	12	13	13	15
Pounds	26,049,893	18,290,290	17,491,557	10,572,723
Value	$958,446	$565,822	$621,807	$351,819
Carbonate—				
Number of establishments	7	5	4	4
Pounds	22,351,172	15,558,434	10,815,491	13,979,766
Value	$648,617	$463,591	$300,468	$484,138
Other (chloride, dioxide, sulphide, etc.), value	$626,900	$577,717	$575,785	$519,299
Bismuth:				
Subnitrate—				
Number of establishments	5	7	5	7
Pounds	280,454	248,134	220,052	255,027
Value	$465,982	$565,732	$548,352	$694,966
Subcarbonate—				
Number of establishments	5	7	6	6
Pounds	140,391	93,546	97,712	53,619
Value	$304,972	$268,082	$304,393	$172,077
Subgallate—				
Number of establishments	5	7	6	5
Pounds	22,946	22,210	28,808	15,538
Value	$54,899	$59,287	$69,994	$42,034
Other (subsalicylate, oxychloride, etc.), value	$71,786	$44,619	$292,905	$600,200
*Butyl acetate:				
Number of establishments	11	9	11	8
Total production, gallons	5,962,562	4,220,490	2,078,926	252,706
Made and consumed, gallons	1,438,699	1,878,479	1,208,463	188,098
For sale—Gallons	4,523,863	2,342,011	870,463	64,608
Value	$5,680,155	$3,613,182	$1,577,503	$193,411
Cadmium salts and compounds, value	$128,809	$58,679	$16,950	$114,407
Calcium:				
Acetate—				
Number of establishments	49	53	63	73
Tons	58,163	69,017	72,052	72,294
Value	$4,695,449	$4,021,292	$3,437,384	$4,823,403
Arsenate (see "Arsenic").				
Chloride—				
Number of establishments	18	15	16	13
Tons	277,010	191,123	170,773	90,750
Value	$5,947,281	$4,442,876	$3,717,456	$2,038,632
Phosphates—				
Number of establishments	8	11	13	14
Tons	38,139	34,003	35,764	38,751
Value	$5,557,454	$4,914,086	$4,452,715	$4,393,119

	1929	1927	1925	1923
Calcium—Continued.				
Hypochlorite—				
Number of establishments	15	19	17	16
Tons	93,116	110,524	115,438	146,976
Value	$3,350,537	$4,148,205	$3,964,604	$5,192,385
Satin white (calcium sulphate and alumina)—				
Number of establishments	4	5	5	
Tons	21,007	18,385	14,411	
Value	$532,385	$542,414	$444,700	$9,938,329
Sulphate—				
Number of establishments	3			
Tons	3,889			
Value	$185,998	$11,513,408	$7,047,334	
Other (carbide, citrate, etc.), value	$14,009,514			
*Carbon bisulphide:				
Number of establishments	10	8	6	7
Pounds	71,009,798	44,972,489	39,874,700	25,200,967
Value	$2,859,584	$2,159,524	$1,938,894	$1,337,024
*Carbon tetrachloride:				
Number of establishments	3	4	4	4
Pounds	32,712,749	[3] 17,026,466	16,059,956	11,745,972
Value	$1,728,034	$1,036,165	$978,068	$956,590
Cerium salts and compounds, value	$239,090	(4)	(4)	(4)
*Chloroform:				
Number of establishments	5	5	4	4
Pounds	3,081,920	2,972,889	1,582,402	1,805,083
Value	$595,759	$604,317	$379,221	$478,524
Chromium compounds, other than of sodium and potassium, value	$150,836	$166,581	$175,027	$484,484
Cobalt compounds and salts, value	$769,586	$517,798	$413,472	$1,710,142
Copper:				
Sulphate (blue vitriol)—				
Number of establishments	13	11	12	10
Pounds	78,669,112	56,666,812	32,296,583	32,304,421
Value	$4,344,538	$2,774,400	$1,683,788	$1,777,003
Carbonate—				
Number of establishments	7	6	5	5
Pounds	675,436	1,072,808	263,994	386,740
Value	$123,202	$182,076	$44,888	$76,700
Oxide—				
Number of establishments	5			
Pounds	825,280			
Value	$170,778	$394,711	$366,411	$368,082
Other (cyanide, chloride, nitrate, oleate, etc.), value	$354,029			
*Ether:				
Number of establishments	6	7	9	8
Total production, pounds	7,026,049	8,068,052	5,662,365	5,220,663
Made and consumed, pounds	562,497	1,933,281	272,776	285,188
For sale—Pounds	6,463,552	6,134,771	5,389,589	4,935,475
Value	$1,897,194	$1,720,374	$1,461,557	$619,860
*Ethyl acetate:				
Number of establishments	14	12	12	9
Total production, gallons	14,100,402	6,638,147	4,021,653	3,091,024
Made and consumed, gallons	3,168,177	2,031,245	1,114,441	561,236
For sale—Gallons	10,932,225	4,606,902	2,907,212	2,529,788
Value	$9,006,914	$3,701,084	$2,406,517	$2,193,039
*Geraniol:				
Number of establishments	6			
Pounds	94,743	(5)	(5)	(5)
Value	$244,650			
*Glycerin:				
Crude [6]—				
Number of establishments	48	68	75	73
Pounds	28,789,974	26,999,863	30,734,804	27,444,065
Value	$2,358,031	$3,942,991	$4,268,351	$3,124,470
Refined—				
Number of establishments	26	24	24	24
Total production, pounds	138,487,150	95,352,632	97,354,898	76,049,552
Made and consumed, pounds	25,347,075	5,767,714	3,052,048	1,944,698
For sale—Pounds	113,140,075	89,584,918	94,302,850	74,104,854
Value	$12,715,641	$19,184,806	$16,991,213	$12,214,012
Gold chloride:				
Number of establishments	6			
Ounces	6,016			
Value	$73,008	$584,159	$546,161	$535,378
Other gold salts and compounds, value	$462,771			

