GAS, MANUFACTURED, ILLUMINATING AND HEATING

[A preliminary report for this industry was issued under date of April 18, 1929]

Description of the industry.—This industry designation covers establishments, both private and municipal, engaged primarily in the commercial manufacture of gas to be delivered through mains, for illuminating, household, and industrial purposes. It does not cover establishments which merely distribute gas not of their own manufacture. Blast-furnace gas and, with a few exceptions, gas resulting from by-product coke-oven operation, are not treated as products of this industry. A considerable amount of by-product coke-oven gas is, however, purchased by commercial gas plants and used as an ingredient of manufactured gas.

The products of the gas industry comprise not only gas, but also the by-products resulting from its manufacture, such as coke, tar, ammonia, naphthalene, and light oil and its derivatives. Only a few gas plants break up tar and light oil for the recovery of their derivatives.

Pintsch-gas plants.—Data for Pintsch-gas plants were included with those for the "Gas, manufactured, illuminating and heating" industry for 1925 and prior years, but for 1927 they were included with those for the "Compressed and liquefied gas" industry. At the census for 1925 data were received for 44 of these plants, with an aggregate value of products of $1,911,369, less than one-half of 1 per cent of the total value of products for the gas industry as constituted for that year.

Purchased gas.—The total output of gas in 1927, as shown in this report, included 96,618,409 M cubic feet purchased by establishments reporting. (See Tables 6 and 7.) Of this amount, 19,508,362 M cubic feet, representing gas made within the gas industry (coal gas, water gas, etc.), is duplicated in the figures for the total output. Similar duplication appears in the figures for earlier years.

Decrease in number of establishments.—As will be seen by reference to Table 1, the number of establishments classified in this industry has been decreasing from census to census. The decline from 1925 to 1927 was due to the omission of data for Pintsch-gas plants for 1927 (see "Pintsch-gas plants" above) and, in common with that shown for other census periods, to the tendency toward centralization, as a result of which establishments formerly manufacturing independently find it to their advantage to cease manufacturing and to purchase gas from other establishments for distribution, or are acquired by public-service corporations and operated as distributing stations supplied from larger and more centrally situated plants.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Combined summary for the gas and coke industries may be found on p. 746]

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture[1]	Horsepower
1927	828	48,497	$68,356,448	$211,785,523	$516,705,170	$304,919,647	496,014
1925	919	46,998	67,436,443	178,423,145	455,460,053	277,036,908	428,132
1923	939	42,282	59,600,334	191,120,082	450,097,161	258,977,079	358,605
1921	954	34,956	53,306,407	202,253,479	411,195,503	208,942,024	(2)
1919	1,022	42,908	52,758,628	157,550,882	329,278,908	171,728,026	238,454
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	—9.9	3.2	1.4	18.7	13.4	10.1	15.9
1923-1925	—2.1	11.2	13.1	—6.6	1.2	7.0	19.4
1923-1927	—11.8	14.7	14.7	10.8	14.8	17.7	38.3
1919-1927	—19.0	13.0	29.6	34.4	56.9	77.6	108.0

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	11,186	496,014	9,108	428,132	6,880	358,605
Steam engines	2,936	193,769	3,176	203,319	3,953	270,588
Steam turbines	1,163	130,122	815	77,796		
Internal-combustion engines	90	11,028	82	7,696	136	10,956
Water wheels and turbines	1	16	5	508	22	3,926
Electric motors driven by purchased current	6,996	161,079	5,030	138,813	2,769	73,135
Electric motors, total	8,246	178,607	6,257	155,309	4,442	96,007
Driven by purchased current	6,996	161,079	5,030	138,813	2,769	73,135
Driven by current generated in establishment reporting	1,250	17,528	1,227	16,496	1,673	22,872
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	85	11,192	94	12,076	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—CONSUMPTION OF GAS-MAKING MATERIALS AND FUELS, PRODUCED IN PLANT AND PURCHASED, FOR THE UNITED STATES, 1921 TO 1927, AND FOR STATES, 1927

STATE	COAL					COKE AND BREEZE (SHORT TONS)						OIL (BARRELS, 42 GALS.)			GAS TARS (BARRELS, 42 GALS.)
	Anthracite (long tons)		Bituminous (short tons)			Produced in plant			Purchased			Material			
				Fuel			Fuel			Fuel				Fuel	
	Material	Fuel	Material	Boiler	Retort and bench	Material	Boiler	Retort and bench	Material	Boiler	Retort and bench	Gas-making	Carburetting		Fuel
United States:															
1927	112,919	151,902	8,101,623	880,750	52,790	892,555	524,731	851,939	1,938,997	937,859	84.869	5,493,550	16,263,051	1,178,396	1,016,284
1925	619,402	202,958	6,870,570	[1] 1,059,374	(2)	782,046	[1] 1,203,980	(2)	1,865,360	[1] 225,504	(2)	5,052,650	16,175,664	1,327,171	(3)
1923	982,693	262,979	6,237,663	[1] 1,039,276	(2)	793,402	[1] 1,040,472	(2)	1,752,454	[1] 126,907	(2)	4,208,669	16,606,434	1,341,006	(3)
1921	1,129,601	119,404	5,706,825	[1] 1,258,304	(2)	755,416	[1] 1,108,397	(2)	1,543,289	[1] 77,008	(2)	3,770,599	16,271,572	588,355	(3)
States, 1927															
Alabama			54,812	19		2,148	5,211	8,888					5,068		
Arizona				24								151,201		779	3,724
California			3,062									4,324,781	56,873	613,725	186,026
Colorado			118,536	6,595	3,103	33,081	13,496	18,018	3,270	51			88,929		823
Connecticut	2,169	3,660	219,727	25,361		34,101	24,799	36,304	60,297	7,306	103		495,121		24,801
Florida			35,974	14,116		6,383	2,970	4,153	30.609	490	46		196,889	60,152	12,094
Georgia			99,929	15,608	241	16,847	7,353	14,457	6,925	240	450		149,839		1,013
Idaho			9,505	563	80	6	264	2,664					238		195
Illinois	1,685	110	368,179	153,369	7,645	21,019	18,350	28,392	220,379	4,879	1,716	3,180	1,686,123	22	3,932
Indiana			751,427	42,706	8,267	23,321	48,805	32,098	12,758	474			278,394		150
Iowa	1,211	1,742	91,482	38,041	664	2,526	229	3,607	13,876	757	152		362,300	286	2,049
Kansas			5,294	984	92		932		1,692	365			8,670		
Kentucky			17,238	3,072	87		100	2,902	1,715	164			12,482		
Maine	1,935	132	65,895	2,638		619	395	7,243	4,250	1,014		451	29,358		833
Maryland	493	925	10,848	10,020		642	599	2,216	89,520	25,397			369,963		112
Massachusetts	2,294	12,645	637,050	61,238		69,036	66,572	84,741	113,570	3,758	1,250	1,547	1,010,447	41,537	30,428
Michigan			919,818	77,387	16,891	110,704	96,306	99,003	4,478	2,127	8,398	9	599,770		4,052
Minnesota			80,881	39,971		1,134	2,974	28,560	5,194	1,169	42,426		356,109		4,673
Mississippi			19,629	2,565	500	1,456	1,919	3,379	3,224				20,796		227
Missouri			564,652	48,579	751	46,097	6,740	29,752	28,452	151		59	344,939		3,761

Montana			10,007	1,448	23	114	644	1,855					9,355		276
Nebraska			6,044	17,895		31			29,150	13	31		198,925	55	998
New Hampshire	606	234	61,675	2,741	512	739	2,441	7,428	4,553	24	38	639	36,139		148
New Jersey	10,152	34,961	92,840	44,838		1,507	1,150	5,589	194,048	7,722			1,328,847		7,203
New York	51,881	66,075	2,260,092	81,990	1,522	402,670	133,446	241,830	608,256	54,971	17,973		5,113,764		597,825
North Carolina			82,584	5,449	210	11,366	3,419	16,072	5,413	715			65,964		4,647
North Dakota			21,210	2,176		100	962	2,000	892				4,257		
Ohio			44,662	8,425	37		1,553	4,415	23,239	10			7,608		276
Oregon			6,164	12			380	1,807				987,470	10,292	28,717	714
Pennsylvania	38,007	31,218	361,209	25,680	178	4,818	1,331	37,198	245,588	6,050	12,286		1,625,564	424,002	5,292
Rhode Island	641		283,841	1,989	5,845	15,453	17,654	33,828					100,029	3	2,697
South Carolina	400		36,321	3,886	7	3,575	2,737	6,029	1,917				40,243		979
South Dakota			4,280	5,084	85				3,589			714	33,428		605
Tennessee			64,678	11,297		4,570	12,981	10,601	19,230				109,777		
Texas			12,990	20,330		3,728	454	3,262	16,423	809,308		5,138	74,335	9,054	9,991
Vermont	99		11,848	2,288		569	991	2,023	2,283	148			25,818		290
Virginia	675		69,769	14,369	165	3,817	5,616	6,976	15,437	751			237,320		10,827
Washington			122,008	22,564	32	39,384	10,194	6,995					120,189		
Wisconsin	541		401,670	31,376	5,853	30,782	25,148	49,628	15,240	121			187,217		3,438
Other States [4]	130	200	73,793	34,057		212	5,616	8,026	144,530	9,684		18,361	861,672	64	91,185

[1] Includes data for retort and bench fuel.
[2] See footnote 1.
[3] No data.
[4] Arkansas, Delaware, District of Columbia, Louisiana, Nevada, New Mexico, Utah, West Virginia, and Wyoming.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927

[Combined statistics for products of the gas and coke industries may be found in the table on p. 747]

PRODUCT	1927	1925	1923	1921
Gas industry, all products, total value	$516,705,170	$455,460,053	$450,097,161	$411,195,503
Gas and by-products	485,099,542	426,851,205	425,983,358	398,464,341
Other products (not normally belonging to the industry)	1,945,950	1,422,391	476,573	149,064
Receipts from lamps and appliances—				
Rents	390,193	2,306,089	2,602,659	2,833,059
Sales	29,269,485	24,880,368	21,034,571	9,749,039
Gas and by-products, total value	485,099,542	426,851,205	425,983,358	398,464,341
Gas				
Total produced and purchased, M cu. ft	445,457,144	395,520,627	386,547,471	333,997,626
For sale—				
M cu. ft	412,236,133	359,401,849	356,553,990	306,058,339
Value	$446,244,677	$395,968,502	$394,506,469	$372,032,009
Plant consumption and loss, M cu. ft	33,221,011	36,118,778	29,993,481	27,939,287
By-products				
Total produced for sale, value	$38,854,865	$30,882,703	$31,476,889	$26,432,332
Coke:				
Total production, short tons	4,805,119	4,032,187	3,728,945	[1] 3,895,052
For sale—				
Short tons	2,977,306	2,398,391	2,174,518	2,031,239
Value	$25,514,288	$20,721,381	$21,532,541	$17,503,289
Consumed in plant, short tons	1,827,813	1,633,796	1,554,427	1,863,813
Screenings and breeze:				
Total production, short tons	562,669	475,080	399,119	(2)
For sale—				
Short tons	85,627	62,697	88,752	----------
Value	$321,554	$169,455	$343,404	----------
Consumed in plant, short tons	477,042	412,383	310,367	----------
Tar:				
Total production, gallons	211,179,704	179,633,672	167,234,477	167,729,959
For sale (total)—				
Gallons	162,169,846	125,274,215	108,867,435	113,765,945
Value	$8,217,635	$6,140,784	$5,040,346	$5,395,635
Coal-gas tar—				
Gallons	78,690,507	63,803,091	58,876,615	60,333,000
Value	$4,449,171	$3,546,759	$3,038,983	$3,203,620
Water-gas tar—				
Gallons	82,528,822	61,219,427	49,750,153	52,923,588
Value	$3,687,017	$2,580,743	$1,986,769	$2,170,653
Oil-gas tar—				
Gallons	950,517	251,697	240,667	509,357
Value	$81,447	$13,282	$14,594	$21,362
Consumed in plant, gallons	49,009,858	54,359,457	58,367,042	53,964,014

[1] Includes data for screenings and breeze. [2] Included in figure for "Coke," above.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927—Continued

[See note at head of this table]

PRODUCT	1927	1925	1923	1921
By-products—Continued				
Ammonia products:				
Total ammonia (NH_3) content—				
Pounds	28,814,232	24,339,955	22,749,956	(3)
Value	$1,753,432	$1,816,092	$1,925,580	$1,667,851
Reported as—				
Ammonium sulphate—				
Pounds	56,078,150	13,439,204	8,050,598	3,901,442
Value	$1,255,739	$351,235	$278,158	$101,245
Ammonia (NH_3)—				
Pounds	14,794,695	20,980,154	[4] 20,737,307	(5)
Value	$497,693	$1,464,857	$1,647,422	[5] $1,566,606
Crude light oil:				
Total production, gallons	7,873,042	9,693,925	5,690,524	3,340,959
For sale—				
Gallons	1,449,672	1,901,864	1,373,964	1,565,769
Value	$115,792	$116,534	$110,393	$111,641
Plant consumption and loss, gallons	6,423,370	7,792,061	4,316,560	1,775,190
Light-oil derivatives:				
Total production, gallons	7,782,920	2,654,910	1,628,411	2,059,686
For sale—				
Gallons	3,759,894	2,109,847	1,035,976	2,015,512
Value	$660,419	$400,712	$234,233	$354,012
Plant consumption and loss, gallons	4,023,026	545,063	592,435	44,174
Drip and holder oil:				
For sale—				
Gallons	4,614,884	4,354,206	3,924,318	2,950,214
Value	$351,880	$295,394	$269,018	$180,118
Naphthalene, crude:				
Total production, pounds	2,971,782	6,158,678	3,563,387	795,282
For sale—				
Pounds	1,814,794	446,791	465,916	795,282
Value	$28,760	$2,537	$4,752	$33,248
Plant consumption and loss, pounds	1,156,988	5,711,887	3,097,471	----------
Other by-products, value	$1,891,105	$1,219,814	$2,016,622	$1,186,538

[3] No data.

[4] Represents the ammonia content of the following: Ammonia liquors, 5,039,223 gallons, valued at $376,352; anhydrous ammonia, 182,676 pounds, $17,811; ammonia reported in terms of NH_3, 14,634,055 pounds, $1,253,259.

[5] Represents the following: Ammonia liquors, 12,027,799 gallons, valued at $1,076,755; anhydrous ammonia, 6,509,955 pounds, $489,851. The ammonia ($NH_3$) content of these products can not be estimated because an indefinite amount of NH_3 is included in other forms. It is probable, however, that a large part of the anhydrous ammonia reported was the NH_3 content of liquors.

TABLE 5.—PRODUCTS MADE FOR SALE, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927

STATE	Total value of products	Gas (quantities in M cu. ft.)	BY-PRODUCTS						Gross receipts from rents and sales of lamps and appliances
			Coke (quantities in short tons)	Screenings and breeze (quantities in short tons)	Tar (quantities in gallons)			Other by-products	
					Coal-gas tar	Water-gas tar	Oil-gas tar		
United States:									
Quantity		412, 236, 133	2, 977, 306	85, 627	78, 690, 507	82, 528, 822	950, 517		
Value	$516, 705, 170	$446, 244, 677	$25, 514, 288	$321, 554	$4, 449, 171	$3, 687, 017	$81, 447	$6, 747, 338	$29, 659, 678
Alabama:									
Quantity		628, 531	19, 863		715, 866	23, 000			
Value	$1, 339, 438	$1, 073, 951	$115, 959		$35, 989	$1, 400		$2, 503	$109, 636
Arizona:									
Quantity		639, 739					1, 628		
Value	$1, 277, 907	$1, 140, 713					$276	$5, 021	$131, 897
California:									
Quantity		23, 489, 143				26, 000	122		
Value	$24, 544, 051	$24, 229, 930				$2, 080	$11	$111, 857	$200, 173
Colorado:									
Quantity		3, 704, 008	20, 531	73	1, 300, 460	115, 680			
Value	$3, 655, 607	$3, 045, 787	$152, 953	$337	$69, 942	$5, 837		$4, 682	$376, 069
Connecticut:									
Quantity		8, 954, 031	56, 784	3, 629	2, 658, 747	2, 285, 432			
Value	$13, 319, 633	$11, 353, 522	$603, 141	$10, 449	$278, 524	$163, 973		$41, 879	$868, 145
Florida:									
Quantity		2, 670, 297	3, 925		327, 248	235, 232			
Value	$5, 286, 948	$4, 684, 537	$32, 380		$16, 362	$10, 461		$22, 469	$520, 739
Georgia:									
Quantity		2, 793, 990	23, 686	1	895, 511	1, 229, 802	1, 200		
Value	$5, 122, 730	$4, 322, 541	$227, 689	$2	$46, 463	$58, 017	$48	$12, 772	$455, 198
Idaho:									
Quantity		110, 171	3, 396		106, 129	400			
Value	$259, 703	$210, 272	$24, 312		$4, 930	$24		$1, 350	$18, 815
Illinois:									
Quantity		51, 693, 345	97, 090	2, 780	3, 039, 349	11, 866, 893			
Value	$52, 147, 796	$49, 333, 663	$721, 740	$7, 106	$162, 295	$433, 703		$207, 248	$1, 282, 041
Indiana:									
Quantity		10, 450, 286	434, 165	1, 448	6, 231, 545	1, 715, 207			
Value	$16, 125, 553	$11, 230, 400	$3, 273, 970	$4, 760	$343, 713	$84, 094		$265, 035	$923, 581
Iowa:									
Quantity		5, 002, 581	12, 475		340, 231	2, 325, 837			
Value	$7, 718, 084	$6, 943, 724	$135, 832		$20, 946	$128, 368		$5, 656	$483, 558

Kansas:									
Quantity		176,614	2,039		51,104	15,995			
Value	$333,224	$303,243	$20,548		$2,044	$639			$6,750
Kentucky:									
Quantity		560,128	3,920		130,456	46,407			
Value	$534,024	$486,769	$18,131		$5,684	$2,047		$735	$20,658
Maine:									
Quantity		923,788	18,713	5,163	723,051	121,912			
Value	$1,874,692	$1,376,059	$252,891	$5,534	$39,217	$4,585		$1,495	$194,911
Maryland:									
Quantity		11,572,100	1,574		78,808	2,606,958			
Value	$11,072,185	$9,830,124	$9,993		$5,254	$147,419		$2,270	$1,077,125
Massachusetts:									
Quantity		25,914,533	228,965	7,811	6,084,101	6,798,492			
Value	$38,657,688	$32,117,842	$2,439,417	$22,639	$337,962	$358,896		$228,265	$3,152,667
Michigan:									
Quantity		30,861,340	298,361	3,129	9,763,855	3,041,618			
Value	$34,263,079	$28,887,661	$2,578,980	$60,722	$508,121	$99,667		$239,343	$1,888,585
Minnesota:									
Quantity		7,617,435	16,851		1,168,890	1,907,423			
Value	$8,497,408	$7,793,225	$202,790		$64,785	$101,009		$24,614	$310,985
Mississippi:									
Quantity		365,103	5,965	50	174,420				
Value	$787,198	$672,704	$28,958	$100	$10,475			$4,479	$70,482
Missouri:									
Quantity		10,255,646	320,301	23,533	5,082,356	1,630,643			
Value	$14,311,869	$10,491,427	$2,271,295	$71,049	$281,024	$94,787		$397,560	$704,727
Montana:									
Quantity		188,846	2,236	178	48,459	43,563			
Value	$447,967	$352,383	$19,801	$670	$5,239	$7,218		$5,513	$57,143
Nebraska:									
Quantity		2,559,788	71		600	1,335,876			
Value	$3,604,625	$3,312,923	$1,020		$30	$78,002		$18,313	$194,337
New Hampshire:									
Quantity		993,564	28,100	988	680,816	79,662			
Value	$2,113,473	$1,514,030	$285,884	$1,948	$39,773	$3,490		$76,496	$191,852
New Jersey:									
Quantity		27,865,598	8,700	5	232,154	12,019,412			
Value	$38,705,313	$34,627,490	$85,011	$25	$13,159	$518,882		$96,108	$3,364,638
New York:									
Quantity		89,033,127	733,649	28,468	23,348,432	10,829,379			
Value	$118,930,982	$103,491,142	$6,483,090	$107,899	$1,341,172	$615,796		$1,313,517	$5,578,366
North Carolina:									
Quantity		1,445,015	23,677	321	968,145	132,731			
Value	$3,104,253	$2,575,925	$169,536	$600	$39,952	$6,270		$2,179	$309,791
North Dakota:									
Quantity		307,299	10,814		276,887				
Value	$763,490	$601,699	$119,220		$19,351				$23,220
Ohio:									
Quantity		3,283,030	10,426		319,327	7,340			
Value	$2,966,115	$2,810,382	$62,564		$22,217	$226		$848	$69,878

TABLE 5.—PRODUCTS MADE FOR SALE, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927—Continued

STATE	Total value of products	Gas (quantities in M cu. ft.)	BY-PRODUCTS						Gross receipts from rents and sales of lamps and appliances
			Coke (quantities in short tons)	Screenings and breeze (quantities in short tons)	Tar (quantities in gallons)			Other by-products	
					Coal-gas tar	Water-gas tar	Oil-gas tar		
Oregon:									
Quantity		4,192,312	1,434		66,142		947,567		
Value	$6,139,053	$4,254,375	$7,721		$6,073		$81,112	$1,191,227	$598,545
Pennsylvania:									
Quantity		45,643,727	164,190	802	3,020,454	14,825,187			
Value	$45,888,043	$39,936,183	$1,002,625	$807	$136,984	$273,670		$1,984,852	$2,552,922
Rhode Island:									
Quantity		4,413,413	147,741	3,082	2,695,535	749,149			
Value	$7,512,477	$4,973,195	$1,921,162	$12,360	$165,121	$31,572		$15,604	$393,463
South Carolina:									
Quantity		800,192	9,440		367,565	265,472			
Value	$1,596,987	$1,307,592	$54,645		$18,371	$14,855		$11,334	$190,190
South Dakota:									
Quantity		406,904				151,643			
Value	$730,874	$695,011				$7,693		$1,500	$26,670
Tennessee:									
Quantity		2,157,496	21,209		766,210	649,438			
Value	$3,352,310	$2,912,891	$138,587		$45,628	$31,962		$13,632	$209,610
Texas:									
Quantity		989,938	630	1,030	136,926	115,816			
Value	$1,773,029	$1,465,514	$76,703	$5,665	$11,129	$9,200		$584	$204,234
Vermont:									
Quantity		418,811	2,416		99,954	65,579			
Value	$870,330	$779,580	$22,316		$5,327	$2,624			$60,483
Virginia:									
Quantity		3,495,261	10,451	207	380,388	931,339			
Value	$5,094,882	$4,718,432	$80,341	$64	$18,268	$41,175		$17,512	$219,090
Washington:									
Quantity		2,926,899	14,150	68	887,100	924,271			
Value	$4,506,512	$3,966,122	$103,603	$68	$50,432	$36,682		$17,048	$332,557
Wisconsin:									
Quantity		12,142,926	202,768	2,332	4,914,244	634,169			
Value	$14,505,715	$10,971,581	$1,676,863	$8,463	$253,963	$22,786		$382,967	$1,189,092
Other States: [1]									
Quantity		10,589,178	16,600	529	609,042	2,775,865			
Value	$12,969,923	$11,450,133	$92,617	$287	$23,252	$287,908		$18,871	$1,096,855

[1] Arkansas, Delaware, District of Columbia, Louisiana, Nevada, New Mexico, Utah, West Virginia, and Wyoming.

TABLE 6.—GAS PRODUCED AND PURCHASED, BY KIND AND QUANTITY, BY GEOGRAPHIC DIVISIONS: 1927

GEOGRAPHIC DIVISION	Total (M cu. ft.)	Water gas (M cu. ft.)	Coal gas, including coke-oven gas (M cu. ft.)	Oil gas (M cu. ft.)	Natural gas (M cu. ft.)	Other gases (M cu. ft.)
United States:						
Total	445,457,144	251,558,877	156,919,315	31,537,829	1,931,430	3,509,693
Produced	348,838,735	233,241,841	82,193,994	31,490,022	----------	1,912,878
Purchased	96,618,409	18,317,036	74,725,321	47,807	1,931,430	1,596,815
New England:						
Total	44,570,536	23,933,497	20,605,249	31,790	----------	----------
Produced	38,206,033	23,855,826	14,318,417	31,790	----------	----------
Purchased	6,364,503	77,671	6,286,832	----------	----------	----------
Middle Atlantic:						
Total	176,218,951	128,239,288	46,851,631	----------	167,487	960,545
Produced	140,205,923	111,306,765	28,899,158	----------	----------	----------
Purchased	36,013,028	16,932,523	17,952,473	----------	167,487	960,545
East North Central:						
Total	114,878,078	46,031,937	65,770,554	12,021	1,458,947	1,604,619
Produced	70,106,591	44,792,092	23,697,859	12,021	----------	1,604,619
Purchased	44,771,487	1,239,845	42,072,695	----------	1,458,947	----------
West North Central:						
Total	28,063,107	18,240,432	8,782,733	11,900	111,735	916,307
Produced	24,655,057	18,181,060	6,182,060	11,900	----------	280,037
Purchased	3,408,050	59,372	2,600,673	----------	111,735	636,270
South Atlantic:						
Total	32,597,240	23,569,806	9,027,434	----------	----------	----------
Produced	26,776,967	23,562,181	3,214,786	----------	----------	----------
Purchased	5,820,273	7,625	5,812,648	----------	----------	----------
East South Central:						
Total	4,404,273	2,543,209	1,819,276	----------	13,566	28,222
Produced	4,390,707	2,543,209	1,819,276	----------	----------	28,222
Purchased	13,566	----------	----------	----------	13,566	----------
West South Central:						
Total	4,380,018	4,230,395	135,123	14,500	----------	----------
Produced	4,380,018	4,230,395	135,123	14,500	----------	----------
Purchased	----------	----------	----------	----------	----------	----------
Mountain:						
Total	6,018,697	2,401,998	2,737,909	878,790	----------	----------
Produced	6,018,697	2,401,998	2,737,909	878,790	----------	----------
Purchased	----------	----------	----------	----------	----------	----------
Pacific:						
Total	34,326,244	2,368,315	1,189,406	30,588,828	179,695	----------
Produced	34,098,742	2,368,315	1,189,406	30,541,021	----------	----------
Purchased	227,502	----------	----------	47,807	179,695	----------

TABLE 7.—GAS—PRODUCTION AND CONSUMPTION, BY STATES: 1927

STATE	GAS (M CU. FT.)					
	Total	Production		Consumption		
		Made in plant	Purchased from other establishments	Sold	Consumed on premises	Unaccounted for
United States	445,457,144	348,838,735	[1] 96,618,409	412,236,133	3,062,088	30,158,923
Alabama	780,235	780,235	----------	628,531	4,682	147,022
Arizona	782,707	782,707	----------	639,739	1,402	141,566
California	26,513,179	26,285,677	227,502	23,489,143	59,515	2,964,521
Colorado	3,980,194	3,980,194	----------	3,704,008	10,857	265,329
Connecticut	9,559,625	9,559,625	----------	8,954,031	42,805	562,789
Florida	3,240,647	3,240,647	----------	2,670,297	6,480	563,870
Georgia	3,084,695	3,084,695	----------	2,793,990	16,383	274,322
Idaho	128,712	128,712	----------	110,171	586	17,955
Illinois	55,019,753	29,296,289	25,723,464	51,693,345	61,791	3,264,617
Indiana	11,568,161	10,692,861	875,300	10,450,286	150,716	967,159
Iowa	5,490,972	5,431,600	59,372	5,002,581	19,685	468,706
Kansas	208,226	182,286	25,940	176,614	142	31,470
Kentucky	695,686	695,686	----------	560,128	3,196	132,362
Maine	1,048,716	1,048,716	----------	923,788	18,106	106,822
Maryland	12,114,550	6,301,902	5,812,648	11,572,100	24,161	518,289
Massachusetts	27,634,342	21,269,839	6,364,503	25,914,533	174,503	1,545,306
Michigan	32,013,787	19,567,358	12,446,429	30,861,340	113,324	1,039,123
Minnesota	7,924,872	5,360,491	2,564,381	7,617,435	43,708	263,729
Mississippi	483,055	469,489	13,566	365,103	3,108	114,844
Missouri	10,966,473	10,208,116	758,357	10,255,646	28,894	681,933
Montana	224,953	224,953	----------	188,846	2,228	33,879
Nebraska	2,703,018	2,703,018	----------	2,559,788	7,358	135,872
New Hampshire	1,085,787	1,085,787	----------	993,564	5,861	86,362
New Jersey	30,951,663	19,330,760	11,620,903	27,865,598	280,195	2,805,870
New York	96,243,006	91,949,902	4,293,104	89,033,127	1,529,578	5,680,301
North Carolina	1,778,036	1,778,036	----------	1,445,015	6,826	326,195
North Dakota	344,677	344,677	----------	307,299	702	36,676
Ohio	3,434,140	3,005,404	428,736	3,283,030	38,536	112,574
Oregon	4,593,303	4,593,303	----------	4,192,312	40,401	360,590
Pennsylvania	49,024,282	28,925,261	20,099,021	45,643,727	93,557	3,286,998
Rhode Island	4,768,488	4,768,488	----------	4,413,413	145,237	209,838
South Carolina	927,871	927,871	----------	800,192	3,357	124,322
South Dakota	424,869	424,869	----------	406,904	920	17,045
Tennessee	2,445,297	2,445,297	----------	2,157,496	12,991	274,810
Texas	1,071,998	1,071,998	----------	989,938	7,383	74,677
Vermont	473,578	473,578	----------	418,811	2,534	52,233
Virginia	3,923,188	3,923,188	----------	3,495,261	12,750	415,177
Washington	3,219,762	3,219,762	----------	2,926,899	17,987	274,876
Wisconsin	12,842,237	7,544,679	5,297,558	12,142,926	36,965	662,346
Other States [2]	11,738,404	11,730,779	7,625	10,589,178	32,678	1,116,548

[1] Coke-oven gas, 74,550,486 M cu. ft.; carbureted water gas, 18,317,036; coal gas, 174,835; natural gas, 1,931,430; oil gas, 47,807; and other gases, 1,596,815.

[2] Arkansas, Delaware, District of Columbia, Louisiana, Nevada, New Mexico, Utah, West Virginia, and Wyoming.

TABLE 8.—GAS SOLD—QUANTITY AND VALUE AND NUMBER OF CUSTOMERS, ACCORDING TO CLASS OF CONSUMER, BY STATES: 1927

STATE	Total	CLASS OF CONSUMER						
		Domestic	House heating	Industrial	Commercial	Street lighting	Other gas companies	Miscellaneous
United States:								
Number of customers	10,587,579	9,271,115	77,044	828,497	407,867	173	263	2,620
M cu. ft	412,236,133	281,043,700	7,950,718	58,301,610	32,016,113	1,922,167	30,473,887	527,938
Value	$446,244,677	$331,185,883	$7,137,837	$56,814,625	$34,540,156	$1,721,560	$14,411,588	$433,028
Alabama:								
Number of customers	18,569	18,114	6	2	447			
M cu. ft	628,531	594,213	2,500	574	31,244			
Value	$1,073,951	$1,023,131	$3,625	$775	$46,420			
Arizona:								
Number of customers	21,792	19,414	1,046	23	1,307		1	1
M cu. ft	639,739	487,708	31,118	8,429	104,878		7,117	489
Value	$1,140,713	$911,788	$51,822	$12,948	$152,740		$10,676	$739
California:								
Number of customers	524,842	480,770	43	36,707	7,317	2	3	
M cu. ft	23,489,143	20,585,356	791	1,662,801	872,303	84,026	283,866	
Value	$24,229,930	$21,492,819	$4,188	$1,616,621	$843,504	$117,715	$155,083	
Colorado:								
Number of customers	87,939	80,743	417	4,490	2,289			
M cu. ft	3,704,008	2,234,768	280,287	869,205	319,748			
Value	$3,045,787	$2,247,504	$135,108	$484,907	$178,268			
Connecticut:								
Number of customers	289,652	281,954	333	1,294	5,935	1	2	133
M cu. ft	8,954,031	7,005,661	128,600	1,291,602	372,343	20,538	128,216	7,071
Value	$11,353,522	$9,356,437	$113,793	$1,276,883	$502,674	$19,113	$77,675	$6,947
Florida:								
Number of customers	90,695	84,747	622	4,870	451	1		4
M cu. ft	2,670,297	2,244,991	38,940	314,457	71,296	466		147
Value	$4,684,537	$4,057,038	$66,704	$414,967	$144,678	$885		$265
Georgia:								
Number of customers	77,287	75,883	1	110	1,292			1
M cu. ft	2,793,990	2,414,117	222	274,973	96,031			8,647
Value	$4,322,541	$3,866,587	$410	$302,905	$143,992			$8,647
Idaho:								
Number of customers	5,373	5,222	4	22	125			
M cu. ft	110,171	97,584	897	1,083	10,607			
Value	$210,272	$190,822	$756	$1,697	$16,997			

TABLE 8.—GAS SOLD—QUANTITY AND VALUE AND NUMBER OF CUSTOMERS, ACCORDING TO CLASS OF CONSUMER, BY STATES: 1927—Con.

STATE	Total	CLASS OF CONSUMER						
		Domestic	House heating	Industrial	Commercial	Street lighting	Other gas companies	Miscellaneous
Illinois:								
Number of customers	1,108,070	1,035,490	6,288	7,804	58,348	6	6	128
M cu. ft	51,693,345	30,312,825	1,314,922	5,815,149	6,830,194	104,495	7,309,077	6,683
Value	$49,333,663	$34,289,651	$1,040,827	$4,450,880	$6,527,146	$72,721	$2,944,327	$8,111
Indiana:								
Number of customers	247,417	234,371	114	6,096	6,700	1	4	131
M cu. ft	10,450,286	6,740,722	30,941	2,803,747	733,747	13,026	118,670	9,433
Value	$11,230,400	$8,398,870	$24,901	$1,860,831	$845,920	$14,486	$78,476	$6,916
Iowa:								
Number of customers	322,633	286,929	683	7,823	27,168	2	1	27
M cu. ft	5,002,581	4,013,274	23,297	572,162	330,428	3	59,372	4,045
Value	$6,943,724	$5,769,934	$34,144	$642,727	$463,459	$4	$28,594	$4,862
Kansas:								
Number of customers	7,313	6,787		43	483			
M cu. ft	176,614	137,085		2,594	36,935			
Value	$303,243	$255,091		$4,071	$44,081			
Kentucky:								
Number of customers	80,753	77,208	917	3	2,625			
M cu. ft	560,128	456,801	19,209	11,101	73,017			
Value	$486,769	$322,121	$36,652	$13,311	$114,685			
Maine:								
Number of customers	37,055	34,730	81	520	1,722	1	1	
M cu. ft	923,788	646,440	19,863	72,590	110,459	15,440	58,996	
Value	$1,376,059	$1,057,262	$16,186	$95,789	$150,494	$24,318	$32,010	
Maryland:								
Number of customers	205,739	189,243	1,800	364	14,328	1		3
M cu. ft	11,572,100	7,894,246	620,000	1,055,310	1,693,191	265,055		44,298
Value	$9,830,124	$7,070,236	$434,000	$669,632	$1,424,576	$197,127		$34,553
Massachusetts:								
Number of customers	812,725	741,517	42,426	6,653	22,088	12	29	
M cu. ft	25,914,533	18,235,692	1,734,120	2,832,291	1,060,093	201,748	1,850,589	
Value	$32,117,842	$24,162,497	$2,150,420	$2,963,178	$1,285,056	$186,501	$1,370,190	
Michigan:								
Number of customers	629,791	615,194	695	4,857	9,043		2	
M cu. ft	30,861,340	22,664,054	272,515	5,731,972	2,084,062		108,737	
Value	$28,887,661	$22,394,049	$201,291	$4,348,025	$1,833,005		$111,291	
Minnesota:								
Number of customers	221,241	211,882	170	1,702	7,485			2
M cu. ft	7,617,435	6,212,640	124,951	357,465	914,047			8,332
Value	$7,793,225	$6,399,958	$120,447	$345,943	$919,347			$7,530

Mississippi:								
Number of customers	13,028	10,932	820	19	1,257			
M cu. ft	365,103	285,028	4,003	18,593	57,479			
Value	$672,704	$558,399	$6,871	$23,483	$83,951			
Missouri:								
Number of customers	276,944	255,748	954	2,361	17,874	7		
M cu. ft	10,255,646	7,124,070	309,295	1,070,796	1,543,351	208,134		
Value	$10,491,427	$7,721,478	$245,091	$831,378	$1,515,651	$177,829		
Montana:								
Number of customers	9,773	9,224	9	75	465			
M cu. ft	188,846	135,363	977	11,675	40,831			
Value	$352,383	$258,946	$1,238	$18,887	$73,312			
Nebraska:								
Number of customers	81,932	79,534	99	240	2,059			
M cu. ft	2,559,788	2,135,590	22,927	160,370	240,901			
Value	$3,312,923	$2,881,961	$17,024	$125,275	$288,663			
New Hampshire:								
Number of customers	38,761	34,819	89	1,222	2,613	1		17
M cu. ft	993,564	688,370	37,999	162,160	104,558	260		217
Value	$1,514,030	$1,081,346	$47,712	$207,724	$176,480	$390		$378
New Jersey:								
Number of customers	872,941	818,762	924	5,684	47,551	13	7	
M cu. ft	27,865,598	21,215,882	261,452	2,465,735	3,322,002	170,871	429,656	
Value	$34,627,490	$26,894,781	$316,716	$2,949,071	$3,967,028	$191,955	$307,939	
New York:								
Number of customers	2,506,775	1,699,735	999	700,013	104,929	12	14	1,073
M cu. ft	89,033,127	58,044,601	341,857	24,234,877	4,868,652	60,499	1,219,542	263,099
Value	$103,491,142	$69,036,911	$267,187	$27,250,651	$5,870,803	$77,484	$785,888	$202,218
North Carolina:								
Number of customers	39,537	37,997		106	1,434			
M cu. ft	1,445,015	1,339,764		9,219	96,032			
Value	$2,575,925	$2,403,799		$15,383	$156,743			
North Dakota:								
Number of customers	12,156	11,229			927			
M cu. ft	307,299	245,549			61,750			
Value	$601,699	$493,632			$108,067			
Ohio:								
Number of customers	26,564	25,632	8	176	727		1	20
M cu. ft	3,283,030	3,179,260	952	26,107	67,119		5,195	4,397
Value	$2,810,382	$2,693,287	$737	$31,566	$75,083		$5,181	$4,528
Oregon:								
Number of customers	99,379	82,209	11,982	3,679	1,467	42		
M cu. ft	4,192,312	2,040,004	1,349,040	724,879	75,807	2,582		
Value	$4,254,375	$2,629,436	$866,287	$659,236	$97,586	$1,830		
Pennsylvania:								
Number of customers	872,796	826,482	441	17,322	27,995	68	178	310
M cu. ft	45,643,727	23,567,286	377,403	2,266,156	2,411,578	550,075	16,425,587	45,642
Value	$39,936,183	$26,715,126	$373,364	$2,361,160	$2,623,558	$550,679	$7,262,726	$49,570
Rhode Island:								
Number of customers	112,411	108,014	363	1,880	2,150	1	3	
M cu. ft	4,413,413	2,902,045	132,186	389,555	470,672	24,966	493,989	
Value	$4,973,195	$3,793,310	$109,298	$360,453	$413,618	$12,328	$284,188	

TABLE 8.—GAS SOLD—QUANTITY AND VALUE AND NUMBER OF CUSTOMERS, ACCORDING TO CLASS OF CONSUMER, BY STATES: 1927—Con.

STATE	Total	CLASS OF CONSUMER						
		Domestic	House heating	Industrial	Commercial	Street lighting	Other gas companies	Miscellaneous
South Carolina:								
Number of customers	21,930	21,509	72	36	313			
M cu. ft	800,192	763,423	1,873	2,972	31,924			
Value	$1,307,592	$1,248,670	$2,000	$5,003	$51,919			
South Dakota:								
Number of customers	16,228	15,402	2	263	561			
M cu. ft	406,904	314,825	335	34,686	57,058			
Value	$695,011	$557,316	$237	$56,206	$81,252			
Tennessee:								
Number of customers	55,370	50,442	15	1,216	3,659	1		37
M cu. ft	2,157,496	1,613,043	9,519	245,221	273,597	13,737		2,379
Value	$2,912,891	$2,291,345	$6,579	$270,626	$325,922	$15,110		$3,309
Texas:								
Number of customers	28,520	24,384	3,131	77	924		1	3
M. cu. ft	989,938	685,478	90,010	25,086	162,023		14,136	13,205
Value	$1,465,514	$1,058,992	$132,668	$28,449	$214,598		$16,962	$13,845
Vermont:								
Number of customers	20,420	18,410		669	1,341			
M cu. ft	418,811	348,601		36,828	33,382			
Value	$779,580	$644,993		$66,984	$67,603			
Virginia:								
Number of customers	90,666	85,448	42	1,459	3,715			2
M cu. ft	3,495,261	3,112,441	8,700	110,814	259,816			3,490
Value	$4,718,432	$4,230,247	$11,253	$139,614	$332,925			$4,393
Washington:								
Number of customers	101,527	93,058	637	4,928	2,901		2	1
M cu. ft	2,926,899	1,933,787	108,229	151,982	730,101		2,050	750
Value	$3,966,122	$2,702,460	$129,908	$186,857	$944,393		$2,049	$455
Wisconsin:								
Number of customers	264,810	255,519	391	3,026	5,868		6	
M cu. ft	12,142,926	7,988,111	141,986	2,213,423	763,738		1,035,668	
Value	$10,971,581	$8,255,804	$97,871	$1,473,452	$707,792		$436,662	
Other States:[1]								
Number of customers	236,225	226,428	420	663	7,984	1	2	727
M cu. ft	10,589,178	8,403,002	108,802	262,971	599,119	186,246	923,424	105,614
Value	$11,450,133	$9,767,849	$70,522	$247,077	$726,167	$61,085	$501,671	$75,762

[1] Arkansas, Delaware, District of Columbia, Louisiana, Nevada, New Mexico, Utah, West Virginia, and Wyoming.

TABLE 9.—GAS SOLD—QUALITY, ACCORDING TO HEATING VALUE (BRITISH THERMAL UNITS PER CUBIC FOOT), BY NUMBER OF ESTABLISHMENTS AND QUANTITY, BY GEOGRAPHIC DIVISIONS: 1927 AND 1925

GEOGRAPHIC DIVISION	TOTAL		QUALITY NOT REPORTED		LESS THAN 500 B. T. U.		500 TO 549 B. T. U.		550 TO 574 B. T. U.		575 TO 624 B. T. U.		625 TO 649 B. T. U.		650 AND OVER B. T. U.	
	Number of establishments	M cu. ft.	Number of establishments	M cu. ft.	Number of establishments	M cu. ft.	Number of establishments	M cu. ft.	Number of establishments	M cu. ft.	Number of establishments	M cu. ft.	Number of establishments	M cu. ft.	Number of establishments	M cu. ft.
United States:																
1927	828	412, 236, 133			27	9, 382, 736	471	309, 904, 724	255	66, 085, 735	65	20, 069, 154	4	62, 927	6	6, 730, 857
1925	919	359, 401, 849	60	17, 089, 386	24	7, 250, 987	421	175, 400, 836	282	130, 373, 090	115	25, 913, 829	5	96, 856	12	3, 276, 865
New England:																
1927	95	41, 618, 140			2	37, 504	75	38, 751, 791	13	2, 737, 777	5	91, 068				
1925	101	38, 054, 961	6	82, 255	1	4, 527	66	25, 036, 724	21	11, 952, 367	6	974, 362			1	4, 726
Middle Atlantic:																
1927	160	162, 542, 452			1	746, 271	140	156, 919, 236	6	254, 650	11	371, 624			2	4, 250, 671
1925	186	145, 623, 377	14	16, 661, 975	1	17, 533	123	62, 063, 603	22	64, 740, 647	23	798, 467			3	1, 341, 152
East North Central:																
1927	200	108, 430, 927			1	3, 368, 193	92	82, 095, 354	97	19, 690, 002	9	838, 719			1	2, 438, 659
1925	214	84, 235, 983	6	65, 745	1	3, 031, 720	84	62, 039, 366	101	15, 757, 426	18	1, 465, 925	1	10, 231	3	1, 865, 570
West North Central:																
1927	136	26, 326, 267			2	29, 353	61	3, 746, 450	54	13, 606, 914	18	8, 916, 550	1	27, 000		
1925	141	24, 455, 885	8	58, 763	2	25, 210	52	2, 020, 946	49	9, 737, 408	29	12, 601, 730	1	11, 828		
South Atlantic:																
1927	99	29, 707, 423			1	13, 558	53	21, 058, 684	28	1, 608, 144	15	6, 997, 463	1	9, 499	1	20, 075
1925	108	26, 619, 063	10	41, 811			53	16, 748, 268	18	2, 873, 569	22	6, 855, 767	2	70, 642	3	29, 006
East South Central:																
1927	33	3, 711, 258			5	153, 312	16	3, 250, 361	9	279, 963	2	17, 622			1	10, 000
1925	39	3, 355, 252	4	13, 470	4	88, 042	13	2, 354, 662	11	795, 744	4	62, 768	1	4, 155	2	36, 411
West South Central:																
1927	10	3, 876, 629					4	168, 580	5	988, 254	1	2, 719, 795				
1925	23	5, 483, 126	6	111, 284			7	1, 859, 300	7	794, 996	3	2, 717, 546				
Mountain:																
1927	35	5, 414, 683			10	4, 201, 954	13	628, 359	7	522, 347	2	24, 143	2	26, 428	1	11, 452
1925	39	5, 127, 774	2	14, 242	10	3, 527, 322	13	997, 761	9	258, 477	5	329, 972				
Pacific:																
1927	60	30, 608, 354			5	832, 591	17	3, 285, 909	36	26, 397, 684	2	92, 170				
1925	68	26, 446, 428	4	39, 841	5	556, 633	10	2, 280, 206	44	23, 462, 456	5	107, 292				

TABLE 10.—ACTIVE METERS AND SERVICES, NUMBER, STORAGE HOLDE
DAILY PLANT CAPACITY, AND MILES OF MAINS, BY STATES, 1927

STATE	Number of active meters	Number of active services	Rated capacity of gas storage holders	Rated daily plant capacity	M
United States	10,254,450	7,569,913	1,225,930	2,238,666	
Alabama	18,085	18,077	2,550	4,515	
Arizona	22,465	22,450	1,356	4,724	
California	527,764	465,068	69,384	137,985	
Colorado	89,714	79,322	4,215	15,350	
Connecticut	289,821	191,891	30,397	55,575	
Florida	89,651	85,166	13,812	42,570	
Georgia	77,394	77,011	8,093	25,006	
Idaho	5,069	4,077	395	925	
Illinois	1,188,357	810,240	122,453	238,694	
Indiana	255,405	267,737	27,030	51,497	
Iowa	179,807	183,869	14,335	34,831	
Kansas	7,928	8,078	1,591	1,120	
Kentucky	7,768	7,894	751	1,645	
Maine	37,848	35,706	3,501	6,606	
Maryland	206,375	191,900	36,959	72,281	
Massachusetts	815,186	498,815	108,356	145,178	
Michigan	632,801	544,889	84,974	130,617	
Minnesota	216,889	175,739	17,042	43,670	
Mississippi	13,149	12,532	1,478	3,675	
Missouri	278,184	219,305	30,842	55,296	
Montana	9,840	8,525	795	1,125	
Nebraska	82,275	76,656	7,872	13,041	
New Hampshire	40,481	30,168	4,187	8,629	
New Jersey	862,999	647,805	93,531	141,771	
New York	2,359,489	1,034,384	342,309	566,207	
North Carolina	41,406	42,335	4,281	17,794	
North Dakota	12,078	11,488	940	1,655	
Ohio	29,965	34,499	2,409	5,695	
Oregon	111,012	99,700	11,427	32,030	
Pennsylvania	792,255	810,159	68,037	145,757	
Rhode Island	113,353	72,150	19,140	25,580	
South Carolina	22,815	22,640	2,639	8,350	
South Dakota	16,191	15,229	1,371	2,757	
Tennessee	55,526	65,044	6,799	12,710	
Texas	30,981	28,502	3,755	7,744	
Vermont	20,430	15,249	1,248	4,080	
Virginia	94,343	92,080	11,089	20,230	
Washington	96,215	101,857	9,170	23,030	
Wisconsin	267,637	221,853	31,085	52,473	
Other States [1]	235,499	239,824	24,332	76,248	

[1] Arkansas, Delaware, District of Columbia, Louisiana, Nevada, New Mexico, Utah, West V and Wyoming.

