SOAP

[A preliminary report for this industry was issued July 21, 1932]

Description of the industry.—This industry classification covers establishments engaged primarily in the manufacture of soap and soap products. The soap departments of large meat-packing plants are also included.

The principal products are toilet soap, white and yellow laundry soap, soap chips, and other hard soaps; granulated and powdered soaps and soap powders; shaving soap, cream, and powder; and soft, liquid, and paste soaps.

Shaving soap, cream, and powder.—Separate data on the production of shaving soap, shaving cream, and shaving powder were collected for 1929 and 1931, but it was necessary to combine the totals to avoid disclosing approximations of the data reported by establishments engaged in the manufacture of shaving soap.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately. No comparable data are available for years prior to 1904]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	248	14,163	$17,739,732	$121,829,338	$257,718,699	$135,889,361
1929	282	14,363	18,994,656	180,352,984	310,191,530	129,838,546
1927	256	13,432	19,715,931	172,244,130	287,059,935	114,815,805
1925	272	15,496	18,526,104	184,873,537	278,273,107	93,399,570
1923	270	17,002	20,776,443	173,545,981	276,402,838	102,856,857
1921	283	16,558	18,864,713	150,355,643	240,194,619	89,838,976
1919	348	20,436	21,228,063	238,518,858	316,740,115	78,221,257
1914	371	14,172	8,087,937	88,866,786	127,942,441	39,075,655
1909	420	12,999	6,226,882	72,179,418	111,357,777	39,178,359
1904	436	11,044	4,762,676	43,625,608	68,274,700	24,649,092
Per cent of increase or decrease (−):						
1929–1931	−12.1	−1.4	−6.6	−32.4	−16.9	4.7
1927–1929	10.2	6.9	−3.7	4.7	8.1	13.1
1925–1927	−5.9	−12.8	6.4	−6.8	.1	22.9
1923–1925	.7	−9.4	−10.8	6.5	5.2	−9.2
1921–1923	−4.6	2.7	10.1	15.4	14.	14.5
1919–1921	−18.7	−19.0	−11.1	−37.0	−2	4.9
1921–1931	−12.4	−14.5	−6.0	−19.0	7.	.3
1919–1929	−19.0	−29.7	−10.5	−24.4	−2.4	0
1909–1919	−17.1	57.2	240.9	230.5	184.	99.7

[1] The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9

[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of this table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
States, 1931						
California	28	736	$906,432	$7,725,570	$16,909,623	$9,184,053
Illinois	28	1,697	2,053,391	11,909,842	19,554,686	7,644,844
Indiana	7	959	1,137,222	7,856,574	24,308,534	16,451,960
Minnesota	7	45	48,258	310,104	826,536	516,432
Missouri	9	338	377,625	3,127,016	5,272,987	2,145,971
New York	39	1,822	2,486,405	16,759,384	28,882,923	12,123,539
Ohio	17	2,294	2,794,027	18,772,833	30,065,500	11,292,667
Pennsylvania	27	682	831,460	6,099,773	13,270,847	7,171,074
Rhode Island	6	27	41,838	357,999	523,779	165,780
Washington	4	33	43,269	200,530	313,131	112,601
Massachusetts	24	3,508	4,630,941	29,528,686	82,756,294	53,227,608
New Jersey	16					
Other States [3]	36	2,022	2,388,864	19,181,027	35,033,859	15,852,832

For footnotes 1 and 2, see p. 640.