See footnotes at end of table.

TABLE 15.—GROUP IX, MISCELLANEOUS CHEMICALS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1923 TO 1929—Continued

[See "Products made and consumed and for sale," p. 646]

[Ton, 2,000 pounds]

	1929	1927	1925	1923
Iodine, resublimed:				
Number of establishments	7	7	8	8
Pounds	87,102	90,765	79,872	97,070
Value	$412,444	$429,475	$372,988	$440,487
Iron:				
Chloride (crystals and solutions)—				
Number of establishments	7	7	8	8
Pounds	5,941,289	2,985,663	2,983,969	2,104,000
Value	$292,515	$176,769	$177,878	$143,637
Sulphate (copperas)—				
Number of establishments	28	32	34	32
For sale—				
Tons, total	56,047	61,527	52,994	70,552
Made in rolling and wire-drawing mills	40,379	42,895	33,750	45,418
Other	15,668	18,632	19,244	25,134
Value	$553,604	$672,918	$602,585	$1,275,045
Ferro-alloys (electric-furnace) [2]—				
Number of establishments	19	16	19	23
Tons	246,859	197,425	150,141	215,424
Value	$28,655,447	$17,049,050	$15,255,491	$20,899,085
Other salts and compounds, value	$1,438,555	$1,193,981	$1,328,772	$1,223,637
Lead:				
Acetate—				
Number of establishments	6	8	7	9
Pounds	2,084,364	3,016,840	2,501,021	1,232,637
Value	$255,753	$395,122	$359,686	$160,133
Arsenate (see "Arsenic").				
Other, not including pigments, value	$186,736	$254,809	$192,995	$388,868
Magnesium: [3]				
Sulphate (Epsom salt)—				
Number of establishments	8	8	11	12
Tons	36,983	27,065	23,428	20,676
Value	$1,404,978	$1,141,633	$1,219,177	$851,103
Other salts and compounds, value	$1,125,756	$1,548,508	$2,631,331	$2,223,163
Manganese:				
Dioxide—				
Number of establishments	4			
Pounds	2,479,648			
Value	$64,547			
Resinate—				
Number of establishments	3	[4] $390,962	$326,372	$201,367
Pounds	854,652			
Value	$99,883			
Other salts and compounds, value	$201,122			
Mercury:				
Chloride, mercuric (corrosive sublimate)—				
Number of establishments	5	6	6	5
Pounds	375,034	433,725	341,834	305,905
Value	$606,512	$663,584	$369,341	$291,686
Chloride, mercurous (calomel)—				
Number of establishments	5	5	3	4
Pounds	150,725	104,901	102,341	127,654
Value	$315,099	$197,890	$136,003	$153,571
Other salts and compounds, value	$635,172	$599,291	$463,791	$315,181
*Methyl acetone:				
Number of establishments	7	6	5	5
Pounds	4,675,140	2,603,529	3,644,302	6,602,336
Value	$574,736	$352,947	$457,589	$930,468
Nickel salts and compounds, value	$1,218,028	$836,465	$373,273	$786,171