TABLE 11.—MUNICIPAL ESTABLISHMENTS—SUMMARY STATISTICS AND DETAILED STATISTICS FOR PRODUCTS AND MATERIALS, BY GEOGRAPHIC DIVISIONS: 1927 AND 1925

	UNITED STATES		NEW ENGLAND		MIDDLE ATLANTIC		EAST CENTRAL		WEST NORTH CENTRAL		SOUTH ATLANTIC		MOUNTAIN AND PACIFIC	
	1927	1925	1927	1925	1927	1925	1927	1925 [1]	1927	1925	1927	1925	1927	1925
Number of establishments	46	52	3	5	3	4	6	9	10	10	18	18	6	6
Persons engaged	1,130	1,050	179	211	21	18	95	127	233	290	519	342	83	62
Salaried employees	360	301	56	52	9	8	26	32	115	110	144	91	10	8
Wage earners (average for the year)	770	749	123	159	12	10	69	95	118	180	375	251	73	54
Salaries and wages	$1,614,476	$1,435,195	$275,196	$295,496	$25,762	$22,927	$112,810	$165,148	$409,213	$420,865	$684,300	$449,032	$107,195	$81,727
Salaries	$569,903	$431,738	$64,536	$63,856	$12,992	$11,742	$40,276	$54,913	$214,389	$138,306	$223,407	$148,856	$14,303	$14,065
Wages	$1,044,573	$1,003,457	$210,660	$231,640	$12,770	$11,185	$72,534	$110,235	$194,824	$282,559	$460,893	$300,176	$92,892	$67,662
Cost of materials and supplies	$410,071	$2,483,249	$136,211	$396,237	$2,453	$55,568	$36,890	$249,196	$63,092	$700,055	$157,315	$972,713	$14,110	$109,480
Cost of fuel and power	$2,116,423		$285,370		$38,634		$151,033		$660,518		$888,763		$92,105	
Value of products	$7,427,736	$7,242,409	$887,123	$962,122	$101,772	$124,931	$466,037	$684,292	$2,450,253	$2,235,948	$3,190,137	$2,916,258	$332,414	$318,858
Value added by manufacture [2]	$4,901,242	$4,759,160	$465,542	$565,885	$60,685	$69,363	$278,114	$435,096	$1,726,643	$1,535,893	$2,144,059	$1,943,545	$226,199	$209,378
Miles of mains	1,799	1,643	172	233	33	39	112	144	565	525	814	605	103	97
PRODUCTS														
Total value	$7,427,736	$7,242,409	$887,123	$962,122	$101,772	$124,931	$466,037	$684,292	$2,450,253	$2,235,948	$3,190,137	$2,916,258	$332,414	$318,858
Gas:														
For sale, M cu. ft.	5,223,752	5,077,257	591,039	610,832	73,086	80,375	252,187	379,636	1,825,524	1,774,758	2,306,020	2,060,912	175,896	170,744
Value	$6,875,702	$6,707,920	$767,358	$854,087	$101,547	$124,563	$373,512	$588,272	$2,249,190	$2,023,876	$3,081,893	$2,814,146	$302,202	$302,976
Coke:														
For sale—														
Short tons	24,975	26,873	9,261	9,761			7,967	9,051			4,610	5,337	3,137	2,724
Value	$186,038	$161,566	$77,047	$45,728			$61,107	$70,530			$26,434	$31,688	$21,450	$13,620
Made and consumed, tons	22,577	[3] 22,539	10,465	[3] 9,989			2,485	[3] 2,897			7,444	[3] 6,808	2,183	[3] 2,845
Tar:														
For sale, gallons	2,505,362	2,147,277	243,861	429,608			205,629	244,656	1,111,291	619,146	861,709	771,867	82,872	82,000
Value	$126,194	$87,619	$10,597	$21,974			$13,929	$13,227	$59,759	$24,765	$37,463	$25,603	$4,446	$2,050
Other products, value	$55,097	$7,775	$331	$482			$848	$261	$18,863	$611	$30,739	$6,209	$4,316	$212
Receipts from rents and sales of lamps and appliances	$184,705	$277,529	$31,790	$39,851	$225	$368	$16,641	$12,002	$122,441	$186,696	$13,608	$38,612		

See footnotes at end of table.

TABLE 11.—MUNICIPAL ESTABLISHMENTS—SUMMARY STATISTICS AND DETAILED STATISTICS FOR PRODUCTS AND MATERIALS, BY GEOGRAPHIC DIVISIONS: 1927 AND 1925—Continued

	UNITED STATES		NEW ENGLAND		MIDDLE ATLANTIC		EAST CENTRAL		WEST NORTH CENTRAL		SOUTH ATLANTIC		MOUNTAIN AND PACIFIC	
	1927	1925	1927	1925	1927	1925	1927	1925 [1]	1927	1925	1927	1925	1927	1925
PRINCIPAL MATERIALS														
Coal used for gas making:														
Anthracite, long tons	2,165	1,698			1,490	1,478					675	220		
Bituminous, short tons	105,227	96,444	31,811	28,065			16,360	17,774	4,560	3,096	44,346	39,162	8,150	8,347
Coke used for gas making:														
Purchased, short tons	34,206	48,718		893	375	357	2,451	2,569	18,158	23,901	13,222	20,998		
Made and consumed in plant, tons	5,523	6,952	2,271	5,076				247			2,386	1,169	866	460
Oil used for gas making and enriching, gallons	15,471,506	16,132,294	867,768	1,414,124	240,833	324,439	287,641	1,333,943	6,153,693	5,852,046	6,961,999	6,446,418	959,662	761,324

[1] Includes figures for Texas. [2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.) [3] Revised.

TABLE 12.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries		Wages	Cost of materials, supplies, fuel, and power				Value of products	Value added by manufacture [1]
		Total	Salaried officers and employees		Wage earners (average for the year)		Officers of corporations	Other salaried employees		Coal, coke, and oil purchased	Electric current purchased	Gas purchased	Other materials and supplies, and lamps and appliances		
			Officers of corporations	Other salaried employees											
United States	828	75,285	910	25,878	48,497	496,014	$3,904,982	$41,609,443	$68,356,448	$121,753,436	$2,782,132	$30,720,676	$56,529,279	$516,705,170	$304,919,647
Alabama	9	395	7	84	304	704	21,600	99,753	285,379	318,138	5,688	----------	289,219	1,339,438	726,393
Arizona	11	204	8	65	131	1,443	13,282	85,957	154,432	340,927	18,382	----------	156,597	1,277,907	762,001
California	40	3,096	26	903	2,167	43,176	48,928	1,437,319	3,083,674	5,724,976	308,642	80,482	1,814,411	24,544,051	16,615,540
Colorado	9	846	10	336	500	1,601	29,154	596,694	588,909	1,080,985	13,132	----------	526,892	3,655,607	2,034,598
Connecticut	20	2,105	59	599	1,447	10,229	276,677	918,616	2,262,423	3,658,414	81,689	----------	1,444,260	13,319,633	8,135,270
Florida	19	877	21	204	652	7,598	66,844	373,101	833,232	1,276,915	36,760	----------	458,523	5,286,948	3,514,750
Georgia	15	819	14	186	619	2,343	41,732	295,629	576,677	1,170,282	44,231	----------	648,393	5,122,730	3,259,824
Idaho	4	53	2	19	32	329	1,858	29,549	47,925	82,933	1,023	----------	35,999	259,703	139,748
Illinois	58	6,033	48	3,217	2,768	51,138	275,758	5,745,637	4,239,644	9,016,252	374,554	8,170,330	3,229,800	52,147,796	31,356,860
Indiana	40	2,074	27	642	1,405	14,686	98,566	971,050	1,793,480	5,141,125	147,835	348,231	1,989,667	16,125,553	8,498,695
Iowa	54	1,180	40	432	708	7,349	93,415	608,354	917,583	1,860,975	54,131	28,594	815,388	7,718,084	4,958,996
Kansas	6	75	1	25	49	377	1,800	31,894	57,445	80,832	8,280	7,543	14,705	333,224	221,864
Kentucky	9	108	2	33	73	5,492	3,700	42,008	69,277	150,652	10,716	----------	37,129	534,024	335,527
Maine	10	322	11	77	234	618	30,310	130,852	330,108	534,500	12,272	----------	226,301	1,874,692	1,101,619
Maryland	13	1,351	20	637	694	9,134	74,117	1,035,392	931,323	1,786,644	20,402	783,487	1,060,525	11,072,185	7,421,127
Massachusetts	41	6,099	87	1,933	4,079	31,033	482,296	2,958,282	6,046,546	9,083,577	125,308	2,238,113	4,754,705	38,657,688	22,455,985
Michigan	56	4,615	84	1,984	2,547	48,371	278,500	3,169,749	4,007,666	7,363,595	184,992	3,165,257	3,833,590	34,263,079	19,715,645
Minnesota	20	1,188	6	398	784	8,148	73,100	579,975	957,955	2,320,893	22,727	1,000,000	1,006,378	8,497,408	4,147,410
Mississippi	8	175	5	28	142	520	21,426	43,883	152,788	195,401	3,773	4,864	114,178	787,198	468,982
Missouri	24	2,407	24	965	1,418	12,941	149,860	1,446,625	1,847,022	4,120,369	124,610	392,489	1,433,727	14,311,869	8,240,674

See footnotes at end of table.

TABLE 12.—GENERAL STATISTICS, BY STATES: 1927—Continued

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries		Wages	Cost of materials, supplies, fuel, and power				Value of products	Value added by manufacture [1]
		Total	Salaried officers and employees		Wage earners (average for the year)		Officers of corporations	Other salaried employees		Coal, coke, and oil purchased	Electric current purchased	Gas purchased	Other materials and supplies, and lamps and appliances		
			Officers of corporations	Other salaried employees											
Montana	4	106	5	30	71	338	$13,352	$43,854	$107,965	$120,386	$1,303	----------	$85,184	$447,967	$241,094
Nebraska	18	380	8	171	201	3,152	18,900	309,091	299,018	936,404	13,682	----------	284,436	3,604,625	2,370,103
New Hampshire	11	380	10	90	280	1,449	23,146	145,610	350,171	663,549	9,073	----------	234,491	2,113,473	1,206,360
New Jersey	24	4,054	25	1,368	2,661	36,369	84,601	2,628,544	3,991,690	5,976,104	32,930	$3,938,754	4,095,950	38,705,313	24,661,575
New York	69	20,235	125	6,532	13,578	112,962	863,184	10,280,351	19,244,004	33,345,282	530,417	1,288,914	16,852,581	118,930,982	66,913,788
North Carolina	23	491	6	143	342	2,463	8,443	199,314	381,388	837,852	43,364	----------	414,502	3,104,253	1,808,535
North Dakota	5	108	2	30	76	184	3,600	58,872	102,800	245,147	2,240	----------	64,832	763,490	451,271
Ohio	12	378	10	143	225	4,659	14,260	199,551	328,026	411,422	46,876	229,928	147,310	2,966,115	2,130,579
Oregon	10	928	22	448	458	4,760	56,304	706,403	749,395	1,352,052	56,427	----------	517,895	6,139,053	4,212,679
Pennsylvania	67	5,341	47	1,630	3,664	28,711	132,729	2,776,556	5,211,247	9,339,205	134,489	8,357,111	3,799,572	45,888,043	24,257,666
Rhode Island	4	1,110	9	335	766	2,581	69,662	498,779	1,088,837	2,025,343	45,943	----------	1,133,002	7,512,477	4,308,189
South Carolina	8	259	14	64	181	1,290	32,614	103,408	187,233	381,997	7,573	----------	249,563	1,596,987	957,854
South Dakota	9	113	8	35	70	501	15,000	54,919	76,039	215,990	5,862	----------	70,173	730,874	438,849
Tennessee	7	778	12	187	579	2,645	52,281	259,296	594,910	730,868	6,723	----------	235,767	3,352,310	2,378,952
Texas	6	275	13	89	173	1,557	39,986	146,124	215,468	373,488	6,130	----------	199,006	1,773,029	1,194,405
Vermont	9	139	11	37	91	565	16,906	48,725	127,953	236,224	5,191	----------	101,925	870,330	526,990
Virginia	14	671	10	174	487	3,920	25,613	296,007	626,707	1,216,804	40,297	----------	411,348	5,094,882	3,426,433
Washington	10	937	12	259	666	6,260	61,822	402,208	862,147	946,674	22,973	----------	678,372	4,506,512	2,858,493
Wisconsin	34	2,293	28	730	1,535	15,771	128,053	839,607	2,215,539	3,297,607	102,523	676,565	1,860,652	14,505,715	8,568,368
Other States [2]	18	2,287	31	616	1,640	8,647	161,603	1,011,905	2,412,423	3,792,653	68,969	10,014	1,202,331	12,969,923	7,895,956

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Arkansas, 1 establishment; Delaware, 3; District of Columbia, 1; Louisiana, 3; Nevada, 2; New Mexico, 2; Utah, 2; West Virginia, 3; Wyoming, 1.

COKE, NOT INCLUDING GAS-HOUSE COKE

Description of the industry.—This industry designation covers establishments engaged primarily in the manufacture of coke by the distillation of coal either in (A) "beehive" ovens or in (B) "by-product" ovens. The volatile constituents of the coal escape from the former class of ovens and are wasted but are retained by the latter.

Establishments which, although they operate coke ovens, are engaged primarily in the production and distribution of gas for illuminating and heating, are classified under "Gas, manufactured, illuminating, and heating."

No detailed data as to the quantities and values of the various classes of coke-oven products are compiled by the Census Bureau, as such data are published annually by the United States Bureau of Mines. The detailed statistics for coke and by-products in Table 3 of this report are based on those compiled by the Bureau of Mines, adjusted to exclude figures for 17 establishments for 1927, 13 for 1925, and 7 each for 1923 and 1921, which are classified as by-product coke-oven plants by the Bureau of Mines but which operate as public utilities in the distribution of gas and are therefore classified as gas plants for census purposes.

Assignment of establishments to industries.—Although the coke industry, as defined for census purposes, consists primarily in the manufacture of coke and by-products as an independent operation, it also includes the operation of coke plants in conjunction with blast furnaces and other affiliated establishments, where such plants are reported as separate industrial units. Data for coal-mining operations, which are sometimes included in reports made by establishments operating their own mines, have been eliminated, so far as possible, and the cost of materials includes in all cases the total cost of the coal laid down at the ovens.

Comparison of Census and Bureau of Mines production statistics.—The differences between the census totals and the Bureau of Mines totals, as shown in Table 3, are due in part to the fact that the census figures represent production whereas the Bureau of Mines figures represent sales, which always differ more or less from production, and in part to the inclusion in the census figures, but not in the Bureau of Mines figures, of data for some coal sold by the coking plants and for miscellaneous items of income.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Combined summary for the gas and coke industries may be found on p. 746]

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	171	21,082	$34,167,692	$286,728,701	$382,012,617	$95,283,916	451,874
1925	237	23,191	36,762,401	277,750,675	378,633,527	100,882,852	409,552
1923	262	28,364	48,107,894	354,030,441	516,922,898	162,892,457	332,560
1921	176	16,070	23,832,946	168,790,864	221,313,363	52,522,499	(2)
1919	278	29,319	42,299,292	224,266,674	316,515,838	92,249,164	224,879
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	—27.8	—9.1	—7.1	3.2	0.9	—5.5	10.3
1923–1925	—9.5	—18.2	—23.6	—21.5	—26.8	—38.1	23.2
1923–1927	—34.7	—25.7	—29.0	—19.0	—26.1	—41.5	35.9
1919–1927	—38.5	—28.1	—19.2	27.9	20.7	3.3	100.9

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	4,768	451,874	4,453	409,552	4,043	332,560
Steam engines	1,030	110,782	1,139	118,349	1,104	227,254
Steam turbines	334	225,336	313	182,879		
Internal-combustion engines	13	15,989	11	10,921	12	2,298
Electric motors driven by purchased current	3,391	99,767	2,990	97,403	2,927	103,008
Electric motors, total	10,634	327,643	9,367	311,064	7,964	265,804
Driven by purchased current	3,391	99,767	2,990	97,403	2,927	103,008
Driven by current generated in establishment reporting	7,243	227,876	6,377	213,661	5,037	162,796
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	106	122,054	157	122,858	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—PRODUCTS,[1] BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927

[Combined statistics for products of the gas and coke industries may be found on p. 747]

KIND	1927	1925	1923	1921
Coke-oven products, value [2]	$368,851,467	$365,526,544	$468,386,472	$195,475,004
Coke:				
Total production, short tons	49,132,213	50,141,774	56,017,325	24,583,940
Made in—				
Beehive ovens	7,207,417	11,354,784	19,379,870	5,538,042
By-product ovens	41,924,796	38,786,990	36,637,455	19,045,898
Value	$247,187,630	$253,650,656	$363,822,102	$142,240,670
Screenings and breeze:				
Total production, short tons	4,039,773	3,706,587	3,562,055	1,817,388
Sales—				
Short tons	751,912	907,055	733,712	211,551
Value	$2,114,033	$3,203,801	$2,863,141	$498,818
By-products:				
Gas—				
Production, M cu. ft	667,161,377	621,407,582	585,941,458	299,094,737
Sales—				
M cu. ft	355,548,382	325,080,645	277,058,388	136,048,717
Value	$53,724,663	$49,050,966	$42,711,689	$19,788,341
Tar—				
Production, gallons	519,378,540	467,344,530	429,929,749	245,261,119
Sales—				
Gallons	278,473,948	225,533,874	200,792,985	128,436,242
Value	$14,570,126	$11,107,156	$8,675,485	$5,270,774
Ammonia—				
NH_3 equivalent of all forms—				
Pounds	349,619,116	310,744,721	287,681,592	162,492,887
Value	$26,239,840	$26,850,266	$31,094,119	$16,143,170
Liquor (NH_3 content)—				
Production, pounds	49,825,891	57,425,326	51,825,389	[3] 27,023,829
Sales—				
Pounds	49,011,372	47,128,790	[4] 50,986,996	30,009,918
Value	$2,335,047	$4,385,501	[4] $5,139,706	$3,052,433
Sulphate—				
Production, pounds	1,172,643,719	1,013,277,580	915,926,762	528,547,798
Sales—				
Pounds	1,225,624,762	986,179,337	884,952,912	529,931,877
Value	$23,904,793	$22,464,765	$25,954,413	$13,090,737
Crude light oil—				
Production, gallons	161,956,695	145,285,887	133,976,047	75,158,488
Sales—				
Gallons	8,264,543	9,719,992	6,233,952	2,261,437
Value	$954,635	$1,002,813	$642,438	$213,572
Light-oil derivatives—				
Production, gallons	127,992,291	115,885,817	103,880,182	58,633,996
Sales—				
Gallons	123,821,774	112,552,884	102,467,452	59,706,746
Value	$23,881,757	$20,431,928	$18,127,269	$11,141,203
Naphthalene—				
Crude—				
Production, pounds	8,228,400	9,154,771	11,535,107	2,603,330
Sales—				
Pounds	7,773,779	9,608,066	9,710,527	1,428,040
Value	$84,992	$91,368	$170,482	$37,967
Other by-products, value	$93,791	$137,590	$279,747	$140,489
The coke industry, total value of products [5]	$382,012,617	$378,633,527	$516,922,898	$221,313,363

[1] Statistics are based on data compiled and published by the United States Bureau of Mines, revised to exclude figures for 17 establishments for 1927, 13 for 1925, and 7 each for 1923 and 1921, classified as gas plants by the Census Bureau and as by-product coke-oven plants by the Bureau of Mines.
[2] See "Comparison of Census and Bureau of Mines production statistics," p. 769.
[3] Includes data for a small amount reported as "Other forms."
[4] Includes data for an unknown quantity of sulphate sold on the basis of NH_3 content.
[5] From reports of Census of Manufactures. See "Comparison of Census and Bureau of Mines production statistics," p. 769.

TABLE 4.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Establishments			PERSONS ENGAGED IN THE INDUSTRY			Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [3]
	Total number	(A) Beehive	(B) By-product	Total	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies [1]	Fuel and power [2]		
United States: The industry	171	109	62	23,809	2,727	21,082	451,874	$7,200,470	$34,167,692	$27,517,965	$259,210,736	$382,012,617	$95,283,916
(A) Beehive plants	109	109	-------	3,612	328	3,284	23,977	780,684	4,070,573	1,267,828	22,068,858	30,891,944	7,555,258
(B) By-product plants	62	-------	62	20,197	2,399	17,798	427,897	6,419,786	30,097,119	26,250,137	237,141,878	351,120,673	87,728,658
Alabama	8	-------	8	2,053	294	1,759	46,598	808,837	2,459,179	1,679,397	16,311,639	25,510,423	7,519,387
Illinois	5	-------	5	2,109	375	1,734	31,820	981,381	3,034,460	1,647,982	21,500,197	32,607,710	9,459,531
Indiana	4	-------	4	1,808	156	1,652	38,100	361,417	2,676,244	2,948,776	35,567,716	50,310,812	11,794,320
Minnesota	3	-------	3	501	119	382	5,976	221,101	620,893	374,589	5,220,719	8,200,139	2,604,831
New York	4	-------	4	1,259	170	1,089	32,674	518,613	1,995,841	1,123,454	17,793,593	24,726,655	5,809,608
Ohio	15	1	14	3,288	305	2,983	57,272	988,442	5,227,992	4,860,092	42,136,202	57,007,983	10,011,689
Pennsylvania	84	75	9	6,516	780	5,736	164,303	1,954,508	8,662,733	9,301,430	66,622,828	100,086,571	24,162,313
Tennessee	3	2	1	141	10	131	1,596	35,625	172,477	87,626	969,542	1,471,414	414,246
Virginia	7	7	-------	275	10	265	1,558	22,884	220,089	66,815	990,473	1,420,783	363,495
West Virginia	20	17	3	1,259	81	1,178	14,470	169,101	1,777,044	1,121,091	7,292,893	11,443,807	3,029,823
Other States [4]	18	7	11	4,600	427	4,173	57,507	1,138,561	7,320,740	4,306,713	44,804,934	69,226,320	20,114,673

[1] Does not include coal used for making coke.
[2] Includes all coal used, for coking as well as for fuel.
[3] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[4] Colorado, 4 establishments, 3(A), 1(B); Georgia, 1(A); Kentucky, 2, 1(A), 1(B); Maryland, 1(B); Massachusetts, 1(B); Michigan, 3(B); New Jersey, 2(B); Utah, 2, 1(A), 1(B); Washington, 1(A); Wisconsin, 1(B).

PETROLEUM REFINING

[A preliminary report for this industry was issued under date of March 8, 1929]

Description of the industry.—This industry consists in the refining of crude petroleum by distillation. It does not, therefore, include the compounding of refined or partly refined petroleum products nor the production of natural gasoline from natural gas at the wells. The leading products, named in the order of their importance, as measured by value, are gasoline, fuel oils, lubricating oils, and illuminating oils. At each of the biennial censuses (1921 to 1927, inclusive) gasoline has contributed approximately one-half of the total value of products for the industry. (See Table 3.)

Detailed statistics of products (Table 3).—The total value of products for this industry includes some duplication, due to the fact that the "partially refined oils, sold for rerunning," and to some extent the "tops," reported as products by certain establishments, become materials for other establishments.

The production of natural gasoline, as reported by the Bureau of Mines for the several years covered by the table, is shown in footnote 3.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919, but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture[1]	Horsepower
1927	354	71,234	$113,716,705	$1,752,997,043	$2,142,648,503	$389,651,460	552,651
1925	359	65,324	104,645,391	1,889,678,019	2,376,656,556	486,978,537	393,753
1923	382	66,717	103,833,760	1,425,052,861	1,793,700,087	368,647,226	[2] 349,154
1921	366	63,189	102,294,108	1,382,170,434	1,727,440,157	345,269,723	(3)
1919	320	58,889	89,749,637	1,247,908,355	1,632,532,766	384,624,411	238,906
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	—1.4	9.0	8.7	—7.2	—9.8	—20.0	40.4
1923-1925	—6.0	—2.1	.8	32.6	32.5	32.1	12.8
1923-1927	—7.3	6.8	9.5	23.0	19.5	5.7	58.3
1919-1927	10.6	21.0	26.7	40.5	31.2	1.3	131.3

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Revised.
[3] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horse-power		*Horse-power*		*Horse-power*
Prime movers, total	11,813	552,651	7,530	393,753	6,532	[1] 349,154
Steam engines	2,524	109,195	1,877	85,976	1,981	227,952
Steam turbines	1,211	238,271	584	169,494		
Internal-combustion engines	472	40,981	410	34,801	428	34,993
Water wheels and turbines	1	200			24	785
Electric motors driven by purchased current	7,605	164,004	4,659	103,482	4,099	[1] 85,424
Electric motors, total	17,666	420,769	11,484	279,723	10,131	[1] 245,572
Driven by purchased current	7,605	164,004	4,659	103,482	4,099	[1] 85,424
Driven by current generated in establishment reporting	10,061	256,765	6,825	176,241	6,032	160,148
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	292	155,506	288	130,518	(2)	(2)

[1] Revised. [2] Not called for on schedule.

TABLE 3.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927

PRODUCT	1927	1925	1923	1921
Petroleum-refining industry, all products, total value	$2,142,648,503	$2,376,656,556	$1,793,700,087	$1,727,440,157
Refinery products, not including oils sold in condition in which purchased	$2,133,922,688	$2,364,069,067	$1,774,394,019	$1,705,429,906
Other products [1]	$8,725,815	$12,587,489	$19,306,068	$22,010,251
Refinery products, not including oils sold in condition in which purchased, aggregate value [2]	$2,133,922,688	$2,364,069,067	$1,774,394,019	$1,705,429,906
Light products of distillation:				
Total gallons	13,391,340,090	11,278,871,093	7,799,554,742	5,350,112,268
Total value	$1,102,154,007	$1,265,284,305	$924,356,354	$877,515,033
Gasoline [3]—				
Number of establishments	318	320	336	321
Gallons	12,491,833,334	10,726,262,144	7,332,329,194	5,098,056,740
Value	$1,022,011,786	$1,218,235,713	$876,732,346	$840,672,320
Naphtha—				
Number of establishments	94	85	115	111
Gallons	689,046,826	294,946,777	399,492,628	199,532,746
Value	$68,943,123	$29,938,400	$38,761,417	$28,892,271
Benzine—				
Number of establishments	14	10	23	32
Gallons	50,556,058	41,714,476	67,732,920	52,522,782
Value	$4,625,309	$4,992,842	$8,862,591	$7,950,442
Tops—				
Number of establishments	22	26	(4)	(5)
Gallons	159,903,872	215,947,696		
Value	$6,573,789	$12,117,350		

[1] Crude oil and oil products sold in condition in which purchased, receipts for refining for others, etc.
[2] These aggregates are the sums of all value items in the columns beneath except those which are underscored.
[3] The production of natural gasoline, not covered by the census, was reported by the United States Bureau of Mines, as follows:

	1927	1925	1923	1921
Number of plants	1,119	1,080	1,067	1,058
Gallons	1,641,144,000	1,127,437,000	816,226,000	449,934,402
Value	$118,688,000	$120,378,000	$77,268,000	$61,815,258

[4] No complete data; see footnote 6.
[5] No data.

TABLE 3.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927—Continued

PRODUCT	1927	1925	1923	1921
Illuminating oils:				
Number of establishments	249	252	273	264
Gallons	2,217,590,680	2,365,301,739	2,238,899,998	1,939,197,171
Value	$147,925,073	$161,880,676	$146,941,897	$151,594,503
Fuel oils:				
Total gallons	15,415,859,725	14,604,037,579	11,976,396,147	9,749,123,499
Total value	$456,959,052	$488,957,806	$345,666,436	$377,264,190
Distillates—				
Number of establishments	174	150	178	171
Gallons	976,669,534	1,204,936,795	854,800,722	1,220,247,008
Value	$44,286,925	$51,743,145	$32,106,661	$59,586,055
Gas oils—				
Number of establishments	212	189	204	203
Gallons	2,576,590,816	1,812,644,984	1,591,950,506	1,634,342,163
Value	$99,327,969	$79,601,622	$62,530,377	$85,322,417
Residual fuel oils—				
Number of establishments	250	235	295	264
Gallons	11,862,599,375	11,586,455,800	9,529,644,919	6,894,534,328
Value	$313,344,158	$357,613,039	$251,029,398	$232,355,718
Partially refined oils, sold for rerunning:				
Number of establishments	93	72	44	36
Total gallons	1,583,726,709	1,497,878,926	1,300,803,932	394,203,511
Above fuel oil	821,599,896	787,402,238	[6] 1,068,705,238	230,050,823
Fuel oil	724,090,305	692,440,284	218,017,266	137,493,174
Below fuel oil	38,036,508	18,036,404	14,081,428	26,659,514
Value	$62,210,130	$65,305,061	$54,977,467	$24,177,934
Lubricating oils: [7]				
Total gallons	1,381,901,726	1,361,071,547	1,150,653,387	949,226,727
Total value	$244,629,175	$252,104,578	$204,494,849	$194,609,241
Pale or paraffin; viscosity less than 100° Universal, or flash under 400° F., closed cup—				
Number of establishments	88	75	65	76
Gallons	227,197,875	270,344,631	215,563,080	159,245,305
Value	$30,616,659	$38,763,249	$28,051,342	$27,644,661
Red or neutral; viscosity 100° Universal or higher, or flash 400° F., or over, closed cup (not including cylinder oils)—				
Number of establishments	87	81	78	84
Gallons	531,627,390	528,755,778	311,391,402	275,539,207
Value	$87,243,433	$92,403,658	$58,778,399	$51,799,170
Cylinder oils—				
Number of establishments	95	93	95	101
Gallons	219,673,302	206,883,675	234,410,497	188,043,612
Value	$43,036,477	$47,225,926	$44,719,798	$38,362,813
Other lubricating oils, including compounded and undistributed (except cylinder) oils—				
Number of establishments	86	77	83	80
Gallons	403,403,159	355,087,463	389,288,408	326,398,603
Value	$83,732,606	$73,711,745	$72,945,310	$76,802,597
Liquid asphaltic road oils:				
Number of establishments	47	38	43	51
Gallons	204,798,873	274,316,604	198,919,676	168,378,024
Value	$9,307,838	$12,511,739	$7,864,930	$7,831,230
Residuum or tar:				
Gallons	118,467,420	125,114,608	80,066,120	40,101,796
Value	$5,117,722	$5,581,753	$3,190,668	$1,831,031
Greases:				
Total gallons	63,039,324	45,820,361	35,024,082	24,444,019
Total value	$12,961,205	$13,920,627	$10,784,789	$9,754,743
Petrolatum, mineral jelly, etc.—				
Number of establishments	37	30	28	31
Gallons	15,334,428	13,862,225	12,913,170	9,030,212
Value	$2,974,472	$3,559,207	$2,786,967	$2,551,528

[6] Includes 106,261,656 gallons reported as "tops."
[7] Production by petroleum refineries only. Lubricating oils are produced to a considerable extent (complete data as to quantity and value not available) by establishments other than petroleum refineries.

TABLE 3.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927—Continued

PRODUCT	1927	1925	1923	1921
Greases—Continued.				
Lubricating greases, other than axle grease [8]—				
Number of establishments	46	41	29	35
Gallons	44, 652, 007	26, 301, 450	13, 982, 250	10, 667, 542
Value	$9, 051, 121	$8, 262, 744	$5, 362, 741	$4, 953, 628
Axle grease [8]—				
Number of establishments	21	22	19	16
Gallons	3, 052, 889	5, 656, 686	8, 128, 662	4, 746, 265
Value	$935, 612	$2, 098, 676	$2, 635, 081	$2, 249, 587
Paraffin wax:				
Gallons	94, 257, 226	89, 761, 623	69, 536, 104	58, 418, 896
Value	$23, 432, 260	$30, 590, 464	$12, 899, 125	$11, 764, 231
Acid oil:				
Gallons	90, 607, 047	59, 550, 136	67, 359, 962	65, 357, 673
Value	$1, 848, 797	$1, 139, 310	$1, 471, 725	$1, 477, 135
Asphalt, other than liquid asphalt:				
Tons (2,000 pounds)	2, 642, 324	2, 275, 803	2, 133, 573	1, 169, 736
Value	$37, 884, 108	$30, 460, 927	$23, 338, 914	$16, 647, 461
Coke, petroleum:				
Tons (2,000 pounds)	1, 243, 510	923, 763	647, 457	531, 244
Value	$7, 169, 596	$6, 437, 483	$4, 795, 794	$3, 715, 295
Other refinery products, value [9]	$22, 323, 725	$29, 894, 338	$33, 611, 071	$27, 247, 879

[8] Production by petroleum refineries only. Total production of lubricating greases, including axle grease, regardless of class of establishment in which produced, was valued as follows: 1927, $26,119,059; 1925, $27,704,767; 1923, $22,454,005. Values for 1921 not available.

[9] Oils in process, still gas, wax tailings, etc.

TABLE 4.—PRINCIPAL MATERIALS CONSUMED, BY KIND AND QUANTITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

[No data for 1921]

MATERIAL	1927	1925	1923
	Barrels (42 gals.)	*Barrels (42 gals.)*	*Barrels (42 gals.)*
Crude petroleum	831, 331, 822	739, 489, 345	601, 747, 763
Partially refined oils, waxes, tops, etc	33, 939, 307	57, 844, 880	35, 154, 904
Natural gasoline, total	26, 383, 114	23, 223, 116	15, 948, 605
Purchased	24, 779, 504	21, 274, 369	14, 676, 784
Extracted and used	1, 603, 610	1, 948, 747	1, 271, 821
	Short tons	*Short tons*	*Short tons*
Soda ash	21, 221	20, 944	(1)
Caustic soda	95, 026	60, 419	(1)
Sulphuric acid:			
Purchased or produced in plant	872, 956	820, 371	(1)
Reclaimed and reused	343, 787	345, 453	340, 012

[1] No data.

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture[1]
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	354	83,305	12	12,059	71,234	552,651	$30,900,277	$113,716,705	$1,649,288,320	$103,708,723	$2,142,648,503	$389,651,460
Arkansas	8	461	-------	111	350	1,458	357,464	508,772	10,039,405	273,772	12,725,342	2,412,165
California	54	9,363	-------	1,777	7,586	100,997	4,390,824	14,314,173	260,678,927	6,754,023	356,910,953	89,478,003
Illinois	9	4,123	-------	509	3,614	33,055	1,293,351	5,621,101	63,479,242	4,659,219	84,858,430	16,719,969
Kansas	15	2,952	-------	373	2,579	23,997	888,572	3,806,013	57,633,595	3,608,502	73,878,325	12,636,228
Kentucky	5	347	-------	94	253	4,798	249,021	339,793	6,530,602	348,242	8,246,366	1,367,522
Louisiana	12	6,160	2	1,065	5,093	30,698	2,748,332	8,186,966	109,188,073	6,778,494	138,249,752	22,283,185
Massachusetts	3	1,395	-------	318	1,077	8,776	718,374	1,614,822	29,843,018	2,342,418	40,291,442	8,106,006
Montana	15	242	-------	61	181	1,204	147,438	233,819	7,365,440	271,089	8,714,956	1,078,427
New Jersey	10	9,791	-------	1,431	8,360	41,165	3,815,204	14,316,996	217,353,392	14,476,233	273,341,828	41,512,203
New Mexico	4	52	-------	8	44	154	16,368	59,646	1,176,665	43,608	1,554,472	334,199
New York	5	2,224	-------	289	1,935	20,487	738,447	3,074,238	34,077,347	1,995,576	40,327,492	4,254,569
Ohio	12	2,731	-------	331	2,400	14,871	840,061	3,505,878	39,779,554	2,294,768	52,892,071	10,817,749
Oklahoma	46	6,071	-------	864	5,207	35,969	2,271,505	7,749,884	124,325,198	6,706,336	153,278,576	22,247,042
Pennsylvania	48	10,689	6	1,557	9,126	49,911	3,796,695	14,185,370	144,344,149	10,104,501	186,568,769	32,120,119
Texas	62	15,650	2	1,922	13,726	103,880	4,681,038	19,683,149	338,004,947	26,635,562	429,501,524	64,861,015
West Virginia	5	595	-------	87	508	3,000	247,397	754,597	10,815,116	854,344	14,827,454	3,157,994
Wyoming	15	1,882	2	268	1,612	20,690	898,403	3,249,634	46,218,238	2,239,730	60,834,758	12,376,790
Other States[2]	26	8,577	-------	994	7,583	57,541	2,801,783	12,511,854	148,435,412	13,322,306	205,645,993	43,888,275

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] Arizona, 1 establishment; Colorado, 4; Delaware, 2; Georgia, 1; Indiana, 4; Maryland, 3; Michigan, 1; Missouri 2; Rhode Island, 2; South Carolina, 1; Tennessee, 1; Utah, 1; Virginia, 1; Washington, 2.

SUMMARY FOR INDUSTRIES IN GROUP 7 WHICH ARE NOT COV BY SEPARATE REPORTS, BY STATES

[This table presents summary statistics for the industries in Group 7 other than those for which reports are given on pp. 746–777. More detailed statistics for 1927 are given, for the United St whole, in Table II, p. 1316; and summaries for States and large cities, carrying statistics for dustries, in comparison with those for other industries, appear in Tables III and IV, pp. 1 1416. See "General explanations," pp. 3–12; in particular, "Limitation of statistics to establi reporting products valued at $5,000 or more," p. 6, "Power equipment," p. 7, "Cost of materia "Value added by manufacture," p. 9, and "State and city statistics," p. 11]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture
FUEL, MANUFACTURED						
[*Principal products:* Fuels made by pressing into briquettes or balls anthracite culm, bituminou charcoal, sawdust, or wood shavings, etc., mixed with asphaltic pitch, coal-tar pitch, or other material as a binder]						
United States [1]						
1927	[2] 20	274	$445,511	$4,873,195	[3] $7,203,410	$2,330,215
1925	14	246	369,280	3,935,503	[4] 6,019,310	2,083,807
1923	15	364	510,604	3,907,197	[4] 5,584,070	1,676,873
1921	14	371	484,423	2,280,374	[4] 3,177,742	897,368
1919	11	171	221,545	1,386,394	[4] 1,973,877	587,483

[1] Statistics for States can not be given without disclosing data reported by individual establisl
[2] California, 2 establishments; Indiana, 1; Maryland, 1; Massachusetts, 1; Missouri, 1; New Je New York, 1; Pennsylvania, 3; Virginia, 2; Washington, 2; West Virginia, 2; and Wisconsin, 2.
[3] Quantity, 917,262 tons. In addition, 64,867 tons of manufactured fuel, valued at $889,174, we as a secondary product by establishments in other industries. Thus the total production of manuf fuel in all industries in 1927 amounted to 982,129 tons, valued at $8,092,584. No quantity figures f years. See footnote 4.
[4] In addition, manufactured fuel made as a secondary product by establishments in other in was valued as follows: 1925, $768,753; 1921, $80,148; 1919, $384,779. No comparable data for 1923.
[5] Not called for on schedule.

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture
LUBRICATING GREASES, NOT MADE IN PETROLEUM REFINERIES						
[*Principal products:* Hard and soft greases (including axle grease) for the lubrication of motor v machinery, etc. Considerable quantities of lubricating greases are also made in the petroleum- industry]						
United States						
1927	45	568	$798,926	$6,314,092	[1] $11,655,999	$5,341,907
1925	53	607	820,296	6,796,062	[1] 13,239,065	6,443,003
1923	52	603	828,982	7,259,635	[1] 12,583,951	5,324,316
1921	50	420	534,291	5,309,461	[1] 8,912,413	3,602,952
1919	53	472	569,925	4,807,501	[1] 8,868,772	4,061,271
States, 1927						
Missouri	3	64	84,657	549,539	982,158	432,619
Ohio	11	132	180,187	1,345,134	2,620,332	1,275,198
Pennsylvania	11	245	337,522	3,112,344	5,131,204	2,018,860
Other States [3]	20	127	196,560	1,307,075	2,922,305	1,615,230

[1] For 1927, value of lubricating greases, $9,781,858; other products, $1,874,141. For 1925, lubr greases, $12,039,329; other products, $1,199,736. For 1923, lubricating greases, $11,717,935; other pr $866,016. No corresponding data for earlier years. Does not include the following values of lubr greases made as secondary products by establishments in other industries: 1927, $16,288,485; 1925, $15, (revised); 1923, $10,736,070; 1921, $10,761,150; 1919, $9,342,892.
[2] Not called for on schedule.
[3] California, 3 establishments; Illinois, 2; Maryland, 2; Massachusetts, 1; Michigan, 1; Minnes New Jersey, 3; New York, 3; Oklahoma, 1; Texas, 2.

Group 8.—RUBBER PRODUCTS

THE GROUP AS A WHOLE

[Preliminary reports for these industries were published as follows: Rubber tires and inner tubes, October 15, 1928; Rubber boots and shoes, October 1, 1928; Rubber goods, other than tires, inner tubes, and boots and shoes, December 19, 1928]

This group comprises three industries, namely, (1) Rubber tires and inner tubes, (2) Rubber boots and shoes, and (3) Rubber goods, other than tires, inner tubes, and boots and shoes. These industries embrace establishments using india rubber or gutta-percha as an important constituent in the manufacture of their products of chief value.

Changes in classification.—At censuses prior to that for 1921, all manufacturers of rubber products other than boots and shoes, belting, and hose were classified under a single industry designation, "Rubber tires, tubes, and rubber goods, not elsewhere classified," but at the last four censuses the manufacture of rubber tires and inner tubes has been treated as a separate industry.

The manufacture of rubber belting and hose, classified separately for 1921 and prior census years, is now treated as a part of the "Rubber goods, other than tires, inner tubes, and boots and shoes" industry. This change was made because of the fact that considerable amounts of belting and hose are made as secondary products by establishments whose chief products are other classes of rubber goods, so that the total value of rubber belting and hose made either as primary or as secondary products by establishments in the several industries in the rubber group differs considerably from the total value of products reported by establishments engaged primarily in the manufacture of rubber belting and hose.

TABLE 1.—SUMMARY FOR GROUP 8—RUBBER PRODUCTS: 1919 TO 1927

[See "Regrouping of industries and renumbering of groups, p. 19]

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
THE GROUP AS A WHOLE							
1927	516	141,997	$198,073,743	$660,370,209	$1,225,077,114	$564,706,905	790,622
1925	[2] 530	141,869	191,285,520	721,729,675	1,260,805,063	539,075,388	659,691
1923	529	137,868	182,084,056	501,162,768	958,517,634	457,354,866	605,634
1921	496	103,273	123,612,873	377,879,372	704,903,133	327,023,761	(3)
1919	477	158,549	193,763,089	594,343,590	1,138,216,019	543,872,429	429,273
Per cent of increase or decrease (—):							
1925–1927	—2.6	0.1	3.5	—8.5	—2.8	4.8	19.8
1923–1925	.2	2.9	5.1	44.0	31.5	17.9	8.9
1923–1927	—2.5	3.0	8.8	31.8	27.8	23.5	30.5
1919–1927	8.2	—10.4	2.2	11.1	7.6	3.8	84.2
RUBBER TIRES AND INNER TUBES							
1927	109	78,256	$120,063,854	$499,220,642	$869,688,063	$370,467,421	451,724
1925	126	81,640	120,614,081	559,939,811	925,001,520	365,061,709	403,227
1923	160	73,963	108,623,102	365,165,016	644,193,697	279,028,681	370,551
1921	178	55,496	75,054,148	291,554,377	496,123,335	204,568,958	(3)
RUBBER BOOTS AND SHOES							
1927	22	26,848	32,078,955	43,372,916	124,607,801	81,234,885	68,359
1925	23	24,999	28,057,948	40,566,085	115,934,554	75,368,469	59,413
1923	25	29,435	33,670,810	45,268,988	131,739,742	86,470,754	56,184
1921	24	23,888	23,428,115	32,132,942	94,032,524	61,899,582	(3)
RUBBER GOODS, OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES							
1927	385	36,893	45,930,934	117,776,651	230,781,250	113,004,599	270,539
1925	[2] 381	35,230	42,613,491	121,223,779	219,868,989	98,645,210	197,051
1923	344	34,470	39,790,144	90,728,764	182,584,195	91,855,431	178,899
1921	294	23,889	25,130,610	54,192,053	114,747,274	60,555,221	(3)

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] These figures differ from those published in the report for 1925 because of changes in the classification of establishments manufacturing rubber cement as their principal product and also those manufacturing toy balloons as their principal products. Prior to 1927 rubber cement was treated as a product of the "Mucilage, paste, and other adhesives, not elsewhere classified" industry and toy balloons as products of the "Toys (not including children's wheel goods or sleds), games, and playground equipment" industry. The figures for 1925 have been adjusted by the inclusion of the data for such establishments, but no corresponding adjustment has been made in the statistics for 1923 and 1921.

[3] Not called for on schedule.

TABLE 2.—RUBBER CONSUMED AND STOCKS AFLOAT AND HELD BY ESTABLISHMENTS IN THE RUBBER-INDUSTRIES GROUP: 1927 AND 1925

[Ton, 2,240 pounds]

	Total	INDUSTRY		
		Rubber tires and inner tubes	Rubber boots and shoes	Rubber goods, other than tires, inner tubes, and boots and shoes
Consumption:				
Crude rubber, total—				
1927	364,057	316,295	16,424	31,338
1925	387,629	335,873	15,901	35,855
Plantation—				
1927	342,251	302,643	13,783	25,825
1925	358,167	318,870	13,741	25,556
Para—				
1927	8,820	3,861	580	4,379
1925	10,263	4,941	827	4,495
Other—				
1927	12,986	9,791	2,061	1,134
1925	19,199	12,062	1,333	5,804
Reclaimed rubber—				
1927	175,774	105,718	11,923	58,133
1925	(1)	(1)	(1)	(1)
Crude rubber afloat Dec. 31:				
1927	10,713	10,299	(2)	(2)
1925	(1)	(1)	(1)	(1)
Stocks on hand Dec. 31:				
Crude rubber, total—				
1927	45,733	36,933	2,878	5,922
1925	37,250	29,666	2,166	5,418
Plantation—				
1927	41,407	34,856	2,238	4,313
1925	31,633	26,725	1,745	3,163
Para—				
1927	2,490	801	271	1,418
1925	2,625	738	219	1,668
Other—				
1927	1,836	1,276	369	191
1925	2,992	2,203	202	587
Reclaimed rubber—				
1927	16,581	9,344	870	6,367
1925	(1)	(1)	(1)	(1)

[1] Not called for on schedule.
[2] Can not be shown separately without disclosing data reported by individual establishments.

TABLE 3.—CRUDE RUBBER CONSUMED BY ESTABLISHMENTS IN THE RUBBER-INDUSTRIES GROUP, BY CLASS OF PRODUCTS MADE: 1927

PRODUCTS MADE	Rubber consumed (ton, 2,240 lbs.)	PRODUCTS MADE	Rubber consumed (ton, 2,240 lbs.)
Total consumption	364,057	Rubberized fabrics and rubberized and rubber clothing (finished)	5,390
Rubber tires and inner tubes:		Mechanical rubber goods:	
Pneumatic—		Belting	3,821
Motor-vehicle, except motor-cycle—		Hose and tubing	4,885
Casings	231,505	Other	5,387
Inner tubes	52,009	Rubber flooring, and rubber mats and matting	1,713
Motor-cycle, bicycle, and other casings and tubes	1,177	Hard-rubber goods	1,485
Solid and cushion	15,724	Rubber thread	2,781
Tire sundries and repair materials	4,830	Rubber cement	1,487
Boots and shoes	17,164	Druggists' and medical sundries	2,022
Rubber heels and soles, including slab soling	6,690	Toys	1,407
		Other manufactures of rubber	4,580

TABLE 4.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927

	1927	1925	1923	1921
1. The rubber group as a whole, all products, total value	$1,225,077,114	$1,260,805,063	$958,517,634	$704,903,133
2. Rubber goods	$1,219,585,811	$1,258,445,924	$956,363,276	$692,286,787
3. Other products (not normally belonging to the industries)	$5,491,303	$2,359,139	$2,154,358	$12,616,346
4. Rubber goods made as secondary products in other industries, value	$6,893,317	$10,999,067	$2,431,147	$2,498,278
Rubber goods, all industries: Aggregate value (sum of 2 and 4) [1]	$1,226,479,128	$1,269,444,991	$958,794,423	$694,785,065
Tires and inner tubes, total value	$779,533,129	$824,548,604	$569,130,559	$450,339,135
Pneumatic—				
Motor-vehicle, except motorcycle—				
Casings—				
Total number	63,549,949	58,784,073	45,425,591	27,297,919
Total value	$633,582,246	$656,491,733	$458,107,709	$377,829,338
Balloon—				
Number	32,786,832	(2)	(2)	(2)
Value	$326,062,731			
High-pressure—				
Number	30,763,117			
Value	$307,519,515			
Inner tubes—				
Total number	70,855,455	77,387,836	57,229,225	32,082,002
Total value	$105,487,386	$118,234,658	$74,982,725	$52,858,181
Balloon—				
Number	33,642,868	(2)	(2)	(2)
Value	$52,193,080			
High-pressure—				
Number	37,212,587			
Value	$53,294,306			
Motor-cycle and bicycle—				
Casings and tubes—				
Total number	3,046,260	2,511,661	4,310,810	1,975,053
Total value	$3,695,399	$3,961,327	$5,689,005	$4,263,175
Casings—				
Number	434,712	2,080,773	3,668,114	1,623,772
Value	$1,159,510	$3,564,933	$5,016,050	$3,946,066
Single-tube tires—				
Number	2,260,181			
Value	$2,325,445			
Inner tubes—				
Number	351,367	430,888	642,696	351,281
Value	$210,444	$396,394	$672,955	$317,109
Other casings and tubes, value	$109,758	(3)	(3)	(3)
Solid and cushion—				
Motor-vehicle—				
Number	812,548	1,035,226	944,337	401,388
Value	$34,985,419	$43,870,387	$29,060,586	$14,735,925
Other, including carriage and other tiring, value	$1,672,921	$1,990,499	$1,290,534	$652,516
Rubber boots and shoes, total value	$133,195,913	$119,922,826	$134,986,897	$94,807,029
Rubber boots—				
Pairs	5,361,667	4,739,423	9,097,896	6,532,212
Value	$16,746,281	$16,027,904	$23,573,097	$15,104,058
Rubber shoes and overshoes—				
Total pairs	71,576,570	52,338,782	60,102,775	57,191,040
Total value	$90,993,833	$80,076,608	$83,031,542	$60,759,215
Lumbermen's—				
Pairs	3,772,632	(2)	(2)	(2)
Value	$8,851,138			
Arctics—				
Pairs	7,801,416			
Value	$16,880,084			
Gaiters—				
Pairs	24,910,386			
Value	$30,101,972			
Arctics and gaiters, not reported separately—				
Pairs	4,009,576			
Value	$7,422,995			
Other rubber shoes, rubbers, and footholds—				
Pairs	31,082,560			
Value	$27,737,644			

See footnotes at end of table.

TABLE 4.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927—Continued

	1927	1925	1923	1921
Rubber goods, all industries—Continued.				
Rubber boots and shoes—Continued.				
Canvas rubber-soled shoes—				
Pairs	28,810,061	24,999,932	26,114,073	15,236,590
Value	$25,455,799	$23,818,314	$28,382,258	$18,943,756
Rubber goods, other than tires, inner tubes, and boots and shoes, total value	$313,750,086	$313,974,494	$252,245,820	$147,140,623
Rubber heels, for sale as such—				
Pairs	318,346,037	342,195,710	289,221,857	137,498,617
Value	$25,503,609	$26,091,662	$23,690,841	$14,527,762
Rubber soles, including composition or fiber, for sale as such—				
Pairs	40,820,386	36,064,367	13,509,232	5,002,787
Value	$9,341,312	$10,384,577	$4,907,662	$1,739,848
Rubberized fabrics, for sale as such, total value	$26,540,938	$21,632,878	$20,758,169	$11,218,777
Automobile and carriage—				
Yards	17,362,711	25,232,299	33,038,756	15,544,831
Value	$11,047,634	$13,873,238	$14,188,553	$6,910,363
Hospital sheeting—				
Yards	3,421,754	3,185,141		
Value	$1,841,679	$1,397,983		
Raincoat fabrics—				
Yards	23,687,744		18,100,656	19,679,279
Value	$9,741,516	22,654,627	$6,569,616	$4,308,414
Other—		$6,361,657		
Yards	11,335,603			
Value	$3,910,109			
Mechanical rubber goods—				
Rubber belting—				
Transmission—				
Pounds	23,172,883	(3)		
Value	$12,601,016	$15,145,579		
Conveyor—				
Pounds	15,758,579	(3)	$24,266,881	$13,068,798
Value	$5,973,031	$5,868,238		
Other—				
Pounds	4,456,179	(3)		
Value	$3,372,903	$2,467,255		
Rubber hose and tubing—				
Garden—				
Feet	106,051,971	131,274,543		
Value	$8,091,923	$11,514,092		
Fire—				
Feet	16,023,978	10,835,829	$34,011,774	$18,139,651
Value	$6,203,430	$5,400,619		
Other—				
Value	$27,176,797	$18,729,111		
Rubber packing—				
Pounds	15,019,157	(3)	(3)	(3)
Value	$4,853,217	$4,443,803	$5,628,272	$4,460,127
Washers, gaskets, valves, pump sleeves, liner strips—				
Pounds	12,938,468			
Value	$7,728,633			
Rubber and friction tape—				
Pounds	16,998,847			
Value	$4,038,755	(4)	(4)	(4)
Plumbers' rubber goods—				
Value	$697,329			
Rubber-covered rolls (all sizes)—				
Value	$2,162,066			
Other mechanical rubber goods—				
Value	$17,077,156			
Hard-rubber goods, total value	$18,891,286	$29,110,589	$25,133,680	$11,940,940
Battery jars, boxes, and parts—				
Value	$9,862,375	(2)	(2)	(2)
Other—				
Value	$9,028,911			
Reclaimed rubber, for sale as such—				
Pounds	330,435,663	243,851,873	131,731,945	68,276,588
Value	$27,372,579	$23,020,517	$11,714,438	$7,424,453

See footnotes at end of table.