[3] Alabama, 1 establishment; Colorado, 2; Connecticut, 4; Florida, 1; Georgia, 1; Iowa, 3; Kansas, 3; Kentucky, 1; Louisiana, 1; Maryland, 2; Michigan, 1; Nebraska, 1; North Carolina, 1; Oregon, 2; Tennessee, 1; Texas, 2; Utah, 1; Virginia, 1; Wisconsin, 7.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data reported by individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	14,163	14,250	14,234	14,374	14,332	14,170	13,792	*13,619*	13,941	14,327	14,471	14,327	14,121
1929	14,363	14,172	14,413	14,414	14,208	14,005	*13,825*	13,919	14,280	14,925	15,191	14,783	14,220
1925	15,406	15,187	15,573	15,639	15,657	15,145	15,158	*15,006*	15,011	15,349	15,699	15,874	15,573
1919	20,436	20,590	18,739	18,055	*17,963*	19,223	20,932	21,759	22,567	22,653	22,089	21,229	19,392
1914	14,172	14,212	14,325	14,427	14,461	14,418	14,138	13,893	13,927	14,160	14,286	14,106	*13,711*
1909	12,999	*12,937*	12,671	12,885	12,843	12,476	12,653	13,001	13,105	13,250	13,475	13,649	13,850
States, 1931													
California	736	*684*	704	720	716	697	692	700	715	734	762	838	865
Illinois	1,697	1,643	1,639	1,724	1,709	1,725	1,652	*1,626*	1,730	1,774	1,758	1,724	1,662
Indiana	959	979	974	989	982	969	942	943	944	938	965	*929*	951
Minnesota	45	*41*	*41*	*41*	46	47	48	47	46	46	46	46	46
Missouri	338	365	352	346	355	350	339	326	*319*	329	327	324	320
New York	1,822	1,926	1,879	1,863	1,837	1,815	1,770	*1,715*	1,729	1,804	1,861	1,847	1,823
Ohio	2,294	*2,223*	2,258	2,238	2,324	2,307	2,271	2,252	2,311	2,354	2,372	2,323	2,294
Pennsylvania	682	671	687	704	704	705	672	*645*	670	676	697	692	666
Rhode Island	27	27	27	27	27	27	27	28	28	27	*26*	*26*	*26*
Washington	33	35	34	33	33	30	32	33	34	34	35	35	*29*

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9]

KIND	1931	1929	1927	1925
1. Soap industry, all products, total value	$257,718,699	$310,191,530	$287,059,935	$278,273,107
2. Soap	$228,330,828	$274,839,304	$242,927,457	$237,420,436
3. Other products (not normally belonging to the industry)	$29,387,871	$35,352,226	$44,132,478	$40,852,671
4. Soap made as a secondary product in other industries	$9,731,294	$11,917,571	$6,291,791	$4,454,488
Soap, all industries:				
Aggregate value (sum of 2 and 4)	$238,062,122	$286,756,875	$249,219,248	$241,874,924
Hard soaps [1]—				
Total pounds	2,572,895,242	2,587,954,758	2,435,147,011	2,251,455,045
Total value	$197,185,381	$235,580,543	$212,474,776	$207,173,060
Toilet soap [1]—				
Pounds	305,638,280	324,383,543	287,696,300	272,206,996
Value	$53,064,155	$59,982,997	$53,572,981	$49,387,128
Foots soap—				
Pounds	20,015,108	21,829,276	15,788,153	13,062,084
Value	$1,212,600	$1,916,077	$1,368,051	$1,162,171
Soap chips and flakes—				
Pounds	351,076,793	387,925,004	373,215,795	325,042,787
Value	$30,353,303	$41,763,903	$39,422,667	$36,283,839
Laundry soap (in bar form)—				
White—				
Pounds	787,731,756	914,588,831	887,720,019	755,788,858
Value	$33,282,684	$51,175,255	$48,859,052	$49,996,906
Yellow—				
Pounds	643,372,418	550,593,948	598,675,316	675,167,863
Value	$35,102,433	$40,774,488	$42,864,599	$47,088,060
Granulated and powdered soap—				
Pounds	421,803,780	337,291,356	215,919,132	142,321,736
Value	$40,976,787	$35,724,861	$21,016,580	$15,789,485
Other hard soaps—				
Pounds	43,257,107	51,342,800	56,132,896	67,864,721
Value	$3,193,419	$4,242,962	$5,370,846	$7,465,471
Soap powder or washing powder—				
Pounds	262,711,490			
Value	$12,058,920			
Cleansers and scouring powders containing soap—		505,529,239	484,463,778	547,986,130
Pounds	[2] 164,067,301	$23,387,172	$24,023,606	$25,858,113
Value	[2] $6,382,874			
Liquid soap—				
Pounds	33,626,668	35,263,195	24,933,523	22,047,417
Value	$2,421,266	$3,497,384	$3,240,285	$2,122,358
Soft soap—				
Pounds	42,285,375	66,141,365	79,773,314	61,189,483
Value	$2,246,484	$3,950,851	$4,231,115	$2,513,631
Paste soap—				
Pounds	31,623,484	40,525,581	30,458,681	30,086,038
Value	$1,976,410	$3,009,945	$2,259,306	$2,200,911
Shaving soap, cream, and powder, total value	$11,553,281	$10,793,908	(3)	(3)
Weight reported—				
Pounds	10,452,597	11,093,665	(3)	(3)
Value	$7,025,273	$7,791,616		
Weight not reported—				
Value	$4,528,008	$3,002,292	(3)	(3)
Other soaps [4]—				
Pounds	7,903,949	6,444,377	33,249,520	22,750,253
Value	$415,492	$766,252	$2,642,904	$1,731,105
Soap stock or soap base, for sale—				
Pounds	8,977,784	4,106,339	8,178,932	5,382,271
Value	$546,682	$292,323	$347,256	$275,746
Soap not reported by kind—				
Pounds	34,441,092	49,513,181	----------	----------
Value	$3,275,332	$5,478,497	----------	----------