	1929	1927	1925	1923
Silver:				
Nitrate—				
Number of establishments	5	6	8	5
Ounces	5,646,749	4,896,607	4,338,549	3,438,464
Value	$2,015,936	$1,956,961	$2,022,956	$1,508,785
Other salts and compounds, value	$88,385	$186,786	$150,372	$179,858
Strontium salts and compounds, value	$198,171	$296,026	$202,058	$309,967
Sulphur:				
Refined—				
Number of establishments	14	7	8	11
Tons	78,119	43,508	47,220	61,424
Value	$3,066,002	$1,799,163	$2,121,092	$2,765,133
Chloride, yellow and red—				
Number of establishments	4	5	[5]	[5]
Pounds	17,827,108	3,354,965	4,972,591	1,188,991
Value	$312,228	$72,628	$132,781	$46,664
Sulphur-lime [7]—				
Dry—				
Number of establishments	9	11	[5]	[5]
Tons	7,203	3,018	2,518	3,599
Value	$602,762	$433,992	$377,184	$468,064
Solution—				
Number of establishments	50	30	[5]	[5]
Gallons	11,973,877	7,652,779	2,607,004	2,472,284
Value	$1,446,026	$1,055,665	$363,191	$369,194
Tin salts and compounds, value	$13,111,529	$10,582,562	$6,783,421	$3,650,554
*Vanillin:				
Number of establishments	5	6	4	4
Pounds	317,355	299,624	215,012	227,997
Value	$1,858,228	$1,922,510	$1,133,920	$1,326,935
Vitreous enamels, value	[8] $4,512,183	[5]	[5]	[5]
Zinc:				
Chloride—				
Number of establishments	12	13	14	10
Pounds	77,232,392	58,268,485	58,046,674	64,575,076
Value	$1,618,774	$1,921,466	$1,992,768	$1,996,950
Sulphate—				
Number of establishments	7	8	10	13
Pounds	24,903,841	20,627,505	13,481,646	12,807,971
Value	$698,092	$517,865	$376,801	$347,877
Stearate—				
Number of establishments	6	7	6	5
Pounds	1,454,797	782,833	786,771	453,186
Value	$320,203	$164,927	$169,051	$107,319
Other salts and compounds, value	$473,786	$376,666	$420,944	$410,913
Other elements, compounds, and salts				
Inorganic:				
Metals and alloys (aluminum, sodium, titanium, magnesium, zirconium, etc.); calcined bauxite; compounds and salts of molybdenum, silicon, phosphorus, vanadium, lithium, etc., value	$85,746,613	$69,738,777	$62,725,932	$65,170,261
*Organic: [9]				
Nitrocellulose, tetraethyl lead, acetone, ethylene glycol, formaldehyde, ethyl chloride, etc., value	$53,402,573	$27,970,203	$16,461,249	$11,903,411

*Organic.

[1] Not including glycerol (glycerin), ethyl alcohol, nor methanol produced by the distillation of wood.

[2] The statistics for 1925 and 1923 are not comparable with those for 1929 and 1927 because the production reported by establishments engaged primarily in the manufacture of patent or proprietary medicines and compounds is included for 1929 and 1927 but not for prior years.

[3] Revised.

[4] Included in item for "Other elements, compounds, and salts—inorganic."

[5] No data.

[6] Production for sale by chemical and soap-manufacturing establishments only. The total production of crude glycerin, 80 per cent basis (Quarterly Census of Animal and Vegetable Fats and Oils), was as follows: 1929, 140,079,568 pounds; 1927, 128,208,642 pounds; 1925, 103,406,943 pounds.

[7] Production of electric-furnace ferro-alloys only. For the total production of ferro-alloys in all industries, see Table 10, report on Blast Furnaces.

[8] Quantity not reported by all manufacturers. In addition, 90,932,626 pounds of vitreous enamels, valued at $5,683,701, were made and consumed in further manufacturing operations in the "Stamped ware, enameled ware, and metal stamping, enameling, japanning, and lacquering" and the "Plumbers' supplies, not including pipe or vitreous-china sanitary ware" industries.