TABLE 4.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE, FO UNITED STATES: 1921 TO 1927—Continued

	1927	1925	1923	
Rubber goods, all industries—Continued.				
Rubber goods, other than tires, etc.—Continued.				
Druggists' and medical sundries, and stationers' rubber goods, total value	$15,731,745	$18,462,585	$19,864,060	$1
Water bottles and fountain syringes—				
Dozens	1,139,834			
Value	$4,767,399			
Rubber gloves—				
Dozen pairs	817,211			
Value	$2,422,916	(2)	(2)	
Rubber bands—				
Pounds	1,738,379			
Value	$1,424,752			
Other—				
Value	$7,116,678			
Rubber flooring—				
Square feet	8,778,253	11,959,542		
Value	$4,503,436	$6,123,362		
Rubber cement—				
Gallons	4,827,059	(3)		
Value	$3,883,627	$2,807,356		
Tire sundries and repair materials—				
Value	$24,209,727			
Rubber mats and matting—				
Value	$7,272,675		$82,270,043	$51
Rubber thread—				
Pounds	5,281,597			
Value	$5,339,743			
Jar rings—				
Gross	6,768,841	$112,772,271		
Value	$3,053,640			
Bathing caps—				
Dozens	740,860			
Value	$1,701,220			
Other manufactures of rubber [5]—				
Value	$40,428,293			
Not distributed by class or kind, value		$10,999,067	$2,431,147	$2

[1] These aggregates are the sums of all items in the columns beneath except those which are unde
[2] Not reported in detail.
[3] No data.
[4] Included in figure for "Other manufactures of rubber."
[5] Includes rubber clothing, $16,035,426; toy balloons, play balls, and other rubber toys, $6,788,6 total value of rubber clothing made both in the rubber industries and in the wearing-apparel in see "Wearing apparel" report; and for total value of rubber toys, see "Toys, games, and pla equipment" report.

TABLE 5.—PRINCIPAL PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY S 1927

[This table gives separate statistics for each State for which such statistics can be given without di the production reported by individual establishments, and also gives, in combination, the fig those States which outranked the least important of the States for which separate figures ar Thus each of the "Other States" is less important than any of the States shown separately or bination. The States for which combined figures are given are named in the order of the relativ tance of their output of the specific commodity]

	Quantity	Val
Tires and inner tubes:		
Motor-vehicle, except motor-cycle—	*Number*	
Casings, total	63,549,949	$633,
Balloon, total	32,786,832	326,
Ohio	20,354,844	199,
Wisconsin	1,909,818	18,
New Jersey	818,667	9,
Pennsylvania	592,347	6,
Connecticut	384,750	4,
Indiana	160,454	1,
Nebraska	92,859	
Iowa	84,577	

TABLE 5.—PRINCIPAL PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927—Continued

[See note at head of this table]

	Quantity	Value
Tires and inner tubes—Continued.		
Motor-vehicle, except motor-cycle—Continued.		
Casings—Continued.		
Balloon—Continued.		
Massachusetts, Maryland, New York, and North Carolina	*Number* 5,067,818	$53,021,633
Michigan, California, Illinois, and Colorado	3,066,305	29,741,346
Other States	254,393	1,607,548
High-pressure, total	30,763,117	307,519,515
Ohio	18,800,718	194,029,210
Wisconsin	2,121,515	17,556,448
New Jersey	1,056,866	10,865,177
Connecticut	963,541	8,762,844
Pennsylvania	801,080	7,985,898
Nebraska	322,787	1,870,244
Indiana	261,226	1,532,514
Iowa	136,712	755,598
California, Michigan, Illinois, Colorado, and Missouri	3,307,823	30,916,437
Maryland, North Carolina, and West Virginia	1,301,454	14,845,919
Massachusetts and New York	1,538,166	17,516,686
Other States	151,229	882,540
Inner tubes, total	70,855,455	105,487,386
Balloon, total	33,642,868	52,193,080
Ohio	20,803,158	30,128,016
Wisconsin	1,638,004	2,487,174
New Jersey	1,068,711	2,260,345
Pennsylvania	1,109,250	1,460,819
Massachusetts and Maryland	4,307,802	8,057,308
Indiana and California	2,926,445	4,917,353
Other States	1,789,498	2,882,065
High-pressure, total	37,212,587	53,294,306
Ohio	21,516,217	31,012,167
Wisconsin	2,516,162	3,033,644
Pennsylvania	1,523,144	2,063,118
Indiana and California	3,606,316	5,747,965
Massachusetts and New Jersey	3,107,577	5,060,739
Other States	4,943,171	6,376,673
Solid and cushion, total	812,548	34,985,419
Ohio	627,714	24,450,782
Other States	184,834	10,534,637
Rubber boots, total	*Pairs* 5,361,667	16,746,281
Massachusetts	2,627,561	8,029,834
Other States	2,734,106	8,716,447
Rubber shoes and overshoes, total	71,576,570	90,993,833
Lumbermen's, total	3,772,632	8,851,138
Indiana	(1)	(1)
Massachusetts	1,182,591	3,344,580
Other States	[2] 2,590,041	[2] 5,506,558
Arctics, total	7,801,416	16,880,084
Indiana	(1)	(1)
Massachusetts	2,724,893	5,341,260
Other States	[2] 5,076,523	[2] 11,538,824
Gaiters, total	24,910,386	30,101,972
Massachusetts	4,837,058	9,617,680
Other States	20,073,328	20,484,292
Arctics and gaiters not reported separately (Massachusetts, Wisconsin, Connecticut, and New Jersey)	4,009,576	7,422,995

[1] The figure for Indiana, the leading State, can not be given without disclosing the production of individual establishments.

[2] Includes data for Indiana. See footnote 1.

TABLE 5.—PRINCIPAL PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927—Continued

[See note at head of this table, p. 784]

	Quantity	Value
Rubber shoes and overshoes—Continued.	*Pairs*	
Other rubber shoes, rubbers, and footholds, total	31,082,560	$27,737,644
Massachusetts	12,884,797	11,214,608
Other States	18,197,763	16,523,036
Canvas rubber-soled shoes, total	28,810,061	25,455,799
Massachusetts	10,126,359	8,651,700
Other States	18,683,702	16,804,099
Rubber heels, for sale as such, total	318,346,037	25,503,609
Ohio	116,503,334	10,096,437
Massachusetts	85,684,379	5,805,703
Other States	116,158,324	9,601,469
Rubber soles, including composition or fiber, for sale as such, total	40,820,386	9,341,312
Massachusetts	20,305,947	4,665,005
Other States	20,514,439	4,676,307
Rubberized fabrics, for sale as such:	*Yards*	
Automobile and carriage, total	17,362,711	11,047,634
Connecticut and Massachusetts	10,605,111	7,481,499
New Jersey, Michigan, and Ohio	6,757,600	3,566,135
Raincoat fabrics, total	23,687,744	9,741,516
Massachusetts	15,114,538	6,151,931
Other States	8,573,206	3,589,585
Rubber belting:	*Pounds*	
Transmission, total	23,172,883	12,601,016
Ohio	6,941,883	4,430,297
New Jersey	9,185,728	4,248,734
Other States	7,045,272	3,921,985
Conveyor, total	15,758,579	5,973,031
Ohio	6,836,126	2,501,383
New Jersey	4,936,149	1,928,831
Other States	3,986,304	1,542,817
Rubber hose:	*Feet*	
Garden, total	106,051,971	8,091,923
New Jersey	33,701,302	2,425,367
Ohio	27,093,569	2,153,454
Other States	45,257,100	3,513,102
Fire, total	16,023,978	6,203,430
New Jersey	9,158,788	3,362,834
Other States	6,865,190	2,840,596
	Pounds	
Rubber packing, total	15,019,157	4,853,217
Ohio	6,018,524	1,925,498
New Jersey	4,157,196	1,515,419
Other States	4,843,437	1,412,300
	Square feet	
Rubber flooring, total	8,778,253	4,503,436
Massachusetts	3,232,115	1,522,184
New Jersey	1,196,853	909,752
Other States	4,349,285	2,071,500
Rubber mats and matting, total		7,272,675
Ohio		4,242,114
Other States		3,030,561

TABLE 5.—PRINCIPAL PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927—Continued

[See note at head of this table, p. 784]

	Quantity	Value
	Pounds	
Hard-rubber battery jars, boxes, and parts, total		$9,862,375
Ohio		3,214,969
Other States		6,647,406
Reclaimed rubber, for sale as such, total	330,435,663	27,372,579
Ohio	119,854,459	9,172,551
New Jersey	47,884,521	4,243,821
Massachusetts	35,491,791	3,389,515
Other States	127,204,892	10,566,692
	Gallons	
Rubber cement, total	4,827,059	3,883,627
Massachusetts	1,781,643	1,277,162
Ohio	1,350,380	1,105,411
Other States	1,695,036	1,501,054
	Dozens	
Rubber water bottles and fountain syringes, total	1,139,834	4,767,399
Ohio	845,438	2,353,681
Other States	294,396	2,413,718

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RUBBER TIRES AND INNER TUBES

[A preliminary report for this industry was issued under date of October 15, 1928]

Description of the industry.—This classification covers establishments engaged primarily in the manufacture of pneumatic tires and inner tubes and solid and cushion rubber tires for any class of vehicles. Manufacturers of rubber tires and inner tubes were not separately classified at censuses prior to that for 1921. For this reason no comparative figures for this industry can be given for 1919. (See "Changes in classification," p. 779.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1921 TO 1927

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	109	78,256	$120,063,854	$499,220,642	$869,688,063	$370,467,421	451,724
1925	126	81,640	120,614,081	559,939,811	925,001,520	365,061,709	403,227
1923	160	73,963	108,623,102	365,165,016	644,193,697	279,028,681	370,551
1921	178	55,496	75,054,148	291,554,377	496,123,335	204,568,958	(2)
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	—13.5	—4.1	—0.5	—10.8	—6.0	1.5	12.0
1923-1925	—21.2	10.4	11.0	53.3	43.6	30.8	8.8
1923-1927	—31.9	5.8	10.5	36.7	35.0	32.8	21.9
1921-1927	—38.8	41.0	60.0	71.2	75.3	81.1	.....

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers, total	14,104	*Horsepower* 451,724	12,173	*Horsepower* 403,227	9,134	*Horsepower* 370,551
Steam engine	110	25,758	165	32,534	} 261	179,054
Steam turbines	83	174,459	78	131,640		
Internal-combustion engines	1	10	4	129	1	3
Water wheels and turbines	1	90	1	90	19	1,700
Electric motors driven by purchased current	13,909	251,407	11,925	238,834	8,853	189,794
Electric motors, total	25,759	433,949	21,637	399,714	16,514	326,516
Driven by purchased current	13,909	251,407	11,925	238,834	8,853	189,794
Driven by current generated in establishment reporting	11,850	182,542	9,712	160,880	7,661	136,722
Electric generators	68	*Kilowatts* 139,586	83	*Kilowatts* 110,850	(1)	*Kilowatts* (1)

[1] Not called for on schedule.

TABLE 3.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [1]
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	109	95,422	4	17,162	78,256	451,724	$40,430,162	$120,063,854	$488,167,931	$11,052,711	$869,688,063	$370,467,421
Connecticut	4	1,792	-------	287	1,505	26,570	499,742	2,184,538	9,863,771	301,812	15,090,927	4,925,344
Indiana	7	1,567	-------	215	1,352	10,560	456,682	1,546,012	6,297,549	247,108	11,080,887	4,536,230
Iowa	5	307	-------	72	235	2,787	142,494	292,850	1,229,448	74,531	1,907,688	603,709
Nebraska	3	350	-------	59	291	2,467	102,225	457,930	1,700,665	73,453	2,694,867	920,749
New Jersey	10	3,566	1	589	2,976	18,811	1,224,384	4,413,250	14,406,811	461,719	29,240,084	14,371,554
Ohio	38	63,345	-------	11,565	51,780	239,783	28,004,103	82,260,053	309,552,747	6,624,856	565,074,244	248,896,641
Pennsylvania	10	2,371	-------	370	2,001	15,096	617,521	2,611,984	10,364,304	321,970	18,564,522	7,878,248
Wisconsin	4	4,227	-------	539	3,688	20,813	1,246,621	5,288,911	24,406,845	547,713	43,823,143	18,868,585
Other States [2]	28	17,897	3	3,466	14,428	114,837	8,136,390	21,008,326	110,345,791	2,399,549	182,211,701	69,466,361

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] Alabama, 1 establishment; California, 4; Colorado, 2; Georgia, 1; Illinois, 2; Kentucky, 1; Maryland, 3; Massachusetts, 2 (see "Rubber goods, other than tires, inner tubes, and boots, and shoes," footnote 2, Table 3, p. 20); Michigan, 4; Missouri, 1; New York, 2; North Carolina, 2; Texas, 1; Virginia, 1; West Virginia, 1.

RUBBER BOOTS AND SHOES

[A preliminary report for this industry was issued under date of October 1, 1928]

Description of the industry.—The establishments classified in this industry are those whose principal products are rubber boots, shoes, overshoes, and canvas rubber-soled shoes. (Statistics for the manufacture of boots and shoes from materials other than rubber are presented in a separate report.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	22	26,848	$32,078,955	$43,372,916	$124,607,801	$81,234,885	68,359
1925	23	24,999	28,057,948	40,566,085	115,934,554	75,368,469	59,413
1923	25	29,435	33,670,810	45,268,988	131,739,742	86,470,754	56,184
1921	24	23,888	23,428,115	32,132,942	94,032,524	61,899,582	(2)
1919	25	32,875	30,882,722	50,346,880	116,917,434	66,570,554	49,400
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	(3)	7.4	14.3	6.9	7.5	7.8	15.1
1923-1925	(3)	—15.1	—16.7	—10.4	—12.0	—12.8	5.7
1923-1927	(3)	—8.8	—4.7	—4.2	—5.4	—6.1	21.7
1919-1927	(3)	—18.3	3.9	—13.9	6.6	22.0	38.4

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.
[3] Per cent not computed where base is less than 100.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	3,817	68,359	2,996	59,413	2,370	56,184
Steam engines	27	12,783	28	14,408	47	17,595
Steam turbines	3	1,335	2	260		
Water wheels and turbines	9	1,821	10	1,946	12	2,675
Electric motors driven by purchased current	3,778	52,420	2,956	42,799	2,311	35,914
Electric motors, total	4,101	53,841	3,227	44,567	2,613	37,864
Driven by purchased current	3,778	52,420	2,956	42,799	2,311	35,914
Driven by current generated in establishment reporting	323	1,421	271	1,768	302	1,950
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	19	2,069	23	1,783	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—GENERAL STATISTICS, BY STATES: 1927

[Massachusetts is the only State for which separate figures can be given without disclosing data reported by individual establishments]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY			Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture[1]
		Total	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	22	30,267	3,419	26,848	68,359	$5,180,753	$32,078,955	$41,815,119	$1,557,797	$124,607,801	$81,234,885
Massachusetts	10	13,664	1,583	12,081	35,514	2,465,010	15,470,897	18,158,149	799,338	56,440,025	37,482,538
Other States[2]	12	16,603	1,836	14,767	32,845	2,715,743	16,608,058	23,656,970	758,459	68,167,776	43,752,347

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Connecticut, 4 establishments; Illinois, 1; Indiana, 1; New Jersey, 1; Pennsylvania, 1; Rhode Island, 3; Wisconsin, 1.

RUBBER GOODS, OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES

[A preliminary report for this industry was issued under date of December 19, 1928]

Description of the industry.—The principal products of establishments in this industry are rubber belting and hose, rubber heels and soles, reclaimed rubber, rubberized fabrics, and hard-rubber goods. The industry now covers the manufacture of rubber toys and rubber cement, previously assigned to the "Toys, games, and playground equipment" industry and the "Mucilage, paste, and other adhesives" industry, respectively. The 1925 figures in the tables below have been adjusted to include these items in the rubber-goods industry. (The rubber-goods industry does not include the manufacture of rubber-insulated wire and cable, which are treated as products of the "Electrical machinery, apparatus, and supplies" industry.)

As explained elsewhere (see "Changes in classification," p. 779), the manufacture of rubber tires and inner tubes and of all other rubber products except boots and shoes, belting, and hose was treated as a single industry at censuses prior to that for 1921 and for this reason no comparative statistics can be given for 1919.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1921 TO 1927

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	385	36,893	$45,930,934	$117,776,651	$230,781,250	$113,004,599	270,539
1925	381	35,230	42,613,491	121,223,779	219,868,989	98,645,210	197,051
1923	344	34,470	39,790,144	90,728,704	182,584,195	91,855,431	178,899
1921	294	23,889	25,130,610	54,192,053	114,747,274	60,555,221	(2)
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	1.0	4.7	7.8	—2.8	5.0	14.6	37.3
1923-1925	10.8	2.2	7.1	33.6	20.4	7.4	10.1
1923-1927	11.9	7.0	15.4	29.8	26.4	23.0	51.2
1921-1927	31.0	54.4	82.8	117.3	101.1	86.6	----------

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horse-power		*Horse-power*		*Horse-power*
Prime movers, total	10,006	270,539	7,391	197,051	4,968	178,899
Steam engines	133	31,513	155	35,805	214	68,886
Steam turbines	32	23,304	28	13,717		
Internal-combustion engines	8	327	12	255	10	356
Water wheels and turbines	13	1,504	15	1,269	19	2,131
Electric motors driven by purchased current	9,820	213,891	7,181	146,005	4,725	107,526
Electric motors, total	11,535	236,200	9,143	176,856	7,518	149,653
Driven by purchased current	9,820	213,891	7,181	146,005	4,725	107,526
Driven by current generated in establishment reporting	1,715	22,399	1,962	30,851	2,793	42,127
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	95	23,963	102	20,096	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [1]
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	385	43,009	101	6,015	36,893	270,539	$15,047,926	$45,930,934	$109,951,872	$7,824,779	$230,781,250	$113,004,599
California	21	1,000	12	223	765	8,913	649,705	1,017,996	2,524,843	160,494	5,733,233	3,047,896
Connecticut	15	3,337	-------	423	2,914	16,097	1,014,811	3,531,641	9,268,254	637,832	18,499,876	8,593,790
Illinois	24	1,468	20	210	1,238	9,602	488,905	1,616,702	3,056,551	221,501	7,230,049	3,951,997
Indiana	11	1,153	5	93	1,055	12,831	249,898	1,316,685	2,065,429	288,100	4,890,596	2,537,067
Michigan	6	366	3	40	323	2,794	170,392	449,434	1,495,417	79,425	3,537,051	1,962,209
Missouri	7	635	1	123	511	2,724	199,685	455,165	3,670,042	79,792	5,495,329	1,745,495
New Jersey	52	8,921	8	1,071	7,842	59,281	2,771,948	10,577,822	24,851,281	1,618,962	49,756,024	23,285,781
New York	37	5,228	6	741	4,481	30,420	2,208,587	6,471,898	12,677,491	706,028	28,677,682	15,294,163
Ohio	77	6,521	14	852	5,655	41,005	2,140,636	6,824,180	13,813,345	1,487,727	32,467,873	17,166,801
Pennsylvania	24	2,235	8	349	1,878	18,780	766,663	2,290,276	5,022,761	557,378	11,049,899	5,469,760
Rhode Island	7	2,444	-------	400	2,044	13,992	877,184	1,907,222	4,408,403	360,323	9,605,615	4,836,889
Texas	5	167	1	26	140	139	36,030	109,546	210,592	8,782	577,507	358,133
Washington	3	25	1	6	18	20	11,018	16,290	16,907	566	76,048	58,575
Wisconsin	6	517	-------	43	474	1,718	106,843	502,319	1,278,802	56,326	2,435,384	1,100,256
Other States [2]	90	8,992	22	1,415	7,555	52,223	3,355,621	8,843,758	25,591,754	1,561,543	50,749,084	23,595,787

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] Alabama, 1 establishment; Colorado, 3; Delaware, 2; Florida, 1; Georgia, 2; Iowa, 1; Kansas, 1; Kentucky, 1; Louisiana, 1; Maine, 2; Maryland, 2; Massachusetts, 62; Minnesota, 3; North Carolina, 1; Oklahoma, 1; Oregon, 3; Tennessee, 1; Virginia, 2.

As Massachusetts is one of the leading States in the manufacture of rubber goods, it is desirable to show separate statistics for that State, so far as possible. The Massachusetts figures for the "Rubber tires and inner tubes" industry can not, however, be given separately without disclosing operations of individual establishments, and they have therefore been combined with those for the "Rubber goods, other than tires, inner tubes, and boots and shoes" industry. These combined statistics are as follows:

Number of establishments	64	Salaries	$6,959,441
Persons engaged, total	13,337	Wages	13,298,241
Proprietors and firm members	8	Cost of materials and supplies	54,663,060
Salaried officers and employees	2,965	Cost of fuel and power	2,052,655
Wage earners (average for the year)	10,364	Value of products	97,717,724
Horsepower	70,623	Value added by manufacture	41,002,009

Group 9.—LEATHER AND ITS MANUFACTURES

THE GROUP AS A WHOLE

[Preliminary reports for certain industries of this group were issued as follows: Leather—Tanned, curried, and finished, November 13, 1928; Trunks, suitcases, and bags, December 4, 1928; Saddlery and harness, December 31, 1928; Boot and shoe cut stock, Boot and shoe findings, and Boots and shoes other than rubber, April 13, 1929; Gloves and mittens, leather, April 15, 1929; Leather belting, April 18, 1929]

The leather group is made up of 10 industries, namely: (1) Leather—Tanned, curried, and finished; (2) Leather belting; (3) Boot and shoe cut stock, not made in boot and shoe factories; (4) Boot and shoe findings, not made in boot and shoe factories; (5) Boots and shoes, other than rubber; (6) Leather gloves and mittens; (7) Pocketbooks, purses, and cardcases; (8) Saddlery and harness; (9) Trunks, suitcases, and bags; (10) Leather goods, not elsewhere classified.

Duplication in group totals for cost of materials and value of products.—The cost-of-materials and value-of-products figures for the leather-industries group as a whole include a considerable amount of duplication resulting from the use of the products of establishments in certain industries as materials by establishments in other industries. In other words, the total value of products for the group includes not only the factory value of the finished products in the form in which they reach the final purchaser but also the value of the products of the "Leather: Tanned, curried, and finished" industry, which are used as materials in the other leather industries, and the value of the products of the "Boot and shoe cut stock" and "Boot and shoe findings" industries, which are used as materials in the boot and shoe industry proper. Similarly, the total cost of materials for the group includes not only the cost of the hides and other basic raw materials produced outside the leather group and used as materials by tanneries but also the amounts paid for tannery products and for boot and shoe cut stock and boot and shoe findings by establishments which use these products as materials for further manufacture. Furthermore, reduplication occurs in the case of boot and shoe cut stock not made in boot and shoe factories; for the value of the leather used in making such stock appears three times in the total value of products for the group—once as reported by the tanneries, again as a part of the value of the cut stock, and still again as a part of the value of finished boots and shoes. Within any one of the industries, however, there is little duplication resulting from the use of the products of some establishments as materials by others in the same industry.

SUMMARY FOR GROUP 9.—LEATHER AND ITS MANUFACTURES

[See "Regrouping of industries and renumbering of groups," p. 19

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, containers for products, fuel, and power	Value of products
				Expressed in thousands of d		
Total	1927	4,265	315,991	364,447	1,088,641	1,869,305
	1925	[2] 4,243	[2] 314,025	[2] 355,346	[2] 1,012,881	[2] 1,763,709
	1923	4,868	344,545	388,630	1,083,345	1,880,086
	1921	4,813	280,071	314,412	934,398	1,544,185
Leather: Tanned, curried, and finished.	1927	494	52,924	67,887	331,985	494,256
	1925	[4] 531	[4] 52,263	[4] 65,834	[4] 296,953	[4] 452,186
	1923	597	59,703	73,784	321,750	488,898
	1921	608	48,955	57,741	277,725	383,365
Finished products of leather.	1927	3,771	263,067	296,560	756,656	1,375,049
	1925	[5] 3,712	[5] 261,762	[5] 289,512	[5] 715,927	[5] 1,311,523
	1923	[6] 4,272	[6] 285,747	[6] 315,712	[6] 775,065	[6] 1,404,735
	1921	4,205	231,116	256,671	656,673	1,160,820
Belting	1927	173	2,164	2,925	16,185	27,266
	1925	168	2,644	3,505	18,868	31,811
	1923	169	3,160	3,895	24,569	37,724
	1921	164	2,268	2,842	13,076	19,168
Boot and shoe cut stock, not made in boot and shoe factories.	1927	201	8,611	9,354	97,966	121,022
	1925	[4] 245	[4] 7,977	[4] 8,906	[4] 75,326	[4] 94,048
	1923	[6] 228	[6] 8,038	[6] 7,981	[6] 82,032	[6] 102,838
	1921	226	7,049	7,613	56,923	72,692
Boot and shoe findings, not made in boot and shoe factories.	1927	379	9,950	11,202	31,862	57,433
	1925	326	8,605	9,695	29,248	52,064
	1923	364	7,865	8,274	27,653	48,013
	1921	344	5,917	6,609	22,931	39,117
Boots and shoes, other than rubber.	1927	1,357	203,110	225,090	494,553	944,714
	1925	1,460	206,992	225,788	481,632	925,383
	1923	1,606	225,216	250,346	527,457	1,000,078
	1921	1,505	183,502	204,954	478,432	867,476
Gloves and mittens [7]	1927	232	9,106	8,814	19,276	36,662
	1925	[2] 226	[2] 7,115	[2] 6,915	[2] 17,779	[2] 33,293
	1923	260	10,010	8,545	20,224	38,081
	1921	272	7,907	5,843	13,844	24,855
Pocketbooks, purses, and cardcases.	1927	257	8,570	13,170	29,619	57,345
	1925	190	6,826	9,022	22,442	43,105
	1923	207	5,518	7,291	16,236	32,732
	1921	115	2,715	3,224	6,221	13,085
Saddlery and harness	1927	264	4,023	4,541	16,526	27,356
	1925	258	4,570	5,060	18,776	30,084
	1923	472	6,617	6,916	24,460	42,113
	1921	593	4,489	4,997	17,665	30,164
Trunks, suitcases, and bags.	1927	495	10,345	13,085	29,128	59,959
	1925	475	10,348	13,226	31,382	61,224
	1923	505	11,441	13,520	32,837	63,023
	1921	504	8,712	10,260	23,883	46,549
Leather goods, not elsewhere classified.	1927	413	7,188	8,379	21,540	43,292
	1925	364	6,685	7,396	20,474	40,512
	1923	461	7,882	8,944	19,597	40,134
	1921	482	8,557	10,329	23,698	47,715

[1] Each total is the sum, expressed to the nearest thousand, of the individual items For this reason the totals in some cases may differ slightly from the sums of the item

[2] These figures differ from those published in the report for 1925, because of the trans lishments previously classified as "Gloves and mittens, leather" to the "Gloves a industry, Group 2.

[3] Not called for on schedule.

[4] Revised; this revision does not affect the group total, because the revision is the re ancing changes in "Leather: Tanned, curried, and finished" and "Boot and shoe cut

[5] Figures changed because of changes in figures making up this subclass. See "Boot a and "Gloves and mittens."

[6] Revised; this revision not carried into the group total.

[7] The figures for 1927 and 1925 are not comparable with those for previous years beca in the figures for earlier years of the statistics for certain establishments which manuf mittens of cloth and leather combined; for later years, this class of establishments was in glove, and mitten industry.

LEATHER: TANNED, CURRIED, AND FINISHED

[A preliminary report for this industry was issued under date of November 13, 1928]

Description of the industry.—This industry designation covers tanneries manufacturing leather, whether from hides and skins owned by them or on a contract basis from hides and skins belonging to others, and establishments engaged in currying and finishing leather. Practically all the products of this industry are used as materials for further manufacture, largely in the other leather industries but to some extent in industries outside the leather group.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	494	52,924	$67,887,231	$331,984,736	$494,255,838	$162,271,102	220,530
1925 [2]	531	52,263	65,834,112	296,953,488	452,186,000	155,232,512	215,678
1923	597	59,703	73,784,340	321,749,551	488,897,835	167,148,284	230,187
1921	608	48,955	57,740,510	277,724,919	383,365,048	105,640,129	(3)
1919	680	72,476	88,205,473	646,521,527	928,591,701	282,070,174	217,761
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	—7.0	1.3	3.1	11.8	9.3	4.5	2.2
1923–1925	—11.1	—12.5	—10.8	—7.7	—7.5	—7.1	—6.3
1923–1927	—17.3	—11.4	—8.0	3.2	1.1	—2.9	—4.2
1919–1927	—27.4	—27.0	—23.0	—48.7	—46.8	—42.5	1.3

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Revised.
[3] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	8,158	220,530	6,927	215,678	7,112	230,187
Steam engines	670	96,023	722	97,241	909	142,920
Steam turbines	52	38,417	54	41,346		
Internal-combustion engines	25	2,540	37	3,011	35	2,965
Water wheels and turbines	13	1,105	44	2,047	21	993
Electric motors driven by purchased current	7,398	82,445	6,070	72,033	6,147	83,309
Electric motors, total	15,117	176,419	15,152	168,265	12,242	158,935
Driven by purchased current	7,398	82,445	6,070	72,033	6,147	83,309
Driven by current generated in establishment reporting	7,719	93,974	9,082	96,232	6,095	75,626
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	294	76,149	279	73,945	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—PRODUCTS, BY CLASS AND VALUE: 1927

ITEM	Value
"Leather: Tanned, curried, and finished" industry, all products, total value	$494, 255, 838
Leather	454, 964, 813
Receipts for contract work on materials owned by others	24, 201, 288
By-products of tanning, currying, and finishing (hair, glue stock, fleshings, etc.)	10, 010, 100
Other products (not normally belonging to the industry)	5, 079, 637

CLASS	Total	Tanned, curried, and finished, including tanned only	Curried and finished only
Leather, aggregate value	$454, 964, 813	$440, 108, 079	$14, 856, 734
For sale, total	377, 203, 944	365, 465, 725	11, 738, 219
For consumption,[1] total	77, 760, 869	74, 642, 354	3, 118, 515
Heavy leather, total	184, 117, 429	174, 849, 836	9, 267, 593
For sale	137, 671, 713	130, 956, 045	6, 715, 668
For consumption [1]	46, 445, 716	43, 893, 791	2, 551, 925
Upper leather, total	225, 575, 469	223, 591, 108	1, 984, 361
For sale	194, 938, 718	193, 520, 947	1, 417, 771
For consumption [1]	30, 636, 751	30, 070, 161	566, 590
Glove leather, total	17, 654, 374	17, 523, 292	131, 082
For sale	17, 263, 445	17, 132, 363	131, 082
For consumption [1]	390, 929	390, 929	----------
Fancy and miscellaneous leather, total	27, 617, 541	24, 143, 843	3, 473, 698
For sale	27, 330, 068	23, 856, 370	3, 473, 698
For consumption [1]	287, 473	287, 473	----------

[1] For consumption in the manufacture of shoes, belting, gloves, etc., in plants owned by the leather-producing companies.

TABLE 4.—LEATHER—PRODUCTION, BY CLASS AND QUANTITY, FOR THE UNITED STATES: 1927, 1926, AND 1925

[Statistics given in this table were compiled from data reported at the Monthly Census of Hides, Skins, and Leather]

CLASS	1927	1926	1925
Sole and belting leather:			
Sole—cattle, total ... backs, bends, and sides	15,828,586	13,615,211	14,878,644
Oak and union ... backs, bends, and sides	15,193,824	13,153,371	14,327,037
Chrome ... backs, bends, and sides	634,762	461,840	551,607
Sole—horse (chrome) ... whole butts	175,636	167,310	141,039
Belting butts:			
Rough ... butts and butt bends	929,060	857,873	808,815
Curried ... butts and butt bends	962,235	994,355	(1)
Offal, total ... pounds	118,391,827	104,312,283	109,873,327
Heads ... pounds	11,298,762	9,989,634	10,553,650
Bellies ... pounds	72,802,384	63,159,726	68,908,656
Shoulders—sole leather ... pounds	19,788,233	17,749,165	28,905,269
Shoulders—rough ... pounds	13,099,423	12,172,759	
Other ... pounds	1,403,025	1,240,999	1,505,752
Harness leather, total ... sides	1,016,255	1,168,907	1,288,075
Union black ... sides	457,993	511,045	543,362
Oak black ... sides	557,862	657,267	743,960
Russet ... sides	400	595	753
Bag, case, and strap leather ... sides	1,104,576	1,183,378	1,175,125
Skirting leather ... sides	68,842	61,859	77,914
Collar leather ... sides	476,467	527,815	580,826
Latigo leather ... sides	38,473	39,687	25,339
Lace leather ... sides	147,699	144,823	169,632
Welting leather:			
Cattle, total ... pounds	10,068,413	9,210,520	9,623,047
Sides ... pounds	917,204	1,242,725	(1)
Shoulders ... pounds	9,151,209	7,967,795	(1)
Pigskin strips (including fancy) ... pounds	3,247,493	2,151,919	1,585,237
Upholstery leather, total ... pieces	1,593,111	1,609,197	1,573,212
Whole-hide grains ... hides	353,993	405,394	462,918
Buffings (russet) ... hides	152,608	201,488	114,975
Machine-buffed ... hides	148,125	195,579	163,425
Main splits ... pieces	665,005	506,796	527,441
Second splits ... pieces	273,380	299,940	304,453
Upper leather (other than patent):			
Cattle (including kip side), total ... sides	13,459,212	15,476,197	15,338,014
Chrome ... sides	11,509,820	13,677,232	13,587,413
Dress shoe ... sides	8,246,239	10,577,990	10,272,846
Work shoe ... sides	3,263,581	3,099,242	3,314,567
Combination (chrome and vegetable) ... sides	1,702,637	1,519,994	1,422,016
Dress shoe ... sides	89,580	17,072	26,167
Work shoe ... sides	1,613,057	1,502,922	1,395,849
Vegetable ... sides	246,755	275,832	318,322
Dress shoe ... sides	194,804	201,583	188,405
Work shoe ... sides	51,951	74,249	129,917
Foreign tanned ... sides	(1)	3,139	10,263
Calf, total ... skins	15,384,222	14,329,637	12,707,466
Blacks ... skins	5,506,537	3,283,214	3,165,876
Colors ... skins	9,877,685	11,046,423	9,541,590
Kip, total ... whole skins	765,480	613,665	913,808
Blacks ... whole skins	242,154	161,318	267,190
Colors ... whole skins	523,326	452,347	646,618
Goat and kid ... skins	49,417,010	48,415,308	40,887,003
Cabretta ... skins	1,550,635	2,344,046	2,412,316
Sheep and lamb ... skins	14,848,644	13,973,226	14,124,093
Deer and elk ... skins	292,935	430,409	353,910
Kangaroo and wallaby ... skins	705,268	679,680	819,533
Horse, colt, ass, and mule—			
Half and whole fronts ... equivalent half fronts	91,307	115,610	108,245
Butts ... whole butts	376,285	296,621	254,874
Shanks ... shanks	294,810	274,495	240,675

See footnote at end of table.

TABLE 4.—LEATHER—PRODUCTION, BY CLASS AND QUANTITY, FOR THE UNITED STATES: 1927, 1926, and 1925—Continued

[See note at head of this table, p. 799]

CLASS	1927	1926	1925
Patent leather (other than upholstery):			
Cattle (including kip side) ... sides	8,388,467	7,459,393	8,628,323
Calf and kip ... whole skins	121,360	89,684	4,279
Goat and kid ... skins	430,290	503,602	991,254
Horse and colt ... equivalent half fronts	416,103	609,614	683,754
Glove and garment leather:			
Cattle grains (including foreign-tanned kip) ... sides	18,343	64,601	66,761
Calf and kip ... whole skins	41,892	2,748	1,328
Bellies (cowhide) ... bellies	669,364	(1)	(1)
Horse, colt, ass, and mule—			
Half and whole fronts ... equivalent half fronts	1,458,912	1,008,645	1,146,201
Butts ... whole butts	232,004	134,980	100,160
Shanks ... shanks	1,154,115	1,143,028	1,011,289
Pig and hog ... skins	251,164	134,964	114,209
Goat and kid ... skins	171,235	192,981	66,674
Cabretta ... skins	1,820,055	2,071,235	1,677,606
Sheep and lamb (except shearlings) ... skins	7,575,273	5,297,330	5,326,007
Shearlings ... skins	2,727,436	2,518,871	1,984,876
Deer and elk ... skins	594,975	633,915	665,404
Fancy and bookbinders' leather:			
Cowhide ... sides	201,611	298,742	302,283
Buffings (finished) ... hides	58,582	87,991	89,020
Goat and kid ... skins	717,131	663,665	540,541
Cabretta ... skins	36,162	62,170	93,273
Sheep and lamb ... skins	2,824,530	2,369,449	1,984,360
Calf and kip ... skins	673,757	704,333	249,387
Pig and hog ... skins	96,705	89,963	91,022
Seal ... skins	351,331	332,746	321,038
Splits (other than upholstery) finished and rough ... equivalent side splits	24,644,600	24,617,436	24,023,374
Miscellaneous leather:			
Sheep and lamb—			
Roller leather ... skins	930,023	826,679	848,865
Skivers, total ... dozens	271,771	265,715	391,992
Hat sweats ... dozens	74,772	71,519	117,593
Other skivers ... dozens	196,999	194,196	274,399
Fleshers, total ... dozens	257,532	291,513	326,559
Chamois ... dozens	236,897	244,041	256,056
Other fleshers ... dozens	20,635	47,472	70,503
Sheep and lamb, not elsewhere specified ... skins	3,894,515	3,491,047	4,117,358
Rawhide—			
Cattle ... sides	(1)	5,143	6,459
Calf and kip ... skins	(1)	4,198	719
Rough leather ... equivalent sides	29,850	29,525	48,246

[1] No data.

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	494	57,487	163	4,400	52,924	220,530
California	16	1,122	13	93	1,016	6,126
Connecticut	4	183	--------	20	163	380
Delaware	11	2,760	2	107	2,651	5,932
Illinois	26	4,106	9	285	3,812	18,006
Indiana	7	352	8	26	318	1,131
Kentucky	7	532	3	56	473	2,480
Maine	5	191	--------	16	175	1,039
Maryland	4	605	1	39	565	1,818
Massachusetts	115	11,906	44	1,094	10,768	43,222
Michigan	14	2,341	--------	150	2,191	8,374
New Jersey	57	4,775	17	476	4,282	16,455
New York	63	6,475	42	372	6,061	24,613
North Carolina	11	1,466	1	123	1,342	5,572
Ohio	17	1,654	2	139	1,513	5,914
Oregon	5	46	2	6	38	309
Pennsylvania	67	9,920	13	602	9,305	36,047
Tennessee	7	872	3	39	830	4,642
Virginia	9	898	--------	39	859	3,828
West Virginia	10	1,109	--------	42	1,067	4,677
Wisconsin	19	4,851	1	528	4,322	22,218
Other States [1]	20	1,323	2	148	1,173	7,247

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$13,856,133	$67,887,231	$324,321,487	$7,663,249	$494,255,838	$162,271,102
California	307,960	1,429,890	7,550,360	162,255	11,026,193	3,313,578
Connecticut	82,664	223,609	944,698	22,495	1,454,562	487,369
Delaware	347,645	2,984,468	11,611,537	167,127	17,720,820	5,942,156
Illinois	1,075,524	5,231,621	24,602,680	534,650	39,356,176	14,218,846
Indiana	60,802	383,245	2,846,763	46,094	3,670,052	777,195
Kentucky	112,698	512,678	3,045,608	88,742	4,636,381	1,502,031
Maine	44,012	181,187	359,277	25,065	831,568	447,226
Maryland	174,915	543,178	3,247,579	69,402	5,284,858	1,967,877
Massachusetts	3,398,492	14,587,638	46,379,003	1,481,956	77,649,457	29,788,498
Michigan	349,351	2,683,410	13,172,153	371,025	19,576,326	6,033,148
New Jersey	1,591,678	6,215,370	27,108,911	657,243	42,961,937	15,195,783
New York	1,340,471	8,470,403	38,722,924	1,055,847	59,801,276	19,822,505
North Carolina	305,915	1,237,242	11,884,681	243,751	16,405,352	4,276,920
Ohio	428,395	2,120,707	10,250,940	185,263	15,916,482	5,480,279
Oregon	13,450	46,737	79,784	4,505	218,811	134,522
Pennsylvania	2,074,620	11,696,717	71,426,008	1,287,963	101,814,881	29,100,910
Tennessee	105,557	651,153	3,814,878	120,937	5,037,436	1,101,621
Virginia	91,160	775,100	7,302,264	165,919	10,292,537	2,824,354
West Virginia	114,494	1,084,899	9,700,328	174,331	13,290,872	3,416,213
Wisconsin	1,517,990	5,542,776	21,734,821	593,345	35,077,010	12,748,844
Other States [1]	318,340	1,285,203	8,536,290	205,334	12,432,851	3,691,227

[1] Arkansas, 1 establishment; Georgia, 2; Minnesota, 2; Missouri, 4; Mississippi, 1; New Hampshire, 4; Rhode Island, 2; Texas, 2; Vermont, 1; Washington, 1.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

BELTING, LEATHER

[A preliminary report for this industry was issued under date of April 18, 1929]

Description of the industry.—The establishments embraced within this industry are engaged primarily in the manufacture of leather belting for use in the transmission of power. (Leather belts for personal wear are products of the "Leather goods, not elsewhere classified" industry. The manufacture of rubber belting is included in the "Rubber goods, not elsewhere classified" industry.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	173	2,164	$2,925,416	$16,185,267	$27,265,752	$11,080,485	6,728
1925	168	2,644	3,505,450	18,868,230	31,810,926	12,942,696	6,889
1923	169	3,160	3,895,419	24,569,125	37,723,518	13,154,393	9,075
1921	164	2,268	2,841,644	13,075,740	19,168,255	6,092,515	(2)
1919	172	2,765	3,260,439	28,156,711	40,480,654	12,323,943	7,012
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	3.0	—18.2	—16.5	—14.2	—14.3	—14.4	—2.3
1923-1925	—.6	—16.3	—10.0	—23.2	—15.7	—1.6	—24.1
1923-1927	2.4	—31.5	—24.9	—34.1	—27.7	—15.8	—25.9
1919-1927	.6	—21.7	—10.3	—42.5	—32.6	—10.1	—4.1

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927 AND 1925

TYPE	1927		1925	
	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*
Prime movers, total	534	6,728	592	6,889
Steam engines	17	2,925	17	2,850
Steam turbines	1	125		
Internal-combustion engines	6	61	4	59
Water wheels and turbines	3	135	4	66
Electric motors driven by purchased current	507	3,482	567	3,914
Electric motors, total	642	4,035	715	4,584
Driven by purchased current	507	3,482	567	3,914
Driven by current generated in establishment reporting	135	553	148	670
		Kilowatts		*Kilowatts*
Electric generators	13	1,423	12	918

TABLE 3.—PRODUCTS, BY KIND AND VALUE, BY STATES: 1927

[This table presents statistics for the States for which separate figures can be given without disclosing the output of individual establishments. Some of the "Other States," however, reported larger quantities and values of some classes of products than some of the States shown separately]

STATE	Aggregate value of products	LEATHER BELTING				Belt repairs	Leather packing and other products made wholly or in part of leather	Products not normally belonging to the industry
		Total value	Flat		Other			
			Pounds	Value	Value			
United States	$27,265,752	[1] $21,269,504	9,739,859	$16,811,558	$4,457,946	$681,000	$4,139,865	$1,175,383
Illinois	2,165,995	1,880,337	967,809	1,582,833	297,504	23,384	246,512	15,762
Massachusetts	5,211,281	3,995,796	2,025,489	3,540,057	455,739	34,774	1,117,287	63,424
Missouri	906,330	837,954	468,365	705,794	132,160	36,931	27,398	4,047
New York	4,546,564	3,444,678	1,564,225	3,083,774	360,904	250,446	774,021	77,419
Ohio	732,142	646,028	380,803	601,295	44,733	63,984	12,518	9,612
Pennsylvania	3,647,869	2,990,982	1,633,707	2,475,667	515,315	25,678	509,452	121,757
Other States	10,055,571	7,473,729	2,699,461	4,822,138	2,651,591	245,803	1,452,677	883,362

[1] In addition, leather belting to the value of $507,293 was manufactured as a secondary product by establishments engaged primarily in other lines of manufacture.

TABLE 4.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	173	3,022	97	761	2,164	6,728
California	9	84	9	24	51	26
Connecticut	6	62	9	13	40	5
Illinois	10	245	11	64	170	317
Indiana	7	209	1	44	164	188
Massachusetts	20	477	9	84	384	1,897
Michigan	4	128	3	28	97	292
Missouri	10	106	4	31	71	143
New Jersey	7	37	5	11	21	16
New York	29	490	11	176	303	1,476
North Carolina	5	48	--------	17	31	45
Ohio	11	91	4	30	57	241
Pennsylvania	14	347	7	58	282	525
Texas	3	16	2	7	7	2
Washington	4	18	5	3	10	21
Wisconsin	4	33	2	14	17	114
Other States [1]	30	631	15	157	459	1,420

See footnotes at end of table.

TABLE 4.—GENERAL STATISTICS, BY STATES: 1927—Continued

[See note at head of this table, p. 803]

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [1]
			Materials and supplies	Fuel and power		
United States	$2,018,941	$2,925,416	$15,980,306	$204,961	$27,265,752	$11,080,485
California	66,472	85,312	337,759	3,413	670,597	329,425
Connecticut	36,962	35,472	149,694	5,270	283,120	128,156
Illinois	179,459	251,282	1,217,181	35,602	2,165,995	913,212
Indiana	43,600	148,502	524,342	8,068	905,121	372,711
Massachusetts	198,541	535,243	3,473,821	45,757	5,211,281	1,691,703
Michigan	98,504	136,078	577,189	12,703	1,042,820	452,928
Missouri	143,638	76,808	527,217	5,863	906,330	373,250
New Jersey	18,868	28,503	84,965	631	189,515	103,919
New York	486,839	437,092	2,716,147	31,757	4,546,564	1,798,660
North Carolina	42,233	38,034	419,033	2,542	625,570	203,995
Ohio	76,930	88,426	415,202	4,515	732,142	312,425
Pennsylvania	147,138	395,181	2,034,547	18,871	3,647,869	1,594,451
Texas	9,902	10,511	73,283	144	114,119	40,692
Washington	4,940	16,590	58,420	637	116,201	57,144
Wisconsin	34,539	34,403	184,874	1,112	292,409	106,423
Other States [1]	430,376	607,979	3,186,632	28,076	5,816,099	2,601,391

[1] Alabama, 1 establishment; Colorado, 2; Delaware, 1; Georgia, 2; Louisiana, 3; Maine, 1; Maryland, 2; Minnesota, 3; Mississippi, 1; Nebraska, 1; New Hampshire, 1; Oregon, 1; Rhode Island, 4; South Carolina, 2; Tennessee, 3; Virginia, 2.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

BOOT AND SHOE CUT STOCK

[A preliminary report for this industry was issued under date of April 13, 1929]

Description of the industry.—The establishments covered by this industry designation are those engaged wholly or principally in the manufacture, from substances other than rubber, of uppers, soles, top lifts, heels, tips, inner soles, etc., for sale to establishments which use them as materials in the manufacture of boots, shoes, and other footwear. Cut stock is also manufactured for sale, although made principally for their own consumption, by some establishments in the boot and shoe industry, and a small amount of cut stock is made as a secondary product by establishments classified in other industries. The entire production of cut stock is, therefore, somewhat greater than the amount made by establishments in the cut-stock industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	201	8,611	$9,354,049	$97,966,431	$121,022,421	$23,055,990	13,719
1925 [2]	245	7,977	8,906,159	75,326,204	94,047,681	18,721,477	14,858
1923 [2]	228	8,038	7,980,851	82,031,754	102,838,245	20,806,491	14,429
1921	226	7,049	7,613,216	56,922,902	72,691,564	15,768,662	(3)
1919	252	9,715	9,124,778	133,887,276	161,203,310	27,316,034	8,448
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	—18.0	7.9	5.0	30.1	28.7	23.2	—7.7
1923-1925	7.5	—.8	11.6	—8.2	—8.5	—10.0	3.0
1923-1927	—11.8	7.1	17.2	19.4	17.7	10.8	—4.9
1919-1927	—20.2	—11.4	2.5	—26.8	—24.9	—15.6	62.4

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Revised.
[3] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	201	9,938	192	1,135	8,611	13,718
Illinois	5	318	--------	58	260	453
Massachusetts	140	3,176	132	438	2,606	2,368
Missouri	11	2,775	3	322	2,450	1,660
New York	11	151	15	17	119	183
Other States [1]	34	3,518	42	300	3,176	9,054

STATE	Salaries	Wages	Cost of materials, supplies, fuel and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$2,391,255	$9,354,049	$97,580,458	$385,973	[3] $121,022,421	$23,055,990
Illinois	175,760	268,994	2,869,834	17,342	3,663,407	776,231
Massachusetts	1,203,379	3,007,839	40,141,046	117,522	50,648,195	10,389,627
Missouri	424,359	3,014,370	24,959,598	34,614	30,015,012	5,020,800
New York	40,091	139,090	1,014,583	5,897	1,384,995	364,515
Other States [1]	547,666	2,923,756	28,595,397	210,598	35,310,812	6,504,817

[1] Connecticut, 1 establishment; Kansas, 1; Maine, 2; Maryland, 2; Michigan, 1; New Hampshire, 8; New Jersey, 3; Ohio, 5; Pennsylvania, 10; Virginia, 1.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[3] In addition, boot and shoe cut stock valued at $8,864,800 was manufactured by establishments engaged primarily in other lines of manufacture.

BOOT AND SHOE FINDINGS

[A preliminary report for this industry was issued under date of April 13, 1929]

Description of the industry.—This industry consists in the manufacture, for sale as such, of shoe pegs, bows, clasps, stays, metal tips and heelplates, toe caps and heel caps, buckles, staples, counters, shanks, wooden heels, shoe trimmings, boot and shoe laces, and other findings for the boot and shoe trade. Many of the establishments engaged in the manufacture of boots and shoes also manufacture findings, principally for their own consumption but also to some extent for sale, and establishments in some other industries manufacture them as secondary products. The output of establishments classified in the "Boot and shoe findings" industry does not, therefore, represent the entire production of findings.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	379	9,950	$11,201,872	$31,862,322	$57,433,389	$25,571,067	18,021
1925	326	8,605	9,695,136	29,248,469	52,063,829	22,815,360	15,419
1923	364	7,865	8,274,016	27,653,235	48,012,533	20,359,298	12,825
1921	344	5,917	6,608,798	22,930,700	39,116,538	16,185,838	(2)
1919	427	8,941	8,187,196	40,428,347	62,825,408	22,397,061	9,970
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	16.3	15.6	15.5	8.9	10.3	12.1	16.9
1923-1925	—10.4	9.4	17.2	5.8	8.4	12.1	20.2
1923-1927	4.1	26.5	35.4	15.2	19.6	25.6	40.5
1919-1927	—11.2	11.3	36.8	—21.2	—8.6	14.2	80.8

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1927

[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]

ATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	379	11,739	255	1,534	9,950	18,021
Maine	5	307	1	42	264	560
Massachusetts	253	6,158	175	826	5,157	8,172
Missouri	16	1,380	13	203	1,164	1,884
New Hampshire	17	646	12	62	572	1,151
New York	49	1,497	29	218	1,250	2,110
Ohio	9	429	6	27	396	1,989
Pennsylvania	7	325	8	37	280	614
Rhode Island	5	48	6	8	34	18
Wisconsin	6	269	2	51	236	149
Other States [1]	12	680	3	80	597	1,374

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$3,364,138	$11,201,872	$31,266,171	$596,151	[3] $57,433,389	$25,571,067
Maine	84,146	237,536	419,283	3,734	1,132,410	709,393
Massachusetts	1,990,981	5,822,248	19,550,067	317,777	33,475,856	13,608,012
Missouri	235,702	1,153,747	2,168,956	38,462	4,348,014	2,140,596
New Hampshire	156,870	596,017	1,809,003	31,211	3,532,106	1,691,892
New York	473,050	1,573,938	3,269,322	84,820	6,692,943	3,338,801
Ohio	64,112	387,678	441,203	25,320	1,205,070	738,547
Pennsylvania	73,317	283,780	1,254,685	18,046	2,042,777	770,046
Rhode Island	16,281	29,946	134,171	1,535	261,257	125,551
Wisconsin	74,842	244,160	974,391	19,865	1,532,741	538,485
Other States [1]	194,837	872,822	1,245,090	55,381	3,210,215	1,909,744

[1] California, 1 establishment; Connecticut, 2; Illinois, 3; Kentucky, 1; New Jersey, 2; Vermont, 2; Virginia, 1.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[3] In addition, boot and shoe findings valued at $1,810,098 were manufactured as secondary products by establishments engaged primarily in other lines of manufacture.

BOOTS AND SHOES, OTHER THAN RUBBER

[A preliminary report for this industry was issued under date of April 13, 1929]

Description of the industry.—This industry consists in the manufacture of boots, shoes, sandals, slippers, moccasins, leggings, overgaiters, and allied footwear, chiefly of leather, although footwear made of canvas and of other textile fabrics is also included. A few of the establishments classified in this industry are engaged wholly in contract work on materials owned by others. Some establishments make only mocassins, sandals, spats, etc.

Decrease in number of establishments.—In 1925 the industry was represented by 1,460 establishments, the decrease to 1,357 in 1927 being the net result of a gain of 230 and a loss of 333. The loss is accounted for as follows: Out of business, 283; idle, 23; transferred to other industries, 6; products valued at less than $5,000, 21. (See sec. 10, p. 6.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	1,357	203,110	$225,090,242	$494,553,016	$944,714,463	$450,161,447	138,706
1925	1,460	206,992	225,787,981	481,631,964	925,383,422	443,751,458	139,569
1923	1,606	225,216	250,345,922	527,456,868	1,000,078,022	472,621,154	128,550
1921	1,505	183,502	204,954,095	478,432,445	867,475,896	389,043,451	(2)
1919	1,449	211,049	210,734,610	715,269,315	1,155,041,436	439,772,121	115,886
	PER CENT OF INCREASE OR DECREASE (−)						
1925–1927	−7.1	−1.9	−0.3	2.7	2.1	1.4	−0.6
1923–1925	−9.1	−8.1	−9.8	−8.7	−7.5	−6.1	8.6
1923–1927	−15.5	−9.8	−10.1	−6.2	−5.5	−4.8	7.9
1919–1927	−6.3	−3.8	6.8	−30.9	−18.2	2.4	19.7

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	24,841	138,706	25,868	139,569	19,269	128,550
Steam engines	272	44,711	296	47,998	329	55,790
Steam turbines	15	10,612	17	5,753		
Internal-combustion engines	15	1,219	16	898	16	448
Water wheels and turbines	13	1,910	18	1,876	14	2,171
Electric motors driven by purchased current	24,526	80,254	25,521	83,044	18,910	70,141
Electric motors, total	36,348	115,026	34,031	112,901	29,242	112,481
Driven by purchased current	24,526	80,254	25,521	83,044	18,910	70,141
Driven by current generated in establishment reporting	11,822	34,772	8,510	29,857	10,332	42,340
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	194	28,708	292	29,550	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—PRODUCTS, BY KIND, METHOD OF MANUFACTURE, QUANTITY, AND VALUE: 1927 AND 1919

KIND	Census year	TOTAL		NUMBER OF PAIRS, BY METHOD OF MANUFACTURE				
		Value	Number of pairs	Welted	McKay	Turned	Wood or metal fastened	Stitch-down
Aggregate value, all products	1927	[1] $944,714,463						
	1919	[1] 1,155,041,436						
Boots, shoes, slippers, and other footwear, total	1927	931,523,722	[2] 367,067,065	123,565,686	112,339,827	52,744,077	27,622,123	43,973,911
	1919	1,128,286,743	[2] 331,224,628	124,988,547	119,203,701	60,785,608	13,143,915	6,875,756
Boots and shoes, total	1927	892,875,042	325,611,282	123,395,593	106,680,833	32,798,712	27,622,123	35,114,021
	1919	1,088,405,631	303,182,481	124,242,934	106,513,756	52,631,120	13,143,915	6,650,756
Leather, total	1927	872,815,973	320,335,038	122,923,617	102,869,013	31,850,248	27,588,139	35,104,021
	1919	1,072,337,206	292,126,118	123,202,353	98,913,488	50,370,381	13,139,140	6,500,756
Other than athletic and sporting:								
Men's	1927	298,683,879	93,012,560	71,201,494	3,559,380	314,347	15,767,591	2,169,748
	1919	429,740,457	95,017,356	70,951,187	13,997,182	43,997	9,336,042	688,948
Boys' and youths'	1927	60,810,145	26,914,871	10,597,386	3,668,460	541,576	10,905,227	1,202,222
	1919	72,883,299	26,503,432	[3] 8,354,305	14,574,282	(4)	3,209,346	365,499
Women's	1927	394,327,726	123,516,708	29,815,364	74,724,090	14,849,082	863,757	3,264,415
	1919	447,289,044	104,812,505	35,496,943	46,607,780	21,547,923	270,860	888,999
Misses' and children's	1927	89,499,333	51,386,467	8,785,449	17,900,545	5,693,773	49,829	18,956,873
	1919	102,091,213	48,538,203	7,984,950	21,314,657	14,621,897	182,116	4,434,581
Infants'	1927	25,335,287	24,101,295	2,097,305	2,138,478	10,364,539	1,735	9,499,238
	1919	18,249,791	16,668,912	220,380	2,257,120	14,068,685		122,727
Athletic and sporting, total	1927	4,159,603	1,403,137	[5] 426,619	878,060	86,931	(4)	11,527
	1919	2,083,402	585,710	194,588	162,467	87,879	140,776	
Men's [6]	1927	3,321,801	1,142,019	238,025	822,010	73,345		8,639
Women's [6]	1927	837,802	261,118	[5] 188,594	56,050	13,586	(4)	2,888
Canvas and other textile fabrics, total	1927	20,059,069	5,276,244	471,976	3,811,820	948,464	33,984	10,000
	1919	16,068,425	11,056,363	1,040,581	7,600,268	2,260,739	4,775	150,000
Men's	1927	229,412	110,731	9,192	91,178		10,361	
Women's [6]	1927	19,829,657	5,165,513	462,784	3,720,642	948,464	23,623	10,000

Slippers for house wear, total	1927	30,562,485	34,634,342	170,093	5,658,994	19,945,365		8,859,890
	1919	33,409,101	21,815,046	745,613	[5] 12,689,945	8,154,488	(7)	225,000
Leather, total	1927	14,541,137	12,940,606	103,093	2,193,319	7,263,441		3,380,753
	1919	18,168,856	8,494,321	656,813	3,572,977	4,039,531		225,000
Men's, youths', and boys'	1927	6,583,101	5,023,013	42,109	991,657	2,301,407		1,687,840
	1919	5,308,089	3,230,086	230,558	[5] 1,442,115	1,434,413	(7)	123,000
Women's and misses'	1927	7,958,036	7,917,593	60,984	1,201,662	4,962,034		1,692,913
	1919	12,860,767	5,264,235	426,255	2,130,862	2,605,118		102,000
Other than leather, total	1927	16,021,348	21,693,736	67,000	3,465,675	12,681,924		5,479,137
	1919	15,240,245	13,320,725	88,800	9,116,968	4,114,957		
Men's [6]	1927	4,252,314	4,833,715	55,000	835,628	2,692,352		1,250,735
Women's [6]	1927	11,769,034	16,860,021	12,000	2,630,047	9,989,572		4,228,402
Other footwear [8]	1927	8,086,195	6,821,441					
	1919	6,472,011	6,227,101					
Leggings, overgaiters, puttees, etc.:								
Leather	1927	1,067,151						
	1919	246,257						
Other than leather	1927	1,198,362						
	1919	8,392,724						
Other products [9]	1927	9,691,851						
	1919	17,240,136						
Receipts for contract work	1927	1,233,377						
	1919	875,576						

[1] In addition, products normally belonging to the boot and shoe industry to the following values were reported as secondary products by establishments engaged primarily in other lines of manufacture: For 1927, $208,082; for 1919, $894,201.
[2] For 1927 includes 6,821,441 pairs, and for 1919, 6,227,101 pairs, of "Other footwear," not reported according to method of manufacture. (See footnote 8.)
[3] Includes data for "Turned" to avoid disclosing the production of individual establishments.
[4] Included in figure for "Welted" to avoid disclosing the production of individual establishments.
[5] Includes data for "Wood and metal fastened" to avoid disclosing the production of individual establishments.
[6] Not reported separately for 1919.
[7] Included in figure for "McKay" to avoid disclosing the production of individual establishments.
[8] Moccasins, sandals, ballet slippers, etc. (See footnote 2.)
[9] Includes boot and shoe cut stock made for sale as such, to the value of $7,087,681 for 1927 and of $7,913,997 for 1919.

TABLE 4.—BOOTS, SHOES, AND SLIPPERS—PRODUCTION, BY CLASS AND BY STATES: 1927, 1919, AND 1914

[This table presents statistics for the States for which separate figures can be given without disclosing the output of individual establishments. Some of the "Other States," however, reported larger quantities of some classes of products than some of the States shown separately]

CLASS	NUMBER OF PAIRS		
	1927	1919	1914
Boots, shoes, slippers, and other footwear, total	367,067,065	331,224,628	292,666,468
Illinois	27,014,832	10,638,609	8,292,659
Maine	15,733,693	19,175,387	15,709,277
Massachusetts	87,731,093	116,992,912	115,224,383
Missouri	47,851,535	26,362,397	20,868,352
New Hampshire	22,233,149	22,700,694	24,659,886
New York	84,330,812	62,773,081	38,798,158
Pennsylvania	18,330,784	23,617,362	22,184,502
Wisconsin	18,273,797	11,142,456	8,382,882
Other States	45,567,370	37,821,730	38,546,369
Boots and shoes: Leather (except athletic and sporting)	318,931,901	291,540,408	265,642,260
Illinois	26,185,820	(1)	7,915,722
Massachusetts	73,802,470	104,949,229	101,118,687
Missouri	45,498,750	26,318,469	20,762,242
New York	61,609,190	48,409,508	38,415,373
Pennsylvania	17,077,545	22,234,364	21,834,633
Wisconsin	17,628,423	10,549,376	8,188,295
Other States	77,129,703	79,079,462	72,407,808
Men's	93,012,560	95,017,356	98,031,144
Illinois	4,576,127	3,576,329	3,934,629
Maine	4,346,748	3,319,890	4,476,245
Massachusetts	21,293,691	39,610,259	44,750,716
Missouri	16,963,132	8,399,403	8,840,878
New Hampshire	8,113,033	10,586,597	11,048,926
New York	15,064,537	14,266,093	9,923,488
Pennsylvania	2,547,935	2,117,680	1,697,909
Wisconsin	9,303,084	6,340,008	5,000,827
Other States	10,804,273	6,801,097	8,357,526
Youths' and boys'	26,914,871	26,503,432	22,895,719
Illinois	1,284,757	(1)	1,058,239
Maine	139,627	1,235,043	572,980
Massachusetts	3,253,609	5,517,399	8,318,252
Missouri	5,322,568	2,294,733	748,018
New Hampshire	2,390,957	3,651,685	4,010,136
New York	9,700,309	6,571,423	2,590,175
Pennsylvania	1,881,131	1,192,017	1,230,664
Wisconsin	1,846,232	1,894,948	865,138
Other States	1,095,681	4,146,184	3,502,117
Women's	123,516,708	104,812,505	80,916,239
Illinois	9,018,280	3,013,743	1,625,866
Maine	8,062,226	5,343,009	4,256,166
Massachusetts	38,766,977	45,251,383	32,295,781
Missouri	16,822,009	10,256,064	6,758,611
New Hampshire	7,876,422	4,491,754	3,773,648
New York	20,980,550	14,272,275	12,021,725
Pennsylvania	3,568,814	3,869,766	3,672,662
Wisconsin	2,692,749	1,578,289	1,336,525
Other States	15,728,681	16,736,222	15,175,255
Misses' and children's	51,386,467	48,538,203	48,322,395
Illinois	6,338,221	2,651,348	751,819
Maine	738,436	546,883	3,399,575
Massachusetts	8,268,224	12,010,815	12,644,427
Missouri	4,710,328	4,506,852	4,096,733
New Hampshire	2,964,821	3,143,790	3,875,836
New York	9,536,717	7,631,207	4,573,354
Pennsylvania	7,085,687	10,730,035	11,116,356
Wisconsin	2,506,413	677,163	815,473
Other States	9,237,620	6,640,110	7,048,822

See footnotes at end of table.

TABLE 4.—BOOTS, SHOES, AND SLIPPERS—PRODUCTION, BY CLASS AND BY STATES: 1927, 1919, AND 1914—Continued

[See note at head of this table]

CLASS	NUMBER OF PAIRS		
	1927	1919	1914
Boots, shoes, slippers, and other footwear—Contd.			
Boots and shoes—Continued.			
Leather (except athletic and sporting)—Contd.			
Infants'	24,101,295	16,668,912	15,476,763
Illinois	4,968,435	330,986	545,169
Massachusetts	2,219,969	2,559,373	3,109,511
Missouri	1,680,713	861,417	318,002
New York	6,327,077	5,668,510	4,306,631
Pennsylvania	1,993,978	4,324,866	4,117,042
Wisconsin	1,279,945	58,968	170,332
Other States	5,631,178	2,864,792	2,910,076
Athletic and sporting	1,403,137	585,710	(2)
Mens'	1,142,019	(3)	(2)
Women's	261,118	(3)	(2)
Canvas and other textile fabrics	5,276,244	11,056,363	(2)
Men's	110,731	(3)	(2)
Women's	5,165,513	(3)	(2)
Slippers (for house wear)	34,634,342	21,815,046	24,673,102
Massachusetts	11,477,951	9,029,891	(4)
New York	16,740,451	10,021,339	(4)
Other States	6,415,940	2,763,816	(4)
All-leather	12,940,606	8,494,321	17,733,689
Massachusetts	3,095,655	5,620,573	11,799,532
New York	6,458,088	957,024	1,301,509
Other States	3,386,863	1,916,724	4,632,648
Men's, youths' and boys'	5,023,013	3,230,086	3,666,972
Massachusetts	1,735,401	2,364,668	3,061,796
New York	2,003,055	263,408	108,531
Other States	1,284,557	602,010	496,645
Women's	7,917,593	5,264,235	14,066,717
Massachusetts	1,360,254	3,255,905	8,737,736
New York	4,455,033	693,616	1,192,978
Other States	2,102,306	1,314,714	4,136,003
Other than all-leather	21,693,736	13,320,725	6,939,413
Massachusetts	8,382,296	3,409,318	(4)
New York	10,282,363	9,064,315	(4)
Other States	3,029,077	847,092	(4)
Men's	4,833,715	(3)	(3)
Massachusetts	1,358,749	(3)	(3)
New York	2,463,958	(3)	(3)
Other States	1,011,008	(3)	(3)
Women's	16,860,021	(3)	(3)
Massachusetts	7,023,547	(3)	(3)
New York	7,818,405	(3)	(3)
Other States	2,018,069	(3)	(3)
Other footwear	6,821,441	6,227,101	2,351,106

[1] Included in figures for "Other States."
[2] Not called for on schedule.
[3] Not separately reported.
[4] No data.

TABLE 5.—BOOTS, SHOES, AND SLIPPERS—PRODUCTION, BY METHOD OF MANUFACTURE, BY STATES: 1927 AND 1919

STATE	Census year	NUMBER OF PAIRS					
		Total	Welted	McKay	Turned	Wood and metal fastened and stitch down	Unclassified
United States	1927	367,067,065	123,565,686	112,339,827	52,744,077	71,596,034	6,821,441
	1919	331,224,628	124,988,547	119,203,701	60,785,608	20,019,671	6,227,101
Massachusetts	1927	87,731,093	30,420,127	38,732,731	11,934,419	5,856,809	787,007
	1919	116,992,912	52,279,293	34,840,757	24,145,290	5,064,023	663,549
New York	1927	84,330,812	17,866,462	9,118,604	22,301,444	30,142,914	4,901,388
	1919	62,773,081	14,085,642	27,738,172	13,921,010	2,953,344	4,074,913
Missouri	1927	47,851,535	13,598,002	20,305,888	1,460,481	12,483,024	4,140
	1919	26,362,397	10,352,661	10,588,512	1,080,861	3,440,363	----------
Illinois	1927	27,014,832	8,039,411	9,168,218	4,368,395	5,323,109	115,699
	1919	10,638,609	5,017,338	4,321,509	1,059,611	227,351	12,800
New Hampshire	1927	22,233,149	12,298,737	9,416,652	517,460	----------	300
	1919	22,700,694	10,494,583	9,153,088	1,015,310	2,037,713	----------
Pennsylvania	1927	18,330,784	8,196,528	2,855,055	5,424,062	1,595,466	259,673
	1919	23,617,362	7,165,740	4,897,879	10,496,787	622,714	434,242
Wisconsin	1927	18,273,797	9,780,921	2,417,519	675,642	5,231,561	168,154
	1919	11,142,456	5,982,448	1,688,267	581,211	2,790,463	100,067
Maine	1927	15,733,693	6,317,294	6,852,936	2,295,536	208,693	59,234
	1919	19,175,387	5,971,546	10,520,261	2,104,563	539,385	39,632
Ohio	1927	[1] 14,449,148	5,744,185	8,451,913	253,050	(2)	----------
	1919	17,870,148	5,295,248	10,827,740	1,710,762	19,000	17,398
Other States	1927	31,118,222	11,304,019	5,020,311	3,513,588	10,754,458	525,846
	1919	19,951,582	8,344,048	4,627,516	3,770,203	2,325,315	884,500

[1] Exclusive of stitch-downs.
[2] Included in figure for "Other States" to avoid disclosing the output of individual establishments.

TABLE 6.—COMPARATIVE SUMMARY, BY STATES: 1927, 1925, AND 1923

STATE	Census year	Number of establishments	Wage earners (average for the year)	Horsepower	Wages	Cost of materials	Value of products
					Expressed in thousands [1]		
United States	1927	1,357	203,110	138,706	$225,090	$494,553	$944,714
	1925	1,460	206,992	139,569	225,788	481,632	925,383
	1923	1,606	225,216	128,550	250,346	527,457	1,000,078
California	1927	10	875	762	1,074	1,996	4,271
	1925	12	816	648	1,007	1,694	3,456
	1923	13	890	429	1,019	1,846	3,836
Illinois	1927	57	14,038	10,345	13,421	35,623	71,628
	1925	60	13,933	10,526	13,201	33,163	66,367
	1923	60	12,087	7,871	12,603	33,487	60,332
Iowa	1927	5	396	211	374	884	1,655
	1925	4	312	334	262	680	1,111
	1923	4	314	345	246	847	1,245
Maine	1927	44	9,740	6,205	9,044	19,284	36,663
	1925	39	9,633	6,137	9,183	18,927	38,114
	1923	45	9,737	6,284	9,322	19,173	38,833
Maryland	1927	16	2,198	1,578	1,903	4,582	7,797
	1925	14	1,844	1,098	1,607	3,568	6,197
	1923	15	1,847	965	1,715	3,611	7,389
Massachusetts	1927	469	55,986	35,970	65,282	120,354	237,517
	1925	537	57,405	33,252	65,497	119,765	240,944
	1923	595	69,397	35,066	82,916	146,721	290,674
Michigan	1927	10	941	996	949	2,871	4,812
	1925	11	1,099	1,532	898	2,410	4,545
	1923	14	1,262	783	1,169	3,203	5,411
Minnesota	1927	11	1,724	971	1,607	3,969	6,812
	1925	13	2,034	1,232	1,829	4,755	8,224
	1923	14	2,387	1,208	2,398	5,019	9,335
Missouri	1927	68	24,277	16,880	22,874	75,883	136,998
	1925	68	24,003	18,418	22,899	67,840	124,328
	1923	65	23,019	12,877	22,235	71,494	121,830
New Hampshire	1927	63	12,114	8,288	12,151	30,008	49,853
	1925	59	12,275	8,865	11,911	29,357	52,632
	1923	65	13,589	8,528	13,655	32,753	55,036
New Jersey	1927	17	1,389	1,525	1,629	3,202	6,736
	1925	19	1,724	1,655	1,782	3,464	7,172
	1923	27	2,457	1,621	2,550	5,281	10,618
New York	1927	318	35,828	24,133	51,969	95,013	190,936
	1925	334	39,157	26,630	54,218	100,539	191,375
	1923	367	41,277	22,235	54,713	101,729	195,082
Ohio	1927	48	12,993	10,633	14,016	26,723	53,289
	1925	57	12,768	8,913	13,528	26,076	51,547
	1923	60	13,886	8,739	15,102	28,414	60,731
Pennsylvania	1927	107	11,429	8,056	11,242	21,659	43,580
	1925	109	11,438	7,251	10,734	20,919	4[illegible],037
	1923	130	13,100	8,325	12,307	24,402	50,056
Tennessee	1927	5	1,772	1,220	1,239	5,100	8,682
	1925	3	1,279	876	943	3,969	6,616
Washington	1927	9	82	110	123	303	566
	1925	8	82	139	121	334	605
	1923	6	156	198	174	536	940
Wisconsin	1927	63	11,029	6,582	11,404	31,681	57,315
	1925	64	10,507	7,910	10,967	28,755	53,954
	1923	68	11,607	7,357	12,038	30,415	57,001
Other States	1927	37	6,299	4,241	4,789	15,418	25,604
	1925	49	6,683	4,153	5,200	15,417	26,159
	1923	58	8,204	5,719	6,183	18,526	31,729

[1] The figures for the United States are the sums, expressed to the nearest thousand, of the items for the individual States, expressed in units. For this reason the United States figures in some cases differ slightly from the sums of the State figures as here given.

TABLE 7.—GENERAL STATISTICS, BY STATES: 1927

[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 value of products than some of the States shown separately]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	1,357	224,004	568	20,326	203,110	138,706
California	10	994	--------	119	875	762
Illinois	57	15,597	11	1,548	14,038	10,345
Indiana	4	911	--------	113	798	743
Iowa	5	442	--------	46	396	211
Kansas	5	92	4	10	78	44
Kentucky	6	2,491	--------	169	2,322	1,070
Maine	44	10,680	7	933	9,740	6,205
Maryland	16	2,434	1	235	2,198	1,578
Massachusetts	469	62,229	215	6,028	55,986	35,970
Michigan	10	1,066	1	124	941	996
Minnesota	11	1,962	3	235	1,724	971
Missouri	68	26,957	9	2,671	24,277	16,880
New Hampshire	63	13,217	29	1,074	12,114	8,288
New Jersey	17	1,566	3	174	1,389	1,525
New York	318	39,126	139	3,159	35,828	24,133
Ohio	48	14,021	3	1,025	12,993	10,633
Pennsylvania	107	12,547	100	1,018	11,429	8,056
Tennessee	5	1,905	3	130	1,772	1,220
Washington	9	106	14	10	82	110
Wisconsin	63	12,319	21	1,269	11,029	6,582
Other States [1]	22	3,342	5	236	3,101	2,384

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$43,343,517	$225,090,242	$489,410,458	$5,142,558	$944,714,463	$450,161,447
California	291,262	1,074,393	1,979,296	16,670	4,270,853	2,274,887
Illinois	3,015,888	13,421,467	35,316,551	306,856	71,628,288	36,004,881
Indiana	190,511	552,426	1,725,109	18,222	2,820,091	1,076,760
Iowa	62,613	374,173	869,723	14,695	1,654,988	770,570
Kansas	20,626	48,122	143,963	3,621	359,654	212,070
Kentucky	225,539	1,619,057	3,880,756	41,095	7,518,606	3,596,755
Maine	1,857,130	9,044,294	19,079,057	205,199	36,663,037	17,378,781
Maryland	512,786	1,903,045	4,517,168	65,276	7,796,894	3,214,450
Massachusetts	13,439,936	65,282,193	118,884,659	1,468,911	237,516,655	117,163,085
Michigan	210,446	949,157	2,832,316	39,073	4,811,584	1,940,195
Minnesota	436,576	1,606,789	3,916,952	51,562	6,812,342	2,843,828
Missouri	4,171,809	22,874,378	75,407,490	475,317	136,998,386	61,115,579
New Hampshire	2,054,786	12,151,051	29,645,948	361,803	49,853,099	19,845,348
New Jersey	382,936	1,628,845	3,132,473	69,349	6,755,998	3,534,176
New York	8,503,028	51,968,958	93,951,891	1,061,333	190,936,330	95,923,106
Ohio	2,329,450	14,015,745	26,475,656	247,330	53,289,298	26,566,312
Pennsylvania	2,353,128	11,241,946	21,375,155	283,739	43,580,217	21,921,323
Tennessee	270,721	1,239,122	5,060,360	39,923	8,681,951	3,581,668
Washington	41,887	122,849	298,943	3,793	565,912	263,176
Wisconsin	2,522,840	11,404,101	31,380,212	300,611	57,315,001	25,634,178
Other States [1]	449,619	2,568,131	9,536,780	68,180	14,905,279	5,300,319

[1] Alabama, 1 establishment; Connecticut, 2; Florida, 1; Georgia, 2; Louisiana, 1; Nebraska, 2; North Carolina, 1; Oregon, 1; Texas, 3; Virginia, 6; West Virginia, 2.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

GLOVES AND MITTENS, LEATHER

[A combined preliminary report for the leather glove and mitten and the cloth glove and mitten industries was issued under date of April 15, 1929]

Description of the industry.—The establishments classified in the leather glove and mitten industry are those engaged primarily in the manufacture of gloves (except baseball and boxing gloves, which are products of the "Sporting and athletic goods" industry), mittens, and gauntlets made of leather, lined and unlined.

Statistics for Fulton County, N. Y.—Because of the great importance of Fulton County, N. Y., in the leather glove and mitten industry, statistics for this county as a whole and for Gloversville and Johnstown, in which are located most of the leather glove and mitten manufacturing establishments reported for the county, are given in Table 4. From this table it will be seen that Fulton County reported more than one-half and Gloversville more than one-third of the total value of products of the industry for 1927.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	232	9,106	$8,813,912	$19,276,416	$36,662,053	$17,385,637	2,603
1925 [2]	226	7,115	6,914,788	17,778,693	33,292,916	15,514,223	3,266
1923	260	10,010	8,544.709	20,223,924	38,080,575	17,856,651	4,372
1921	272	7,907	5,842,784	13,844,159	24,855,321	11,011,162	(3)
1919	355	10,685	8,150,784	26,286,129	46,940,511	20,654,382	3,288
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	2.7	28.0	27.5	8.4	10.1	12.1	—20.3
1923-1925	—13.1	—28.9	—19.1	—12.1	—12.6	—13.1	—25.3
1923-1927	—10.8	—9.0	3.2	—4.7	—3.7	—2.6	—40.5
1919-1927	—34.6	—14.8	8.1	—26.7	—21.9	—15.8	—20.8

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Revised.
[3] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927 AND 1925

TYPE	1927		1925	
	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*
Prime movers, total	1,063	2,603	1,002	3,266
Steam engines	6	646	8	850
Internal-combustion engines	3	26	2	22
Water wheels and turbines	1	250	2	255
Electric motors driven by purchased current	1,053	1,681	990	2,139
Electric motors, total	1,084	1,926	1,019	2,374
Driven by purchased current	1,053	1,681	990	2,139
Driven by current generated in establishment reporting	31	245	29	235
		Kilowatts		*Kilowatts*
Electric generators	3	300	3	300

TABLE 3.—GLOVES AND MITTENS—PRODUCTION, BY KIND, QUANTITY, AND VALUE: 1927 [1]

[For convenience, statistics showing the production of leather, cloth, and knit gloves and mittens have been assembled in this table]

KIND	Dozen pairs	Value
1. Leather glove and mitten industry, all products, total value		$36, 662, 053
2. Gloves and mittens, total	2, 954, 124	35, 720, 872
3. Leather	2, 743, 542	34, 751, 304
4. Cloth and cloth and leather combined	200, 376	848, 230
5. Other	10, 206	121, 338
6. Other products (not normally belonging to the industry)		837, 992
7. Receipts for contract work		103, 180
8. Cloth glove and mitten industry, all products, total value		30, 202, 152
9. Gloves and mittens, total	16, 927, 386	29, 437, 995
10. Cloth and cloth and leather combined	16, 883, 660	29, 072, 721
11. Leather	31, 705	247, 374
12. Other	12, 021	117, 900
13. Other products (not normally belonging to the industry)		762, 957
14. Receipts for contract work		1, 200
15. Gloves and mittens made in the knit-goods industry	1, 050, 054	7, 337, 898
16. Gloves and mittens made as secondary products in other industries, total	149, 522	384, 032
17. Leather	26, 222	211, 387
18. Cloth	123, 300	172, 645
Gloves and mittens, all industries: Aggregate (sum of 2, 9, 15, and 16)	[2] 21, 081, 086	[2] 72, 880, 797
Gloves and mittens, except products of the knit-goods industry, total	20, 031, 032	65, 542, 899
All-woven fabric, total	10, 194, 651	14, 193, 348
Illinois	299, 795	574, 421
Indiana	1, 955, 770	3, 058, 525
Iowa	388, 237	735, 774
Missouri	1, 525, 015	1, 895, 913
New York	406, 977	700, 417
Ohio	3, 645, 730	4, 629, 179
Other States	1, 973, 127	2, 599, 119
All-knit fabric, total	3, 986, 001	5, 931, 746
Warp-knit fabric	1, 767, 388	2, 491, 119
Other knit fabric	2, 218, 613	3, 440, 627
Combination of woven or knit fabric and leather	3, 026, 684	9, 968, 502
All leather, lined and unlined, total	2, 801, 469	35, 210, 065
California	60, 296	949, 865
Illinois	174, 703	1, 839, 121
New York	1, 506, 229	23, 100, 712
Wisconsin	589, 639	5, 794, 997
Other States	470, 602	3, 525, 370
Other (principally asbestos)	22, 227	239, 238
Gloves and mittens made in knit-goods establishments, total	1, 050, 054	7, 337, 898
Sueded-cotton gloves	28, 108	350, 462
Gloves, except sueded-cotton	836, 415	6, 450, 932
Mittens	185, 531	536, 504

[1] Corresponding statistics are not available for earlier years for the reason that data of this character were collected for the first time at the census for 1927.
[2] These aggregates are the sums of all items in the columns beneath except those which are underscored.

TABLE 4.—THE LEATHER GLOVE AND MITTEN INDUSTRY—SUMMARY FOR FULTON COUNTY, N. Y., FOR GLOVERSVILLE AND FOR JOHNSTOWN, 1927, AND PERCENTAGES OF INDUSTRY TOTALS FOR THE UNITED STATES,[1] 1927, 1925, AND 1923

	FULTON COUNTY, N. Y.				GLOVERSVILLE			
	Number or amount, 1927	Per cent of total for United States			Number or amount, 1927	Per cent of total for United States		
		1927	1925	1923		1927	1925	1923
Number of establishments	136	58.6	49.8	47.3	94	40.5	31.2	28.5
Wage earners (average for the year)	5,338	58.6	43.1	42.9	3,625	39.8	26.8	29.7
Wages	$5,431,518	61.6	44.5	45.7	$3,724,738	42.2	28.4	30.9
Paid for contract work	$310,544	100.0	95.2	83.3	$195,533	63.0	73.8	61.1
Cost of materials, supplies, fuel, and power	$11,612,416	60.2	47.8	43.7	$7,905,437	41.0	30.6	30.7
Value of products	$22,063,978	60.2	48.0	45.4	$15,014,683	41.0	30.9	30.9
Value added by manufacture [2]	$10,451,562	60.1	48.3	47.2	$7,109,246	40.9	31.3	31.1
Horsepower	907	34.9	23.2	22.9	676	26.0	17.4	13.1

	JOHNSTOWN				REMAINDER OF COUNTY			
	Number or amount, 1927	Per cent of total for United States			Number or amount, 1927	Per cent of total for United States		
		1927	1925	1923		1927	1925	1923
Number of establishments	34	14.7	14.6	14.6	8	3.4	4.0	4.2
Wage earners (average for the year)	1,226	13.5	11.8	10.1	487	5.3	4.5	3.0
Wages	$1,249,299	14.2	11.0	11.1	$457,481	5.2	5.1	3.7
Paid for contract work	$109,360	35.2	11.6	14.5	$5,651	1.8	9.8	7.6
Cost of materials, supplies, fuel, and power	$2,623,553	13.6	12.0	9.6	$1,083,426	5.6	5.2	3.5
Value of products	$5,165,031	14.1	11.6	10.9	$1,884,264	5.1	5.5	3.6
Value added by manufacture [2]	$2,541,478	14.6	11.2	12.4	$800,838	4.6	5.8	3.8
Horsepower	155	6.0	4.0	7.6	76	2.9	1.8	2.2

[1] For United States totals, see Table 1.
[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

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

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	232	10,397	251	1,040	9,106	2,603
California	14	333	9	49	275	90
Illinois	15	644	11	55	578	132
New York	154	6,607	207	686	5,714	987
Wisconsin	25	1,826	10	171	1,645	483
Other States [1]	24	987	14	79	894	911

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$2,037,884	$8,813,912	$19,091,574	$184,842	$36,662,053	$17,385,637
California	123,683	274,335	421,436	3,187	975,230	550,607
Illinois	115,951	629,718	1,243,441	13,012	2,360,411	1,103,958
New York	1,170,512	5,786,574	12,366,220	109,830	23,850,506	11,374,456
Wisconsin	458,074	1,318,210	3,202,473	33,610	6,059,792	2,823,709
Other States [1]	169,664	805,075	1,858,004	25,203	3,416,114	1,532,907

[1] Indiana. 2 establishments; Iowa, 4; Maryland, 1; Massachusetts, 2; Michigan, 2; Minnesota, 2; New Hampshire, 2; Ohio, 2; Oregon, 1; Pennsylvania, 3; Virginia, 1; Washington, 2.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

POCKETBOOKS, PURSES, AND CARDCASES

Description of the industry.—This industry consists in the manufacture of leather pocketbooks, purses, women's purse-handbags, vanity boxes or cases, cardcases, wallets, coin purses, bill folds, etc.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	257	8,570	$13,169,509	$29,618,524	$57,344,655	$27,726,131	1,725
1925	190	6,826	9,021,720	22,442,200	43,105,213	20,663,013	1,356
1923	207	5,518	7,291,112	16,235,882	32,731,725	16,495,843	1,094
1921	115	2,715	3,224,244	6,221,200	13,084,969	6,863,769	(2)
1919	139	2,905	3,061,903	7,557,155	14,549,659	6,992,504	431
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	35.3	25.5	46.0	32.0	33.0	34.2	27.2
1923–1925	—8.2	23.7	23.7	38.2	31.7	25.3	23.9
1923–1927	24.2	55.3	80.6	82.4	75.2	68.1	57.7
1919–1927	84.9	195.0	330.1	291.9	294.1	296.5	300.2

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	257	10,003	205	1,228	8,570	1,725
California	10	118	14	20	84	13
Illinois	14	162	13	21	128	62
Massachusetts	11	467	6	64	397	67
New Jersey	8	897	-------	97	800	268
New York	178	6,322	142	839	5,341	783
Ohio	7	346	8	29	309	197
Pennsylvania	12	850	8	60	782	214
Other States [1]	17	841	14	98	729	121

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$3,170,059	$13,169,509	$29,480,478	$138,046	[3] $57,344,655	$27,726,131
California	26,812	106,350	158,520	829	396,133	236,784
Illinois	33,555	213,065	384,323	4,721	866,643	477,599
Massachusetts	175,825	341,069	717,579	6,047	1,542,556	818,930
New Jersey	291,158	962,623	1,739,793	12,670	3,656,966	1,904,503
New York	2,166,413	9,909,952	22,717,023	85,498	42,802,339	19,999,818
Ohio	87,645	253,596	554,351	8,673	1,277,874	714,850
Pennsylvania	174,570	799,549	1,847,607	6,607	3,420,078	1,565,864
Other States [1]	214,081	583,305	1,361,282	13,001	3,382,066	2,007,783

[1] Colorado 1 establishment; Georgia, 1; Kansas, 1; Maine, 2; Maryland, 2; Missouri, 3; Texas, 2; Virginia, 1; Wisconsin, 4.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[3] In addition, pocketbooks, purses, and cardcases valued at $220,030 were manufactured as secondary products by establishments engaged primarily in other lines of manufacture.

SADDLERY AND HARNESS

[A preliminary report for this industry was issued under date of December 31, 1928]

Description of the industry.—This industry designation covers the manufacture of saddles and parts, harness and parts, halters, horse boots, turf goods, feed bags, etc.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	264	4,023	$4,541,398	$16,526,180	$27,356,244	$10,830,064	4,908
1925	258	4,570	5,059,562	18,775,991	30,083,555	11,307,564	5,021
1923	472	6,617	6,915,581	24,460,405	42,113,300	17,652,895	7,761
1921	593	4,489	4,996,664	17,664,981	30,163,601	12,498,620	(2)
1919	1,823	10,411	10,849,066	52,442,907	83,713,010	31,270,103	8,205
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	2.3	—12.0	—10.2	—12.0	—9.1	—4.2	—2.3
1923-1925	—45.3	—30.9	—26.8	—23.2	—28.6	—35.9	—35.3
1923-1927	—44.1	—39.2	—34.3	—32.4	—35.0	—38.6	—36.8
1919-1927	—85.5	—61.4	—58.1	—68.5	—67.3	—65.4	—40.2

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	264	5,111	211	877	4,023	4,908
California	7	109	3	9	97	160
Colorado	9	107	5	10	92	101
Georgia	6	427	5	35	387	285
Illinois	19	457	18	74	365	310
Indiana	11	261	22	35	204	214
Iowa	14	333	6	72	255	203
Kansas	12	126	10	18	98	126
Kentucky	10	217	7	35	175	243
Massachusetts	6	65	5	15	45	49
Michigan	5	66	1	14	51	68
Minnesota	10	229	5	26	198	178
Missouri	14	386	4	93	289	440
Nebraska	6	177	1	31	145	423
New York	14	91	14	19	58	112
North Carolina	5	36	5	6	25	23
Ohio	13	220	14	45	161	380
Oregon	9	155	5	12	138	198
Pennsylvania	12	114	16	16	82	105
Tennessee	10	250	7	30	213	126
Texas	14	355	12	70	273	226
Washington	9	28	8	3	17	25
Wisconsin	12	304	11	87	206	382
Other States [1]	37	598	27	122	449	531

See footnotes at end of table.

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

[See note at head of this table, p. 823]

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$1,659,780	$4,541,398	$16,362,481	$163,699	[3] $27,356,244	$10,830,064
California	22,761	151,049	288,376	2,053	558,781	268,352
Colorado	29,049	135,027	253,258	2,716	540,007	284,033
Georgia	59,284	260,078	1,048,948	4,628	1,666,361	612,785
Illinois	124,896	441,064	1,544,757	13,212	2,430,307	872,338
Indiana	102,439	172,934	571,643	8,619	987,649	407,387
Iowa	133,691	330,159	1,618,961	9,631	2,429,274	800,682
Kansas	36,957	116,890	478,413	4,676	741,136	258,047
Kentucky	73,376	195,616	1,080,164	8,989	1,615,070	525,917
Massachusetts	29,987	53,505	161,981	3,609	284,253	118,663
Michigan	23,740	74,641	195,926	991	354,098	157,181
Minnesota	52,086	246,088	703,320	4,467	1,274,627	566,840
Missouri	197,747	328,048	907,893	16,619	1,781,023	856,511
Nebraska	80,003	173,918	1,012,513	6,666	1,533,264	514,085
New York	32,384	78,461	186,882	3,757	368,726	178,087
North Carolina	16,014	28,618	60,802	880	138,105	76,423
Ohio	69,997	174,300	678,012	11,022	1,045,601	356,567
Oregon	28,485	204,124	406,009	5,937	777,897	365,951
Pennsylvania	26,944	104,232	179,237	4,349	395,490	211,904
Tennessee	52,327	209,309	952,102	6,202	1,429,315	471,011
Texas	100,267	278,797	1,179,402	7,265	2,038,248	851,581
Washington	4,050	26,833	103,048	1,576	179,017	74,393
Wisconsin	143,468	281,768	993,151	9,062	2,079,018	1,076,805
Other States [1]	219,828	475,939	1,757,683	26,773	2,708,977	924,521

[1] Alabama, 2 establishments; Arizona, 4; Arkansas, 3; Connecticut, 2; Delaware, 2; Idaho, 1; Louisiana, 1; Montana, 3; Nevada, 1; New Jersey, 2; New Mexico, 1; North Dakota, 1; Oklahoma, 2; Rhode Island, 1; South Dakota, 2; Utah, 3; Virginia, 2; West Virginia, 2; Wyoming, 2.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[3] In addition, saddlery and harness valued at $430,303 were manufactured as secondary products by establishments engaged primarily in other lines of manufacture.

TRUNKS, SUIT CASES, AND BAGS

[A preliminary report for this industry was issued under date of December 4, 1928]

Description of the industry.—The establishments in this industry are engaged primarily in the manufacture of trunks, valises, suit cases, traveling bags, satchels, Boston bags, carrying cases, brief cases, hatboxes, luncheon kits, etc. These commodities are made principally from leather, but certain other materials, such as imitation leather, canvas, and fiber board, are also used.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	495	10,345	$13,084,687	$29,128,235	$59,958,681	$30,830,446	9,001
1925	475	10,348	13,225,966	31,381,851	61,223,867	29,842,016	7,893
1923	505	11,441	13,520,094	32,836,895	63,023,072	30,186,177	7,269
1921	504	8,712	10,260,364	23,882,610	46,548,977	22,666,367	(2)
1919	597	11,470	12,463,767	33,222,432	63,932,266	30,709,834	7,696
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	4.2	(3)	—1.1	—7.2	—2.1	3.3	14.0
1923–1925	—5.9	—9.6	—2.2	—4.4	—2.9	—1.1	8.6
1923–1927	—2.0	—9.6	—3.2	—11.3	—4.9	2.1	23.8
1919–1927	—17.1	—9.8	5.0	—12.3	—6.2	.4	17.0

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.
[3] Less than one-tenth of 1 per cent decrease.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	Persons engaged in the industry: Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	Horsepower
United States	495	12,512	415	1,752	10,345	9,001
California	40	428	45	61	322	218
Illinois	59	1,398	41	190	1,167	763
Indiana	6	139	3	29	107	209
Maryland	4	72	4	8	60	21
Massachusetts	24	548	17	113	418	171
Michigan	11	423	8	74	341	663
Minnesota	9	75	6	10	59	44
Missouri	18	904	14	69	821	349
New Jersey	25	956	15	97	844	1,322
New York	153	2,404	121	378	1,905	963
Ohio	23	421	14	68	339	331
Pennsylvania	51	1,253	61	138	1,054	519
Texas	9	137	12	20	105	110
Virginia	9	1,344	16	144	1,184	1,396
Washington	5	118	5	12	101	51
Wisconsin	19	1,099	6	228	865	1,292
Other States [1]	30	793	27	113	653	579

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power: Materials and supplies	Fuel and power	Value of products	Value added by manufacture [2]
United States	$4,506,702	$13,084,687	$28,762,720	$365,515	[3] $59,958,681	$30,830,446
California	129,650	407,952	1,065,215	6,761	2,089,206	1,017,230
Illinois	541,357	1,602,076	3,269,712	36,127	6,547,949	3,242,110
Indiana	55,277	123,042	229,868	14,050	530,431	286,513
Maryland	8,914	63,500	137,636	1,085	270,819	132,098
Massachusetts	281,312	477,395	1,093,927	6,475	2,332,776	1,232,374
Michigan	205,342	444,900	941,641	30,618	2,075,992	1,103,733
Minnesota	26,133	74,463	157,737	2,392	324,973	164,844
Missouri	148,630	968,734	1,701,640	23,931	3,698,242	1,972,671
New Jersey	289,917	1,210,461	2,272,368	33,111	4,839,401	2,533,922
New York	930,879	2,995,680	6,929,713	81,832	13,925,864	6,914,319
Ohio	178,884	440,561	867,310	17,335	2,006,428	1,121,783
Pennsylvania	375,423	1,374,662	3,313,511	29,398	6,585,486	3,242,577
Texas	54,520	90,635	155,676	2,370	448,573	290,527
Virginia	375,307	1,126,415	2,409,917	22,600	5,254,990	2,822,473
Washington	31,928	120,784	216,400	1,878	408,770	190,492
Wisconsin	629,013	932,963	2,436,793	37,612	5,375,582	2,901,177
Other States [1]	244,216	630,464	1,563,656	17,940	3,243,199	1,661,603

[1] Colorado, 5 establishments; Connecticut, 2; District of Columbia, 1; Florida, 2; Georgia, 2; Iowa, 2; Kansas, 1; Kentucky, 3; Louisiana, 1; Maine, 2; Nebraska, 1; North Dakota, 1; Oregon, 1; Rhode Island, 2; Tennessee, 3; Utah, 1.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[3] In addition, trunks, suitcases, and bags valued at $790,703 were manufactured as secondary products by establishments engaged primarily in other lines of manufacture.

LEATHER GOODS, NOT ELSEWHERE CLASSIFIED

Description of the industry.—This industry embraces a group of establishments manufacturing miscellaneous leather products not treated as belonging to any one of the other leather industries. Among these products are belts (for personal wear), straps (not including halter straps, bridle straps, or straps for use as parts of harness and saddles), dog collars, suspender parts and trimmings, music rolls, burnt-leather goods, razor strops, embossed leather, wristlets for watches, pillows, typewriter cases, gun cases, fishing tackle and rod cases, sweat bands, desk pads, washers, valves, gaskets, leather chair seats, leather garments, and many other commodities made solely or principally from leather.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	413	7,188	$8,379,080	$21,539,590	$43,291,552	$21,751,962	3,651
1925	364	6,685	7,395,537	20,473,515	40,511,952	20,038,437	3,223
1923	461	7,882	8,944,278	19,596,861	40,134,415	20,537,554	4,902
1921	482	8,557	10,329,353	23,698,049	47,715,082	24,017,033	(2)
1919	503	8,945	9,415,403	30,035,537	52,952,772	22,917,235	3,840
	PER CENT OF INCREASE OR DECREASE (−)						
1925–1927	13.5	7.5	13.3	5.2	6.9	8.6	13.3
1923–1925	−21.0	−15.2	−17.3	4.5	0.9	−2.4	−34.3
1923–1927	−10.4	−8.8	−6.3	9.9	7.9	5.9	−25.5
1919–1927	−17.9	−19.6	−11.0	−28.3	−18.2	−5.1	−4.9

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—GENERAL STATISTICS, BY STATES: 1927

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

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	413	8,754	328	1,238	7,188	3,651
California	24	208	24	31	153	94
Connecticut	10	214	6	22	186	80
Illinois	47	796	39	101	656	682
Maryland	9	123	4	16	103	44
Massachusetts	38	815	24	103	688	530
Michigan	7	172	4	28	140	75
Minnesota	4	213	-------	29	184	141
Missouri	12	702	4	125	573	150
New Jersey	20	740	11	57	672	337
New York	175	3,649	154	557	2,938	1,014
Ohio	16	271	13	38	220	111
Pennsylvania	25	503	25	75	403	178
Other States [1]	26	348	20	56	272	215

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$2,937,367	$8,379,080	$21,275,463	$264,127	[3]$43,291,552	$21,751,962
California	62,136	203,506	394,675	3,391	885,549	487,483
Connecticut	63,137	169,042	376,096	5,923	908,989	526,970
Illinois	314,951	836,223	2,385,517	26,822	4,594,259	2,181,920
Maryland	14,885	100,389	295,711	2,487	582,359	284,161
Massachusetts	206,297	688,256	1,736,179	59,114	3,499,650	1,704,357
Michigan	72,287	153,762	627,340	3,442	987,541	356,759
Minnesota	63,635	192,136	631,533	4,358	986,959	351,068
Missouri	154,009	498,297	1,325,960	8,276	3,089,206	1,754,970
New Jersey	179,846	673,991	1,105,818	19,114	2,508,437	1,383,505
New York	1,475,234	4,041,781	10,212,550	102,589	20,907,891	10,592,752
Ohio	69,766	211,261	518,530	4,172	1,128,184	605,482
Pennsylvania	154,439	348,315	1,047,912	12,715	1,940,471	879,844
Other States [1]	106,745	262,121	617,642	11,724	1,272,057	642,691

[1] Colorado, 2 establishments; Georgia, 1; Indiana, 3; Kansas, 1; Kentucky, 1; Louisiana, 1; Maine, 1; New Hampshire, 1; North Carolina, 1; Oklahoma, 1; Oregon, 3; Rhode Island, 2; Texas, 1; Virginia, 1; Washington, 2; West Virginia, 1; Wisconsin, 3.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[3] In addition, "Leather goods, not elsewhere classified," valued at $3,992,725, were manufactured as secondary products by establishments engaged primarily in other lines of manufacture.