[9] For detailed statistics of production and sales of synthetic organic chemicals, see report of the United States Tariff Commission, Tariff Information Series No. 39, 1929.

INDEX OF PRODUCTS AND DISTRIBUTION OF NUMBER OF ESTABLISHMENTS, BY STATES

[This list covers those products, and only those, for which separate statistics are given in the foregoing tables]

Table	Page	PRODUCT, NUMBER OF ESTABLISHMENTS, AND DISTRIBUTION BY STATES
		Acids—
4	3	Acetic, 17: Pa., 4; N. J., 3; Mass., 2; Mich., 2; Calif., Ill., Ind., Md., N. Y., Tenn., 1 each.
4	3	Boric, 7: Calif., 3; Md., N. J., N. Y., Pa., 1 each.
4	3	Carbonic (carbon dioxide), 54: Calif., 7; N. Y., 7; Ill., 4; N. J., 4; Pa., 4; Ohio, 3; Tenn., 3; Tex., 3; Fla., 2; Ga., 2; La., 2; Mass., 2; Mo., 2; Ala., Ind., Md., Mich., Minn., N. C., Utah, Va., Wash., 1 each.
4	3	Chromic, 8: N. J., 3; Pa., 3; Mo., 1; Ohio, 1.
4	3	Citric, 5: N. Y., 2; Calif., N. J., Pa., 1 each.
4	3	Hydrochloric (muriatic), 33: N. J., 5; N. Y., 4; Pa., 4; Ill., 3; Mass., 3; Calif., 2; Conn., 2; Mich., 2; Ohio, 2; Ark., Del., Ind., La., Tex., Wash., 1 each.
4	3	Mixed (sulphuric-nitric), 36: N. J., 8; Ill., 4; Pa., 4; Mo., 3; Ala., 2; Colo., 2; Mich., 2; Ariz., Calif., Conn., Del., Ind., Mass., N. Y., Ohio, Okla., Wash., Wis., 1 each.
4, 7	3, 6	Nitric, 48: N. J., 10; Pa., 6; Ill., 5; Mich., 3; Mo., 3; Ala., 2; Calif., 2; Colo., 2; Conn., 2; N. Y., 2; Tex., 2; Wis., 2; Ariz., Del., Ind., Mass., Ohio, Wash., W. Va., 1 each.
4	3	Oleic, 13: Ohio, 6; N. Y., 3; Pa., 2; Ill., 1; N. J., 1.
4	3	Phosphoric, 9: N. J., 2; S. C., 2; Ala., Mont., N. Y., R. I., Tenn., 1 each.
4	3	Stearic, 12: Ohio, 6; N. Y., 2; Pa., 2; Ill., 1; N. J., 1.
4, 5, 6	3, 4, 5	Sulphuric, 170: Ga., 18; Pa., 15; N. J., 14; Ill., 12; Ohio, 12; S. C., 11; N. C., 9; Va., 9; Ala., 8; Calif., 7; Tenn., 6; Md., 6; La., 5; Fla., 4; Mass., 4; Tex., 5; Mich., 3; Ariz., 2; Conn., 2; Miss., 2; N. Y., 2; Okla., 2; Wis., 2; Ark., Colo., Del., Ind., Ky., Mo., Mont., Utah, Wash., W. Va., 1 each.
4	3	Sulphuric, reclaimed, 69: Tex., 13; Pa., 9; N. J., 7; Calif., 5; Ill., 5; Ind., 3; Kans., 3; Ohio, 3; La., 2; Mo., 2; N. Y., 2; Okla., 2; Wyo., 2; Ala., Ariz., Ark., Ky., Md., Mich., S. C., Utah, Wash., W. Va., Wis., 1 each.
4	3	Tannic, 4: Mass., Mo., N. J., N. Y., 1 each.
4	3	Tartaric, 4: N. Y., 2; Calif., 1; Ohio., 1.
		Alums—
11	8	Aluminum sulphate (concentrated alum), 27: Pa., 6; Ohio, 4; Ill., 3; N. J., 3; Mass., 2; Calif., Conn., Del., Ga., Ind., La., Mo., N. H., Tenn., 1 each.
11	8	Ammonia alum, 6: Pa., 3; Del., Ill., Mass., 1 each.
11	8	Chrome and potash alums, 7: N. J., 2; Pa., 2; Del., Ill., Mo., 1 each.
11	8	Soda alum, 3, Ill.