Group 10.—STONE, CLAY, AND GLASS PRODUCTS

THE GROUP AS A WHOLE

The industries included in this group derive their principal materials from the earth in the form of stone, clay, and sand, and the group is constituted on the basis of this similarity in regard to source of materials rather than upon any similarity in the character or uses of the finished products.

Certain of the industries in the group are closely related to quarrying. In some cases both quarrying and manufacturing are carried on by the same establishment, and in a number of these cases the two lines of work are of nearly equal importance. As such establishments usually keep only single sets of books, and as the same employees are sometimes engaged in both lines of work, it is impossible to make any separation of the data for quarrying and for manufacturing.

This group has been divided into three subgroups, namely, (1) industries in which stone is the principal material; (2) those in which clay is the principal material; and (3) the glass industry and those industries which use glass as their principal material. The classification of a few industries is necessarily rather arbitrary. For example, cement is one of the materials used in the manufacture of concrete products; and plaster as well as stone and clay are used in the manufacture of statuary and art goods.

The following table presents summary statistics for the group as a whole, for each of its subgroups, and for each industry separately. On pages 832 to 883 are given detailed reports for those industries for which separate statistics have been published in pamphlet form, and following these, on pages 884 to 888, appear brief descriptions and summary statistics for the 9 industries in this group for which separate reports have not been prepared.

SUMMARY FOR GROUP 10.—STONE, CLAY, AND GLASS PRODUCTS: 1921 TO 1927

[See "Regrouping of industries and renumbering of groups," p. 19]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
				Expressed in thousands of dollars [1]				
Total	1927	8,673	350,017	464,273	594,774	1,612,549	1,017,774	2,709,131
	1925	8,478	353,036	467,012	603,427	1,640,652	1,037,225	2,348,157
	1923	8,317	351,692	453,567	573,472	1,563,121	989,648	1,936,054
	1921	8,347	252,990	307,065	428,259	1,033,091	604,832	(2)
Industries using stone as a material.	1927	5,156	126,569	187,879	303,632	787,843	484,211	1,672,639
	1925	4,852	123,699	178,644	300,793	779,031	478,238	1,365,905
	1923	4,621	118,560	167,466	273,368	697,461	424,092	1,071,210
	1921	4,752	84,565	109,833	212,557	464,614	252,057	(2)
Asbestos products, other than steam packing or pipe and boiler covering.	1927	62	6,337	8,376	21,518	44,156	22,639	26,525
	1925	49	6,129	7,692	19,225	36,274	17,049	22,918
	1923	56	6,078	6,640	20,026	36,820	16,794	26,855
	1921	40	2,026	1,948	6,076	13,030	6,954	(2)
Cement	1927	161	36,322	53,111	120,012	293,565	173,553	1,069,390
	1925	145	38,437	53,912	114,169	300,895	186,726	871,650
	1923	133	35,091	49,708	100,767	264,098	163,332	642,840
	1921	125	26,231	34,416	102,360	203,627	101,267	(2)
Concrete products	1927	2,330	17,808	24,898	33,913	93,259	59,346	54,342
	1925	1,666	14,722	20,761	27,792	75,214	47,422	38,361
	1923	1,128	10,766	14,834	20,486	53,602	33,117	30,748
	1921	1,123	6,984	8,691	13,483	31,768	18,285	(2)
Emery wheels and other abrasive and polishing appliances.	1927	68	3,261	4,608	10,840	24,182	13,342	13,464
	1925	63	3,352	4,770	11,104	25,730	14,626	11,654
	1923	57	3,595	4,708	10,698	25,307	14,608	11,530
	1921	53	2,849	2,876	6,184	12,559	6,375	(2)
Grindstones, pulpstones, and millstones.	1927	23	468	560	258	1,621	1,363	3,585
	1925	21	454	560	291	1,631	1,339	3,005
	1923	21	647	691	560	2,096	1,537	3,896
	1921	17	503	514	458	1,499	1,040	(2)
Hones, whetstones, and similar products.	1927	8	192	182	337	819	481	1,136
	1925	6	156	158	394	787	393	891
	1923	8	166	172	179	547	368	1,151
	1921	7	95	93	97	300	203	(2)
Lime	1927	260	10,903	12,191	17,269	41,587	24,318	84,195
	1925	283	12,095	14,002	20,049	50,736	30,687	87,871
	1923	301	12,290	13,522	19,700	47,244	27,544	74,205
	1921	292	10,345	9,802	14,214	31,015	16,801	(2)
Marble, granite, slate, and other stone products.	1927	1,978	40,474	68,491	66,328	201,181	134,853	295,174
	1925	2,356	36,575	59,593	66,976	193,047	126,071	240,297
	1923	2,691	40,056	61,600	66,883	191,537	124,655	213,133
	1921	2,925	30,260	44,135	53,067	137,241	84,174	(2)
Sand-lime brick	1927	45	790	1,051	1,158	3,616	2,458	8,598
	1925	41	801	1,119	1,238	3,760	2,522	6,396
	1923	31	582	698	946	2,408	1,462	4,332
	1921	26	374	361	501	1,220	720	(2)
Wall plaster, wall board, and floor composition.	1927	221	10,014	14,412	31,998	83,856	51,858	116,230
	1925	222	10,978	16,078	39,553	90,957	51,404	82,863
	1923	195	9,289	14,894	33,124	73,801	40,676	62,520
	[3] 1921	144	4,898	6,997	16,117	32,354	16,237	(2)
Industries using clay as a material.	1927	2,598	148,850	182,466	156,264	488,559	332,295	707,248
	1925	2,688	150,953	189,012	155,937	502,770	346,833	700,775
	1923	2,734	151,176	185,282	155,034	497,812	342,778	613,862
	1921	2,624	106,627	120,200	108,775	316,056	207,281	(2)

See footnotes at end of table.

SUMMARY FOR GROUP 10.—STONE, CLAY, AND GLASS PRODUCTS: 1921 TO 1927—Continued

[See "Regrouping of industries and renumbering of groups," p. 19]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
				Expressed in thousands of dollars [1]				
Industries using clay as a material—Continued.								
China firing and decorating, not done in potteries.	1927	31	366	428	682	1,692	1,010	43
	1925	31	333	386	672	1,590	918	38
	1923	33	355	460	610	1,493	883	49
	1921	34	325	398	504	1,242	738	(2)
Clay products (other than pottery) and nonclay refractories.	1927	1,846	100,972	121,968	99,870	319,908	220,038	529,581
	1925	1,939	102,777	127,127	100,013	333,730	233,717	517,204
	1923	1,983	102,723	123,773	103,318	333,416	230,099	480,576
	1921	1,881	68,759	73,726	68,276	194,329	12 ,054	(2)
Crucibles	1927	11	258	344	772	1,982	1,210	1,688
	1925	11	284	381	755	2,092	1,337	1,476
	1923	13	516	627	1,226	3,468	2,242	1,647
	1921	17	412	496	827	1,970	1,143	(2)
Graphite, ground and refined.	1927	13	289	341	1,319	2,932	1,612	3,011
	1925	11	228	278	1,328	2,569	1,241	2,927
	1923	8	244	304	1,082	2,185	1,103	2,700
	1921	11	152	185	703	1,457	753	(2)
Minerals and earths, ground or otherwise treated.	1927	245	8,270	9,833	17,625	41,260	23,635	116,909
	1925	250	8,762	9,882	17,165	42,381	25,216	127,649
	1923	243	8,707	10,168	13,301	35,309	22,007	83,471
	1921	272	6,887	7,298	11,522	26,174	14,652	(2)
Pottery, including porcelain ware.	1927	316	33,667	45,150	33,581	110,597	77,017	54,879
	1925	309	33,536	46,769	33,926	111,078	77,152	50,141
	1923	304	36,824	46,706	33,600	114,392	80,792	44,532
	1921	271	28,458	35,356	25,227	84,217	58,990	(2)
Statuary and art goods, factory product.	1927	136	2,028	4,404	2,415	10,187	7,772	1,137
	1925	137	2,033	4,188	2,078	9,330	7,251	1,340
	1923	150	1,807	3,244	1,898	7,550	5,652	887
	1921	138	1,634	2,741	1,715	6,667	4,952	(2)
Glass and manufactures of glass.	1927	919	74,598	93,928	134,879	336,147	201,268	329,244
	1925	938	78,384	99,356	146,697	358,851	212,154	281,476
	1923	962	81,956	100,819	145,070	367,848	222,778	250,982
	1921	971	61,798	77,032	103,926	252,420	145,494	(2)
Glass	1927	2[illegible]9	65,825	81,353	109,911	282,394	172,483	318,298
	1925	310	69,371	86,736	113,652	295,959	182,307	271,[illegible]39
	1923	333	73,335	89,898	113,170	309,353	196,183	240,528
	1921	329	54,748	68,224	86,036	213,471	127,435	(2)
Glass cutting, staining, and ornamenting.	1927	400	4,465	6,215	8,779	22,328	13,549	3,316
	1925	410	4,8[illegible]0	6,517	13,331	27,943	14,612	3,531
	1923	434	5,157	6,042	11,809	25,027	13,218	4,732
	1921	432	4,682	5,574	10,808	22,209	11,402	(2)
Mirrors, framed and unframed.	1927	250	4,308	6,361	16,189	31,425	15,236	7,630
	1925	218	4,153	6,104	19,713	34,949	15,235	6,306
	1923	195	3,464	4,879	20,091	33,468	13,377	5,722
	1921	180	2,368	3,233	10,082	16,740	6,657	(2)

[1] Each total is the sum, expressed to the nearest thousand, of the individual items expressed in units. For this reason the totals in some cases may differ slightly from the sums of the items as here given.
[2] Not called for on schedule.
[3] Statistics not strictly comparable with those for 1923, 1925, and 1927.

ASBESTOS PRODUCTS, OTHER THAN STEAM PACKING OR PIPE AND BOILER COVERING

[A preliminary report for this industry was issued under date of November 21, 1928]

Description of the industry.—The establishments classified in this industry are engaged primarily in the manufacture of commodities composed wholly or chiefly of asbestos, among which are the following: Asbestos textiles, such as brake and friction linings, clutch facings, yarn, cloth, and tape or listings; asbestos building materials, such as shingles, lumber, roofing, and insulating materials; and miscellaneous asbestos products, such as table mats and protectors and other household specialties, paper, millboard, and molded composition insulators. Establishments engaged primarily in the manufacture of asbestos pipe and boiler covering, asbestos packing, and asbestos gaskets are classified in the industry designated as "Steam and other packing, pipe and boiler covering, and gaskets, not made in textile mills."

Detailed statistics of products.—The census for 1927 was the first for which a special schedule, calling for the quantities and the values of the several classes of products, was used for this industry, and consequently Table 3 does not show comparative figures for earlier years.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	62	6,337	$8,375,502	$21,517,740	$44,156,388	$22,638,648	26,525
1925	49	6,129	7,691,801	19,225,002	36,273,797	17,048,795	22,918
1923	56	6,078	6,640,022	20,026,265	36,820,444	16,794,179	26,855
1921	40	2,026	1,947,698	6,076,000	13,030,440	6,954,440	(2)
1919	46	3,654	3,731,974	12,947,702	23,977,557	11,029,855	9,657
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	(3)	3.4	8.9	11.9	21.7	32.8	15.7
1923-1925	(3)	.8	15.8	—4.0	—1.5	1.5	—14.7
1923-1927	(3)	4.3	26.1	7.4	19.9	34.8	—1.2
1919-1927	(3)	73.4	124.4	66.2	84.2	105.2	174.7

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.
[3] Per cent not computed where base is less than 100.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers, total	1,622	*Horse-power* 26,525	1,166	*Horse-power* 22,918	771	*Horse-power* 26,855
Steam engines	10	1,670	10	1,770	29	15,330
Steam turbines	7	7,600	7	7,881		
Internal-combustion engines					2	11
Water wheels and turbines	2	285	1	40	3	135
Electric motors driven by purchased current	1,603	16,970	1,148	13,227	737	11,379
Electric motors, total	2,236	29,951	1,816	21,529	1,445	25,910
Driven by purchased current	1,603	16,970	1,148	13,227	737	11,379
Driven by current generated in establishment reporting	633	12,981	668	8,302	708	14,531
Electric generators	13	*Kilowatts* 6,400	13	*Kilowatts* 6,370	(1)	*Kilowatts* (1)

[1] Not called for on schedule.

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

KIND	Quantity	Value
1. Asbestos-products industry, all products, total value		$44,156,388
2. Asbestos products		41,184,741
3. Other products (not normally belonging to the industry)		2,971,647
4. Asbestos products made as secondary products in other industries, value		5,777,485
Asbestos products other than steam packing or pipe and boiler covering, all industries: Aggregate value (sum of 2 and 4)		[1] 46,962,226
Asbestos textiles, total value		[2] 27,090,616
Brake and friction lining, total value		11,970,669
Quantity reported	*Feet* 64,139,056	9,464,907
Quantity not reported		2,505,762
Clutch facings, total value		2,597,382
Quantity reported	*Pieces* 11,622,279	2,045,109
Quantity not reported		552,273
Yarn	*Pounds* 12,176,127	3,856,575
Cloth	8,279,952	3,224,191
Tape or listings, total value		1,013,030
Quantity reported	1,575,797	810,466
Quantity not reported		202,564
Other textiles	6,843,365	3,289,908
Asbestos textiles, not reported in detail, made as secondary products by establishments classified in other industries		1,138,861

[1] This aggregate is the sum of all value items in the column beneath except those which are underlined.
[2] Includes data for asbestos textiles, valued at $4,399,460, made as secondary products by establishments classified in other industries.

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

KIND	Quantity	Value
Asbestos products, other than steam packing or pipe and boiler covering, all industries—Continued.		
Asbestos shingles	*Squares* 1,009,767	$6,450,088
Asbestos lumber (plain and corrugated)	*Feet* 48,411,871	4,167,516
Asbestos table mats and protectors, total value		637,722
Quantity reported	*Pounds* 1,396,821	623,660
Quantity not reported		14,062
Other asbestos products,[3] value		[4] 8,616,284

[3] Asbestos flexible roofing, millboard, asbestos cements, and miscellaneous asbestos products, for which the data were combined in order to avoid disclosing the output of individual establishments.
[4] Includes data for asbestos flexible roofing, asbestos paper and millboard, asbestos cements, and molded composition insulators, valued at $1,363,963, made as secondary products by establishments classified in other industries.

TABLE 4.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	62	7,103	9	757	6,337	26,525
Illinois	7	502	--------	87	415	2,098
Massachusetts	5	474	--------	72	402	1,770
New Jersey	8	2,107	--------	178	1,929	7,698
New York	4	68	3	12	53	225
Ohio	6	272	--------	34	238	1,330
Pennsylvania	8	1,310	--------	126	1,184	3,738
Other States [1]	24	2,370	6	248	2,116	9,666

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$2,081,209	$8,375,502	$20,550,608	$967,132	$44,156,388	$22,638,648
Illinois	231,134	584,821	1,504,962	52,292	3,237,967	1,680,713
Massachusetts	197,466	494,462	1,056,201	56,777	2,643,113	1,530,135
New Jersey	464,175	2,814,675	7,037,844	402,003	13,261,190	5,821,343
New York	22,650	69,551	139,175	9,879	356,742	207,688
Ohio	165,144	385,981	691,515	20,320	1,871,528	1,159,693
Pennsylvania	348,814	1,588,207	2,880,448	127,694	8,025,685	5,017,543
Other States [1]	651,826	2,437,805	7,240,463	298,167	14,760,163	7,221,533

[1] California, 4 establishments; Connecticut, 3; Indiana, 1; Louisiana, 2; Maryland, 1; Michigan, 2; Minnesota, 1; Missouri, 2; New Hampshire, 2; North Carolina, 3; Oregon, 1; South Carolina, 1; Tennessee, 1.
[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

CEMENT

[A preliminary report for this industry was issued under date of November 12, 1928]

Description of the industry.—This industry consists in the manufacture of hydraulic cement from rock usually quarried by the same establishments. The principal product is Portland cement, but small quantities of natural and puzzolan cements are also manufactured. Portland cement is a calcined and ground mixture of limestone, chalk or marl, and clay or shale. Natural cement is an argillaceous limestone, calcined and ground. Puzzolan cement is made by grinding a mixture of furnace slag and slaked lime.

Comparative statistics for prior years.—Table 3 shows comparative figures for the United States for the census years 1921 to 1927, compiled from data collected at the biennial censuses of manufactures. The United States Bureau of Mines compiles annual statistics on the production of cement, and these are available for the years alternating with the biennial census years.

State statistics.—Production statistics, by States, are given in Table 3 and general statistics, by States, in Table 4. In each case, as explained in the headnote, statistics are presented for all States for which separate figures can be given without disclosing the data supplied by individual establishments. Statistics are given for three States in Table 3 which are not shown separately in Table 4. This condition arises because small quantities of natural and puzzolan cement are produced in these States, in each case by only one establishment; and if the total value of products, including that of natural and puzzolan cement, were shown for any one of these States in Table 4, it would be possible to calculate the value of these commodities by subtracting the value of Portland cement, as given in Table 3, from the total, as given in Table 4.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919, but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	161	36,322	$53,110,745	$120,012,025	$293,565,293	$173,553,268	1,069,390
1925	145	38,437	53,911,519	114,168,969	300,895,070	186,726,101	871,650
1923	133	35,091	49,707,992	[2] 100,766,747	[2] 264,098,497	163,331,750	642,840
1921	125	26,231	34,415,677	102,359,637	203,626,929	101,267,292	[3]
1919	123	25,524	33,194,920	79,509,800	175,264,910	95,755,110	488,808
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	11.0	—5.5	—1.5	5.1	—2.4	—7.1	22.7
1923-1925	9.0	9.5	8.5	13.3	13.9	14.3	35.6
1923-1927	21.1	3.5	6.8	19.1	11.2	6.3	66.4
1919-1927	30.9	42.3	60.0	50.9	67.5	81.2	118.8

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not strictly comparable with other years for the reason that the cost of containers (nonreturnable) sold with products is excluded for 1923 and included for other years.
[3] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horse-power		*Horse-power*		*Horse-power*
Prime movers, total	11,982	1,069,390	9,178	871,650	6,554	642,840
Steam engines	261	143,720	273	145,526	} 355	319,068
Steam turbines	160	359,504	141	277,511		
Internal-combustion engines	49	15,118	41	15,540	30	12,405
Water wheels and turbines	11	6,700	8	6,900	10	7,670
Electric motors driven by purchased current	11,501	544,348	8,715	426,173	6,159	303,697
Electric motors, total	22,640	1,041,396	16,675	782,785	11,601	541,093
Driven by purchased current	11,501	544,348	8,715	426,173	6,159	303,697
Driven by current generated in establishment reporting	11,139	497,048	7,960	356,612	5,442	237,396
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	290	343,525	269	244,525	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES, 1921 TO 1927, AND PRODUCTION OF PORTLAND CEMENT, BY STATES, 1927

[This table presents statistics for all States for which separate figures can be given without disclosing the output of individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately]

	Number of establishments	Barrels	Value [1]
Total, all products:			
1927	161		$293,565,293
1925	145		300,895,070
1923	133		264,098,497
1921	125		[2] 203,714,669
Portland cement:			
1927	153	173,206,513	287,431,268
1925	138	161,658,901	293,964,730
1923	(3)	137,460,238	[4] 260,658,875
1921	(3)	98,842,049	186,811,473
Natural and puzzolan cement:			
1927	11	2,123,868	3,126,211
1925	10	1,729,343	2,709,030
1923	10	1,325,465	[4] 2,029,685
1921	(3)	539,402	897,025
Other products:			
1927			3,007,814
1925			4,221,310
1923			1,409,937
1921			16,006,171
Portland cement, by States,[5] 1927:			
Total	153	173,206,513	287,431,268
Alabama	6	7,564,863	11,261,550
California	12	14,580,654	27,244,602
Illinois	4	7,017,047	11,541,976
Iowa	5	5,415,144	8,539,712
Kansas	7	6,180,255	10,104,927
Michigan	14	13,965,241	21,302,407
Missouri	5	6,778,384	11,846,658
New York	11	10,775,375	17,856,625
Ohio	10	8,853,869	14,824,138
Pennsylvania	26	43,732,278	69,352,319
Tennessee	5	4,430,439	7,222,862
Texas	7	5,655,835	10,567,138
Other States	41	38,257,129	65,766,354

[1] Does not include the value of refractory cement which is made by establishments classified in the "Clay products (other than pottery) and nonclay refractories" industry, as follows: For 1927, 105,937 tons, valued at $2,477,683; 1925, 78,477 tons, $2,270,276; 1923, 95,812 tons, $1,835,349. No separate data for 1921.

[2] This total does not agree with the corresponding total shown in Table 1, because of the inclusion here of $87,740 representing the value of cement produced as a secondary product by establishments in other industries.

[3] No data. [4] See footnote 2, Table 1. [5] See "State statistics," p. 835.

TABLE 4.—GENERAL STATISTICS, BY STATES: 1927

[This table presents statistics for all States for which separate figures can be given without disclosing operations of individual establishments. Certain of the "Other States," however, reported larger values of products than some of the States shown separately]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	161	42,884	6	6,556	36,322	1,069,390
California	12	3,296	-------	430	2,866	95,846
Iowa	5	1,371	-------	202	1,169	47,064
Kansas	8	1,520	3	284	1,233	41,101
Michigan	14	2,830	-------	346	2,484	87,464
Missouri	5	2,491	-------	565	1,926	53,028
New York	13	3,039	-------	624	2,415	73,253
Pennsylvania	26	10,847	-------	1,679	9,168	244,355
Tennessee	5	969	-------	134	835	29,957
Texas	7	1,083	-------	101	982	33,685
Other States [1]	66	15,438	3	2,191	13,244	363,637

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$16,331,586	$53,110,745	$59,495,154	$60,516,871	$293,565,293	$173,553,268
California	1,298,314	4,559,145	3,927,667	6,585,715	27,378,943	16,865,561
Iowa	508,764	1,642,021	1,025,553	2,296,587	8,539,712	5,217,572
Kansas	713,981	1,562,672	1,592,085	1,961,125	10,306,207	6,752,997
Michigan	1,035,402	3,496,876	6,542,353	4,377,652	21,446,747	10,526,742
Missouri	924,673	2,509,372	2,723,798	2,514,732	12,084,703	6,846,173
New York	1,102,902	3,544,633	4,169,634	3,843,492	18,116,723	10,103,597
Pennsylvania	4,285,164	14,211,801	15,362,102	14,490,528	71,827,227	41,974,597
Tennessee	365,802	975,309	1,661,407	1,439,095	7,222,862	4,122,360
Texas	348,375	1,212,784	1,432,318	2,601,278	10,578,117	6,544,521
Other States [1]	5,748,209	19,396,132	21,058,237	20,406,667	106,064,052	64,599,148

[1] Alabama, 7 establishments; Colorado, 3; Florida, 1; Georgia, 3; Illinois, 5; Indiana, 5; Kentucky, 1; Louisiana, 1; Maryland, 2; Minnesota, 3; Montana, 2; Nebraska, 1; New Jersey, 2; Ohio, 11; Oklahoma, 2; Oregon, 3; South Dakota, 1; Utah, 3; Virginia, 2; Washington, 4; West Virginia, 3; Wisconsin, 1.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

TABLE 2.—PRODUCTS, BY CLASS, QUANTITY, AND VALUE, AND STOCKS ON HAND, FOR THE UNITED STATES: 1927, 1926, AND 1925—Continued

[For statistics of principal products, by States, see Table 3, p. 843]

[Ton, 2,000 pounds; square, 100 square feet]

CLASS AND YEAR	Number of establishments	Quantity	Value	Stocks on hand Dec. 31
CLAY PRODUCTS, OTHER THAN POTTERY				
Total value:				
1927			$296,161,652	
1926			317,930,245	
1925			[2] 314,995,139	
Common brick:		*Thousands*		*Thousands*
1927	1,155	7,060,984	78,407,745	1,552,297
1926	1,223	7,517,211	88,226,625	1,393,508
1925	1,273	7,561,501	88,551,400	1,387,775
Vitrified brick or block:				
For paving—				
1927	79	405,812	9,141,002	109,350
1926	80	381,684	8,918,947	97,021
1925	77	448,492	10,350,093	127,403
Other vitrified brick or block—				
1927	45	97,588	1,622,722	21,191
1926	51	85,896	1,365,794	23,002
1925	41	90,609	1,525,604	21,112
Face brick:				
1927	452	2,412,903	41,520,881	737,495
1926	456	2,439,820	44,516,236	655,434
1925	421	2,474,690	45,427,625	606,937
Fancy or ornamental brick:				
1927	12	1,456	108,451	449
1926	4	115	3,592	83
1925	9	1,701	50,279	627
Enameled brick:				
1927	7	18,097	1,374,725	10,976
1926	9	15,441	1,275,692	9,466
1925	7	16,931	1,507,659	10,248
Hollow brick:				
1927	45	37,040	436,065	7,781
1926	39	63,359	692,258	7,610
1925	(3)	(3)	(3)	(3)
Terra cotta:		*Tons*		*Tons*
1927	31	155,932	16,628,139	28,324
1926	34	155,564	19,666,880	27,073
1925	31	152,441	19,138,690	19,999
Hollow building tile:				
Partition, load-bearing, furring, and book tile—				
1927	399	3,605,519	21,784,658	769,790
1926	396	3,698,778	23,560,571	660,373
1925	385	3,818,985	25,153,145	704,649
Floor-arch, silo, and cornerib tile; conduits; radial chimney blocks; fireproofing tile—				
1927	71	508,790	4,714,722	143,794
1926	66	397,639	4,257,857	95,053
1925	54	405,917	4,111,079	99,227
Roofing tile:		*Squares*		*Squares*
1927	49	368,451	5,348,750	90,534
1926	44	408,724	7,015,775	114,903
1925	23	289,956	5,155,301	45,023
Floor tile (plain, vitreous, encaustic, quarry, etc.):		*Square feet*		*Square feet*
1927	57	20,433,581	4,586,319	4,640,948
1926	65	24,920,354	5,521,965	4,120,140
1925	45	19,243,987	4,361,319	4,360,058
Ceramic mosaic tile (vitreous and semivitreous, unglazed):				
1927	24	20,506,223	4,552,106	5,194,863
1926	19	22,573,178	4,865,967	4,253,988
1925	21	20,331,051	4,092,392	2,933,674
Enameled tile (bright, dull, matt, and semimatt finishes) and glazed ceramic mosaic:				
1927	24	7,083,913	3,356,347	1,484,357
1926	(4)	(4)	(4)	(4)
1925	(4)	(4)	(4)	(4)
Faience tile (including hand-decorated):				
1927	32	3,073,545	2,419,826	1,097,044
1926	[5] 33	[5] 7,702,558	[5] 4,794,128	[5] 1,482,151
1925	[5] 30	[5] 4,915,525	[5] 3,294,537	[5] 862,515

[2] Revised.
[3] Not reported separately; included in figure for "Other clay products."
[4] Included in figure for "Faience tile."
[5] Includes data for "Enameled tile."

TABLE 2.—PRODUCTS, BY CLASS, QUANTITY, AND VALUE, AND STOCKS ON HAND, FOR THE UNITED STATES: 1927, 1926, AND 1925—Continued

[For statistics of principal products, by States, see Table 3, p. 843]

[Ton, 2,000 pounds; square, 100 square feet]

CLASS AND YEAR	Number of establishments	Quantity	Value	Stocks on hand Dec. 31
CLAY PRODUCTS, OTHER THAN POTTERY—continued				
Wall tile (white and bright-glazed), including trim:		*Square feet*		*Square feet*
1927	24	39,537,355	$12,503,064	5,286,151
1926	26	39,009,986	12,787,359	2,457,082
1925	22	30,365,838	10,220,260	2,309,769
Draintile:		*Tons*		*Tons*
1927	324	734,392	5,511,301	175,244
1926	301	519,483	3,858,408	184,349
1925	335	660,673	4,960,423	196,945
Sewer pipe:				
1927	107	2,115,688	29,425,913	611,543
1926	111	1,994,333	29,303,094	585,462
1925	104	2,138,672	30,420,828	669,795
Stove lining:				
1927	21	13,646	503,021	5,013
1926	20	11,573	472,904	3,386
1925	21	25,852	656,139	5,165
Flue lining:				
1927	95	252,019	2,851,526	52,904
1926	89	241,465	2,857,309	47,908
1925	63	182,267	2,480,327	31,769
Wall coping:				
1927	57	52,841	670,505	10,907
1926	54	56,345	685,303	9,755
1925	30	37,124	381,367	6,069
Fire-clay products:				
Brick, block, or tile for locomotive and other fire-box lining, etc. (9-inch equivalent)—		*Thousands*		*Thousands*
1927	214	866,397	34,287,297	224,682
1926	230	1,007,784	40,013,394	253,891
1925	238	990,113	40,727,578	221,886
High-alumina brick (over 40 per cent Al_2O_3)—				
1927	13	11,351	1,187,096	5,537
1926	14	9,095	978,624	3,277
1925	10	4,966	436,123	2,510
Special shapes—		*Tons*		*Tons*
1927	39	132,618	2,699,485	41,180
1926	40	61,909	1,714,914	17,010
1925	(3)	(3)	(3)	(3)
Glass-house tank blocks, melting pots, stoppers, floaters, and rings:				
1927	14	41,177	2,310,473	23,647
1926	(3)	(3)	(3)	(3)
1925	(3)	(3)	(3)	(3)
Chimney pipe and tops:				
1927	28	7,905	243,034	2,510
1926	(3)	(3)	(3)	(3)
1925	(3)	(3)	(3)	(3)
Segment blocks:				
1927	14	58,989	967,422	36,316
1926	(3)	(3)	(3)	(3)
1925	(3)	(3)	(3)	(3)
Refractory cement (clay):				
1927	40	45,609	1,241,257	(6)
1926	42	31,816	1,328,216	(6)
1925	(7)	(7)	(7)	(6)
Clay sold, raw or prepared:				
1927	240	487,301	2,597,779	(6)
1926	250	476,020	2,666,843	(6)
1925	240	656,918	3,482,236	(6)
Other clay products:				
1927	67	----------	3,160,021	(6)
1926	94	----------	[8] 6,581,590	(6)
1925	118	----------	[2] [8] 8,510,735	(6)
NONCLAY REFRACTORIES				
Total value:				
1927	----------	----------	23,547,601	----------
1926	----------	----------	24,505,519	----------
1925	----------	----------	20,364,431	----------

[2] Revised.
[3] Not reported separately; included in figure for "Other clay products."
[6] No data.
[7] Included in figure for "Refractory cement (nonclay)."
[8] See footnote 3.

TABLE 2.—PRODUCTS, BY CLASS, QUANTITY, AND VALUE, AND STOCKS ON HAND FOR THE UNITED STATES: 1927, 1926, AND 1925—Continued

[For statistics of principal products, by States, see Table 3, p. 843]

[Ton, 2,000 pounds; square, 100 square feet]

CLASS AND YEAR	Number of establishments	Quantity	Value	Stocks on hand Dec. 31
NONCLAY REFRACTORIES—continued				
Silica brick:		*Thousands*		*Thousands*
1927	27	245,881	$12,756,994	56,876
1926	31	266,409	13,614,033	51,114
1925	28	235,877	11,280,127	(6)
Magnesite and chrome brick:				
Magnesite brick—				
1927	6			
1926	7			
1925	7	13,941	3,874,176	3,642
Chrome brick—		16,130	4,762,645	2,945
1927	4	12,732	3,751,872	(6)
1926	4			
1925	4			
Refractory cement (nonclay):		*Tons*		*Tons*
1927	22	60,328	1,236,426	(6)
1926	17	45,788	1,045,468	(6)
1925	[9] 38	[9] 78,477	[9] 2,270,276	(6)
Other nonclay refractories, including those of alumina and silicon carbide:				
1927	20	----------	5,680,005	----------
1926	18	----------	5,083,373	----------
1925	16	----------	3,062,156	----------

CLASS AND YEAR	Number of establishments	Value
POTTERY		
Total value:		
1927	-------	$111,612,931
1926	-------	116,493,308
1925	-------	112,018,500
Red earthenware:		
1927	79	2,850,428
1926	80	2,633,909
1925	73	2,631,867
Stoneware (except chemical) and yellow and Rockingham ware:		
1927	49	4,503,079
1926	63	5,311,123
1925	56	4,349,317
Chemical stoneware:		
1927	5	985,732
1926	7	848,303
1925	9	928,462
Chemical porcelain:		
1927	3	(10)
1926	4	208,731
1925	4	242,342
White ware, including cream-color, white granite, semi-porcelain, and semivitreous porcelain ware:		
1927	59	31,692,083
1926	60	33,563,570
1925	62	32,815,622
Porcelain china, bone china, delft, and Belleek ware:		
1927	8	(10)
1926	7	1,291,880
1925	8	966,939

CLASS AND YEAR	Number of establishments	Value
POTTERY—continued		
Hotel china:		
1927	20	$10,019,528
1926	18	10,382,279
1925	19	9,866,975
Vitreous china plumbing fixtures:		
1927	46	23,627,594
1926	48	22,875,604
1925	50	25,035,715
Semivitreous or porcelain plumbing fixtures:		
1927	24	5,465,966
1926	18	5,597,701
1925	(11)	(11)
Porcelain electrical supplies (not including fittings):		
1927	60	22,860,678
1926	52	24,867,688
1925	59	21,826,971
Saggers:		
1927	109	1,915,950
1926	108	2,325,738
1925	104	1,764,077
Garden pottery:		
1927	17	326,210
1926	(11)	(11)
1925	(11)	(11)
Art pottery:		
1927	40	2,156,250
1926	(11)	(11)
1925	(11)	(11)
Other pottery products, including red and brown white-lined cooking ware:		
1927	49	[12] 5,209,433
1926	93	[13] 6,586,782
1925	99	[13] 11,590,213

[6] No data.
[9] Includes data for "Refractory cement (clay)."
[10] Can not be shown separately without disclosing the production of individual establishments; included in figure for "Other pottery products."
[11] Not reported separately; included in figure for "Other pottery products."
[12] See footnote 10.
[13] See footnote 11.

TABLE 3.—PRINCIPAL PRODUCTS, BY CLASS, QUANTITY, AND VALUE, AND STOCKS ON HAND, BY STATES: 1927

[In this table, in each section giving figures for a particular product or class of products, the several States are listed in the order of their importance, and every State for which figures are shown separately is of greater importance than any of the "Other States." The "Other States" group comprises those States for which separate figures can not be given without disclosing data reported by individual establishments, together with those whose values of products fall below the value reported for the most important State for which separate figures can not be given]

[Ton, 2,000 pounds; square, 100 square feet]

CLASS AND STATE	Number of establishments	Quantity	Value	Stocks on hand December 31
CLAY PRODUCTS, OTHER THAN POTTERY				
		Thousands		*Thousands*
Common brick, total	1,155	7,060,984	$78,407,745	1,552,297
New York	82	1,198,028	$14,028,902	263,640
Illinois	66	1,348,551	12,843,713	171,964
Pennsylvania	120	508,630	7,606,844	101,863
New Jersey	23	356,860	4,125,754	54,889
Ohio	67	300,095	3,398,942	69,482
California	47	324,207	3,232,949	113,800
Connecticut	26	184,478	2,531,503	61,636
North Carolina	64	249,559	2,335,059	28,264
Michigan	18	201,143	2,305,276	38,696
Virginia	41	175,118	2,102,433	44,463
Texas	47	222,542	2,054,909	44,819
Massachusetts	26	113,143	1,723,674	36,800
Tennessee	27	133,331	1,506,373	23,770
Missouri	25	114,914	1,495,009	21,310
Alabama	29	152,140	1,463,986	18,625
Indiana	31	146,249	1,421,870	161,988
Georgia	14	175,232	1,405,268	19,817
Maryland	14	95,750	1,372,947	23,931
Other States	388	1,061,014	11,452,334	252,540
Vitrified brick or block, for paving, total	79	405,812	9,141,002	109,350
Ohio	13	109,807	2,646,113	16,892
Pennsylvania	15	48,643	1,111,359	10,936
Illinois	9	46,841	1,068,848	14,229
Kansas	7	36,966	679,643	5,636
Other States	35	163,555	3,635,039	61,657
Face brick, total	452	2,412,903	41,520,881	737,495
Pennsylvania	86	593,117	10,691,798	173,901
Ohio	51	567,882	8,727,149	146,965
Illinois	27	247,385	3,962,684	77,577
Indiana	23	166,648	2,812,669	52,666
Texas	16	84,491	1,601,823	32,749
Missouri	15	61,651	1,238,249	29,574
Alabama	13	57,091	939,088	9,205
California	16	22,268	825,830	13,874
Virginia	11	42,474	765,087	13,080
Tennessee	8	42,495	727,931	15,165
New Jersey	3	21,995	717,079	11,424
North Carolina	9	43,064	695,500	7,412
Other States	174	462,342	7,815,994	153,903
		Tons		*Tons*
Terra cotta, total	31	155,932	16,628,139	28,324
Illinois	4	51,295	5,128,970	10,024
New Jersey	6	42,313	4,378,074	9,766
Other States	21	62,324	7,121,095	8,534
Hollow building tile:				
Partition, load-bearing, furring, and book tile, total	399	3,605,519	21,784,658	769,790
Ohio	69	1,133,961	5,698,016	166,716
New Jersey	8	397,552	3,350,708	69,466
Indiana	25	288,146	1,990,817	83,301
Illinois	33	331,365	1,827,340	67,999
Iowa	30	232,575	1,363,354	54,938
Pennsylvania	21	266,217	1,331,125	47,070
California	21	99,006	826,735	49,249
Kansas	13	89,443	482,481	10,261
Georgia	7	89,411	475,605	20,659
Texas	15	59,562	442,464	13,772
West Virginia	13	74,262	411,085	11,527

TABLE 3.—PRINCIPAL PRODUCTS, BY CLASS, QUANTITY, AND VALUE, AND STOCKS ON HAND, BY STATES: 1927—Continued

[See note at head of this table, p. 843]

[Ton, 2,000 pounds; square, 100 square feet]

CLASS AND STATE	Number of establishments	Quantity	Value	Stocks on hand December 31
CLAY PRODUCTS, OTHER THAN POTTERY—contd.				
Hollow building tile—Continued.				
Partition, load-bearing, furring, and book tile—Continued.		*Tons*		*Tons*
New York	6	58,714	$393,015	10,402
Alabama	11	47,969	350,254	4,933
Missouri	13	46,131	323,373	14,129
Oklahoma	7	63,401	296,225	19,295
Washington	12	34,222	252,196	10,393
Nebraska	10	43,353	249,329	23,440
Other States	85	250,229	1,720,536	92,240
Floor-arch, silo, and cornerib tile; conduits; radial chimney blocks; fire-proofing tile, total	71	508,790	4,714,722	143,794
Ohio	13	177,690	1,788,421	45,764
Indiana	8	72,969	790,600	39,349
Iowa	10	60,486	403,299	13,884
Pennsylvania	7	38,371	362,038	14,253
Other States	33	159,274	1,370,364	30,544
		Squares		*Squares*
Roofing tile, total	49	368,451	5,348,750	90,534
California	28	153,206	1,925,357	24,990
Other States	21	215,245	3,423,393	65,544
		Square feet		*Square feet*
Floor tile (plain, vitreous, encaustic, quarry, etc.), total	57	20,433,581	4,586,319	4,640,948
Ohio	6	7,462,681	1,599,396	1,193,916
New Jersey	8	5,180,725	1,199,496	1,268,823
Other States	43	7,790,175	1,787,427	2,178,209
Ceramic mosaic tile (vitreous and semivitreous, unglazed), total	24	20,506,223	4,552,106	5,194,863
New Jersey	4	4,068,485	957,507	1,463,361
Ohio	4	4,514,798	790,468	1,909,387
Other States	16	11,922,940	2,804,131	1,822,115
Faience tile (including hand-decorated), total	32	3,073,545	2,419,826	1,097,044
California	14	1,832,866	1,290,570	523,666
Ohio	5	696,568	486,057	281,530
Other States	13	544,111	643,199	291,848
Wall tile (white and bright-glazed), including trim, total	24	39,537,355	12,503,064	5,286,151
Ohio	5	12,833,783	3,401,980	1,273,545
New Jersey	7	7,978,758	2,653,158	1,690,561
Other States	12	18,724,814	6,447,926	2,322,045
		Tons		*Tons*
Draintile, total	324	734,392	5,511,301	175,244
Ohio	78	197,974	1,403,530	37,346
Iowa	41	176,404	1,167,542	53,324
Indiana	42	125,084	918,597	25,907
Illinois	36	107,598	817,027	17,319
Michigan	13	41,005	393,943	7,894
California	12	7,092	113,559	6,198
Other States	102	79,235	697,103	27,256
Sewer pipe, total	107	2,115,688	29,425,913	611,543
Ohio	35	978,260	11,570,349	244,782
California	9	104,364	2,644,961	19,929
Missouri	5	140,808	2,431,782	77,102
Pennsylvania	7	200,415	2,083,444	40,891
Indiana	6	130,556	1,669,867	25,655
Other States	45	561,285	9,025,510	203,184

TABLE 3.—PRINCIPAL PRODUCTS, BY CLASS, QUANTITY, AND VALUE, AND STOCKS ON HAND, BY STATES: 1927—Continued

[See note at head of this table, p. 843]

[Ton, 2,000 pounds; square, 100 square feet]

CLASS AND STATE	Number of establishments	Quantity	Value	Stocks on hand December 31
CLAY PRODUCTS, OTHER THAN POTTERY—contd.				
Flue lining, total	95	*Tons* 252,019	$2,851,526	*Tons* 52,904
Ohio	26	132,451	1,299,327	22,892
Pennsylvania	9	39,935	422,944	6,585
Other States	60	79,633	1,129,255	23,427
Fire-clay products:				
Brick, block, or tile for locomotive and other fire-box lining, etc. (9-inch equivalent), total	214	*Thousands* 866,397	34,287,297	*Thousands* 224,682
Pennsylvania	68	301,938	12,963,109	84,886
Missouri	14	139,799	6,034,776	35,397
Kentucky	9	111,048	4,587,909	25,360
Ohio	32	141,392	4,199,721	39,015
California	15	26,555	1,155,714	6,974
New Jersey	15	17,617	1,026,889	5,392
Other States	61	128,048	4,319,179	27,658
High-alumina brick (over 40 per cent Al_2O_3), total	13	11,351	1,187,096	5,537
Missouri	4	4,377	427,907	1,562
Other States	9	6,974	759,189	3,975
Special shapes, total	39	*Tons* 132,618	2,099,485	*Tons* 41,180
Missouri	5	92,002	1,379,613	28,844
Pennsylvania	8	6,246	410,671	1,230
New Jersey	3	4,879	231,243	1,340
California	7	8,479	197,329	3,885
Other States	16	21,012	480,629	5,881
Refractory cement (clay), total	40	45,609	1,241,257	----------
Pennsylvania	12	20,535	378,494	----------
Other States	28	25,074	862,763	----------
NONCLAY REFRACTORIES				
Silica brick, total	27	*Thousands* 245,881	12,756,994	*Thousands* 56,876
Pennsylvania	15	173,494	8,391,451	37,803
Other States	12	72,387	4,365,543	19,073
POTTERY				
Red earthenware, total	79	----------	2,850,428	----------
Pennsylvania	5	----------	562,424	----------
Ohio	11	----------	530,536	----------
Other States	63	----------	1,757,468	----------
Stoneware (except chemical) and yellow and Rockingham ware, total	49	----------	4,503,079	----------
Ohio	16	----------	1,825,352	----------
Illinois	5	----------	888,191	----------
Other States	28	----------	1,789,536	----------
White ware, including cream-color, white granite, semiporcelain, and semivitreous porcelain ware, total	59	----------	31,692,083	----------
Ohio	37	----------	18,322,816	----------
West Virginia	7	----------	7,794,282	----------
Other States	15	----------	5,574,985	----------
Hotel china, total	20	----------	10,019,528	----------
New York	4	----------	3,733,278	----------
Pennsylvania	3	----------	2,314,801	----------
New Jersey	5	----------	1,770,213	----------
West Virginia	3	----------	1,317,441	----------
Ohio	5	----------	883,795	----------

TABLE 3.—PRINCIPAL PRODUCTS, BY CLASS, QUANTITY, AND VALUE, AND STOCKS ON HAND, BY STATES: 1927—Continued

[See note at head of this table, p. 843]

[Ton, 2,000 pounds; square, 100 square feet]

CLASS AND STATE	Number of establishments	Quantity	Value	Stocks on hand December 31
POTTERY—continued				
Vitreous china plumbing fixtures (exclusive of fittings), total	46		$23,627,594	
Closet bowls:		*Pieces*		
Siphon jets, total	33	225,465	2,076,743	
New Jersey	13	143,528	1,437,061	
Other States	20	81,937	639,682	
Washdowns, total	40	1,539,863	5,866,347	
New Jersey	16	494,762	2,104,645	
Illinois	3	210,812	753,224	
Other States	21	834,289	3,008,478	
Reverse traps, total	35	197,510	1,017,347	
New Jersey	13	87,230	424,444	
Other States	22	110,280	592,903	
Flush tanks:				
Lowdown (large and small), total	40	1,312,739	6,802,887	
New Jersey	16	393,124	2,201,885	
Illinois	3	169,151	906,069	
California	3	138,863	869,900	
Indiana	4	153,211	830,310	
Other States	14	458,390	1,994,723	
Other, total	10	49,890	468,192	
Lavatories, total	27	346,117	4,498,048	
New Jersey	9	182,949	2,468,886	
Other States	18	163,168	2,029,162	
Other bathroom and toilet fixtures, including bathtubs, total	16		2,237,124	
Other fixtures, including laundry tubs and kitchen sinks, total	12		660,906	
Semivitreous or porcelain plumbing fixtures (exclusive of fittings), total	24		5,465,966	
New Jersey	16		4,793,569	
Other States	8		672,397	
Porcelain electrical supplies (exclusive of fittings), total	60		22,860,678	
Ohio	19		8,108,642	
New Jersey	18		3,838,772	
New York	4		3,295,241	
Other States	19		7,618,023	
Art pottery, total	40		2,156,250	
Ohio	5		1,187,841	
Other States	35		968,409	
Saggers, total	109		1,915,950	
Ohio	33		450,269	
New Jersey	27		261,818	
Indiana	5		252,018	
New York	9		243,390	
Illinois	5		186,752	
West Virginia	9		179,205	
California	6		119,954	
Pennsylvania	6		99,215	
Other States	9		123,329	

TABLE 4.—SUMMARY FOR ESTABLISHMENTS CLASSIFIED ACCORDING TO THEIR MAJOR PRODUCTS, WITH PER CENT WHICH PRODUCTION OF SUCH ESTABLISHMENTS FORMED OF TOTAL PRODUCTION OF ALL ESTABLISHMENTS, FOR THE UNITED STATES: 1927

MAJOR PRODUCTS	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products [1]	Horsepower	TOTAL PRODUCTION		PRODUCTION BY ESTABLISHMENTS CLASSIFIED ACCORDING TO MAJOR PRODUCTS			
							Quantity [2]	Value [2]	Quantity [3]	Value [3]	Per cent of total	
											Quantity	Value
Total	2,162	137,639	$137,117,325	$133,450,464	$430,505,181	584,460		$431,322,184				
							Thousands		*Thousands*			
Common brick	809	26,713	31,790,971	21,422,920	75,765,887	175,375	7,060,984	78,407,745	6,416,347	$70,940,145	90.9	90.5
Face brick	258	15,334	18,338,288	14,661,613	46,241,393	97,425	2,412,903	41,520,881	2,167,809	37,236,845	89.8	89.7
							Tons		*Tons*			
Terra cotta	28	5,082	7,632,596	3,521,235	17,449,680	9,780	155,932	16,628,139	150,830	15,930,250	96.7	95.8
Hollow building tiles	156	7,946	10,415,197	8,311,681	25,993,175	58,797	4,114,309	26,499,380	3,411,263	21,985,159	82.9	83.0
							Squares		*Squares*			
Roofing tile	24	1,410	1,859,121	1,139,266	5,434,866	7,353	368,451	5,348,750	311,409	4,610,530	84.5	86.2
							Square feet		*Square feet*			
Floor, ceramic mosaic, enameled, faïence, and wall tile	62	9,264	10,461,992	8,286,350	28,009,135	14,404	90,634,617	27,417,662	88,567,797	26,518,280	97.7	96.7
							Thousands		*Thousands*			
Vitrified brick or block	44	3,510	3,904,730	3,840,697	11,049,086	24,604	503,400	10,763,724	445,905	9,513,300	88.6	88.4
							Tons		*Tons*			
Draintile	128	1,517	1,550,090	1,276,802	4,238,114	12,455	734,392	5,511,301	476,477	3,536,186	64.9	64.2
Sewer pipe	88	11,029	13,091,083	11,621,543	34,378,812	37,906	2,115,688	29,425,913	2,043,221	27,985,127	96.6	95.1
Fire-clay products	153	12,342	14,592,447	14,089,231	40,948,889	57,070	(4)	38,173,878	(4)	35,567,273		93.2
Red earthenware	40	673	831,874	445,634	2,371,291	2,114		2,850,428		2,248,326		78.9
Stoneware (except chemical) and yellow and Rockingham ware	36	1,660	1,872,899	1,412,816	4,929,430	3,582		4,503,079		4,049,701		89.9
White ware, including cream-color, white granite, semiporcelain, and semivitreous porcelain	55	13,395	15,063,068	10,285,866	32,475,757	10,780		31,692,083		31,439,314		99.2
Hotel china	16	4,385	4,980,367	2,209,402	9,782,266	5,075		10,019,528		9,531,699		95.1
Vitreous china plumbing fixtures (exclusive of fittings)	46	6,201	9,735,755	8,796,175	25,458,368	11,691		23,627,594		23,550,235		99.7

See footnotes at end of table.

TABLE 4.—SUMMARY FOR ESTABLISHMENTS CLASSIFIED ACCORDING TO THEIR MAJOR PRODUCTS, WITH PER CENT WHICH PRODUCTION OF SUCH ESTABLISHMENTS FORMED OF TOTAL PRODUCTION OF ALL ESTABLISHMENTS, FOR THE UNITED STATES: 1927—Continued

MAJOR PRODUCTS	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products [1]	Horsepower	TOTAL PRODUCTION		PRODUCTION BY ESTABLISHMENTS CLASSIFIED ACCORDING TO MAJOR PRODUCTS			
							Quantity [2]	Value [2]	Quantity [3]	Value [3]	Per cent of total	
											Quantity	Value
Porcelain electrical supplies (exclusive of fittings)	55	6,849	7,954,877	7,705,833	23,162,372	15,758	----------	22,860,678	----------	22,531,469	--------	98.6
Nonclay refractories	33	4,729	5,781,824	9,002,800	22,252,042	21,557	----------	23,547,601	----------	21,397,041	--------	90.9
Other	131	5,600	7,260,146	5,420,600	20,564,618	18,734	----------	32,523,820	----------	----------	--------	------

[1] The items in this column represent the total values of all products made by establishments engaged primarily in the manufacture of the specified commodities (line 1, Table 2).
[2] The items in these columns represent the total production of the specified commodities, regardless of the classification of the establishments reporting them, and include data for the output of plants reporting products valued at less than $5,000 (lines 2, 4, and 5, Table 2).
[3] The items in these columns represent the values of the specified commodities made as primary products by the establishments reporting.
[4] Reported as 877,748 M brick of 9-inch equivalent and 132,618 tons of special shapes.
[5] Reported as 814,564 M brick of 9-inch equivalent and 115,411 tons of special shapes.

CLAY PRODUCTS (OTHER THAN POTTERY) AND NONCLAY REFRACTORIES

[See headnote at top of p. 838]

Description of the industry.—This classification embraces all establishments engaged primarily in the manufacture of brick, draintile and other tile, sewer pipe, stove lining, terra-cotta products, and other refractories, both clay and nonclay.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	1,846	100,972	$121,967,507	$99,869,669	$319,907,843	$220,038,174	529,581
1925	1,939	102,777	127,127,485	100,013,084	333,730,417	233,717,333	517,204
1923	1,983	102,723	123,773,001	103,317,550	333,416,331	230,098,781	480,576
1921	1,881	68,759	73,725,985	68,275,905	194,329,421	126,053,516	(2)
1919	2,414	76,915	78,256,085	67,488,113	208,422,920	140,934,807	405,157
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	—4.8	—1.8	—4.1	—.1	—4.1	—5.9	2.4
1923-1925	—2.2	.1	2.7	—3.2	.1	1.6	7.6
1923-1927	—6.9	—1.7	—1.5	—3.3	—4.1	—4.4	10.2
1919-1927	—23.5	31.3	55.9	48.0	53.5	56.1	30.7

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	14,326	529,581	11,617	517,204	9,650	480,576
Steam engines	1,547	194,898	1,963	232,809	2,274	268,198
Steam turbines	34	3,219	37	3,288		
Internal-combustion engines	444	23,774	453	24,128	407	16,020
Water wheels and turbines	4	205	12	695	15	774
Electric motors driven by purchased current	12,297	307,485	9,152	256,284	6,954	195,584
Electric motors, total	14,227	334,768	11,097	288,246	8,722	229,321
Driven by purchased current	12,297	307,485	9,152	256,284	6,954	195,584
Driven by current generated in establishment reporting	1,930	27,283	1,945	31,962	1,768	33,737
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	290	27,581	310	29,512	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [1]
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	1,846	109,983	600	8,411	100,972	529,581	$21,868,695	$121,967,507	$47,833,558	$52,036,111	$319,907,843	$220,038,174
Alabama	37	2,236	18	153	2,065	10,942	373,826	1,659,562	859,149	1,025,737	5,337,356	3,452,470
Arizona	8	174	4	5	165	665	11,458	154,416	30,683	81,318	345,391	233,390
Arkansas	12	616	3	39	574	2,711	74,812	478,007	56,789	343,404	1,286,676	886,483
California	96	5,478	33	431	5,014	26,056	1,080,896	5,796,979	2,635,192	2,039,350	18,033,321	13,358,779
Colorado	30	1,121	10	140	971	6,090	317,003	1,134,988	562,643	527,912	3,348,514	2,257,959
Connecticut	27	1,034	11	87	936	6,241	275,984	1,279,229	238,779	450,464	2,659,057	1,969,814
Delaware	7	100	2	11	87	697	53,833	112,135	23,814	41,218	305,883	240,851
District of Columbia	3	93	1	6	86	672	13,634	112,840	15,037	57,232	208,843	136,574
Florida	12	243	7	26	210	1,008	46,377	154,195	42,007	125,555	479,915	312,353
Georgia	30	2,329	7	134	2,188	12,617	373,741	1,536,185	588,225	1,173,445	4,851,497	3,089,827
Idaho	6	79	6	8	65	611	18,845	78,921	33,575	45,446	211,739	132,718
Illinois	104	9,010	28	748	8,234	55,256	2,302,164	12,685,861	3,238,538	5,264,420	31,598,704	23,095,746
Indiana	79	5,184	29	328	4,827	22,244	867,075	6,187,820	2,390,812	2,466,231	15,635,631	10,778,588
Iowa	42	1,936	23	190	1,723	11,921	426,712	1,831,654	328,554	1,488,832	5,144,633	3,326,647
Kansas	28	1,400	1	82	1,317	8,916	177,771	1,337,382	379,419	970,275	3,805,509	2,455,815
Kentucky	38	2,935	10	183	2,742	12,042	455,890	2,687,874	1,347,867	1,102,972	7,366,095	4,915,256
Louisiana	11	248	7	25	216	1,575	42,144	152,836	35,174	142,813	441,746	263,759
Maine	16	268	7	25	236	1,173	81,877	275,560	100,603	161,747	684,244	421,894
Maryland	22	1,308	11	116	1,181	6,267	240,954	1,219,736	618,424	613,627	4,737,685	3,505,634
Massachusetts	31	897	8	93	796	4,807	228,656	1,033,036	300,463	445,730	2,760,036	2,013,843
Michigan	29	1,141	9	107	1,025	7,520	356,972	1,451,477	591,834	822,606	4,205,439	2,790,999
Minnesota	23	660	11	88	561	4,715	180,891	619,678	185,882	373,509	1,714,202	1,154,811
Mississippi	22	662	12	46	604	2,531	103,275	365,088	52,097	255,685	1,146,472	838,690
Missouri	52	5,782	8	626	5,148	22,382	1,546,779	6,220,803	3,666,956	2,460,809	17,150,865	11,023,090
Montana	10	116	4	19	93	1,614	30,772	122,313	111,483	68,493	458,075	278,099

Nebraska	17	328	7	24	297	3,261	68,461	300,870	86,507	133,311	820,206	600,388
New Hampshire	12	313	5	20	288	1,254	62,241	406,805	39,897	157,648	811,626	614,081
New Jersey	66	7,119	15	647	6,457	24,333	1,829,698	9,015,380	3,746,301	2,458,540	22,072,505	15,867,664
New Mexico	4	86	-------	9	77	688	18,739	51,202	13,349	54,934	161,666	93,383
New York	99	6,069	29	349	5,691	32,670	1,173,297	7,875,744	2,071,237	2,526,815	17,983,996	13,385,944
North Carolina	60	1,829	41	127	1,661	9,634	293,698	1,194,642	451,007	995,267	3,816,463	2,370,189
North Dakota	4	79	-------	9	70	275	16,175	62,223	14,999	38,283	191,947	138,665
Ohio	249	18,564	53	1,143	17,368	77,194	2,793,918	22,970,948	8,831,231	8,409,769	54,334,631	37,093,631
Oklahoma	19	802	2	57	743	4,410	102,901	716,455	148,840	512,994	1,693,669	1,031,835
Oregon	15	223	4	25	194	1,207	58,083	261,856	72,147	112,447	643,445	458,851
Pennsylvania	274	18,567	74	1,330	17,163	86,567	3,535,777	21,202,179	10,861,665	8,708,517	56,957,330	37,387,148
South Carolina	22	1,001	16	62	923	4,515	185,422	579,784	209,513	510,322	1,880,232	1,160,397
Tennessee	31	1,872	8	147	1,717	7,811	338,858	1,307,916	369,167	675,435	3,751,344	2,706,742
Texas	57	2,743	35	257	2,451	13,528	505,158	1,920,702	531,790	1,486,110	6,225,831	4,207,931
Utah	8	388	-------	44	344	2,787	88,886	325,880	174,585	124,603	1,173,033	873,845
Virginia	43	1,513	15	112	1,386	7,634	302,877	1,160,288	271,189	659,394	2,929,300	1,998,717
Washington	28	1,047	6	104	937	7,837	216,056	1,268,189	450,594	566,763	3,398,522	2,381,165
West Virginia	25	1,714	2	148	1,564	7,742	409,613	1,964,654	950,550	969,783	5,466,279	3,545,946
Wisconsin	31	506	18	57	431	3,659	129,466	485,657	86,841	305,970	1,219,230	826,419
Wyoming	3	41	-------	8	33	465	13,005	39,208	9,280	13,966	98,175	74,929
Other States [2]	4	129	-------	16	113	837	44,025	168,350	8,860	66,410	361,485	286,215

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] Nevada, 1 establishment; Rhode Island, 1; Vermont, 2.

POTTERY

[See headnote at top of p. 838]

Description of the industry.—This industry designation covers establishments engaged primarily in the manufacture of stoneware, earthenware, porcelain ware, vitreous china plumbing fixtures, and allied products.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Date for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	316	36,667	$45,149,818	$33,580,795	$110,597,338	$77,016,543	54,879
1925	309	36,536	46,768,867	33,925,756	111,078,028	77,152,272	50,141
1923	304	36,824	46,706,308	33,599,885	114,392,033	80,792,148	44,532
1921	271	28,458	35,355,509	25,227,227	84,217,427	58,990,200	(2)
1919	340	27,934	29,820,278	20,794,076	74,919,186	54,125,110	29,040
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	2.3	0.4	—3.5	—1.0	—0.4	—0.2	9.4
1923-1925	1.6	—.8	.1	1.0	—2.9	—4.5	12.6
1923-1927	3.9	—.4	—3.3	—.1	—3.3	—4.7	23.2
1919-1927	—7.1	31.3	51.4	61.5	47.6	42.3	89.0

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers, total	6,347	*Horsepower* 54,879	5,041	*Horsepower* 50,141	3,489	*Horsepower* 44,532
Steam engines	177	19,079	186	19,586	216	19,666
Steam turbines	6	709	16	193		
Internal-combustion engines	37	942	28	774	29	1,147
Water wheels and turbines	1	167	11	217	6	380
Electric motors driven by purchased current	6,126	33,982	4,800	29,371	3,238	23,339
Electric motors, total	7,797	43,787	6,113	37,041	3,757	27,157
Driven by purchased current	6,126	33,982	4,800	29,371	3,238	23,339
Driven by current generated in establishment reporting	1,671	9,805	1,313	7,670	519	3,818
Electric generators	62	*Kilowatts* 8,943	80	*Kilowatts* 10,033	(1)	*Kilowatts* (1)

[1] Not called for on schedule.

TABLE 3.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	316	39,749	120	2,962	36,667	54,879
California	15	974	10	84	880	2,348
Colorado	4	203	1	16	186	336
Illinois	16	1,574	2	105	1,467	2,038
Indiana	8	998	--------	79	919	1,357
Kentucky	3	90	3	8	79	181
Massachusetts	8	328	3	29	296	950
Michigan	6	914	2	70	842	1,641
New Jersey	56	7,570	19	740	6,811	10,195
New York	12	2,812	--------	190	2,622	3,575
North Carolina	4	19	5	5	9	26
Ohio	104	14,694	32	914	13,748	18,146
Pennsylvania	22	2,934	15	231	2,688	5,138
Texas	8	96	6	8	82	277
Washington	3	13	2	3	8	34
West Virginia	22	4,488	4	262	4,222	5,550
Other States [1]	25	2,042	16	218	1,808	3,087

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$8,012,390	$45,149,818	$25,183,725	$8,397,070	$110,597,338	$77,016,543
California	202,846	1,267,733	869,166	182,799	3,384,392	2,332,427
Colorado	38,531	159,775	40,562	34,512	321,043	245,969
Illinois	286,619	1,728,920	1,270,887	435,446	4,936,843	3,230,510
Indiana	196,442	1,226,138	1,095,828	158,383	3,341,346	2,087,135
Kentucky	30,200	80,469	21,775	27,395	323,035	273,865
Massachusetts	80,508	391,351	231,953	68,630	1,202,699	902,116
Michigan	289,870	1,230,396	741,915	214,492	2,874,557	1,918,150
New Jersey	1,900,280	9,685,704	3,768,526	1,618,921	22,852,003	17,464,556
New York	468,876	3,439,116	1,705,608	458,217	7,552,441	5,388,616
North Carolina	3,800	8,730	3,335	2,150	25,192	19,707
Ohio	2,511,257	15,800,411	9,286,458	3,168,322	38,721,965	26,267,185
Pennsylvania	594,480	3,219,853	1,695,514	545,506	8,007,048	5,766,028
Texas	6,906	61,311	33,846	17,720	211,913	160,347
Washington	5,150	10,842	2,038	2,404	41,573	37,131
West Virginia	850,668	4,756,945	2,869,826	1,048,532	11,433,071	7,514,713
Other States [1]	545,957	2,082,124	1,546,488	413,641	5,368,217	3,408,088

[1] Arkansas, 1 establishment; Connecticut, 1; District of Columbia, 1; Georgia, 1; Iowa, 1; Kansas, 1; Louisiana, 2; Maryland, 4; Minnesota, 1; Mississippi, 1; Missouri, 3; Nebraska, 1; Oregon, 1; Tennessee, 3; Virginia, 1; Wisconsin, 2.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

CONCRETE PRODUCTS

[A preliminary report for this industry was issued under date of April 3, 1929]

Description of the industry.—The establishments in this industry are engaged primarily in the manufacture of concrete products, such as building blocks, tile, brick, cast stone, pipe, garden furniture, laundry trays, poles, posts, vaults, caskets, and miscellaneous products, made from crushed rock or gravel and sand, bound together with cement. The classification does not cover concrete construction work on buildings, bridges, etc.

Detailed statistics of products (Tables 3 and 4).—Prior to 1925 the industry was canvassed with the "general schedule," which did not call for the quantities and the values of the several classes of products in detail, and consequently Table 3 gives figures for 1925 and 1927 only.

Table 4 gives statistics of products, by quantity and value, for selected States. Because of the necessity of presenting these statistics in such a manner as to avoid disclosing the production of individual establishments, it is impossible in some cases to give State figures for certain products, and in other cases it is possible to give figures for only one or two or a very few States. Where statistics can be presented for the leading State only, or for the leading State and one or more States immediately following in order of importance, this has been done. Where figures can be given for the States ranking second, third, and fourth but not for the leading State, the name of the leading State is entered in its proper alphabetical position but no figures are given, the names and figures for the second, third, and fourth States appear in alphabetical order, and an explanatory footnote is indexed into the spaces opposite the name of the leading State.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	2,330	17,808	$24,897,709	$33,913,086	$93,259,206	$59,346,120	54,342
1925	1,666	14,722	20,761,376	27,792,116	75,213,986	47,421,870	38,361
1923	1,128	10,766	14,834,042	20,485,547	53,602,321	33,116,774	30,748
1921	1,123	6,984	8,690,770	13,483,392	31,768,143	18,284,751	(2)
1919	2,785	8,378	9,310,899	13,913,317	33,664,332	19,751,015	22,178
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	39.9	21.0	19.9	22.0	24.0	25.1	41.7
1923–1925	47.7	36.7	40.0	35.7	40.3	43.2	24.8
1923–1927	106.6	65.4	67.8	65.5	74.0	79.2	76.7
1919–1927	−16.3	112.6	167.4	143.7	177.0	200.5	145.0

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers, total	6,401	*Horse-power* 54,342	4,347	*Horse-power* 38,361	2,645	*Horse-power* 30,748
Steam engines	83	2,650	91	2,492	} 105	2,755
Steam turbines			3	78		
Internal-combustion engines	545	4,383	450	3,431	379	2,775
Water wheels and turbines	18	87	2	25	5	52
Electric motors driven by purchased current	5,755	47,222	3,801	32,335	2,156	25,166
Electric motors, total	5,757	47,230	3,838	32,677	2,202	25,479
Driven by purchased current	5,755	47,222	3,801	32,335	2,156	25,166
Driven by current generated in establishment reporting	2	8	37	342	46	313
Electric generators	1	*Kilowatts* 12	4	*Kilowatts* 203	(1)	*Kilowatts* (1)

[1] Not called for on schedule.

TABLE 3.—CONCRETE PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1927 AND 1925

[In making use of the statistics in this report, it must be borne in mind that they relate solely to concrete products. For example, the figures for brick refer only to brick made of cement and do not include data for brick made of clay]

	1927	1925	Per cent of increase or decrease (−)
Aggregate value [1]	[2] $92,506,987	[3] $78,546,515	17.8
Building materials:			
Total tons	5,677,310	5,018,522	13.1
Total value	$55,880,923	[4] $50,107,800	11.5
Block and tile—			
Tons	5,007,574	4,183,945	19.7
Value	$37,151,488	$31,193,535	19.1
Brick—			
Tons	227,266	363,858	−37.5
Value	$1,636,368	$2,532,246	−35.4
Cast stone—			
Tons	324,105	354,164	−8.5
Value	$13,914,777	$12,843,418	8.3
Roofing tile—			
Total tons	118,365	116,555	1.6
Total value	$3,178,290	[4] $3,538,601	−10.2
Large—			
Tons	91,717	(5)	----------
Value	$2,401,426	(5)	----------
Small—			
Tons	26,648	(5)	----------
Value	$776,864	(5)	----------
Circular structures:			
Total tons	151,738	111,392	36.2
Total value	$1,724,257	$1,424,406	21.1
Cistern and manhole blocks—			
Tons	44,299	27,940	58.6
Value	$373,030	$223,199	67.1
Silo blocks—			
Tons	43,636	34,043	28.2
Value	$554,100	$517,179	7.1
Staves and slabs—			
Tons	63,803	49,409	29.1
Value	$797,127	$684,028	16.5

See footnotes at end of table.

TABLE 3.—CONCRETE PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1927 AND 1925—Continued

[See note at head of this table, p. 855]

	1927	1925	Per cent of increase or decrease (−)
Conduits and pipes:			
Total tons	1,860,217	1,283,429	44.9
Total value	$24,291,427	$17,761,052	36.8
Culvert pipe—			
Tons	344,774	349,389	−1.3
Value	$4,406,814	$4,480,831	−1.7
Draintile—			
Tons	95,033	79,919	18.9
Value	$840,254	$704,033	19.3
Electric conduits—			
Tons	11,473	1,857	517.8
Value	$267,097	$43,762	510.3
Hand-made pipe—			
Tons	66,175	(5)	----------
Value	$928,559	(5)	----------
Irrigation pipe—			
Tons	94,360	138,806	−32.0
Value	$1,252,901	$1,783,874	−29.8
Machine-made pipe—			
Tons	345,468	261,813	32.0
Value	$3,947,138	$3,617,445	9.1
Meter boxes—			
Tons	4,778	4,960	−3.7
Value	$128,708	$138,425	−7.0
Pressure pipe—			
Tons	78,184	46,503	68.1
Value	$2,157,144	$1,832,673	17.7
Sewer pipe, large—			
Tons	819,972	400,182	104.9
Value	$10,362,812	$5,160,009	100.8
Household accessories:			
Total tons	60,776	81,480	−25.4
Total value	$2,312,487	$2,650,772	−12.8
Garbage boxes—			
Tons	3,730	2,361	58.0
Value	$209,977	$128,095	63.9
Garden furniture—			
Tons	7,197	4,860	48.1
Value	$453,068	$467,173	−3.0
Laundry trays—			
Tons	36,382	60,455	−39.8
Value	$1,199,784	$1,620,920	−26.0
Septic tanks and sanitary fittings—			
Tons	13,467	13,804	−2.4
Value	$449,658	$434,584	3.5
Paving materials:			
Total tons	55,728	28,395	96.3
Total value	$649,748	$422,766	53.7
Crossing slabs—			
Tons	4,197	1,223	243.0
Value	$60,049	$17,107	251.2
Precast sidewalk slabs and curbing—			
Tons	38,447	22,229	73.0
Value	$417,100	$296,003	40.9
Precast units for railroad uses—			
Tons	13,084	4,943	164.7
Value	$172,599	$109,656	57.4
Poles and posts:			
Total tons	37,498	21,934	71.0
Total value	$1,808,120	$1,339,335	35.0
Fence posts—			
Tons	13,601	7,540	80.4
Value	$223,798	$146,736	52.5
Lighting standards—			
Tons	23,264	13,776	68.9
Value	$1,565,245	$1,171,620	33.6
Mail-box posts and transmission and trolley poles—			
Tons	633	618	2.4
Value	$19,077	$20,979	−9.1

See footnotes at end of table.

TABLE 3.—CONCRETE PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1927 AND 1925—Continued

[See note at head of this table, p. 855]

	1927	1925	Per cent of increase or decrease (−)
Monuments and grave markers:			
Tons	2,000	2,245	−10.9
Value	$131,162	$92,794	41.3
Vaults and caskets:			
Tons	52,023	34,529	50.7
Value	$2,088,037	$1,681,853	24.2
Art-marble and Spanish floor tile, value	$322,317	$359,953	−10.5
Other concrete products [6]	$3,298,509	$2,705,784	21.9

[1] Does not include the following values of concrete products reported as secondary products by establishments classified in other industries: 1927, $1,212,885; 1925, $1,247,860.

[2] The difference between this aggregate and the total value of products of the industry as given in Tables 1 and 5 is due to the exclusion from this table and the inclusion in Tables 1 and 5 of $752,219, representing receipts for custom work and the values of certain miscellaneous products not made of concrete.

[3] The difference between the value of products for 1925 as shown in Table 1 and in Table 3 is explained as follows: Table 1 was compiled from data reported by regular manufacturers of concrete products whose output during the census year was valued at $5,000 or more, and covers both concrete products and secondary products (products other than concrete) made by these manufacturers. Table 3 presents figures for concrete products only, as reported (*a*) by establishments covered by Table 1, (*b*) by manufacturers whose products were valued at less than $5,000, and (*c*) by builders and contractors.

[4] Does not include data for cement roofing tile, valued at $476,075 (quantity not reported), made in establishments classified in the roofing-materials industry for 1925. Establishments manufacturing cement roofing tile were included in the concrete-products industry for 1927.

[5] Not reported separately.

[6] Battery wells and boxes, chimney blocks, columns, concrete lumber and specials, cribbing, flush tanks, grease traps, grave copings, incinerators, lintels, mantels, marble mosaic, piers and pier blocks, piling, ready-mixed concrete, sills, terrazzo steps, troughs, vents, water tanks, and well curbing.

TABLE 4.—CONCRETE PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927

[This table presents statistics for the leading States for which separate figures can be given without disclosing the production of individual establishments. See "Detailed statistics of products," p. 854]

KIND	Number of establishments	Tons	Value	KIND	Number of establishments	Tons	Value
Block and tile, total	1,652	5,007,574	$37,151,488	Brick, total	214	227,266	$1,636,368
California	28	50,831	336,270	Florida	10	11,613	82,331
Connecticut	11	32,741	235,173	Illinois	7	4,490	41,117
Delaware	7	18,362	173,146	Massachusetts	9	8,928	58,851
Dist. Columbia	3	21,610	159,760	New Jersey	24	17,552	139,151
Florida	26	76,500	524,236	New York	20	26,445	183,638
Illinois	101	241,295	1,762,244	Pennsylvania	28	99,178	700,505
Indiana	83	174,468	1,170,788	Wisconsin	18	18,759	117,304
Iowa	30	30,214	216,244	Other States	98	40,301	313,471
Kansas	10	16,341	93,428				
Kentucky	20	52,556	378,204				
Louisiana	5	6,870	80,436	Cast stone, total	274	324,105	13,914,777
Maryland	37	94,446	651,294				
Massachusetts	60	194,592	1,410,734	California	23	29,491	1,259,205
Michigan	164	563,717	4,174,319	Connecticut	5	21,522	1,150,282
Minnesota	69	160,913	870,835	Florida	5	10,063	414,211
Missouri	16	53,716	478,494	Illinois	17	14,037	574,553
Nebraska	16	47,720	318,996	Maryland	6	7,274	230,471
New Jersey	161	698,360	5,531,498	Massachusetts	11	52,724	1,785,799
New York	178	709,909	5,241,415	Michigan	11	9,495	224,120
North Carolina	16	32,881	224,883	Missouri	5	8,437	351,639
Ohio	158	379,949	2,751,728	New York	27	54,801	3,524,044
Pennsylvania	232	832,678	6,273,481	Ohio	18	18,316	791,447
Rhode Island	10	19,256	153,652	Pennsylvania	32	14,418	539,672
Tennessee	14	30,446	260,093	Texas	17	23,273	826,831
Texas	21	28,806	244,307	Washington	8	4,828	271,478
Virginia	14	47,678	370,116	Other States	89	55,426	1,971,025
Washington	16	14,616	127,530				
West Virginia	13	35,246	282,840				
Wisconsin	81	290,520	2,247,702	Roofing tile, large	42	91,717	2,401,426
Other States	52	50,337	407,642	Roofing tile, small	31	26,648	776,864

TABLE 4.—CONCRETE PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927—Continued

[See note at head of this table, p. 857]

KIND	Number of establishments	Tons	Value
Cistern and manhole blocks, total	81	44,299	$373,030
Illinois	23	29,700	244,113
Other States	58	14,599	128,917
Silo blocks, total	35	43,636	554,100
Minnesota	10	16,503	164,048
Other States	25	27,133	390,052
Staves and slabs, total	67	63,803	797,127
Illinois	4	7,842	131,896
Indiana	7	16,546	161,730
Iowa	8	12,143	108,058
Kansas	5	6,248	139,844
Minnesota	12	5,259	58,674
New York	4	1,705	20,762
Ohio	4	6,109	84,295
Wisconsin	4	3,254	35,333
Other States	19	4,697	56,535
Culvert pipe, total	166	344,774	4,406,814
Illinois	9	23,968	334,242
Minnesota	11	19,691	243,536
New Jersey	3	18,034	256,791
New York	11	15,886	196,248
Oregon	12	12,270	172,714
Pennsylvania	11	28,408	262,330
South Carolina	4	14,134	170,631
Washington	20	22,989	381,685
West Virginia	4	35,523	428,930
Other States	81	153,871	1,959,707
Draintile, total	141	95,033	840,254
California	10	5,629	71,231
Indiana	11	9,601	90,947
Iowa	11	15,882	112,057
Michigan	7	2,992	32,186
Minnesota	26	28,068	222,992
Ohio	9	4,080	35,880
Washington	14	2,635	36,791
Wisconsin	9	11,557	88,714
Other States	44	14,589	149,456
Electric conduits	5	11,473	267,097
Hand-made pipe, total	56	66,175	928,559
California	13	31,367	488,715
Other States	43	34,808	439,844
Irrigation pipe, total	47	94,360	1,252,901
California	35	82,816	1,011,838
Other States	12	11,544	241,063
Machine-made pipe, total	61	345,468	3,947,138
California	23	103,513	1,185,850
Florida	6	46,343	487,524
Texas	6	32,293	444,285
Other States	26	163,319	1,829,479
Meter boxes, total	28	4,778	128,708
California	4	2,910	98,233
Other States	24	1,868	30,475
Pressure pipe	10	78,184	2,157,144
Sewer pipe, large, total	149	819,972	$10,362,812
California	9	237,186	2,260,050
Indiana	(1)	(1)	(1)
Michigan	8	65,495	909,758
New Jersey	9	48,283	936,643
New York	13	35,752	684,887
Other States	110	433,256	5,571,474
Garbage boxes	15	3,730	209,977
Garden furniture, total	179	7,197	453,068
California	13	546	55,747
Illinois	13	360	56,464
New York	10	2,510	39,254
Pennsylvania	18	1,416	120,388
Other States	125	2,365	181,215
Laundry trays, total	47	36,382	1,199,784
California	9	5,341	210,375
Illinois	5	11,876	319,867
Ohio	3	3,618	122,505
Other States	30	15,547	547,037
Monuments and grave markers	43	2,000	131,162
Septic tanks and sanitary fittings, total	138	13,467	449,658
California	13	1,209	26,793
Connecticut	4	850	31,685
Florida	7	2,589	86,491
Illinois	9	900	27,918
Michigan	14	535	24,321
Pennsylvania	16	2,393	96,637
Virginia	4	833	26,801
Other States	71	4,158	129,012
Vaults and caskets, total	190	52,023	2,088,037
Connecticut	3	2,545	69,060
Illinois	19	11,238	359,243
Indiana	20	5,744	243,305
Michigan	19	2,767	125,483
New Jersey	6	3,500	226,281
New York	10	7,861	238,999
Ohio	19	3,168	176,501
Pennsylvania	25	5,372	189,339
Other States	69	9,828	459,826
Crossing slabs	6	4,197	60,049
Precast sidewalk slabs and curbing	37	38,447	417,100
Precast units for railroad uses	6	13,084	172,599
Fence posts, total	65	13,601	223,798
New York	10	4,906	82,444
Other States	55	8,695	141,354
Lighting standards	20	23,264	1,565,245
Mail-box posts and transmission and trolley poles	4	633	19,077
Art-marble and Spanish floor tile	10	(2)	322,317

[1] The figures for Indiana, the leading State in the manufacture of large sewer pipe, can not be given without disclosing the production of individual establishments; included in "Other States."
[2] Not reported.

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[This table presents statistics for all States for which separate 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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [1]
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	2,330	22,980	1,866	3,306	17,808	54,342	$7,462,907	$24,897,709	$32,530,175	$1,382,911	[2] $93,259,206	$59,346,120
Alabama	18	311	9	36	266	632	69,682	263,885	405,240	19,882	1,192,868	767,746
Arizona	4	39	3	5	31	80	8,700	30,171	42,725	830	113,475	69,920
California	141	2,005	122	259	1,624	3,638	646,891	2,466,376	2,855,438	60,719	8,753,228	5,837,071
Colorado	10	57	2	11	44	110	18,373	45,693	73,472	3,552	200,352	123,328
Connecticut	23	492	14	41	437	415	125,842	635,632	352,402	15,905	1,589,478	1,221,171
Delaware	10	82	8	7	67	117	12,262	58,130	79,768	3,146	210,279	127,365
District of Columbia	5	135	3	21	111	561	47,774	137,631	222,899	10,683	578,972	345,390
Florida	51	636	26	102	508	1,350	218,989	636,237	1,040,988	24,290	2,264,314	1,199,036
Georgia	19	203	9	37	157	436	77,407	132,013	250,840	7,849	669,989	411,300
Illinois	145	1,512	121	233	1,158	2,725	664,448	1,787,646	2,120,846	94,695	6,580,281	4,364,740
Indiana	106	1,167	100	167	900	2,078	346,000	1,140,420	1,878,725	59,086	5,318,409	3,380,598
Iowa	45	239	42	33	164	1,135	60,082	186,656	265,821	15,473	710,105	428,811
Kansas	22	156	12	21	123	340	42,736	163,456	200,767	8,845	616,190	406,578
Kentucky	23	157	19	23	115	299	40,927	139,254	251,233	8,799	621,845	361,813
Louisiana	14	207	5	30	172	331	59,701	157,114	250,420	11,288	683,329	421,621
Maine	5	22	3	3	16	175	2,038	20,416	15,751	1,874	50,299	32,674
Maryland	46	416	35	62	319	1,145	128,116	358,360	484,573	20,843	1,329,561	824,145
Massachusetts	79	925	69	118	738	1,981	294,233	1,275,341	1,022,334	55,475	3,503,013	2,425,204
Michigan	183	1,367	183	156	1,028	3,867	395,145	1,617,154	2,176,234	105,258	6,300,973	4,019,481
Minnesota	84	595	78	120	397	1,948	146,274	478,435	732,931	48,387	1,982,742	1,201,424
Mississippi	8	83	5	9	69	37	18,525	58,102	58,040	1,432	171,192	111,720
Missouri	35	389	24	90	275	1,176	230,010	362,493	505,117	25,238	1,634,776	1,104,421
Montana	3	8	-------	1	7	8	1,970	7,586	16,366	585	34,368	17,417
Nebraska	26	162	17	37	108	424	74,022	119,424	230,654	10,261	532,840	291,925
New Jersey	186	1,837	141	247	1,449	4,271	544,133	2,026,396	3,411,761	140,055	8,830,153	5,278,337

See footnotes at end of table.

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927—Continued

[See note at head of this table, p. 859]

STATE	Number of establishments	Persons engaged in the industry: Total	Persons engaged in the industry: Proprietors and firm members	Persons engaged in the industry: Salaried officers and employees	Persons engaged in the industry: Wage earners (average for the year)	Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power: Materials and supplies	Cost of materials, supplies, fuel, and power: Fuel and power	Value of products	Value added by manufacture [1]
New York	233	2,349	180	366	1,803	7,547	994,008	3,352,940	3,228,656	184,209	11,014,412	7,601,547
North Carolina	21	228	17	33	178	339	66,681	151,359	274,390	9,189	660,432	376,853
North Dakota	4	22	2	5	15	33	7,355	15,761	37,177	1,192	98,901	60,532
Ohio	187	1,286	162	147	977	2,721	326,889	1,389,275	1,745,445	69,528	4,921,807	3,106,834
Oklahoma	11	79	6	11	62	124	20,846	66,220	124,745	5,100	308,237	178,392
Oregon	22	196	9	40	147	866	111,190	210,041	216,656	11,027	699,672	471,989
Pennsylvania	272	2,444	258	362	1,824	6,390	659,474	2,357,783	3,580,654	174,351	9,269,476	5,514,471
Rhode Island	14	151	13	26	142	698	58,631	263,339	395,279	21,209	802,589	386,101
South Carolina	6	64	1	9	54	146	23,350	41,487	95,855	2,667	250,143	151,621
South Dakota	9	54	2	15	37	224	18,971	37,996	69,580	3,093	214,947	142,274
Tennessee	19	289	9	48	232	557	86,915	219,588	350,321	14,253	956,349	591,775
Texas	55	821	41	89	691	1,051	196,512	736,381	838,569	20,337	2,443,597	1,584,691
Virginia	23	339	10	50	279	522	96,932	258,193	293,597	13,891	942,305	634,817
Washington	38	351	21	55	275	931	130,353	404,555	424,885	20,980	1,391,933	946,068
West Virginia	16	192	7	27	158	593	61,154	189,765	348,189	11,354	780,838	421,295
Wisconsin	97	797	74	141	582	2,021	315,543	808,676	1,317,568	58,154	3,569,108	2,193,386
Other States [3]	12	86	4	13	69	300	13,823	90,329	243,264	7,927	461,429	210,238

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] Concrete products, $92,506,987; other products $752,219. Concrete products to the value of $1,212,885 were also reported as secondary products of establishments engaged primarily in other industries.

[3] Arkansas, 2 establishments; Idaho, 1; New Hampshire, 3; Utah, 4; Wyoming, 2.

GLASS

[A preliminary report for this industry was issued under date of December 3, 1928]

Description of the industry.—This industry embraces establishments engaged in the manufacture of glass from raw materials, but does not include those engaged primarily in glass beveling, bending sheet glass, engraving glass, making glass labels, staining and ornamenting glass, or making glassware from purchased "blanks." It does, however, cover the reworking of glass when carried on by the same establishment in which the glass is manufactured. The primary products of the industry are: Plate and window glass of all kinds; pressed and blown glass, comprising tableware, lamps, chimneys, lantern globes, bulbs for electric lamps, opal ware, tubing, etc.; containers for food products, beverages, and medicinal and toilet preparations; and general-purpose containers. A small amount of cutting and decorating is done by establishments in the glass industry, but most of this is done by those classified in the "Glass cutting, staining, and ornamenting" industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	269	65,825	$81,352,734	$109,911,464	$282,394,330	$172,482,866	318,298
1925	310	69,371	86,735,571	113,652,436	295,959,424	182,306,988	271,639
1923	333	73,335	89,897,948	113,170,262	309,353,411	196,183,149	240,528
1921	329	54,748	68,224,248	86,036,406	213,471,309	127,434,903	(2)
1919	371	77,520	87,526,625	90,780,124	261,884,080	171,103,956	207,338
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	—13.2	—5.1	—6.2	—3.3	—4.6	—5.4	17.2
1923-1925	—6.9	—5.4	—3.5	.4	—4.3	—7.1	12.9
1923-1927	—19.2	—10.2	—9.5	—2.9	—8.7	—12.1	32.3
1919-1927	—27.5	—15.1	—7.1	21.1	7.8	.8	53.5

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	11,386	318,298	8,795	271,639	6,651	240,528
Steam engines	193	48,294	227	55,098	308	102,019
Steam turbines	38	63,680	33	43,896		
Internal-combustion engines	186	35,993	240	46,826	258	41,750
Water turbines					4	155
Electric motors driven by purchased current	10,969	170,331	8,295	125,819	6,081	96,604
Electric motors, total	10,713	282,518	17,958	259,167	15,078	185,611
Driven by purchased current	10,969	170,331	8,295	125,819	6,081	96,604
Driven by current generated in establishment reporting	8,744	112,187	9,663	133,348	8,997	89,007
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	222	82,761	337	106,151	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927

KIND	1927	1925	1923	1921
1. Glass industry, all products, total value	$282,394,330	$295,959,424	$309,353,411	$213,471,309
2. Glass and glassware	$276,128,839	$286,481,704	$306,269,334	$210,412,980
3. Other products (not normally belonging to the industry)	$6,265,491	$9,477,720	$3,084,077	$3,058,329
4. Glass and glassware made as secondary products in other industries, value	$633,344	(1)	(1)	(1)
Glass and glassware, all industries: Aggregate value (sum of 2 and 4)	$276,762,183	$286,481,704	$306,269,334	$210,412,980
Plate glass—				
Total cast, square feet	157,546,621	165,379,637	124,780,223	(2)
Rough (sold as such and on hand)—				
Number of establishments	9	14	(2)	(2)
Square feet	3,081,028	4,214,888	2,806,221	711,744
Value	$430,362	$504,110	$501,247	$107,107
Polished—				
Number of establishments	18	19	(2)	(2)
Square feet	118,123,960	117,369,400	94,469,718	56,238,783
Value	$44,258,486	$57,207,447	$66,103,223	$37,260,559
Window glass—				
Number of establishments	23	42	(2)	(2)
Square feet	481,021,350	567,150,590	510,214,838	260,065,080
Value	$26,813,507	$37,524,728	$42,623,203	$24,026,366
Obscured glass, including cathedral and skylight glass, and opalescent sheet glass—				
Number of establishments	20	21	(2)	(2)
Square feet	41,544,699	53,951,313	46,376,243	20,901,698
Value	$5,092,992	$6,915,578	$5,113,932	$2,546,949
Wire glass—				
Rough (sold as such and on hand)—				
Number of establishments	11	12	(2)	(2)
Square feet	25,795,402	28,743,480	28,801,764	13,948,837
Value	$2,746,466	$3,546,039	$3,881,538	$2,107,695
Polished—				
Number of establishments	6	6	(2)	(2)
Square feet	3,319,647	4,165,466	2,804,661	2,210,602
Value	$1,631,238	$2,263,599	$1,651,595	$1,208,592
Pressed and blown glass (except containers)—				
Tableware and ovenware—				
Number of establishments	38	37		
Value	$13,140,897	$12,230,201		
Pressed tumblers and goblets—				
Number of establishments	22	18		
Dozens	27,280,521	29,678,011		
Value	$7,773,776	$8,678,725		
Blown tumblers, stem ware, and bar goods—				
Number of establishments	29	32		
Value	$8,702,482	$7,099,853		
Lenses—				
Number of establishments	11	18		
Value	$1,579,031	$2,743,674		
Lamps—				
Number of establishments	9	8		
Value	$458,019	$426,615		
Chimneys—				
Number of establishments	18	18		
Dozens	2,987,483	3,438,879	$77,279,007	$55,718,148
Value	$2,280,935	$2,657,910		
Lantern globes—				
Number of establishments	16	13		
Dozens	869,247	1,079,683		
Value	$636,099	$866,822		
Shades, globes, and other gas and electric goods (except electric bulbs)—				
Number of establishments	27	30		
Dozens	1,806,712	2,431,064		
Value	$8,153,569	$10,314,792		
Tubing—				
Number of establishments	7	6		
Pounds	21,519,336	16,859,946		
Value	$4,023,458	$3,934,680		
Bulbs for electric lamps, opal ware, specialties, and other pressed and blown glass products, value	$29,908,625	$23,132,488		

[1] No industry other than the glass industry reported glass products for this year.
[2] No data.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927—Continued

KIND	1927	1925	1923	1921
Glass and glassware, all industries—Contd.				
Glass containers—				
Group 1.—Food-product containers—				
Milk bottles—				
Number of establishments	21	27		
Gross	2,180,575	2,086,360		
Value	$11,479,596	$10,588,306		
Fruit jars (home-pack)—				
Number of establishments	10	14		
Gross	1,515,363	1,288,425		
Value	$11,357,687	$6,640,756		
Narrow-neck blown bottles (packers' ware)—				
Number of establishments	38			
Gross	3,300,697			
Value	$11,665,367			
Wide-mouth blown bottles and jars (packers' ware)—				
Number of establishments	36			
Gross	6,299,191			
Value	$19,963,289			
Pressed ware (packers' ware)—				
Number of establishments	5			
Gross	762,708			
Value	$2,446,561		$107,230,589	$85,743,414
Group 2.—Beverage containers—				
Pressure ware—				
Number of establishments	35			
Gross	3,739,876	[3] $83,072,345		
Value	$15,995,378			
Nonpressure ware—				
Number of establishments	18			
Gross	412,892			
Value	$1,724,379			
Group 3.—Medicinal and toilet preparation containers (both pressed and blown)—				
Number of establishments	52			
Gross	12,097,393			
Value	$34,759,034			
Group 4.—General-purpose containers—				
Number of establishments	27			
Dozens	4,222,870			
Value	$4,989,255			
Other glass products	$4,751,695	$6,133,036	$1,885,000	$1,694,150

[3] Reported as "Bottles and jars" of the following classes: Prescriptions, vials, and druggists' ware, $15,037,247; beverage (soda, ginger ale, grape juice, mineral, etc.), $18,594,646; packers and preservers (other than home pack), $20,896,538; battery jars and other electrical goods (of this group), $902,912; patent and proprietary, $16,930,470; demijohns and carboys, $673,416; other bottles and jars, $10,037,116.

TABLE 4.—PRINCIPAL MATERIALS CONSUMED IN THE PRODUCTION OF GLASS, BY KIND AND QUANTITY, BY STATES: 1927 [1]

[This table presents statistics for all States for which separate figures can be given without disclosing the consumption by individual establishments. Some of the "Other States," however, reported greater consumption of these materials than some of the States shown separately]

STATE	Silica sand, tons	Soda ash, tons	Salt cake, tons	Lime, tons	Limestone, tons
United States	1,758,839	604,048	42,607	127,533	235,056
California	54,873	19,568	314	3,665	8,521
Illinois	198,249	70,165	3,739	25,924	28,967
Indiana	246,616	91,890	3,464	14,165	35,329
Maryland	18,228	7,018	(2)	2,081	----------
New Jersey	72,628	27,268	(2)	8,672	4,630
New York	81,940	27,465	473	5,983	3,870
Ohio	180,550	64,679	2,729	8,429	26,579
Oklahoma	27,585	13,259	814	2,430	4,609
Pennsylvania	452,381	148,400	14,717	25,015	79,206
Texas	16,701	4,945	(2)	(2)	(2)
West Virginia	281,796	92,735	7,684	21,381	18,031
Other States	127,292	36,656	8,673	9,788	25,314

[1] In addition, 1,151,267 tons of grinding sand was reported, for which the distribution by States can not be given without disclosing data for individual establishments.
[2] Included in total for "Other States."

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [1]
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	269	71,533	79	5,629	65,825	318,298	$13,853,782	$81,352,734	$79,441,368	$30,470,096	$282,394,330	$172,482,866
California	15	1,590	3	230	1,357	5,438	601,795	1,803,556	2,469,262	562,398	7,825,657	4,793,997
Illinois	13	5,117	2	309	4,806	39,337	743,853	6,248,324	6,189,532	2,743,792	21,477,679	12,544,355
Indiana	26	8,458	2	645	7,811	41,814	1,894,905	8,795,283	10,885,023	3,335,507	35,308,231	21,087,701
Maryland	8	2,007	8	180	1,819	3,035	469,732	1,936,675	1,032,301	531,043	5,487,115	3,923,771
New Jersey	11	4,712	1	387	4,324	12,276	972,665	4,993,597	4,102,167	1,721,259	15,666,810	9,843,384
New York	19	3,646	2	479	3,165	6,611	1,037,411	4,364,244	3,508,003	1,270,602	16,150,288	11,371,683
Ohio	25	8,969	-------	549	8,420	32,569	1,455,470	11,543,962	10,137,086	3,325,298	33,938,992	20,476,608
Oklahoma	11	1,253	5	92	1,156	2,028	279,764	1,317,866	2,025,391	370,375	4,838,257	2,442,491
Pennsylvania	72	19,835	30	1,600	18,205	98,187	4,022,578	22,636,627	22,268,576	9,811,694	78,670,803	46,590,533
Texas	3	318	-------	29	289	833	80,658	396,786	689,556	133,029	1,818,516	995,931
West Virginia	48	11,022	23	809	10,190	28,217	1,507,961	12,798,460	12,266,345	4,198,072	44,161,122	27,696,705
Other States [2]	18	4,606	3	320	4,283	47,953	786,990	4,517,354	3,868,126	2,467,027	17,050,860	10,715,707

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Arkansas, 3 establishments; Florida, 1; Kansas, 2; Louisiana, 3; Massachusetts, 1; Michigan, 1; Missouri, 2; Rhode Island, 1; South Carolina, 1; Tennessee, 2; Wyoming, 1.

LIME

[A preliminary report for this industry was issued under date of October 29, 1928]

Description of the industry.—This industry designation is applied to establishments engaged in the burning of lime, chiefly from limestone but to a small extent from shell and other substances. The principal products are quicklime and hydrated (slaked) lime. The quarrying and the burning of limestone are usually carried on by the same establishments, and for such establishments the statistics given cover both branches of the work. (Establishments engaged exclusively in the quarrying of limestone, which is not a manufacturing operation, are not classified in this industry.)

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	260	10,903	$12,190,918	$17,269,467	$41,587,458	$24,317,991	84,195
1925	283	12,095	14,002,128	20,049,363	50,736,499	30,687,136	87,871
1923	301	12,290	13,522,069	19,700,191	47,243,756	27,543,565	74,205
1921	292	10,345	9,801,651	14,214,205	31,015,487	16,801,282	(2)
1919	476	11,405	10,869,196	14,296,925	33,970,463	19,673,538	51,735
	PER CENT OF INCREASE OR DECREASE (—)						
1925-1927	—8.1	—16.6	—12.9	—13.9	—18.0	—20.8	—4.2
1923-1925	—6.0	—1.6	3.6	1.8	7.4	11.4	18.4
1923-1927	—13.6	—11.3	—9.8	—12.3	—12.0	—11.7	13.5
1919-1927	—45.4	—4.4	12.2	20.8	22.4	23.6	62.7

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers, total	3,409	*Horsepower* 84,195	3,179	*Horsepower* 87,871	2,198	*Horsepower* 74,205
Steam engines	140	9,983	203	13,678	237	18,293
Steam tubines	6	1,091	15	4,266		
Internal-combustion engines	104	4,837	128	4,902	130	3,957
Water wheels and turbines	2	680	22	1,227	5	575
Electric motors driven by purchased current	3,157	67,604	2,811	63,798	1,826	51,380
Electric motors, total	3,330	70,650	3,092	70,276	2,025	56,450
Driven by purchased current	3,157	67,604	2,811	63,798	1,826	51,380
Driven by current generated in establishment reporting	173	3,046	281	6,478	199	5,070
Electric generators	28	*Kilowatts* 2,946	47	*Kilowatts* 8,539	(1)	*Kilowatts* (1)

[1] Not called for on schedule.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1921 TO 1927

KIND	1927	1925	1923	1921
1. Lime industry, all products, total value	$41,587,458	$50,736,499	$47,243,756	$31,015,487
2. Lime	36,222,321	41,849,900	39,544,760	26,221,793
3. Other products (not normally belonging to the industry)	5,365,137	8,886,599	7,698,996	4,793,694
4. Lime made as a secondary product in other industries, value	872,174	593,335	1,175,094	109,325
Lime, all industries: Total value (sum of 2 and 4)	$37,094,495	$42,443,235	$40,719,854	$26,331,118
Quicklime—				
Tons	2,334,377	2,608,582	2,510,283	1,665,109
Value	$21,403,714	$26,310,529	$25,693,305	$18,732,086
Hydrated lime—				
Tons	1,471,654	1,453,600	1,255,562	726,337
Value	$14,152,292	$15,539,371	$13,851,455	$7,489,707
Agricultural lime—				
Tons	317,382	(1)	(1)	(1)
Value	$1,538,489	(1)	(1)	(1)
Not distributed by kind, value		$593,335	$1,175,094	$109,325

[1] Not reported separately.