11	8	Aluminous abrasives, 4: N. Y., 3; Ala., 1.
		Aluminum—
11	8	Chloride, 7: N. J., 2; Conn., Mass., N. Y., Pa., W. Va., 1 each.
11	8	Stearate, 6: N. Y., 2; Ohio, 2; N. J., 1; Mo., 1.
		Ammonia—
7, 8	6	Anhydrous (chemicals industry), 16: N. J., 2; N. Y., 2; Pa., 2; Wash., 2; Calif., Colo., Del., Mass., Mo., Ohio, Va., W. Va., 1 each.
7, 8	6	Aqua and liquor (chemicals industry), 11: N. Y., 2; Pa., 2; Wash., 2; Calif., Md., Mo., N. J., Va., 1 each.
7	6	Iodide, 5: N. J., 2; N. Y., 2; Mo., 1.
7, 8	6	Sulphate (chemicals industry), 10: Pa., 2; Ky., La., Md., Mo., N. J., R. I., Tex., Va., 1 each.
15	10	Amyl acetate, 11: N. J., 5; N. Y., 2; Ill., Md., Mass., Wis., 1 each.
15	10	Antimony chloride, 6: N. J., 2; N. Y., 2; Mo., 1; Pa., 1.
		Arsenate of—
15	10	Calcium, 16: N. J., 4; Calif., 2; Md., 2; N. Y., 2; Ga., Ind., Mich., Mo., Pa., Tenn., 1 each.
15	10	Lead, 20: Calif., 4; N. J., 4; N. Y., 3; Md., 2; Wash., 2; Ga., Ill., Ind., Mich., Ohio, 1 each.
15	10	Arsenic oxides, 7: Calif., 2; Mont., N. J., N. Y., Tenn., Wash., 1 each.
		Barium—
15	10	Carbonate, 7: Ill., 2; Pa., 2; Calif., N. J., W. Va., 1 each.
15	10	Sulphate (blanc fixé), 12: N. Y., 3; Mo., 2; N. J., 2; Calif., Ill., Ohio, R. I., W. Va., 1 each.
		Bismuth—
15	10	Subcarbonate, 5: N. Y., 3; Mo., 1; N. J., 1.
15	10	Subgallate, 5: N. Y., 3; Mo., 1; N. J., 1.
15	10	Subnitrate, 5: N. Y., 3; Mo., 1; N. J., 1.
15	10	Blanc fixé. *See* Barium sulphate.
12, 15	9, 10	Bleaching powder. *See* Calcium hypochlorite.
9	7	Borax. *See* Sodium borate.
15	10	Butyl acetate, 11: N. J., 4; Ill., 2; Calif., Ind., Md., Mass., N. Y., 1 each.
		Calcium—
15	10	Acetate, 49: Pa., 20; N. Y., 10; Mich., 8; Tenn., 3; W. Va., 2; Wis., 2; Ky., Miss., Mo., N. J., 1 each.
15	10	Arsenate. *See* Arsenate of calcium.
15	10	Chloride, 18: Calif., 4; Mich., 4; W. Va., 4; Ohio, 3; Mo., N. Y., Pa., 1 each.
12, 15	9, 10	Hypochlorite, 15: N. Y., 4; Mich., 2; Calif., Me., Md., Mass., N. H., Pa., R. I., Va., Wis., 1 each.
15	10	Phosphates, 3: Ill., 3; Ala., Mo., R. I., S. C., Tenn., 1 each.
15	10	Satin white (calcium sulphate and alumina), 4: Mich., 2; Pa., 1; R. I., 1.
15	10	Sulphate, 3: Ill., Mich., Mo., 1 each.
		Carbon—
15	10	Bisulphide, 10: N. Y., 2; Pa., 2; Calif., Mich., N. H., Tenn., Va., W. Va., 1 each.
15	10	Tetrachloride, 3: Mich., N. Y., W. Va., 1 each.
15	10	Chloroform, 5: Mich., N. H., N. J., N. Y., W. Va., 1 each.
12	9	Chlorine, liquid, 20: N. Y., 6; Mich., 3; Calif., 2; Wash., 2; W. Va., 2; Ill., N. H., N. J., Ohio, R. I., 1 each.
		Copper—
15	10	Carbonate, 7: N. J., 2; N. Y., 2; Calif., Ohio, Pa., 1 each.
15	10	Oxide, 5: N. Y., 2; N. J., Ohio, Pa., 1 each.
15	10	Sulphate (blue vitriol), 13: N. J., 3; Calif., 2; Idaho, Ill., Mass., Mont., N. Y., Ohio., Pa., Tenn., 1 each.
7	6	Cyanide, ferric ferro (Prussian blue), 21: N. Y., 6; N. J., 5; Ill., 4; Pa., 2; Ky., Mich., Ohio, Wis., 1 each.
15	10	Ether, 6: N. J., 2; Md., Mo., N. Y., Pa., 1 each.
15	10	Ethyl acetate, 14: N. J., 5; Calif., 2; Ill., 2; Md., Mass., Mich., N. Y., Pa., 1 each.
15	11	Ferro-alloys, electric furnace, 19: N. Y., 6; Pa., 3; Ala., Calif., Iowa, Md., Minn., N. J., Ohio, Tenn., Va., W. Va., 1 each.
15	10	Geraniol, 6: N. J., 4; N. Y., 2.
		Glycerin—
15	10	Crude, 48: Ohio, 9; N. J., 6; N. Y., 6; Calif., 5; Mass., 5; Ill., 3; Pa., 3; R. I., 2; Colo., Conn., Ind., Iowa, Md., Mo., Nebr., Wash., Wis., 1 each.
15	10	Refined, 26: Ill., 4; N. Y., 4; Ohio, 4; Calif., 2; Kans., 2; Mass., 2; N. J., 2; Pa., 2; Ind., Mo., Nev., Tenn., 1 each.
15	10	Gold chloride, 6: N. J., 2; Pa., 2; Mo., 1; N. Y., 1.
12	9	Hydrogen peroxide, 10: N. Y., 4; N. J., 2; Calif., Mo., Ohio, R. I., 1 each.
15	11	Iodine, resublimed, 7: N. Y., 4; N. J., 2; Mo., 1.
		Iron—
15	11	Alloys. *See* Ferro-alloys.
15	11	Chloride, 7: Mich., 2; N. J., 2; Calif., Mo., N. Y., 1 each.
15	11	Sulphate (copperas), 28: Ohio, 6; Ill., 5; Pa., 5; N. J., 3; Ala., 2; Ind., 2; N. Y., 2; Conn., Mich., Mo., 1 each.
		Lead—
15	11	Acetate, 6: N. J., 3; N. Y., 2; Pa., 1.
15	10	Arsenate. *See* Arsenate of lead.
15	11	Magnesium sulphate (Epsom salt), 8: Calif., Ga., Md., Mich., Mo., N. Y., Ohio, Pa., 1 each.
		Manganese—
15	11	Dioxide, 4: Ill., N. J., Pa., Va., 1 each.
15	11	Resinate, 3: Pa., 2; N. J., 1.
		Mercury—
15	11	Chloride, mercuric, 5: N. J., 3; N. Y., 1; Pa., 1.
15	11	Chloride, mercurous, 5: N. J., 2; Md., N. Y., Pa., 1 each.
15	11	Methyl acetone, 7: Mich., 2; N. Y., 2; Pa., 2; Tenn., 1.
9	7	Niter cake (sodium bisulphate), 46: Pa., 7; N. J., 6; Ga., 3; Ill., 3; Mich., 3; Mo., 3; Ohio, 3; Tenn., 3; Conn., 2; N. Y., 2; N. C., 2; Ala., Calif., Colo., Del., La., Mass., S. C., Wash., W. Va., 1 each.
7	6	Nitrous oxide, 9: Calif., 3; Ohio, 2; N. Y., Md., Mo., N. J., 1 each.
		Potassium—
10	8	Bitartrate (cream of tartar), 7: Mass., 2; N. Y., 2; Calif., N. J., Ohio, 1 each.
10	8	Citrate, 5: N. Y., 2; Mo., N. J., Pa., 1 each.
10	8	Hydroxide, 3, N. Y.
10	8	Iodide, 7: N. Y., 4; N. J., 2; Mo., 1.
14	9	Pyroxylin plastics, 10: N. J., 5; Mass., 3; Conn., 1; N. Y., 1.
14	9	Rubber substitutes, 8: Conn., 2; Mass., 2; N. J., 2; Calif., 1; Ill., 1.
15	10	Satin white. *See* Calcium.
15	11	Silver nitrate, 5: Pa., 2; Mo., N. J., N. Y., 1 each.
		Soda—
9	7	Modified soda (soda ash and caustic), 6: Ill., Mich., N. Y., Ohio, Pa., R. I., 1 each.
9	7	Modified soda (soda ash and bicarbonate), 7: Calif., 2; Mich., 2; N. Y., 2; Ohio, 1.