TABLE 4.—PRINCIPAL PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1927

[This table presents statistics for all States for which separate figures can be given without disclosing the production of individual establishments]

KIND AND STATE	Number of establishments	Tons	Value	KIND AND STATE	Number of establishments	Tons	Value
QUICKLIME				HYDRATED LIME			
Total	231	2,334,377	$21,403,714	Total	154	1,471,654	$14,152,292
Alabama	10	180,502	1,140,562	Alabama	7	33,822	314,580
Arkansas and Texas	7	76,163	738,443	California	4	15,452	222,011
California	8	57,678	701,368	Illinois and Wisconsin	14	45,897	471,711
Connecticut	6	43,021	619,580	Indiana	4	42,097	386,875
Illinois	9	75,608	766,481	Maryland	4	25,086	237,456
Idaho and Montana	3	12,603	112,360	Massachusetts and Vermont	8	29,002	300,182
Indiana	6	62,858	443,489	Missouri	10	95,008	951,481
Iowa and Minnesota	5	22,886	259,527	New York	6	34,178	299,874
Maine and Vermont	13	139,580	1,822,326	Ohio	21	619,110	6,113,258
Maryland	5	14,792	115,147	Pennsylvania	21	217,826	1,951,895
Massachusetts	9	168,512	2,617,533	Tennessee	8	79,623	592,588
Michigan	8	86,328	749,021	Texas	3	33,715	380,783
Missouri	12	203,948	1,680,553	Virginia	10	55,970	494,126
Nevada and Utah	6	19,851	186,954	West Virginia	4	45,187	367,265
New York	9	43,871	465,632	Other States	30	99,681	1,068,207
Ohio	17	141,536	1,085,566				
Pennsylvania	30	366,013	2,828,294				
Tennessee	8	86,243	660,510				
Virginia	17	101,617	829,442				
Washington	4	26,672	387,797				
West Virginia	6	194,721	1,412,531				
Wisconsin	19	180,974	1,491,370				
Other States	14	28,400	289,228				

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	Persons engaged in the industry: Total	Persons engaged in the industry: Proprietors and firm members	Persons engaged in the industry: Salaried officers and employees	Persons engaged in the industry: Wage earners (average for the year)	Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power: Materials and supplies	Cost of materials, supplies, fuel, and power: Fuel and power	Value of products	Value added by manufacture [1]
United States	260	12,048	72	1,073	10,903	84,195	$2,355,483	$12,190,918	$9,690,298	$7,579,169	$41,587,458	$24,317,991
Alabama	10	621	2	48	571	3,449	118,944	410,615	576,228	265,296	1,508,109	666,585
Arkansas	3	271	------	25	246	425	39,350	98,251	74,952	93,125	379,611	211,534
California	10	255	2	18	235	1,408	48,348	339,321	236,159	154,130	1,068,269	677,980
Colorado	3	37	------	4	33	240	10,400	33,904	21,780	19,385	97,241	56,076
Connecticut	6	190	1	10	179	879	25,245	250,227	232,767	104,947	705,269	367,555
Illinois	8	334	4	25	305	2,860	75,188	377,828	232,438	221,844	1,230,323	776,041
Indiana	6	435	------	27	408	2,589	76,635	460,160	159,813	226,405	1,044,712	658,494
Maryland	7	202	3	28	171	866	52,090	122,156	82,744	78,771	515,921	354,406
Massachusetts	9	624	3	40	581	2,816	119,635	815,877	828,273	593,061	2,932,728	1,511,394
Michigan	8	291	1	21	269	2,253	66,394	232,070	445,748	225,017	1,279,611	608,846
Missouri	12	843	------	112	731	4,531	214,875	806,478	511,024	556,913	2,757,308	1,689,371
New York	12	224	3	17	204	2,180	42,143	285,052	200,186	181,331	828,174	446,657
Ohio	22	1,512	7	126	1,379	17,811	270,396	1,949,204	1,610,125	1,196,845	7,739,286	4,932,316
Pennsylvania	36	1,846	13	168	1,665	11,105	317,968	2,181,026	1,210,688	1,120,760	6,197,057	3,865,609
Tennessee	9	539	3	50	486	2,737	125,560	399,621	266,995	187,185	1,305,170	850,990
Texas	4	440	5	31	404	1,457	101,064	337,113	317,850	175,547	1,160,687	667,290
Utah	5	91	3	11	77	465	21,028	93,953	29,994	24,439	229,067	174,634
Vermont	8	184	3	11	170	1,705	20,801	201,654	259,658	84,203	699,753	355,892
Virginia	22	771	5	88	678	5,169	173,369	606,938	467,914	331,709	1,905,171	1,105,548
Washington	5	157	------	20	137	285	56,253	171,123	104,514	35,239	481,913	342,160
West Virginia	8	574	3	43	528	7,046	105,000	550,233	802,023	526,803	2,499,856	1,171,030
Wisconsin	19	573	1	50	522	4,111	78,745	540,815	233,961	610,496	1,862,793	1,018,336
Other States [2]	28	1,034	10	100	924	7,808	196,052	927,299	784,464	565,718	3,159,429	1,809,247

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] Arizona, 1 establishment; Florida, 2; Georgia, 1; Idaho, 1; Iowa, 2; Kentucky, 1; Maine, 5; Minnesota, 3; Montana, 2; Nevada, 1; New Jersey, 2; New Mexico, 1; North Carolina, 2; Oklahoma, 1; Rhode Island, 1; South Carolina, 1; South Dakota, 1.

MARBLE, GRANITE, SLATE, AND OTHER STONE PRODUCTS

[A preliminary report for this industry was issued under date of March 21, 1929]

Description of the industry.—The establishments in this industry are engaged primarily in cutting, shaping, and finishing marble, granite, slate, and other stone for building, monumental, and miscellaneous uses. The quarrying and the finishing of stone are carried on to some extent by the same establishments. In some instances the returns covered both quarrying and manufacturing operations, and, although every effort was made to eliminate the data for quarrying, it was not possible to do so in all cases. The census does not cover the numerous small yards which are engaged in the purchase and sale of finished or partly finished monuments and tombstones but which do no work on them except lettering and finishing to individual order. The manufacture of grindstones, pulpstones, hones, and whetstones is not included in this industry.

Detailed statistics of products (Tables 3 and 4).—The census for 1927 is the first at which a special schedule, calling for detailed data on the several classes of products, was used for this industry. No comparable product figures are available, therefore, for earlier years except the three items for 1925 given in footnotes to Table 3.

Table 4 gives statistics of products, by kind and value, for selected States. Because of the necessity of presenting these statistics in such a manner as to avoid disclosing the production of individual establishments, it has been necessary to present totals only for a few products, in some cases to give figures for only one or two or a very few States, and in still other cases to make combinations of the figures for three States in the same geographic division. Where statistics can be presented for the leading State only, or for the leading State and one or more States immediately following in order of importance, this has been done. Where figures can be given for the States ranking second and third but not for the leading State, the name of the leading State is entered in its proper alphabetical position but no figures are given, the names and figures for the second and third States appear in alphabetical order, and an explanatory footnote is indexed into the spaces opposite the name of the leading State.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	1,978	40,474	$68,490,655	$66,328,248	$201,181,281	$134,853,033	295,174
1925	2,356	36,575	59,592,678	66,976,305	193,046,836	126,070,531	240,297
1923	2,691	40,056	61,599,519	66,882,788	191,537,444	124,654,656	213,133
1921	2,925	30,260	44,135,464	53,067,050	137,241,121	84,174,071	(2)
1919	4,240	32,768	38,354,822	49,524,341	129,164,653	79,640,312	169,177
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	—16.0	10.7	14.9	—1.0	4.2	7.0	22.8
1923–1925	—12.4	—8.7	—3.3	.1	.8	1.1	12.7
1923–1927	—26.5	1.0	11.2	—.8	5.0	8.2	38.5
1919–1927	—53.3	23.5	78.6	33.9	55.8	69.3	74.5

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horse-power		*Horse-power*		*Horse-power*
Prime movers, total	13,811	295,174	11,105	240,297	9,481	213,133
Steam engines	525	37,888	573	41,251	} 884	55,111
Steam turbines	6	2,540	6	3,785		
Internal-combustion engines	189	5,313	262	5,447	358	7,103
Water wheels and turbines	56	15,641	60	13,582	78	14,857
Electric motors driven by purchased current	13,035	233,792	10,204	176,232	8,161	136,062
Electric motors, total	14,741	264,249	11,951	210,295	9,754	168,415
Driven by purchased current	13,035	233,792	10,204	176,232	8,161	136,062
Driven by current generated in establishment reporting	1,706	30,457	1,747	34,063	1,593	32,353
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	97	21,741	186	22,960	(1)	(1)

[1] Not called for on schedule.

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

KIND	Value
Aggregate	[1] $201,181,281
Building stones, total [2]	122,731,466
Marble, total	45,759,500
For exterior use	4,531,053
For interior use	41,228,447
Granite, total	11,495,703
For exterior use	11,326,196
For interior use	169,507
Limestone, total	52,240,008
For exterior use	51,273,617
For interior use	966,391
Slate, total	7,281,512
For roofing [3]	6,001,063
For interior use	1,280,449
Other stones (sandstone, bluestone, etc.), total	5,954,743
For exterior use	4,739,301
For interior use	1,215,442
Monumental stones (monuments, tombstones, and other stone articles for cemetery use), total [4]	59,693,668
Marble	10,781,524
Monumental stones—Continued.	
Granite	$48,462,006
Other stones (limestone, slate, etc.)	450,138
Stones for ornamental and miscellaneous uses, total [2]	14,481,174
Marble, total	1,682,171
Statuary	36,151
Table tops	384,270
Other, including pedestals	1,261,750
Granite, total	6,241,016
Paving blocks	2,890,725
Curbing	2,086,433
Other	1,263,858
Slate, total	3,409,934
Blackboards and school slates	1,545,565
Switchboard panels and other electrical insulation	1,527,469
Other	336,900
Limestone	150,357
Other stones (sandstone, bluestone, onyx, etc.)	2,997,696
Stonework not reported in detail	1,442,086
Other products, value, and receipts for contract and custom work	2,832,887

[1] In addition, stonework valued at $724,007 was reported as a secondary product by establishments classified in other industries.
[2] Combined value of building stones and stones for ornamental and miscellaneous uses, for 1925, $125,272,023. (See "Detailed statistics of products," p. 868.)
[3] Value, for 1925, $4,273,536.
[4] Value, for 1925, $65,009,614.

TABLE 4.—PRODUCTS, BY KIND AND VALUE, BY STATES: 1927

[This table presents statistics for leading States for which separate statistics can be given without disclosing the production of individual establishments. See "Detailed statistics of products," p. 868]

KIND AND STATE	Number of establishments	Value
BUILDING STONES FOR EXTERIOR USE		
Marble, total	79	$4,531,053
Granite, total	188	11,326,196
California	10	953,099
Massachusetts	20	1,412,453
Minnesota	8	1,461,793
New Hampshire	6	969,880
New York	24	2,198,340
North Carolina	6	755,717
Vermont	9	780,836
Other States	105	2,794,078
Limestone, total	373	51,273,617
Connecticut	5	326,203
District of Columbia	6	545,220
Illinois	71	7,524,307
Indiana	47	18,269,727
Iowa	9	626,467
Kansas	6	246,892
Kentucky	9	980,874
Maryland	5	382,153
Massachusetts	4	768,114
Michigan	21	2,791,597
Minnesota	8	631,222
Missouri	9	736,989
Nebraska	3	236,825
New Jersey	17	3,199,944
New York	40	6,816,679
Ohio	15	1,131,088
Oklahoma	4	402,487
Pennsylvania	27	2,526,769
Tennessee	7	504,165
Texas	8	473,416
Wisconsin	10	945,531
Other States	42	1,206,948
Roofing slate, total	83	6,001,063
New York	7	408,556
Pennsylvania	33	2,293,134
Vermont	30	2,484,814
Virginia	4	507,086
Other States	9	307,473
Other stones (sandstone, bluestone, etc.), total	100	4,739,301
California	3	279,940
New York	25	485,911
Ohio	21	2,501,692
Pennsylvania	16	613,454
Other States	35	858,304
BUILDING STONES FOR INTERIOR USE		
Marble, total	209	41,228,447
California	20	3,064,165
Illinois	17	2,894,967
Massachusetts	13	1,678,343
Missouri	10	1,897,009
New Jersey	9	1,317,164
New York	61	12,881,356
Pennsylvania	12	1,193,202
Tennessee	8	4,358,619
Wisconsin	3	1,460,665
Connecticut, Rhode Island, and Vermont	7	3,072,792
Other States	49	7,410,165
BUILDING STONES FOR INTERIOR USE—continued		
Granite, total	9	$169,507
Limestone, total	27	966,391
Slate, total	42	1,280,449
Pennsylvania	25	924,524
Other States	17	355,925
Other stones (sandstone, bluestone, etc.), total	12	1,215,442
MONUMENTS, TOMBSTONES, AND OTHER STONE ARTICLES FOR CEMETERY USE		
Marble, total	683	10,781,524
Alabama	13	210,634
Arkansas	6	54,500
California	33	261,798
Colorado	6	41,734
Connecticut	15	76,949
Delaware	9	47,923
Florida	7	106,207
Georgia	39	3,283,373
Illinois	19	224,942
Indiana	11	107,254
Kentucky	12	83,260
Louisiana	7	80,484
Maine	16	82,610
Maryland	26	136,829
Michigan	16	94,683
Minnesota	9	41,630
Mississippi	7	219,187
Missouri	24	162,905
New Jersey	11	55,643
New York	47	513,018
North Carolina	23	319,634
Ohio	18	216,468
Oklahoma	5	29,380
Pennsylvania	89	561,168
South Carolina	7	66,139
Tennessee	25	418,509
Texas	44	295,561
Virginia	19	180,154
Washington	8	32,759
Wisconsin	23	237,825
Massachusetts, New Hampshire, and Vermont	55	2,394,535
Other States	34	143,829
Granite, total	1,214	48,462,006
California	50	1,169,917
Colorado	12	432,628
Connecticut	22	774,544
Georgia	37	1,138,515
Illinois	35	1,569,224
Indiana	16	376,840
Iowa	9	729,929
Kansas	9	240,799
Kentucky	16	457,147
Maine	27	405,876
Maryland	28	565,666
Massachusetts	124	5,003,939
Michigan	17	575,790
Minnesota	37	2,776,006
Missouri	32	694,192
Nebraska	8	456,809
New Hampshire	37	655,692
New Jersey	17	679,928

TABLE 4.—PRODUCTS, BY KIND AND VALUE, BY STATES: 1927—Continued

[See note at head of this table]

KIND AND STATE	Number of establishments	Value
MONUMENTS, TOMBSTONES, AND OTHER STONE ARTICLES FOR CEMETERY USE—continued		
Granite—Continued.		
New York	96	$5,656,669
North Carolina	25	1,051,356
Ohio	28	1,090,705
Oregon	9	231,357
Pennsylvania	114	3,239,558
Rhode Island	11	801,140
South Carolina	11	346,954
Tennessee	20	312,629
Texas	54	1,000,590
Vermont	162	11,894,522
Virginia	20	395,722
Washington	15	291,193
Wisconsin	38	2,143,370
Other States	78	1,302,800
Other stones (limestone, slate, etc.), total	83	450,138
Ohio	4	191,526
Pennsylvania	17	75,511
Other States	62	183,101
STONES FOR ORNAMENTAL AND MISCELLANEOUS USES		
Marble statuary, total	21	36,151
Marble table tops, total	26	384,270
New York	7	307,127
Other States	19	77,143
Other marble, including pedestals, total	31	1,261,750
New York	13	811,178
Other States	18	450,572
Granite paving blocks, total	48	2,890,725
Georgia	5	208,330
Maine	12	1,173,625
Massachusetts	5	496,644
Wisconsin	5	555,558
Other States	21	456,568
STONES FOR ORNAMENTAL AND MISCELLANEOUS USES—continued		
Granite curbing, total	51	$2,086,433
Georgia	6	517,577
Massachusetts	6	449,365
Other States	39	1,119,491
Other granite, total	53	1,263,858
Wisconsin	6	378,806
Other States	47	885,052
Slate blackboards and school slates, total	32	1,545,565
Pennsylvania	27	1,531,326
Other States	5	14,239
Switchboard panels and other electrical insulation, slate, total	38	1,527,469
Maine	(1)	(1)
Pennsylvania	17	279,448
Vermont	8	451,364
Other States	13	796,657
Other slate, total	32	336,900
Pennsylvania	10	162,381
Vermont	8	82,862
Other States	14	91,657
Limestone, total	13	150,357
Other stones (sandstone, bluestone, onyx, etc.), total	39	2,997,696
California	6	470,983
New York	10	270,294
Ohio	6	1,863,557
Other States	17	392,862

[1] The figures for Maine, the leading State in the manufacture of slate switchboard panels and other slate electrical insulation, can not be given without disclosing the production of individual establishments.

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

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

STATE	Number of establishments	Persons engaged in the industry: Total	Persons engaged in the industry: Proprietors and firm members	Persons engaged in the industry: Salaried officers and employees	Persons engaged in the industry: Wage earners (average for the year)	Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power: Materials and supplies	Cost of materials, supplies, fuel, and power: Fuel and power	Value of products	Value added by manufacture [1]
United States	1,978	48,201	1,694	6,033	40,474	295,174	$16,719,146	$68,490,655	$60,774,569	$5,553,679	[2] $201,181,281	$134,853,033
Alabama	16	436	11	65	360	2,400	154,192	348,502	599,230	54,866	1,332,407	678,311
Arkansas	8	70	18	3	49	411	5,000	65,175	78,798	10,501	256,266	166,967
California	74	1,466	58	224	1,184	9,800	609,436	2,268,331	2,275,469	120,106	6,677,369	4,281,794
Colorado	16	111	10	26	75	1,091	62,622	148,625	200,019	14,892	556,476	341,565
Connecticut	31	428	24	61	343	2,195	168,677	671,163	499,358	49,819	1,793,780	1,244,603
Delaware	12	69	14	6	49	248	8,794	59,376	150,321	7,650	306,900	148,929
District of Columbia	9	181	9	20	152	1,210	54,273	248,326	315,478	18,134	846,740	513,128
Florida	8	107	5	16	86	260	30,565	107,672	129,674	7,220	331,826	194,932
Georgia	57	2,781	48	243	2,490	13,048	488,096	2,530,409	1,723,732	298,098	8,388,710	6,366,880
Idaho	3	33	2	7	24	561	17,208	32,205	21,879	3,658	101,968	76,431
Illinois	121	1,973	95	305	1,573	9,882	1,124,833	3,473,426	4,595,759	203,723	12,624,159	7,824,677
Indiana	60	4,284	30	987	3,267	37,431	2,484,244	5,708,468	5,180,291	609,862	18,960,226	13,170,073
Iowa	19	319	18	53	248	1,607	163,039	404,807	573,007	37,010	1,628,989	1,018,972
Kansas	14	130	14	30	86	813	58,518	150,767	225,330	13,382	566,094	327,382
Kentucky	23	367	23	70	274	2,213	127,617	490,628	596,767	44,079	1,804,231	1,163,385
Louisiana	8	112	8	19	85	377	38,741	184,436	159,305	9,009	571,488	403,174
Maine	40	1,003	27	52	924	7,258	194,091	1,319,027	398,017	121,869	2,697,009	2,177,123
Maryland	39	856	33	94	729	4,280	285,634	1,073,082	1,195,259	86,852	3,131,494	1,849,383
Massachusetts	157	2,643	189	288	2,166	12,409	860,888	3,820,376	2,873,256	335,183	10,833,589	7,625,150
Michigan	45	677	33	135	509	4,165	450,786	1,093,115	1,676,645	74,991	4,484,650	2,733,014
Minnesota	52	1,576	42	194	1,340	11,362	528,680	2,194,621	1,721,784	261,103	6,352,415	4,369,528
Mississippi	7	81	7	14	60	296	23,686	49,445	122,780	6,710	324,331	194,841
Missouri	48	1,174	48	133	993	7,273	330,689	1,514,447	1,332,682	142,556	4,225,224	2,749,986
Montana	6	28	4	8	16	224	8,071	27,267	21,264	3,367	97,363	72,732
Nebraska	12	195	9	47	139	1,062	106,489	226,284	344,327	19,332	922,344	558,685

New Hampshire	42	698	39	50	609	4,835	113,454	1,045,599	466,839	79,495	2,146,802	1,600,468
New Jersey	42	849	31	119	699	4,192	426,301	1,734,476	1,658,542	77,391	5,741,720	4,005,787
New York	238	5,785	188	758	4,839	30,126	2,657,542	12,240,429	9,878,347	599,482	33,789,532	23,311,703
North Carolina	32	1,042	42	60	940	4,457	115,236	1,266,366	756,331	84,263	2,965,466	2,124,872
Ohio	66	1,797	31	218	1,548	16,033	723,121	2,505,343	2,436,266	190,500	8,372,385	5,745,619
Oklahoma	15	230	17	27	186	844	115,423	265,808	364,038	19,804	979,997	596,155
Oregon	10	111	9	19	83	604	41,314	153,171	159,010	9,837	563,816	394,969
Pennsylvania	197	4,518	163	400	3,955	25,899	988,736	5,765,173	4,484,703	563,909	14,838,749	9,790,137
Rhode Island	14	409	16	43	350	1,566	90,319	610,996	391,996	45,322	1,389,028	951,710
South Carolina	11	139	11	24	104	705	43,991	131,362	104,368	7,773	413,771	301,630
South Dakota	4	58	1	9	48	390	20,414	67,577	26,716	8,135	206,161	171,310
Tennessee	38	1,827	37	162	1,628	10,941	575,932	1,928,885	2,284,510	224,784	6,741,993	4,232,699
Texas	62	578	74	65	439	2,666	157,544	624,141	643,005	61,488	2,085,775	1,381,282
Utah	4	30	--------	8	22	200	8,407	40,116	36,169	4,761	91,765	50,835
Vermont	203	6,033	183	645	5,205	45,440	1,426,010	8,411,063	7,126,510	743,427	21,317,503	13,447,566
Virginia	29	1,164	19	133	1,012	5,649	246,090	999,753	916,108	91,727	2,668,233	1,660,398
Washington	20	252	12	35	205	2,124	74,599	370,305	256,979	25,971	935,799	652,849
West Virginia	8	52	5	6	41	378	11,655	59,262	88,833	5,063	215,169	121,273
Wisconsin	55	1,519	36	148	1,335	6,202	491,702	2,051,915	1,670,389	155,884	5,859,551	4,033,278
Other States [3]	3	10	1	4	5	47	6,487	8,935	14,479	691	42,018	26,848

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] See footnote 1, Table 3, p. 8
[3] Arizona, 2 establishments; North Dakota, 1.

MIRRORS

[A preliminary report for this industry was issued under date of February 1, 1929]

Description of the industry.—The establishments in this industry are engaged primarily in the manufacture of mirrors, both framed and unframed, such as pier glasses, mantel mirrors, hall mirrors, mirrors for show cases, and hand mirrors.

Detailed statistics of products.—The census for 1927 is the first at which a special schedule, calling for detailed data on the several classes of mirrors, was used. For this reason the product statistics in Table 3 can not be given in as much detail for 1925 as for 1927.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	250	4,308	$6,360,813	$16,188,614	$31,424,943	$15,236,329	7,630
1925	218	4,153	6,104,015	19,713,293	34,948,504	15,235,211	6,306
1923	195	3,464	4,879,043	20,091,199	33,467,973	13,376,774	5,722
1921	180	2,368	3,232,984	10,082,161	16,739,545	6,657,384	(2)
1919	186	2,599	2,819,140	12,498,733	20,830,775	8,332,042	4,233
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	14.7	3.7	4.2	—17.9	—10.1	(3)	21.0
1923–1925	11.8	19.9	25.1	—1.9	4.4	13.9	10.2
1923–1927	28.2	24.4	30.4	—19.4	—6.1	13.9	33.3
1919–1927	34.4	65.8	125.6	29.5	50.9	82.9	80.3

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.
[3] Less than one-tenth of 1 per cent increase.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers, total	1,271	*Horsepower* 7,630	987	*Horsepower* 6,306	602	*Horsepower* 5,722
Steam engines	21	1,677	14	1,097	30	1,868
Steam turbines			2	260		
Internal-combustion engines	1	3	4	85	4	65
Electric motors driven by purchased current	1,249	5,950	967	4,864	568	3,789
Electric motors, total	1,304	6,222	1,006	5,044	609	4,093
Driven by purchased current	1,249	5,950	967	4,864	568	3,789
Driven by current generated in establishment reporting	55	272	39	180	41	304
Electric generators	6	*Kilowatts* 299	6	*Kilowatts* 440	(1)	*Kilowatts* (1)

[1] Not called for on schedule.

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

KIND	1927		1925	
	Number of establishments	Value	Number of establishments	Value
Total	[1] 250	[2] $31,424,943	[1] 218	[2] $34,948,504
Mirrors, plate-glass, total	[1] 226	19,662,125	196	22,988,169
Framed	82	4,821,531		([3])
Unframed	204	14,840,594		([3])
Mirrors, other than plate-glass, total	[1] 102	3,248,689	104	3,089,927
Framed	29	427,721		([3])
Unframed	89	2,820,968		([3])
Mirrors and other glass, not reported in detail	7	678,000		
Other products [4]	157	7,836,129	105	8,870,408

[1] This total is not the sum of the items below because, in most cases, one establishment manufactures more than one kind of the products reported.
[2] Does not include the following values of mirrors made as secondary products by establishments classified in other industries: 1927, $938,132; 1925, $1,958,058.
[3] Not reported separately.
[4] Fancy art glass, leaded glass, stained-glass windows, glass knobs, show cases, wind shields, picture frames, lamps, and bathroom cabinets. The value of beveled and polished plate glass and receipts for resilvering are also included.

TABLE 4.—MIRRORS—PRODUCTION, BY KIND AND VALUE, BY STATES: 1927

[This table presents statistics for all States for which separate figures can be given without disclosing the output of individual establishments]

KIND AND STATE	Number of establishments	Value
Mirrors, plate-glass, framed, total	82	$4,821,531
California [1]	4	245,360
Illinois	10	777,321
Missouri [1]	6	53,352
New York	13	714,790
Pennsylvania	10	386,297
Indiana, Michigan,[1] and Ohio [1]	8	1,031,611
Other States	31	1,612,800
Mirrors, plate-glass, unframed, total	204	14,840,594
California	20	735,824
Illinois	17	998,530
Indiana	10	1,376,782
Massachusetts [1]	5	178,318
Minnesota [1]	3	48,600
Missouri [1]	10	216,749
New Jersey [1]	12	569,006
New York	41	3,781,276
North Carolina	8	2,112,290
Ohio [1]	16	530,610
Mirrors, plate-glass unframed—Continued.		
Pennsylvania	20	$1,038,003
Tennessee [1]	3	290,720
Virginia	4	784,117
Washington [1]	6	135,976
Wisconsin [1]	6	375,229
Other States	23	1,668,564
Mirrors, other than plate-glass, framed	29	427,721
Mirrors, other than plate-glass, unframed, total	89	2,820,968
California	11	206,036
Massachusetts [1]	3	4,934
Missouri [1]	5	3,509
New Jersey	8	88,770
New York	21	979,621
Ohio [1]	5	10,916
Pennsylvania	9	113,803
Wisconsin	([2])	([2])
Other States	27	1,413,379

[1] This State is outranked by one or more of the "Other States."
[2] The figures for Wisconsin, the leading State in the manufacture of unframed mirrors, other than plate-glass, can not be given without disclosing the production of individual establishments and they are, therefore, included in the figures for "Other States."

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [1]
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)				Materials and supplies	Fuel and power		
United States	250	5,321	153	860	4,308	7,630	$2,266,992	$6,360,813	$15,834,143	$354,471	[2] $31,424,943	$15,236,329
California	27	349	14	73	262	586	201,952	426,872	1,014,527	14,044	2,057,332	1,028,761
Illinois	21	440	13	71	356	571	201,556	674,349	1,225,238	31,870	2,582,616	1,325,508
Indiana	10	501	3	75	423	525	191,489	399,856	1,553,393	22,423	2,680,363	1,104,547
Massachusetts	6	157	4	20	133	239	37,407	188,394	348,982	18,973	785,139	417,184
Michigan	7	192	5	24	163	237	73,161	255,331	579,503	11,050	1,142,462	551,909
Minnesota	4	26	2	2	22	74	2,748	32,167	44,934	3,018	113,466	65,514
Missouri	10	99	9	18	72	175	47,567	112,168	315,901	5,858	587,327	265,568
New Jersey	13	167	8	21	138	255	63,317	199,769	393,112	15,446	867,182	458,624
New York	56	1,371	48	237	1,086	1,701	665,724	1,860,137	2,937,342	93,977	7,343,001	4,311,682
North Carolina	9	221	3	20	198	377	66,530	209,966	1,767,934	16,007	2,465,924	681,983
Ohio	16	237	10	32	195	419	98,668	296,845	568,445	20,116	1,251,036	662,475
Pennsylvania	23	556	11	71	474	883	178,164	648,206	1,345,743	35,291	2,852,814	1,471,780
Tennessee	5	126	3	14	109	145	30,695	92,114	314,865	8,506	618,779	295,408
Virginia	6	143	2	34	107	226	91,238	96,417	596,207	10,945	939,779	332,627
Washington	7	98	--------	22	76	202	51,368	139,192	291,586	11,982	572,499	268,931
Wisconsin	7	199	1	47	151	480	107,761	344,591	1,232,867	11,416	1,985,646	741,363
Other States [3]	23	439	17	79	343	535	157,647	384,439	1,303,564	23,549	2,579,578	1,252,465

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] See footnote 2, Table 3, p. 875.
[3] Alabama, 1 establishment; Arkansas, 1; Colorado, 1; Connecticut, 1; Iowa, 1; Kansas, 1; Kentucky, 2; Louisiana, 1; Maryland, 2; Nebraska, 1; Oklahoma, 1; Oregon, 3; South Dakota, 1; Texas, 3; Utah, 1; West Virginia, 2.

SAND-LIME BRICK

[A preliminary report for this industry was issued under date of August 8, 1928]

Description of the industry.—This industry consists in the manufacture of brick from a combination of sand and lime molded under heavy pressure and subjected to the action of steam in a hardening chamber.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	45	790	$1,051,495	$1,157,965	$3,616,456	$2,458,491	8,598
1925	41	801	1,118,634	1,237,970	3,759,729	2,521,759	6,396
1923	31	582	697,850	945,931	2,408,106	1,462,175	4,332
1921	26	374	361,182	500,689	1,220,425	719,736	(2)
1919	32	504	501,854	575,402	1,663,052	1,087,650	4,358
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	(3)	—1.4	—6.0	—6.5	—3.8	—2.5	34.4
1923–1925	(3)	37.6	60.3	30.9	56.1	72.5	47.6
1923–1927	(3)	35.7	50.7	22.4	50.2	68.1	98.5
1919–1927	(3)	56.7	109.5	101.2	117.5	126.0	97.3

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.
[3] Per cent not computed where base is less than 100.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
Prime movers, total	350	*Horsepower* 8,598	220	*Horsepower* 6,396	117	*Horsepower* 4,332
Steam engines	28	3,023	29	3,495	28	3,036
Steam turbines	4	800	5	205		
Internal-combustion engines	2	25	3	43	3	17
Electric motors driven by purchased current	316	4,750	183	2,653	86	1,279
Electric motors, total	316	4,750	184	2,663	102	1,514
Driven by purchased current	316	4,750	183	2,653	86	1,279
Driven by current generated in establishment reporting			1	10	16	235
Electric generators	2	*Kilowatts* 11	1	*Kilowatts* 25	(1)	*Kilowatts* (1)

[1] Not called for on schedule.

TABLE 3.—SAND-LIME BRICK—PRODUCTION, AND STOCKS ON HAND DECEMBER 31, FOR THE UNITED STATES, 1927, 1926, AND 1925, AND BY STATES, 1927

PRODUCT	1927	1926	1925
1. Sand-lime brick industry, all products, total value	$3,616,456	$4,171,150	$3,745,492
2. Sand-lime brick	3,542,906	3,981,492	3,728,093
3. Other products (not normally belonging to the industry)	73,550	189,658	17,399
4. Sand-lime brick made as a secondary product in other industries	102,936	(1)	52,546
Sand-lime brick, all industries: Aggregate value (sum of 2 and 4)	3,645,842	3,981,492	3,780,639
Quantity (thousands)	319,618	330,586	315,595
Stocks on hand December 31 (thousands)	25,075	22,033	23,599

STATES REPORTING	1927		
	Quantity (thousands)	Value	Stocks on hand Dec. 31 (thousands)
Total	319,618	$3,645,842	25,075
Michigan	112,181	1,402,647	5,325
Minnesota	16,186	171,753	2,579
Florida	7,102	74,898	1,627
Other States:			
New Jersey, New York	59,267	629,884	2,724
Massachusetts, District of Columbia, Connecticut	49,154	590,348	2,310
Wisconsin, Utah, California, South Dakota	31,960	276,723	2,250
Ohio, Pennsylvania	16,739	189,362	4,111
Illinois, Indiana, Missouri	14,191	157,905	3,075
Louisiana, Texas, Georgia, Alabama	12,838	152,322	1,074

[1] Included in second item, above. Data not tabulated separately for years alternating with the biennial-census years.

TABLE 4.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	45	941	8	143	790	8,598
Florida	3	34	--------	9	25	482
Michigan	12	273	3	37	233	1,773
Minnesota	3	46	--------	11	35	536
Other States [1]	27	588	5	86	497	5,807

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$373,340	$1,051,495	$891,117	$266,848	$3,616,456	$2,458,491
Florida	25,187	18,627	16,682	10,268	74,898	47,948
Michigan	90,692	337,199	394,731	86,373	1,390,031	908,927
Minnesota	23,030	46,276	32,846	12,600	171,753	126,307
Other States [1]	234,431	649,393	446,858	157,607	1,979,774	1,375,309

[1] Alabama, 1 establishment; California, 1; Connecticut, 1; District of Columbia, 1; Georgia, 1; Illinois, 1; Indiana, 2; Louisiana, 1; Massachusetts, 2; Missouri, 1; New Jersey, 3; New York, 2; Ohio, 2; Pennsylvania, 2; South Dakota, 1; Texas, 2; Utah, 1; Wisconsin, 2.

[2] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

WALL PLASTER, WALL BOARD, AND FLOOR COMPOSITION

[A preliminary report for this industry was issued under date of January 30, 1929]

Description of the industry.—This industry consists in the manufacture of gypsum and other plaster board and wall plasters, and of insulating board and floor composition. (Certain establishments engaged in making wall and insulating board from wood pulp are classified in the paper industry, and therefore no data for these establishments are included in this report except in Table 3.)

Detailed statistics of products.—The census for 1927 is the first at which a special schedule, calling for the quantities and the values of the several classes of products in detail, has been used for this industry; consequently Tables 3 and 4 do not show comparative detailed product figures for earlier years.

Table 4 gives statistics of products, by quantity and value, for selected States. Because of the necessity of presenting these statistics in such a manner as to avoid disclosing the production of individual establishments, it is impossible in some cases to give State figures for certain products, and in other cases it is possible to give figures for only one or two or a very few States. Where statistics can be presented for the leading State only, or for the leading State and one or more States immediately following in order of importance, this has been done.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	221	10,014	$14,411,777	$31,998,385	$83,856,008	$51,857,623	116,230
1925	222	10,978	16,078,362	39,553,463	90,957,045	51,403,582	82,863
1923	195	9,289	14,893,572	33,124,267	73,800,539	40,676,272	62,520
1921	144	4,898	6,997,050	16,116,801	32,353,697	16,236,896	(2)
1919	161	5,123	5,833,617	11,821,465	26,874,657	15,053,192	32,356
	PER CENT OF INCREASE OR DECREASE (−)						
1925-1927	−0.5	−7.6	−10.4	−19.1	−7.8	0.9	40.3
1923-1925	13.8	18.2	8.0	19.4	23.2	26.4	32.5
1923-1927	13.3	7.8	−3.2	−3.4	13.6	27.5	85.9
1919-1927	37.3	95.5	147.0	170.7	212.0	244.5	259.2

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horse-power		*Horse-power*		*Horse-power*
Prime movers, total	4,717	116,230	2,834	82,863	1,988	62,520
Steam engines	80	11,197	80	15,705	107	19,547
Steam turbines	7	8,200	8	8,206		
Internal-combustion engines	21	5,205	35	5,620	25	2,779
Water wheels and turbines	4	495	4	345	5	545
Electric motors driven by purchased current	4,605	91,133	2,707	52,987	1,851	39,649
Electric motors, total	5,701	109,864	3,822	75,978	2,241	48,972
Driven by purchased current	4,605	91,133	2,707	52,987	1,851	39,649
Driven by current generated in establishment reporting	1,096	18,731	1,115	22,991	390	9,323
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	57	13,631	65	13,798	(1)	(1)

[1] Not called for on schedule.

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

KIND	Quantity	Value
1. Wall plaster, wall board, and floor composition industry, all products, total value		$83,856,008
2. Wall plaster, wall board, and floor composition		74,044,407
3. Other products (not normally belonging to the industry)		[1] 9,811,601
4. Wall plaster, wall board, and floor composition made as secondary products in other industries, value		7,276,124
Wall plaster, wall board, and floor composition, all industries: Aggregate value (sum of 2 and 4)		81,320,531
	Tons	
Wall plasters, total	[2] 4,309,927	[2] 35,242,180
Gypsum plasters, total	4,188,704	31,892,534
Neat plaster	2,423,785	18,080,543
Sanded plaster	554,673	4,143,818
Stucco	648,953	3,819,770
Molding, dental, and gauging plaster	204,462	2,301,301
Finishing plaster	144,998	2,042,223
Other gypsum plaster	211,833	1,504,879
Other plasters, total	[2] 121,223	[2] 3,349,646
Portland-cement stucco	34,839	1,086,172
Magnesite stucco	29,591	1,014,413
Other	[2] 56,793	[2] 1,249,061
Wall board, including insulating board, total		[3] 43,003,947
	Square feet	
Gypsum board, total	929,954,714	20,222,353
Wall board	658,780,359	15,929,492
Plaster board	224,205,056	3,594,681
Gypsum lath	46,969,299	698,180
Fiber and other wall board, including insulating board	[3] 403,653,834	[3] 22,781,594
Floor composition, total		[4] 3,074,404
Magnesite		[4] 2,107,024
Premixed cement		129,405
Other		837,975

[1] Gypsum blocks, 63,733,561 square feet, valued at $3,682,131; gypsum rock, 655,634 tons, $1,709,221; miscellaneous products, $4,420,249.
[2] Includes 9,711 tons of plaster, valued at $177,691, made as secondary products by establishments classified in other industries.
[3] Includes wall board and insulating board, valued at $7,062,933, made by paper mills and as secondary products by establishments classified in other industries. (Quantity incomplete.)
[4] Includes magnesite-floor composition, valued at $35,500, made as a secondary product by establishments classified in other industries.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR SELECTED STATES: 1927

[This table presents statistics for leading States for which separate statistics can be given without disclosing the production of individual establishments. See "Detailed statistics of products," p. 880]

KIND AND STATE	Number of establishments	Quantity	Value
GYPSUM WALL PLASTERS			
		Tons	
Neat plaster, total	70	2,423,785	$18,080,543
Iowa	8	350,460	2,674,248
Michigan	6	191,771	1,469,567
Nevada	3	130,193	762,592
New York	15	930,526	7,242,431
Ohio	3	167,740	1,399,660
Texas	5	277,696	1,602,975
Other States	30	375,399	3,029,070
Sanded plaster, total	45	554,673	4,143,818
Michigan	4	77,426	605,962
New Jersey	3	113,760	888,525
New York	15	209,180	1,332,797
Ohio	7	70,780	513,021
Other States	16	83,527	803,513
Stucco, total	47	648,953	3,819,770
California	5	19,437	179,049
Iowa	4	22,133	109,429
Michigan	5	188,313	515,202
New York	9	278,946	2,181,487
Ohio	3	89,352	450,153
Other States	21	50,772	384,450
Molding, dental, and gauging plaster	35	204,462	2,301,301
Finishing plaster, total	41	144,998	2,042,223
New York	9	33,127	505,604
Other States	32	111,871	1,536,619
Other gypsum plaster	34	211,833	1,504,879
OTHER WALL PLASTERS			
Portland-cement stucco, total	29	34,839	1,086,172
California	11	15,054	585,719
New York	8	6,646	153,046
Other States	10	13,139	347,407
Magnesite stucco, total	24	29,591	1,014,413
Illinois	6	9,008	353,501
Other States	18	20,583	660,912
Other wall plasters (except gypsum)	26	47,082	1,071,370
WALL BOARD			
		Square feet	
Gypsum wall board, total	26	658,780,359	15,929,492
Iowa	3	91,200,946	2,222,496
New York	8	238,590,891	6,305,029
Texas	3	100,552,555	2,212,301
Other States	12	228,435,967	5,189,666
Gypsum plaster board, total	18	224,205,056	3,594,681
New York	4	88,582,057	1,317,919
Other States	14	135,622,999	2,276,762
Gypsum lath	12	46,969,299	698,180
Fiber and other wall board, including insulating board	11	403,653,834	15,718,661
FLOOR COMPOSITION			
Magnesite	38		2,071,524
Premixed cement	4		129,405
Other, total	16		837,975
Illinois	8		465,543
Other States	8		372,432

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	Persons engaged in the industry: Total	Persons engaged in the industry: Proprietors and firm members	Persons engaged in the industry: Salaried officers and employees	Persons engaged in the industry: Wage earners (average for the year)	Horsepower	Salaries	Wages	Cost of materials, supplies, fuel, and power: Materials and supplies	Cost of materials, supplies, fuel, and power: Fuel and power	Value of products	Value added by manufacture [1]
United States	221	11,899	36	1,849	10,014	116,230	$4,423,677	$14,411,777	$26,915,238	$5,083,147	$83,856,008	$51,857,623
California	35	517	15	137	365	4,613	296,009	504,502	1,705,933	110,011	3,217,806	1,401,862
Illinois	17	177	1	69	107	1,259	200,399	185,632	724,457	27,041	1,573,300	821,802
Iowa	11	1,046	-------	128	918	9,349	250,150	1,408,847	1,423,874	690,235	6,835,187	4,721,078
Kansas	4	181	-------	28	153	1,642	56,309	194,000	298,446	103,748	1,100,167	697,973
Maryland	5	61	-------	22	39	271	40,177	39,579	134,851	2,756	268,050	130,443
Michigan	13	918	1	126	791	9,823	354,246	1,098,355	2,581,829	460,411	6,164,295	3,122,055
Minnesota	5	382	-------	82	300	4,413	185,559	359,348	925,243	157,526	2,683,381	1,600,612
Missouri	4	64	3	17	44	246	40,420	97,926	153,630	3,696	496,246	338,920
Nevada	3	269	-------	41	228	4,095	121,239	305,133	363,596	152,483	1,071,805	555,726
New Jersey	9	497	1	96	400	1,741	344,382	722,845	1,330,675	76,918	3,327,924	1,920,331
New York	41	3,837	6	415	3,416	39,719	1,186,233	5,428,390	9,205,275	1,340,771	25,938,165	15,392,119
Ohio	11	949	-------	144	805	4,106	320,157	1,196,006	1,936,695	353,845	5,894,503	3,603,963
Pennsylvania	8	111	1	29	81	1,244	80,208	147,579	410,258	38,848	868,110	419,004
Texas	6	625	-------	78	547	4,293	173,169	736,421	952,509	334,935	4,186,731	2,899,287
Washington	7	153	3	58	92	1,352	83,154	130,154	465,303	25,621	954,919	463,995
Other States [2]	42	2,112	5	379	1,728	28,064	691,866	1,857,060	4,302,664	1,204,302	19,275,419	13,768,453

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

[2] Arizona, 2 establishments; Colorado, 3; Connecticut, 1; Georgia, 1; Indiana, 2; Kentucky, 3; Louisiana, 2; Massachusetts, 3; Mississippi, 1; Montana, 2; Nebraska, 1; New Hampshire, 1; New Mexico, 1; Oklahoma, 3; Oregon, 2; Rhode Island, 1; South Dakota, 2; Utah, 2; Vermont, 1; Virginia, 2; West Virginia, 1; Wisconsin, 3; Wyoming, 2.

SUMMARY FOR INDUSTRIES IN GROUP 10 WHICH ARE NOT COVERED BY SEPARATE REPORTS, BY STATES

[This table presents summary statistics for the industries in Group 10 other than those for which separate reports are given on pp. 832-883. More detailed statistics for 1927 are given, for the United States as a whole, in Table II, p. 1316; and summaries for States and large cities, carrying statistics for these industries, in comparison with those for other industries, appear in Tables III and IV, pp. 1330 and 1416. See "General explanations," pp. 3-12; in particular, "Limitation of statistics to establishments reporting products valued at $5,000 or more," p. 6, "Power equipment," p. 7, "Cost of materials," etc., p. 8, "Value added by manufacture," p. 9, and "State and city statistics," p 11]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
CHINA FIRING AND DECORATING, NOT DONE IN POTTERIES							
[The firing and decorating of china for the trade. (Small establishments engaged in such work for private customers or to individual order are not included)]							
United States							
1927	31	366	$428,232	$681,653	[1] $1,692,079	$1,010,426	43
1925	31	333	385,912	672,277	[1] 1,589,832	917,555	38
1923	33	355	460,411	609,519	[1] 1,492,609	883,090	49
1921	34	325	397,835	504,270	[1] 1,241,964	737,694	(2)
1919	43	244	244,211	310,785	[1] 866,762	555,977	43
States, 1927							
Illinois	10	137	157,097	280,963	711,596	430,633	6
New Jersey	6	53	64,053	122,156	252,035	129,879	8
New York	6	116	145,611	183,691	513,807	330,116	18
Other States [3]	9	60	61,471	94,843	214,641	119,798	11

[1] Does not include the following values of decorated china reported as secondary products by establishments classified in other industries: 1927, $68,846; 1923, $199,673; 1921, $46,551; 1919, $58,398; no comparable data for 1925.

[2] Not called for on schedule.

[3] California, 2 establishments; Connecticut, 1; Indiana, 1; Ohio, 1; Pennsylvania, 2; West Virginia, 1; Wisconsin, 1.

CRUCIBLES

[*Principal products:* Crucibles of all kinds, including glasshouse pots, made largely from fire clay and plumbago (graphite)]

United States							
1927	11	258	$343,552	$772,155	[1] $1,982,135	$1,209,980	1,688
1925	11	284	380,783	754,817	[1] 2,091,518	1,336,701	1,476
1923	13	516	626,678	1,226,159	[1] 3,467,816	2,241,657	1,647
1921	17	412	495,973	827,288	[1] 1,969,930	1,142,642	(2)
1919	22	848	923,287	2,233,072	[1] 5,293,688	3,060,616	2,714
States, 1927							
Pennsylvania	4	102	139,894	354,933	931,461	576,528	750
Other States [3]	7	156	203,658	417,222	1,050,674	633,452	938

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of crucibles: 1927, $173,201; 1925, $75,257; corresponding amounts for earlier years not available. Does not include the following values of crucibles made as secondary products by establishments classified in other industries: 1927, $693,857; 1925, $750,015; 1923, $809,971; 1921, $564,398; 1919, $1,570,579.

[2] Not called for on schedule.

[3] Connecticut, 1 establishment; Illinois, 1; Indiana, 1; Massachusetts, 1; New Jersey, 2; New York, 1.

STONE, CLAY, AND GLASS INDUSTRIES NOT COVERED BY SEPARATE REPORTS, FOR THE UNITED STATES, 1919 TO 1927, AND BY STATES, 1927—Continued

[See note at head of this table, p. 884]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
EMERY WHEELS AND OTHER ABRASIVE AND POLISHING APPLIANCES							
[*Principal products:* Abrasive wheels of emery, corundum, and other materials; buffing and polishing wheels and disks of leather, cloth, canvas, and wood]							
United States							
1927	68	3,261	$4,608,167	$10,839,973	[1] $24,181,837	$13,341,864	13,464
1925	63	3,352	4,770,354	11,104,457	[1] 25,730,434	14,625,977	11,654
1923	57	3,595	4,707,834	10,698,320	[1] 25,306,812	14,608,492	11,530
1921	53	2,849	2,876,413	6,183,515	[1] 12,558,834	6,375,319	(2)
1919	60	5,601	5,878,748	12,228,187	[1] 30,949,270	18,721,083	12,963
States, 1927							
Connecticut	4	57	64,377	368,742	641,959	273,217	52
Illinois	10	122	174,218	671,811	1,321,027	649,216	210
Massachusetts	14	1,753	2,794,561	5,510,235	13,481,609	7,971,374	8,729
Michigan	4	135	162,956	294,005	695,337	401,332	348
New York	10	165	177,242	689,858	1,131,557	441,699	317
Ohio	7	237	235,041	457,114	1,012,317	555,203	480
Pennsylvania	8	389	526,518	1,026,079	2,723,283	1,697,204	1,893
Other States [3]	11	403	473,254	1,822,129	3,174,748	1,352,619	1,435

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of emery wheels and other abrasive and polishing appliances: 1927, $1,776,159; 1925, $374,129; corresponding amounts for earlier years not available. Abrasive wheels are made to a considerable extent by establishments classified in other industries, but the value of such production can not be shown without disclosing the output of individual establishments.

[2] Not called for on schedule.

[3] Indiana, 1 establishment; Kentucky, 1; Missouri, 1; New Jersey, 3; North Carolina, 1; Rhode Island, 1; Washington, 1; Wisconsin, 2.

GLASS CUTTING, STAINING, AND ORNAMENTING							
[Glass cutting, glass beveling, bending sheet glass, engraving on glass, making glass labels, and staining and ornamenting glass. Products include cut-glass tableware; scientific glass apparatus; leaded, stained, and art-glass windows; and druggists' glassware]							
United States							
1927	400	4,465	$6,214,552	$8,778,568	[1] $22,327,581	$13,549,013	3,316
1925	410	4,860	6,516,711	13,330,933	[1] 27,943,048	14,612,115	3,531
1923	434	5,157	6,042,204	11,808,836	[1] 25,026,557	13,217,721	4,732
1921	462	4,682	5,574,401	10,807,878	[1] 22,209,476	11,401,598	(2)
1919	616	6,480	6,154,831	14,357,878	[1] 28,443,321	14,085,443	5,042
States, 1927							
California	23	92	138,794	167,276	493,950	326,674	79
Connecticut	6	241	334,802	739,318	1,293,553	554,235	362
Illinois	33	289	479,361	633,494	1,564,828	931,334	155
Indiana	10	155	163,820	433,174	739,106	305,932	229
Maryland	8	55	68,332	79,512	213,479	133,967	33
Massachusetts	22	163	262,602	327,796	1,007,710	679,914	178
Michigan	5	45	88,001	96,179	266,675	170,496	56
Minnesota	5	19	25,357	38,010	151,322	113,312	26
Missouri	14	119	204,521	262,659	726,632	463,973	17
New Jersey	33	446	582,063	839,137	2,225,433	1,386,296	279
New York	98	1,165	1,804,796	2,106,179	6,057,549	3,951,370	734
Ohio	33	593	724,652	1,288,988	2,913,623	1,624,635	474
Pennsylvania	63	753	926,115	1,056,891	2,937,950	1,881,059	452
Rhode Island	3	16	23,899	14,929	64,412	49,483	23
Texas	7	47	68,088	122,965	285,535	162,570	31
West Virginia	5	77	69,835	159,924	316,429	156,505	40
Wisconsin	14	95	140,766	165,072	530,472	365,400	88
Other States [3]	18	95	108,748	247,065	538,923	291,858	60

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in glass cutting, staining, and ornamenting: 1927, $817,673; 1925, $846,637; corresponding amounts for earlier years not available. Does not include the following values of cut, stained, and ornamented glass made by establishments engaged primarily in other industries: 1927, $8,027,391; 1925, $6,281,810; 1923, $550,672; 1921, $1,053,773; 1919, $1,555,375. Of the amounts shown, the following values of cut glassware and decorated glassware were made in the glass-manufacturing industry: 1927, $3,883,011; 1925, $3,984,087; corresponding amounts for earlier years not available and not included in the values given.