9	7	Sal soda, 19: Calif., 5; N. J., 3; Colo., 2; Md., Mass., Mich., N. Y., Ohio, Oreg., Pa., R. I., Wash., 1 each.
9	7	Salt cake, 28: N. J., 5; Pa., 4; Calif., 3; Ill., 3; Conn., 2; Ohio, 2; Ariz., Ark., Del., Ind., Md., Mass., Mich., N. Y., Tex., 1 each.
9	7	Soda ash, 14: Calif., 4; Mich., 2; N. Y., 2; Ohio, 2; Va., 2; Md., 1; Pa., 1.
		Sodium—
9	7	Acetate, 7: N. J., 2; N. Y., 2; Mass., Mo., Pa., 1 each.
9	7	Benzoate, 5: N. J., 2; Ill., N. Y., W. Va., 1 each.
9	7	Bicarbonate, refined, 5: Calif., Mich., N. Y., Ohio, Va., 1 each.
9	7	Bichromate and chromate, 8: N. J., 5; Md., Mo., Pa., 1 each.
9	7	Bisulphate. *See* Niter cake.
9	7	Borate (borax), 8: Calif., 5; Pa., 2; N. J., 1.
9	7	Caustic (hydroxide)—Lime-soda, 6: Mich., 2; Ohio, 2; N. Y., 1; Va., 1.
9	7	Caustic (hydroxide)—Electrolytic, 19: N. Y., 6; Mich., 3; Calif., 2; Wash., 2; W. Va., 2; Me., N. H., R. I., Wis., 1 each.
9	7	Caustic, repacked (purchased in bulk), 6: Ohio, 2; Ill., Mo., N. J., N. Y., 1 each.
9	7	Citrate, 4: N. Y., 2; Mo., 1; N. J., 1.
9	7	Glauber's salt (sodium sulphate), 20: N. J., 5; Pa., 3; Calif., 2; Mass., 2; N. Y., 2; Conn., Del., Ill., Ind., Iowa, Md., 1 each.
9, 12	7, 9	Hypochlorite, 20: N. Y., 5; N. J., 4; Calif., 3; Mich., 2; Ill., Mass., Mo., N. H., Pa., Wash., 1 each.
9	7	Hyposulphite (thiosulphate), 7: N. J., 3; Calif., Del., Ind., Pa., 1 each.
9	7	Iodide, 6: N. Y., 4; Mo., 1; N. J., 1.
9	7	Phosphates, 14: N. J., 5; Ill., 2; Ala., Calif., Del., Ind., Md., N. Y., Pa., 1 each.
9	7	Silicate, 23: N. J., 4; Ind., 3; N. Y., 3; Ohio, 3; Calif., 2; Ill., 2; Kans., Mass., Mich., Mo., Pa., Wis., 1 each.
9	7	Silicofluoride, 7: Ga., 2; Md., 2; Fla., N. J., Tenn., 1 each.
9	7	Sulphide, 18: N. J., 3; Calif., 2; Mo., 2; N. Y., 2; Pa., 2; Del., Ill., Ind., Mass., Mich., Ohio, W. Va., 1 each.
9	7	Sulphite (normal), 6: N. J., 2; Calif., Md., Mo., W. Va., 1 each.
		Sulphur—
15	11	Chloride, 4: N. Y., 2; Mich., 1; Va., 1.
12	9	Dioxide, 4: Calif., N. J., Va., Wis., 1 each.
15	11	Refined, 14: Calif., 6; N. J., 2; N. Y., 2; Tex., 2; Md., 1; Ohio, 1.
		Sulphur-lime—
15	11	Solution, 50: Calif., 7; Wash., 7; N. Y., 5; Mich., 4; Ga., 3; Md., 3; N. J., 3; Fla., 2; Mo., 2; Ohio, 2; Pa., 2; Ark., Colo., Idaho, Ill., Mass., Miss., N. C., Okla., Oreg., Wis., 1 each.
15	11	Dry, 9: N. J., 2; Ohio, 2; Ala., Calif., Ind., Mich., Mo., 1 each.
15	11	Vanillin, 5: N. J., 4; Mo., 1.
		Zinc—
15	11	Chloride, 12: Calif., 2; Ark., Del., Ill., Ind., Mo., Nebr., N. J., Ohio, Pa., W. Va., 1 each.
15	11	Stearate, 6: N. J., 2; N. Y., 2; Mo., 1; Ohio, 1.
15	11	Sulphate, 7: N. J., 2; Kans., Mo., N. Y., Ohio, Pa., 1 each.

TABLE 16.—CONSUMPTION OF SELECTED PURCHASED MATERIALS, BY QUANTITY AND COST: 1923 TO 1929

[The statistics given in this table refer only to consumption in the "Chemicals, not elsewhere classified" industry]

[Ton, 2,000 pounds]

	1929	1927	1925	1923
Sulphur:				
Tons	911,061	688,877	561,930	578,100
Cost	$18,265,958	$12,812,907	$9,497,021	$9,982,067
Sodium nitrate:				
Tons	44,321	67,398	61,758	114,395
Cost	$1,996,216	$3,432,382	$3,113,618	$6,078,455
Sulphuric acid (basis 50° Baumé):				
Tons	564,935	363,677	306,059	446,522
Cost	$5,066,670	$3,137,991	$2,179,660	$3,372,866
Nitric acid:				
Tons	15,053	11,642	8,059	4,961
Cost	$1,315,224	$1,284,397	$963,969	$536,160
Hydrochloric acid:				
Tons	38,520	(1)	(1)	(1)
Cost	$658,598			
Mixed acid:				
Tons	27,596	(1)	(1)	(1)
Cost	$1,401,270			
Soda ash:				
Tons	382,311	199,651	146,139	(1)
Cost	$8,444,927	$4,647,016	$3,923,356	
Caustic soda:				
Tons	105,703	62,290	49,871	(1)
Cost	$5,410,605	$3,410,360	$2,687,053	

[1] No data.

TABLE 17.—PRIME MOVERS, MOTORS, GENERATORS, AND CONSUMPTION OF PURCHASED ELECTRIC ENERGY—NUMBER AND RATED CAPACITY OF PRIME MOVERS AND ELECTRIC MOTORS, 1929, 1927, 1925, AND 1914, AND OF GENERATORS, 1929, 1927, AND 1925; QUANTITY OF ELECTRIC ENERGY PURCHASED, 1929

[See "Rayon and compressed and liquefied gases," p. 646.]

TYPE	1929		1927		1925		1914		PER CENT DISTRIBUTION OF RATED HORSEPOWER CAPACITY
	Number	Capacity	Number	Capacity	Number	Capacity	Number	Capacity	1929
Prime movers and electric motors driven by purchased energy, aggregate	26,757	*Horsepower* 854,358	19,219	*Horsepower* 576,285	17,747	*Horsepower* 546,707	3,691	*Horsepower* 288,909	100.0
Prime movers, total	1,411	475,498	1,192	338,825	1,322	296,830	1,284	152,047	55.7
Steam, total	1,320	456,229	1,093	308,776	1,196	278,107	1,198	141,425	53.4
Engines	850	163,537	844	117,994	990	139,421	(1)	(1)	19.1
Turbines	470	292,692	249	190,782	206	138,686	(1)	(1)	34.3
Internal-combustion engines	64	3,587	60	3,726	75	4,602	65	7,487	0.4
Water wheels and water turbines	27	15,682	39	26,323	51	14,121	21	3,135	1.9
Electric motors driven by purchased energy	25,346	378,860	18,027	237,460	16,425	249,907	2,407	136,862	44.3
Electric motors, total	44,065	647,138	31,028	421,633	27,059	400,319	5,597	185,504	100.0
Driven by purchased energy	25,346	378,860	18,027	237,460	16,425	249,967	2,407	136,862	58.5
Driven by energy generated in establishments reporting	18,719	268,278	13,001	184,173	10,634	150,352	3,190	48,642	41.5
Electric generators	295	*Kilowatts* 226,924	283	*Kilowatts* 175,634	406	*Kilowatts* 156,554	(2)	(2)	
Electric energy purchased [3]		*Kilowatt-hours* 5,843,293,057		(4)		(4)		(2)	

[1] Not called for separately on schedule.
[2] Not called for on schedule.
[3] This item covers the consumption of purchased electric energy for all purposes—power, heat, light, etc.
[4] Data incomplete.