[2] Not called for on schedule.

[3] Colorado, 2 establishments; District of Columbia, 1; Florida, 1; Georgia, 2; Idaho, 1; Iowa, 2; Kansas, 1; Kentucky, 2; Maine, 1; Nebraska, 1; North Carolina, 1; Oregon, 1; Washington, 2.

SUMMARY FOR INDUSTRIES IN GROUP 10 WHICH ARE NOT COVERED BY SEPARATE REPORTS, BY STATES

[This table presents summary statistics for the industries in Group 10 other than those for which separate reports are given on pp. 832-883. More detailed statistics for 1927 are given, for the United States as a whole, in Table II, p. 1316; and summaries for States and large cities, carrying statistics for these industries, in comparison with those for other industries, appear in Tables III and IV, pp. 1330 and 1416. See "General explanations," pp. 3-12; in particular, "Limitation of statistics to establishments reporting products valued at $5,000 or more," p. 6, "Power equipment," p. 7, "Cost of materials," etc., p. 8, "Value added by manufacture," p. 9, and "State and city statistics," p 11]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
CHINA FIRING AND DECORATING, NOT DONE IN POTTERIES							
[The firing and decorating of china for the trade. (Small establishments engaged in such work for private customers or to individual order are not included)]							
United States							
1927	31	366	$428,232	$681,653	[1] $1,692,079	$1,010,426	43
1925	31	333	385,912	672,277	[1] 1,589,832	917,555	38
1923	33	355	460,411	609,519	[1] 1,492,609	883,090	49
1921	34	325	397,835	504,270	[1] 1,241,964	737,694	(2)
1919	43	244	244,211	310,785	[1] 866,762	555,977	43
States, 1927							
Illinois	10	137	157,097	280,963	711,596	430,633	6
New Jersey	6	53	64,053	122,156	252,035	129,879	8
New York	6	116	145,611	183,691	513,807	330,116	18
Other States [3]	9	60	61,471	94,843	214,641	119,798	11

[1] Does not include the following values of decorated china reported as secondary products by establishments classified in other industries: 1927, $68,846; 1923, $199,673; 1921, $46,551; 1919, $58,398; no comparable data for 1925.
[2] Not called for on schedule.
[3] California, 2 establishments; Connecticut, 1; Indiana, 1; Ohio, 1; Pennsylvania, 2; West Virginia, 1; Wisconsin, 1.

CRUCIBLES

[*Principal products:* Crucibles of all kinds, including glasshouse pots, made largely from fire clay and plumbago (graphite)]

United States							
1927	11	258	$343,552	$772,155	[1] $1,982,135	$1,209,980	1,688
1925	11	284	380,783	754,817	[1] 2,091,518	1,336,701	1,476
1923	13	516	626,678	1,226,159	[1] 3,467,816	2,241,657	1,647
1921	17	412	495,973	827,288	[1] 1,969,930	1,142,642	(2)
1919	22	848	923,287	2,233,072	[1] 5,293,688	3,060,616	2,714
States, 1927							
Pennsylvania	4	102	139,894	354,933	931,461	576,528	750
Other States [3]	7	156	203,658	417,222	1,050,674	633,452	938

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of crucibles: 1927, $173,201; 1925, $75,257; corresponding amounts for earlier years not available. Does not include the following values of crucibles made as secondary products by establishments classified in other industries: 1927, $693,857; 1925, $750,015; 1923, $809,971; 1921, $564,398; 1919, $1,570,579.
[2] Not called for on schedule.
[3] Connecticut, 1 establishment; Illinois, 1; Indiana, 1; Massachusetts, 1; New Jersey, 2; New York, 1.

STONE, CLAY, AND GLASS INDUSTRIES NOT COVERED BY SEPARATE REPORTS, FOR THE UNITED STATES, 1919 TO 1927, AND BY STATES, 1927—Continued

[See note at head of this table, p. 884]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
EMERY WHEELS AND OTHER ABRASIVE AND POLISHING APPLIANCES							
[*Principal products:* Abrasive wheels of emery, corundum, and other materials; buffing and polishing wheels and disks of leather, cloth, canvas, and wood]							
United States							
1927	68	3,261	$4,608,167	$10,839,973	[1] $24,181,837	$13,341,864	13,464
1925	63	3,352	4,770,354	11,104,457	[1] 25,730,434	14,625,977	11,654
1923	57	3,595	4,707,834	10,698,320	[1] 25,306,812	14,608,492	11,530
1921	53	2,849	2,876,413	6,183,515	[1] 12,558,834	6,375,319	(2)
1919	60	5,601	5,878,748	12,228,187	[1] 30,949,270	18,721,083	12,963
States, 1927							
Connecticut	4	57	64,377	368,742	641,959	273,217	52
Illinois	10	122	174,218	671,811	1,321,027	649,216	210
Massachusetts	14	1,753	2,794,561	5,510,235	13,481,609	7,971,374	8,729
Michigan	4	135	162,956	294,005	695,337	401,332	348
New York	10	165	177,242	689,858	1,131,557	441,699	317
Ohio	7	237	235,041	457,114	1,012,317	555,203	480
Pennsylvania	8	389	526,518	1,026,079	2,723,283	1,697,204	1,893
Other States [3]	11	403	473,254	1,822,129	3,174,748	1,352,619	1,435

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of emery wheels and other abrasive and polishing appliances: 1927, $1,776,159; 1925, $374,129; corresponding amounts for earlier years not available. Abrasive wheels are made to a considerable extent by establishments classified in other industries, but the value of such production can not be shown without disclosing the output of individual establishments.

[2] Not called for on schedule.

[3] Indiana, 1 establishment; Kentucky, 1; Missouri, 1; New Jersey, 3; North Carolina, 1; Rhode Island, 1; Washington, 1; Wisconsin, 2.

GLASS CUTTING, STAINING, AND ORNAMENTING							
[Glass cutting, glass beveling, bending sheet glass, engraving on glass, making glass labels, and staining and ornamenting glass. Products include cut-glass tableware; scientific glass apparatus; leaded, stained, and art-glass windows; and druggists' glassware]							
United States							
1927	400	4,465	$6,214,552	$8,778,568	[1] $22,327,581	$13,549,013	3,316
1925	410	4,860	6,516,711	13,330,933	[1] 27,943,048	14,612,115	3,531
1923	434	5,157	6,042,204	11,808,836	[1] 25,026,557	13,217,721	4,732
1921	462	4,682	5,574,401	10,807,878	[1] 22,209,476	11,401,598	(2)
1919	616	6,480	6,154,831	14,357,878	[1] 28,443,321	14,085,443	5,042
States, 1927							
California	23	92	138,794	167,276	493,950	326,674	79
Connecticut	6	241	334,802	739,318	1,293,553	554,235	362
Illinois	33	289	479,361	633,494	1,564,828	931,334	155
Indiana	10	155	163,820	433,174	739,106	305,932	229
Maryland	8	55	68,332	79,512	213,479	133,967	33
Massachusetts	22	163	262,602	327,796	1,007,710	679,914	178
Michigan	5	45	88,001	96,179	266,675	170,496	56
Minnesota	5	19	25,357	38,010	151,322	113,312	26
Missouri	14	119	204,521	262,659	726,632	463,973	17
New Jersey	33	446	582,063	839,137	2,225,433	1,386,296	279
New York	98	1,165	1,804,796	2,106,179	6,057,549	3,951,370	734
Ohio	33	593	724,652	1,288,988	2,913,623	1,624,635	474
Pennsylvania	63	753	926,115	1,056,891	2,937,950	1,881,059	452
Rhode Island	3	16	23,899	14,929	64,412	49,483	23
Texas	7	47	68,088	122,965	285,535	162,570	31
West Virginia	5	77	69,835	159,924	316,429	156,505	40
Wisconsin	14	95	140,766	165,072	530,472	365,400	88
Other States [3]	18	95	108,748	247,065	538,923	291,858	60

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in glass cutting, staining, and ornamenting: 1927, $817,673; 1925, $846,637; corresponding amounts for earlier years not available. Does not include the following values of cut, stained, and ornamented glass made by establishments engaged primarily in other industries: 1927, $8,027,391; 1925, $6,281,810; 1923, $550,672; 1921, $1,053,773; 1919, $1,555,375. Of the amounts shown, the following values of cut glassware and decorated glassware were made in the glass-manufacturing industry: 1927, $3,883,011; 1925, $3,984,087; corresponding amounts for earlier years not available and not included in the values given.

[2] Not called for on schedule.

[3] Colorado, 2 establishments; District of Columbia, 1; Florida, 1; Georgia, 2; Idaho, 1; Iowa, 2; Kansas, 1; Kentucky, 2; Maine, 1; Nebraska, 1; North Carolina, 1; Oregon, 1; Washington, 2.

STONE, CLAY, AND GLASS INDUSTRIES NOT COVERED BY SEPARATE REPORTS, FOR THE UNITED STATES, 1919 TO 1927, AND BY STATES, 1927—Continued

[See note at head of this table, p. 884]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
GRAPHITE, GROUND AND REFINED							
[The extraction from the ore and the refining of graphite (plumbago or black lead)]							
United States [1]							
1927	[2] 13	289	$340,510	$1,319,161	[3] $2,931,584	$1,612,423	3,011
1925	11	228	278,224	1,328,188	[3] 2,569,487	1,241,299	2,927
1923	8	244	304,437	1,082,018	[3] 2,184,609	1,102,591	2,700
1921	11	152	185,468	703,441	[3] 1,456,864	753,423	(4)
1919	24	497	434,317	1,092,684	[3] 2,239,587	1,146,903	7,445

[1] Statistics for States can not be given without disclosing the data reported by individual establishments.
[2] Alabama, 1 establishment; California, 1; Illinois, 2; Michigan, 2; New Jersey, 2; New York, 1; Ohio, 1; Pennsylvania, 2; Texas, 1.
[3] Graphite is produced to a considerable extent by establishments engaged primarily in other industries, but the value of such production outside the industry can not be shown without the possibility of disclosing the output of individual establishments.
[4] Not called for on schedule.

GRINDSTONES, PULP STONES, AND MILLSTONES							
[*Principal products:* Grindstones for sharpening, shaping, and smoothing; pulp stones for use in the mechanical reduction of wood to pulp. The production of these stones embraces both quarrying and manufacturing operations, between which there is no sharp line of demarcation. This condition affects somewhat the comparability of the statistics for different census years]							
United States							
1927	23	468	$559,510	$257,829	[1] $1,620,697	$1,362,868	3,585
1925	21	454	559,654	291,126	[1] 1,630,566	1,339,440	3,005
1923	21	647	691,324	559,551	[1] 2,096,131	1,536,580	3,896
1921	17	563	514,476	458,453	[1] 1,498,897	1,040,444	(2)
1919	35	712	642,363	269,362	[1] 1,436,319	1,166,957	3,763
States, 1927							
Ohio	12	290	332,873	130,515	830,807	700,292	1,888
West Virginia	8	151	195,901	101,612	656,891	555,279	1,384
Other States [3]	3	27	30,736	25,702	132,999	107,297	313

[1] Does not include the following values of grindstones made as secondary products by establishments classified in other industries: 1927, $251,347; 1925, $381,180; 1923, $187,294; 1921, $31,294; no comparable data available for 1919.
[2] Not called for on schedule.
[3] Illinois, 2 establishments; Michigan, 1.

HONES, WHETSTONES, AND SIMILAR PRODUCTS							
[*Principal products:* Hones, oilstones, whetstones, scythestones, and other sharpening stones]							
United States [1]							
1927	[2] 8	192	$182,361	$337,105	[3] $818,600	$481,495	1,136
1925	6	156	157,884	394,283	[3] 786,943	392,660	891
1923	8	166	171,842	178,593	[3] 546,500	367,907	1,151
1921	7	95	92,722	97,260	[3] 300,475	203,215	(4)
1919	11	212	203,001	320,451	[3] 793,778	473,327	1,164

[1] Statistics for States can not be given without disclosing the data reported by individual establishments.
[2] Indiana, 2 establishments; New Hampshire, 2; New Jersey, 1; New York, 1; Ohio, 1; Vermont, 1.
[3] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of hones, whetstones, and similar products: 1927, $113,891; corresponding amounts for earlier years not available. Does not include the following values of hones, whetstones, and similar products made as secondary products by establishments classified in other industries: 1927, $48,212; 1925, $54,189; 1923, $29,862; 1921, $31,785; no comparable data available for 1919.
[4] Not called for on schedule.

STONE, CLAY, AND GLASS INDUSTRIES NOT COVERED BY SEPARATE REPORTS, FOR THE UNITED STATES, 1919 TO 1927, AND BY STATES, 1927—Continued

[See note at head of this table, p. 884]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
MINERALS AND EARTHS, GROUND OR OTHERWISE TREATED							
[The grinding or pulverizing of certain earths, rocks, or minerals, such as emery, flint, barytes, manganese, chalk, talc, feldspar, sandstone, kaolin, mica, fuller's earth, pumice, slate, etc.]							
United States							
1927	245	8,270	$9,832,692	$17,625,493	[1] $41,260,461	$23,634,968	116,909
1925	250	8,762	9,882,383	17,164,594	[1] 42,380,930	25,216,336	127,649
1923	243	8,707	10,167,575	13,301,230	[1] 35,308,723	22,007,493	83,471
1921	272	6,887	7,297,664	11,521,866	[1] 26,173,722	14,651,856	(2)
1919	419	14,426	16,309,518	16,270,251	[1] 46,067,239	29,796,988	127,064
States, 1927							
California	14	219	311,781	882,925	1,767,414	884,489	3,118
Connecticut	5	86	95,358	72,620	220,148	147,528	1,699
Georgia	9	488	423,637	588,503	2,312,136	1,723,633	3,017
Illinois	14	449	684,171	1,106,552	2,970,469	1,863,917	7,592
Maryland	6	87	101,615	130,623	369,034	238,411	1,535
Massachusetts	7	75	102,810	465,932	878,951	413,019	1,425
Missouri	7	165	159,860	116,308	387,104	270,796	1,543
New Hampshire	4	61	62,516	160,014	330,383	170,369	458
New Jersey	12	198	337,888	1,249,387	2,136,846	887,459	4,554
New York	26	730	1,052,767	2,347,481	5,478,240	3,130,759	12,674
North Carolina	13	371	283,144	606,788	1,321,827	715,039	2,526
Ohio	22	539	798,731	1,073,666	3,042,320	1,968,654	10,376
Pennsylvania	46	2,383	2,883,982	5,241,592	10,430,883	5,189,291	40,312
Texas	5	78	99,875	241,312	585,480	344,168	750
Vermont	7	209	283,259	286,561	1,388,733	1,102,172	4,369
Virginia	5	79	94,188	128,730	360,409	231,679	1,055
West Virginia	11	479	638,212	539,281	2,070,785	1,531,504	9,900
Other States [3]	32	1,574	1,418,898	2,387,218	5,209,299	2,822,081	10,006

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in grinding or otherwise treating minerals and earths: 1927, $1,872,025; 1925, $1,614,853; corresponding amounts for earlier years not available. Does not include the following values of minerals and earths, ground or otherwise treated, by establishments engaged primarily in other industries: 1927, $743,435; 1925, $1,044,086; 1923, $774,321; 1921, $951,739; 1919, $321,960.

[2] Not called for on schedule.

[3] Alabama, 2 establishments; Delaware, 2; Florida, 4; Indiana, 1; Kentucky, 1; Maine, 3; Nebraska, 1; Nevada, 1; New Mexico, 1; Oklahoma, 2; Oregon, 1; Rhode Island, 1; South Carolina, 1; Tennessee, 2; Utah, 1; Washington, 2; Wisconsin, 5; Wyoming, 1.

STONE, CLAY, AND GLASS INDUSTRIES NOT COVERED BY SEPARATE REPORTS, FOR THE UNITED STATES, 1919 TO 1927, AND BY STATES, 1927—Continued

[See note at head of this table, p. 884]

YEAR AND STATE	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
STATUARY AND ART GOODS, FACTORY PRODUCT							
[*Principal products:* Ornamental plaster work, plaster casts, ecclesiastical statuary, architectural sculpture, cast-bronze statues, and other art goods of cement, plaster, and composition. (The production of statuary by individual sculptors in their own studios is not, of course, a manufacturing process, and therefore is not covered by the census of manufactures.) Bronze statues cast in bronze foundries engaged primarily in the manufacture of other classes of products are included among the products of the "Brass, bronze, and other nonferrous alloys, and manufactures of these alloys and of copper" industry. The term "art goods" is necessarily vague, as there are many products of other industries to which it might be applied; but the art goods covered by this classification are more or less closely related to the art of sculpture]							
United States							
1927	136	2,028	$4,403,742	$2,414,919	[1] $10,187,247	$7,772,328	1,137
1925	137	2,033	4,188,087	2,078,478	[1] 9,329,892	7,251,414	1,340
1923	150	1,807	3,243,690	1,897,528	[1] 7,550,015	5,652,487	887
1921	138	1,634	2,741,429	1,715,217	[1] 6,666,964	4,951,747	(2)
1919	195	1,466	1,716,067	1,378,540	[1] 5,019,521	3,640,981	682
States, 1927							
California	21	150	305,313	155,562	702,763	547,201	37
Illinois	17	535	1,165,153	917,374	3,240,095	2,322,721	402
Massachusetts	10	147	294,892	211,123	754,145	543,022	174
Michigan	3	48	151,282	23,613	196,867	173,254	3
Missouri	5	67	122,386	83,839	282,418	198,579	35
New Jersey	6	45	60,618	68,488	203,615	135,127	2
New York	30	483	1,278,494	386,308	2,458,476	2,072,168	203
Ohio	5	95	159,557	63,012	425,295	362,283	19
Pennsylvania	13	171	281,453	210,595	678,225	467,630	130
Washington	4	29	51,929	21,579	106,519	84,940	76
Wisconsin	5	116	264,899	94,698	503,802	409,104	24
Other States [3]	17	142	267,766	178,728	635,027	456,299	32

[1] Includes values of miscellaneous products, normally belonging to other industries, made as secondary products by establishments engaged primarily in the manufacture of statuary and art goods: 1927, $550,074; 1925, $93,146; corresponding amounts for earlier years not available. Does not include the following values of statuary and art goods made as secondary products by establishments classified in other industries: 1927, $651,103; 1925, $447,791; 1923, $217,024; 1921, $39,907; 1919, $226,471.

[2] Not called for on schedule.

[3] Colorado, 2 establishments; District of Columbia, 1; Georgia, 1; Indiana, 1; Kentucky, 2; Louisiana, 1; Maryland, 2; Minnesota, 3; Nebraska, 1; Oregon, 1; Texas, 1; Virginia, 1.

Group 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY

THE GROUP AS A WHOLE

Group 11 comprises the industries manufacturing crude iron and steel and those manufacturing iron and steel products, with the following exceptions: Group 13, Machinery, not including transportation equipment; Group 14, Transportation equipment, air, land, and water; and Group 15, Railroad repair shops.

For statistical purposes Group 11 has been divided into two subgroups, namely: (1) Crude iron and steel and rolled products, and (2) other iron and steel products. The industries in the second subgroup use as their principal materials the products of the industries in the first subgroup, so that in the total cost of materials and the total value of products for the group as a whole extensive duplication occurs.

Each establishment which rolled iron or steel was assigned as an entirety to the steel works and rolling mills industry, except that blast-furnace departments were uniformly segregated and treated as separate establishments. Rolling-mill establishments in many cases manufacture large quantities of more advanced products, such as bolts, rivets, pipe, nails, tin plate and terneplate, and wire. For this reason the several industries which constitute the subgroup "Other iron and steel products" embrace only those establishments which do not operate rolling mills but purchase the iron and steel, which they use as materials. Thus the statistics for certain of these industries by no means indicate the full extent of the manufacturing operations involved in the production of the various classes of commodities covered by the industry designations. Moreover, the comparability of the statistics as between one census year and another is affected by changes in the proportions of the products in question which are made by rolling-mill establishments and by establishments which do not operate rolling mills. In the detailed product tables for the more important industries, however, value-of-product figures are given, so far as data are available, covering the total output of the individual classes of commodities, whether made in rolling mills or in other industries. For example, Table 4, p. 930, shows the total value of pipes and tubes made in rolling mills, and in addition the value of products reported by establishments, other than rolling mills, engaged primarily in the manufacture of pipes and tubes, and the data for wire and wire products are shown in a similar manner in Table 5, page 967.

The former industry classifications "Stoves and appliances, gas and oil" and "Stoves (other than gas, oil, or electric) and warm-air furnaces" have been combined under the title "Stoves and ranges (other than electric) and warm-air furnaces."

The table on page 890 lists the industries in Group 11, and gives summary statistics for each as compiled from data collected at the last four censuses. On pages 893 to 973 are presented detailed reports for those industries in Group 11 for which statistics have been published separately in pamphlet form. Following these reports are given brief descriptions and summary statistics for the remaining industries in this group. (See pp. 974 to 983.)

Summary for Group 11.—Iron and Steel and Their Products, Not Including Machinery: 1921 to 1927

[See "Regrouping of industries and renumbering of groups," p. 19]

Industry	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
				Expressed in thousands of dollars [1]				
Total	1927	6,346	835,501	1,264,406	3,544,908	6,199,252	2,654,345	8,323,037
	1925	6,068	851,270	1,284,339	3,734,350	6,461,668	2,727,318	7,518,999
	1923	6,358	892,660	1,324,587	4,152,918	6,828,841	2,675,923	7,259,275
	1921	6,255	571,798	731,184	2,140,345	3,456,387	1,316,043	(2)
Crude iron and steel and rolled products.	1927	602	389,270	645,534	2,269,210	3,488,744	1,219,534	6,781,058
	1925	595	399,914	660,297	2,429,378	3,711,354	1,281,976	6,143,927
	1923	658	424,913	696,761	2,872,028	4,161,938	1,289,910	5,999,941
	1921	628	254,213	354,357	1,366,175	1,901,431	535,256	(2)
Iron and steel: Blast furnaces.	1927	116	27,958	44,258	579,555	708,904	129,349	(3)
	1925	122	29,188	45,312	617,417	765,286	147,869	1,380,394
	1923	169	36,712	58,935	827,630	1,007,613	179,984	1,686,419
	1921	134	18,698	29,370	361,050	419,771	58,722	(2)
Iron and steel: Steel works and rolling mills.	1927	486	361,312	601,275	1,689,655	2,779,840	1,090,185	[3] 6,781,058
	1925	473	370,726	614,985	1,811,961	2,946,068	1,134,107	4,763,533
	1923	489	388,201	637,825	2,044,398	3,154,325	1,109,926	4,313,522
	1921	494	235,515	324,987	1,005,125	1,481,659	476,534	(2)
Other iron and steel products.	1927	5,744	446,231	618,872	1,275,698	2,710,508	1,434,810	1,541,979
	1925	5,473	451,356	624,042	1,304,972	[4] 2,748,773	[4] 1,443,801	1,375,072
	1923	5,700	467,747	627,827	1,280,890	2,666,903	1,386,013	1,259,334
	1921	5,627	317,585	376,827	774,170	1,554,957	780,787	(2)
Iron and steel products, not made in steel works or rolling mills:								
Bolts, nuts, washers, and rivets.[5]	1927	115	13,614	17,324	38,302	75,876	37,574	69,403
	1925	127	13,907	17,942	38,507	75,926	37,419	59,767
	1923	126	15,962	20,207	41,874	84,431	42,557	48,036
	1921	125	10,148	10,269	18,548	35,773	17,226	(2)
Cast-iron pipe	1927	82	22,892	25,982	48,225	95,089	46,864	63,196
	1925	77	23,033	27,438	48,847	[4] 100,919	[4] 52,073	54,820
	1923	73	21,576	25,020	48,804	92,674	43,870	47,239
	1921	70	12,496	13,136	23,897	44,322	20,425	(2)
Doors, shutters, and window sash and frames, metal.	1927	117	8,050	15,564	25,602	65,280	39,678	20,626
	1925	92	6,791	12,899	21,628	50,078	28,450	16,699
	1923	37	2,429	4,333	5,604	15,367	9,763	3,981
	1921	45	1,782	2,881	4,289	12,467	8,177	(2)
Forgings [5]	1927	209	15,399	23,258	51,635	103,672	52,037	126,887
	1925	218	20,290	31,313	68,081	134,511	66,429	120,014
	1923	234	27,468	40,207	92,853	179,011	86,158	136,922
	1921	240	16,740	20,636	44,337	83,151	38,814	(2)
Horseshoes [5]	1927	10	195	282	467	1,363	897	1,088
	1925	9	193	275	496	1,408	912	1,042
	1923	10	255	332	737	1,813	1,076	1,341
	1921	12	207	314	955	1,932	977	(2)
Iron and steel, processed.[6]	1927	33	231	392	510	1,443	934	1,716
	1925	26	306	557	643	2,114	1,471	1,870
	1923	265	1,376	2,406	2,925	9,112	6,187	6,209
	1921	320	1,210	1,922	1,900	6,202	4,302	(2)
Nails, spikes, etc.[5]	1927	56	2,100	2,670	5,157	11,753	6,597	8,073
	1925	58	2,227	2,610	5,646	12,318	6,673	8,102
	1923	61	2,849	3,235	7,005	13,300	6,295	10,275
	1921	56	2,412	2,576	5,670	10,976	5,306	(2)
Springs, steel: Railway, vehicle, heavy machine, etc.[5]	1927	94	5,753	8,913	24,599	43,821	19,222	22,263
	1925	98	5,897	8,989	23,609	44,469	20,860	22,492
	1923	114	8,634	12,782	31,748	59,392	27,644	25,393
	1921	126	5,358	6,779	16,007	31,750	15,743	(2)
Steel barrels, kegs, and drums.	1927	39	2,853	3,986	14,736	24,105	9,369	11,229
	1925	33	2,021	2,914	12,743	19,928	7,185	7,739
	1923	39	2,668	3,363	14,818	23,249	8,431	7,907
	1921	31	2,013	2,323	9,267	14,525	5,258	(2)

See footnotes at end of table.

SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY: 1921 TO 1927—Continued

[See "Regrouping of industries and renumbering of groups," p. 19]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
				Expressed in thousands of dollars [1]				
Other iron and steel products—Continued.								
Iron and steel products, not made in steel works or rolling mills—Contd.								
Structural and ornamental iron and steel work, not made in rolling mills.[5]	1927	1,284	52,392	84,578	243,446	440,376	196,930	251,670
	1925	1,136	48,341	77,411	237,653	420,998	183,345	211,732
	1923	1,056	51,591	80,833	225,487	406,117	180,630	205,518
	1921	1,021	32,897	47,455	151,011	250,085	99,075	(2)
Wrought pipe, welded and heavy riveted, not made in rolling mills.[5]	1927	44	11,083	16,066	55,779	98,186	42,407	53,938
	1925	42	10,871	17,157	59,142	94,696	35,553	41,306
	1923	53	10,633	17,705	57,966	90,823	32,857	40,912
	1921	57	8,728	11,234	37,093	56,662	19,569	(2)
Firearms	1927	20	6,130	7,934	5,048	19,452	14,405	15,747
	1925	20	4,470	5,584	3,174	15,179	12,005	14,580
	1923	21	6,204	7,593	3,644	17,665	14,021	15,639
	1921	20	4,726	5,730	2,696	12,884	10,188	(2)
Galvanizing and other coating, not done in rolling mills.	1927	59	953	1,449	3,722	6,951	3,228	2,657
	1925	54	804	1,128	2,892	5,933	3,041	1,881
	1923	51	877	1,183	3,363	6,327	2,964	1,856
	1921	51	685	844	2,161	4,018	1,856	(2)
Hardware, not elsewhere classified.	1927	485	47,834	60,827	71,877	208,254	136,377	99,674
	1925	476	52,349	65,562	77,503	225,053	147,550	98,278
	1923	473	52,205	63,471	80,598	215,960	135,363	84,006
	1921	456	35,228	36,240	41,520	120,600	79,080	(2)
Pens, steel and brass	1927	6	534	594	293	1,658	1,365	307
	1925	5	487	498	265	1,446	1,180	273
	1923	5	475	415	177	1,171	994	266
	1921	4	372	309	173	846	673	(2)
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.	1927	231	29,245	40,212	55,633	148,879	93,246	90,293
	1925	239	33,280	46,954	63,610	167,878	104,268	84,534
	1923	234	27,201	38,047	51,469	132,665	81,195	59,973
	1921	220	16,670	20,397	25,760	69,119	43,359	(2)
Safes and vaults	1927	25	3,386	4,494	7,226	18,440	11,213	9,688
	1925	35	3,865	5,398	8,266	23,044	14,778	10,054
	1923	34	3,476	4,694	7,086	19,101	12,016	7,690
	1921	34	3,547	4,793	7,440	19,725	12,285	(2)
Screw-machine products	1927	205	9,967	13,778	20,895	48,138	27,243	31,835
	1925	193	8,987	12,669	18,788	43,779	24,991	30,514
	1923	180	9,126	11,919	15,795	39,239	23,443	28,954
	1921	160	5,911	6,548	7,577	18,365	10,788	(2)
Screws, wood	1927	13	3,723	4,277	5,015	11,882	6,867	11,633
	1925	12	5,064	5,525	6,288	15,836	9,548	11,970
	1923	10	4,108	5,024	5,769	13,707	7,938	8,550
	1921	8	2,742	2,797	2,462	7,418	4,956	(2)
Steam fittings and steam and hot-water heating apparatus.	1927	232	42,893	64,851	76,835	225,158	148,323	132,723
	1925	225	43,260	63,979	77,357	228,930	151,573	109,313
	1923	236	44,141	64,807	83,297	221,954	138,657	91,085
	1921	274	30,808	39,596	50,213	127,367	77,153	(2)
Stoves and ranges (other than electric) and warm-air furnaces.[7]	1927	564	45,180	64,327	93,096	258,286	165,190	100,009
	1925	564	46,514	66,299	95,873	264,303	168,430	94,126
	1923	588	49,812	68,331	102,568	268,262	165,694	87,664
	1921	512	32,451	39,308	62,217	144,285	82,068	(2)
Tin cans and other tinware, not elsewhere classified.	1927	236	29,721	35,001	169,421	253,479	84,057	64,005
	1925	221	29,901	34,392	175,779	260,360	84,581	48,728
	1923	241	30,511	32,816	135,980	215,971	79,991	41,252
	1921	244	22,711	24,595	108,748	168,305	59,557	(2)
Tools and cutlery:								
Cutlery (not including silver and plated cutlery) and edge tools.	1927	230	17,178	20,270	19,126	76,688	57,562	43,419
	1925	211	16,407	20,226	20,562	80,263	59,701	51,673
	1923	211	16,671	19,751	17,160	72,477	55,317	43,171
	1921	210	14,345	14,750	14,974	49,341	34,367	(2)

See footnotes at end of table.

SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY: 1921 TO 1927—Continued

[See "Regrouping of industries and renumbering of groups," p. 19]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture	Horsepower
				Expressed in thousands of dollars [1]				
Other iron and steel products—Continued.								
Tools and cutlery—Con.								
Files	1927	36	3,948	5,145	3,136	12,974	9,838	10,979
	1925	38	4,209	5,393	3,518	13,541	10,023	11,534
	1923	37	4,590	5,805	3,840	13,565	9,725	11,155
	1921	39	3,595	3,175	2,309	7,647	5,338	(2)
Saws	1927	77	4,182	5,754	7,674	22,628	14,954	14,526
	1925	71	4,710	5,873	8,224	[4] 24,709	[4] 16,485	14,287
	1923	80	5,420	6,730	9,740	30,787	21,047	13,208
	1921	79	3,788	4,087	6,480	18,185	11,705	(2)
Other tools, not including machine tools.	1927	657	25,232	34,465	37,057	117,431	80,374	85,963
	1925	663	25,340	34,294	39,023	121,263	82,240	78,686
	1923	700	29,100	37,169	43,206	123,158	79,952	75,248
	1921	714	19,453	22,643	25,550	70,523	44,973	(2)
Vault, sidewalk and floor lights, coal-hole covers, and ventilating equipment.[3]	1923	24	296	446	1,213	2,991	1,778	254
	1921	25	245	366	1,170	2,150	980	(2)
Wire, drawn from purchased bars or rods.	1927	73	19,866	30,038	128,092	190,710	62,617	152,574
	1925	68	18,544	26,928	127,251	184,463	57,212	138,115
	1923	64	21,310	29,862	133,883	196,364	62,481	123,923
	1921	61	14,832	17,810	62,705	99,946	37,240	(2)
Wirework, not elsewhere classified.	1927	512	21,697	26,439	63,093	128,536	65,443	45,858
	1925	462	19,268	23,835	59,604	115,429	55,825	35,943
	1923	443	16,783	19,341	52,280	100,248	47,969	31,617
	1921	413	11,485	13,314	37,039	66,385	29,345	(2)

[1] Each total is the sum, expressed to the nearest thousand, of the individual items expressed in units. For this reason the totals in some cases may differ slightly from the sums of the items as here given.
[2] Not called for on schedule.
[3] Horsepower data for blast-furnaces are included with those for steel works and rolling mills.
[4] Revised. Revision not carried to group total.
[5] Similar products are manufactured to a large extent by steel works and rolling mills. The figures here given refer only to establishments engaged primarily in the manufacture of the specified classes of products.
[6] The figures for 1925 and 1927 are not comparable with those for prior censuses, because establishments engaged in welding (job or repair), previously canvassed, were omitted for 1925 and 1927.
[7] Formerly classified as two industries: "Stoves (other than gas, oil, or electric) and warm-air furnaces" and "Stoves and appliances, gas and oil."
[8] Classified in other industries subsequent to 1923.

CAST-IRON PIPE

[A preliminary report for this industry was issued under date of January 25, 1929]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of cast-iron pipe and fittings for gas, water, sewage, etc. It has little relation to the manufacture of wrought-iron and steel pipe.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	82	22,892	$25,982,196	$48,224,970	$95,088,622	$46,863,652	63,196
1925	77	23,033	27,438,033	48,846,592	[2] 100,919,173	[2] 52,072,581	54,820
1923	73	21,576	25,019,953	48,804,425	92,674,088	43,869,663	47,239
1921	70	12,496	13,135,992	23,897,020	44,321,548	20,424,528	(3)
1919	59	12,625	14,705,398	25,386,552	50,235,101	24,848,549	28,741
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	(4)	—0.6	—5.3	—1.3	—5.8	—10.0	15.3
1923–1925	(4)	6.8	9.7	.1	8.9	18.7	16.0
1923–1927	(4)	6.1	3.8	—1.2	2.6	6.8	33.8
1919–1927	(4)	81.3	76.7	90.0	89.3	88.6	119.9

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Revised.
[3] Not called for on schedule.
[4] Per cent not computed where base is less than 100.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927, 1925, AND 1923

TYPE	1927		1925		1923	
	Number	Capacity	Number	Capacity	Number	Capacity
		Horsepower		*Horsepower*		*Horsepower*
Prime movers, total	3,693	63,196	2,654	54,820	2,205	47,239
Steam engines	44	6,896	42	6,581	} 57	10,105
Steam turbines	4	2,140	5	2,230		
Internal-combustion engines	6	1,535	8	1,768	5	1,500
Water wheels and turbines	1	200	1	200	1	200
Electric motors driven by purchased current	3,638	52,425	2,598	44,041	2,142	35,434
Electric motors, total	4,887	67,942	3,928	60,881	3,412	54,330
Driven by purchased current	3,638	52,425	2,598	44,041	2,142	35,434
Driven by current generated in establishment reporting	1,249	15,517	1,330	16,840	1,270	18,896
		Kilowatts		*Kilowatts*		*Kilowatts*
Electric generators	37	7,131	39	6,712	(1)	(1)

[1] Not called for on schedule.

TABLE 3.—PRODUCTS, BY CLASS, QUANTITY, AND VALUE, FOR PRINCIPAL STATES: 1927, 1925, AND 1923

CLASS	1927		1925		1923	
	Tons (2,000 pounds)	Value	Tons (2,000 pounds)	Value	Tons (2,000 pounds)	Value
1. Cast-iron-pipe industry, all products, total		$95,088,622		[1]$100,919,173		$92,674,088
2. Cast-iron pipe and fittings		91,042,892		[1] 95,302,818		87,949,093
3. Other products, including castings (not normally belonging to the industry)		4,045,730		5,616,355		4,724,995
4. Cast-iron pipe made as a secondary product in other industries		195,102		2,084,140		2,194,504
Cast-iron pipe and fittings: Aggregate (sum of 2 and 4)[2]	1,994,023	91,237,994	[1] 1,958,237	[1] 97,386,958	[3] 1,609,322	[3] 90,143,597
Gas and water pipe and fittings, total	1,505,090	65,549,844	[1] 1,433,740	[1] 70,951,852	1,140,072	63,915,878
Alabama	701,042	30,098,435	677,914	32,906,076	504,224	26,364,575
New Jersey	272,503	12,756,744	[1] 215,507	[1] 11,031,822	183,197	10,338,023
Other States	531,545	22,694,665	540,319	27,013,954	452,651	27,213,280
Bell and spigot pipe, total	1,388,338	54,338,352	[1] 1,319,180	[1] 59,607,197	1,025,130	50,121,361
Alabama	639,848	24,127,167	[1] 612,807	[1] 26,627,059	450,922	20,687,084
New Jersey	257,469	11,224,553	211,037	10,000,573	165,608	8,328,640
Other States	491,021	18,986,632	495,336	22,979,565	408,600	21,105,637
Flanged pipe	17,581	1,033,249	[1] 16,208	[1] 1,081,991	15,188	1,001,824
Culvert pipe	14,155	777,029	9,363	563,099	7,487	393,929
Fittings, total	85,016	9,401,214	[1] 88,989	[1] 9,699,565	92,267	12,398,764
Alabama	43,301	4,990,230	52,539	5,482,949	42,731	5,083,424
New Jersey	11,733	1,337,412	[1] 14,672	[1] 1,682,749	17,589	2,009,383
Other States	29,982	3,073,572	21,778	2,533,867	31,947	5,305,957
Soil and plumbers' pipe and fittings, total	488,933	25,688,150	[1] 524,497	[1] 26,435,106	425,360	24,033,215
Alabama	237,343	12,002,042	[1] 257,558	[1] 12,199,011	256,288	13,572,526
New Jersey	51,074	2,994,366	[1] 65,097	[1] 3,792,115	49,294	3,179,464
New York	23,090	1,286,522	19,294	993,198	13,829	995,290
Pennsylvania	59,304	3,164,734	64,925	3,207,508	36,299	2,124,433
Tennessee	50,173	2,379,221	63,356	3,148,756	(4)	(4)
Other States	67,949	3,861,265	54,267	3,094,518	69,650	4,161,502

[1] The difference between this figure and the corresponding one given in the report for 1925 is due to revision of the data reported by certain manufacturers.
[2] These aggregates are the sums of all items in the columns beneath except those which are underlined.
[3] Includes 43,890 tons (estimated), valued at $2,194,504, not distributed by classes and States.
[4] Included in figure for "Other States" in order to avoid disclosing the output of individual establishments.

TABLE 4.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	82	24,183	5	1,286	22,892	63,196
Alabama	34	11,488	-------	648	10,840	27,146
New Jersey	9	3,999	2	216	3,781	12,329
New York	5	333	-------	33	300	758
Pennsylvania	9	2,442	-------	105	2,337	6,511
Tennessee	6	1,603	-------	64	1,539	2,486
Other States [1]	19	4,318	3	220	4,095	13,966

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [3]
			Materials and supplies	Fuel and power [2]		
United States	$3,427,122	$25,982,196	$45,965,094	$2,259,876	$95,088,622	$46,863,652
Alabama	1,727,217	10,619,902	20,337,914	900,923	42,590,922	21,352,085
New Jersey	577,527	5,284,921	8,479,916	641,352	17,424,468	8,303,200
New York	111,412	420,775	469,132	26,732	1,236,930	741,066
Pennsylvania	275,523	3,294,636	4,958,543	264,180	10,417,794	5,195,071
Tennessee	152,333	1,572,092	2,845,016	69,248	5,680,628	2,766,364
Other States [1]	583,110	4,789,870	8,874,573	357,441	17,737,880	8,505,866

[1] California, 2 establishments; Colorado, 1; Indiana, 1; Maryland, 2; Michigan, 1; Missouri, 1; North Carolina, 1; Ohio, 5; Oregon, 1; Utah, 1; and Virginia, 3.

[2] The cost of fuel used in the industry for melting and for similar purposes was, in many cases, reported as a material cost and not as a fuel cost; and for this reason the cost of fuel and power as shown in this table does not include the total cost of fuel used for all purposes.

[3] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)

CUTLERY (NOT INCLUDING SILVER AND PLATED CUTLERY) AND EDGE TOOLS

[A preliminary report for this industry was issued under date of December 31, 1928]

Description of the industry.—The establishments in this industry are engaged primarily in the manufacture of various kinds of cutting implements, which are divided, for census purposes, into two groups, namely, "cutlery (not including silver and plated cutlery)" and "edge tools." The cutting edge is used in so many forms that it is impracticable to collect data in detail except for the major classes of cutting instruments. The most important of these are table and kitchen cutlery, pocket knives, razors, scissors and shears, axes, adzes, hatchets, planes, chisels, augers and bits, and cutting dies.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1919 TO 1927

[Data for establishments with products under $5,000 in value included for 1919 but not for subsequent years. See sec. 10, p. 6]

YEAR OR PERIOD	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, and power	Value of products	Value added by manufacture [1]	Horsepower
1927	230	17,178	$20,270,326	$19,125,989	$76,688,444	$57,562,455	43,419
1925	211	16,407	20,226,033	20,562,009	80,263,252	59,701,243	51,673
1923	211	16,671	19,750,933	17,159,825	72,477,013	55,317,188	43,171
1921	210	14,345	14,749,993	14,973,967	49,341,204	34,367,237	(2)
1919	304	19,859	20,048,465	19,477,437	66,629,570	47,152,133	38,555
	PER CENT OF INCREASE OR DECREASE (—)						
1925–1927	9.0	4.7	0.2	—7.0	—4.5	—3.6	—16.0
1923–1925	-------	—1.6	2.4	19.8	10.7	7.9	19.7
1923–1927	9.0	3.0	2.6	11.5	5.8	4.1	.6
1919–1927	—24.3	—13.5	1.1	—1.8	15.1	22.1	12.6

[1] Value of products less cost of materials, supplies, fuel, and power. (See secs. 18 and 21, pp. 9 and 10.)
[2] Not called for on schedule.

TABLE 2.—PRIME MOVERS, MOTORS, AND GENERATORS, BY TYPE, NUMBER, AND RATED CAPACITY, FOR THE UNITED STATES: 1927 AND 1925

TYPE	1927		1925	
	Number	Capacity	Number	Capacity
		Horse-power		*Horse-power*
Prime movers, total	3,815	43,419	3,283	51,673
Steam engines	38	5,530	63	7,371
Steam turbines	7	8,640	8	10,823
Internal-combustion engines	12	876	17	916
Water wheels and turbines	48	5,222	54	5,853
Electric motors driven by purchased current	3,710	23,151	3,141	26,710
Electric motors, total	4,561	35,223	3,676	31,353
Driven by purchased current	3,710	23,151	3,141	26,710
Driven by current generated in establishment reporting	851	12,072	535	4,643
		Kilowatts		*Kilowatts*
Electric generators	39	10,065	48	5,924

TABLE 3.—CUTLERY (NOT INCLUDING SILVER AND PLATED CUTLERY) AND EDGE TOOLS—PRODUCTION, BY CLASS, KIND, AND VALUE, FOR THE UNITED STATES: 1927 AND 1925

CLASS	1927	1925
1. Cutlery (not including silver and plated cutlery) and edge-tools industry, all products, total value	$76,688,444	$80,263,252
2. Cutlery and edge tools	72,912,288	74,553,272
3. Other products (not normally belonging to the industry)	3,497,734	5,643,515
4. Receipts for repair work	278,422	66,465
5. Cutlery and edge tools made as secondary products in other industries, value	6,376,850	2,813,548
Cutlery and edge tools, all industries: Total value (sum of 2 and 5)	79,289,138	77,366,820
Cutlery—		
Table cutlery, including kitchen cutlery	6,518,585	8,268,660
Razors—		
Safety razors and safety-razor blades	39,681,279	39,372,921
Razors, other than safety	373,482	406,525
Scissors and shears	4,843,527	4,780,288
Pocket knives	5,177,093	5,472,339
Edge tools—		
Axes, adzes, and hatchets	3,707,998	5,928,196
Augers and bits (woodworking only)	2,447,032	3,302,864
Chisels (except cold chisels)	577,470	
Planes	1,824,862	
Cutting dies	3,056,896	2,153,392
Other cutlery and edge tools [1]	11,080,914	7,681,635

[1] Butchers' and painters' knives, leather and rubber knives, corn knives, and knife blades; cleavers, splitters, and machine knives; hair and nail clippers, etc.

TABLE 4.—CUTLERY (NOT INCLUDING SILVER AND PLATED CUTLERY) AND EDGE TOOLS—PRODUCTION, BY CLASS, KIND, AND VALUE, BY STATES: 1927

KIND AND STATE	Value
Cutlery (not including silver and plated cutlery) and edge tools, aggregate value [1]	$79,289,138
Cutlery, as specified, total value	56,593,966
Table cutlery (including kitchen cutlery), total	6,518,585
Connecticut	2,664,752
Illinois	460,927
Massachusetts	1,502,623
Michigan, Ohio, and Wisconsin	115,872
New Jersey	125,629
New York	1,298,948
Other States	349,834
Safety razors and safety-razor blades	39,681,279
Razors, other than safety	373,482
Scissors and shears, total	4,843,527
Arkansas, Indiana, and Kentucky	370,384
Connecticut	1,673,128
New Jersey	1,996,913
Ohio	687,355
Other States	115,747
Pocketknives, total	5,177,093
Colorado, New Jersey, and Wisconsin	243,709
Connecticut	637,814
Illinois, Indiana, and Ohio	207,720
Massachusetts and Rhode Island	756,207
New York	2,900,003
Pennsylvania	431,640
Edge tools, as specified, total value	11,614,258
Axes, adzes, and hatchets, total	3,707,998
Connecticut, New York, and Vermont	826,311
Illinois, Indiana, and Missouri	741,507
Maine	128,132
Michigan, Ohio, and West Virginia	878,196
Pennsylvania	1,056,416
Other States	77,436
Edge tools—Continued.	
Augers and bits (woodworking only), total	$2,447,032
Connecticut	556,119
Illinois	716,199
Massachusetts and New York	309,292
Ohio	753,098
Pennsylvania	112,324
Chisels (except cold chisels), total	577,470
Connecticut	231,932
Illinois, Missouri, and Wisconsin	151,811
New York, Ohio, and Pennsylvania	91,114
Other States	102,613
Planes	1,824,862
Cutting dies, total	3,056,896
Connecticut, New Jersey, and Pennsylvania	83,297
Illinois	387,460
Massachusetts	863,171
Missouri	655,615
New York	577,652
Ohio	372,968
Other States	116,733
Cutlery and edge tools, other [2] and not specified, total	11,080,914
California	48,735
Connecticut	2,459,486
Illinois	330,202
Indiana and New Hampshire	276,807
Maryland, North Carolina, and West Virginia	941,219
Massachusetts	2,833,473
Michigan	365,963
Minnesota and Texas	33,104
New Jersey	622,145
New York	160,629
Ohio	1,088,600
Oregon and Washington	136,817
Pennsylvania	1,124,923
Wisconsin	658,811

[1] This aggregate is the sum of all items in the column beneath except those which are underlined.
[2] Butchers' and painters' knives, leather and rubber knives, corn knives, and knife blades; cleavers, splitters, and machine knives; hair and nail clippers, etc.

TABLE 5.—GENERAL STATISTICS, BY STATES: 1927

[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]

STATE	Number of establishments	PERSONS ENGAGED IN THE INDUSTRY				Horsepower
		Total	Proprietors and firm members	Salaried officers and employees	Wage earners (average for the year)	
United States	230	19,355	122	2,055	17,178	43,419
California	7	36	7	4	25	76
Connecticut	25	2,860	4	271	2,585	8,287
Illinois	17	586	11	81	494	1,132
Indiana	4	86	--------	13	73	199
Massachusetts	42	3,955	27	521	3,407	9,502
Michigan	4	97	5	11	81	260
Missouri	7	386	1	49	336	818
New Jersey	21	1,686	7	172	1,507	2,824
New York	42	3,931	18	415	3,498	6,916
Ohio	19	1,489	7	144	1,338	3,112
Pennsylvania	18	2,336	19	212	2,105	2,515
Wisconsin	8	240	4	44	192	287
Other States [1]	16	1,667	12	118	1,537	7,491

STATE	Salaries	Wages	Cost of materials, supplies, fuel, and power		Value of products	Value added by manufacture [2]
			Materials and supplies	Fuel and power		
United States	$5,038,574	$20,270,326	$17,756,205	$1,369,734	$76,688.444	$57,562,455
California	4,680	44,531	25,840	2,612	107,968	79,516
Connecticut	528,854	3,160,391	2,229,575	217,496	8,430,907	5,983,836
Illinois	221,045	762,469	517,788	63,813	2,075,939	1,494,338
Indiana	26,623	70,213	68,256	3,892	230,380	158,232
Massachusetts	1,314,137	4,173,515	5,594,914	288,351	33,705,477	27,822,212
Michigan	27,477	97,486	58,711	9,024	236,905	169,170
Missouri	101,841	467,995	392,555	27,712	1,257,550	837,283
New Jersey	521,824	1,919,746	1,231,836	90,759	6,091,645	4,769,050
New York	1,061,881	4,133,933	3,874,468	197,380	13,881,541	9,809,693
Ohio	328,357	1,378,172	835,536	110,068	3,851,105	2,905,501
Pennsylvania	522,495	2,302,883	1,547,765	189,104	2,426,074	689,205
Wisconsin	127,291	250,890	235,422	19,123	832,963	578,418
Other States [1]	252,069	1,508,102	1,143,589	150,400	3,559,990	2,266,001

[1] Arkansas, 1 establishment; Colorado, 1; Iowa, 1; Kentucky, 1; Maine, 1; Maryland, 2; Minnesota, 2; New Hampshire, 2; Rhode Island, 2; Vermont, 1; Washington, 1; West Virginia, 1.
[2] Value of products less cost of materials, supplies, fuel and power. (See secs. 18 and 21, pp. 9 and 10.)

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