[1] The hard-soap figures for 1927 and 1925, which include data for shaving soap (but not for shaving cream or shaving powder), are not strictly comparable with those for 1931 and 1929, which do not include such data.

[2] Production by establishments in the soap industry only. In addition, "Cleaning preparations containing soap," to the value of $9,392,428, were made by establishments in other industries, as follows: "Cleaning and polishing preparations" industry, $7,124,232; other industries, $2,268,196. No data for quantities are available, and no data as to values were collected for years prior to 1931.

[3] Not reported separately. (See footnote 1.)

[4] The figures for "Other soaps" for 1927 and 1925, which include data for products shown separately for 1931 and 1929, are not strictly comparable with those for the later years.

TANNING MATERIALS, NATURAL DYESTUFFS, MORDANTS AND ASSISTANTS, AND SIZES

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of tanning extracts and solutions, natural dyestuffs, mordants and assistants, and sizes. Natural dyestuffs are made from woods, barks, leaves, berries, and other forest and vegetable products. (Artificial or synthetic dyes are products of the Chemicals Not Elsewhere Classified industry.)

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	116	1,962	$2,390,118	$15,520,635	$26,469,119	$10,948,484
1929	126	2,419	3,113,617	25,335,629	39,836,035	14,500,406
1927	122	2,414	2,971,477	23,073,925	35,677,033	12,603,108
1925	125	2,495	2,987,070	22,763,114	34,783,703	12,020,589
1923	125	3,243	3,800,783	24,033,018	35,971,612	11,938,594
1921	123	2,993	3,007,547	20,105,517	28,310,708	8,205,191
1919	144	4,342	4,734,614	34,592,698	53,744,283	19,151,585
1914	112	2,839	1,613,116	13,237,995	20,620,336	7,382,341
1909	107	2,397	1,291,379	9,683,651	15,954,574	6,270,923
1904	98	2,707	1,264,492	6,829,340	10,893,113	4,063,773
1899	77	1,647	787,942	4,745,912	7,350,748	2,604,836
Percent of increase or decrease (—):						
1929–31	—7.9	—18.9	—23.2	—38.7	—33.6	—24.5
1927–29	3.3	0.2	4.8	9.8	11.7	15.1
1925–27	—2.4	—3.2	—0.5	1.4	2.6	4.8
1923–25	----------	—23.1	—21.4	—5.3	—3.3	0.7
1921–23	1.6	8.4	26.4	19.5	27.1	45.5
1919–21	—14.6	—31.1	—36.5	—41.9	—47.3	—57.2
1921–31	—5.7	—34.4	—20.5	—22.8	—6.5	33.4
1919–29	—12.5	—44.3	—34.2	—26.8	—25.9	—24.3
1909–19	34.6	81.1	266.6	257.2	236.9	205.4
1899–1909	(3)	45.5	63.9	104.0	117.0	140.7
States, 1931						
Massachusetts	17	145	$205,838	$1,392,242	$2,278,907	$886,665
New Jersey	23	443	704,198	5,222,161	9,124,319	3,902,158
New York	10	151	217,866	1,462,915	2,598,778	1,135,863
North Carolina	6	155	115,118	527,735	869,373	341,638
Pennsylvania	17	234	292,665	1,817,161	3,127,720	1,310,559
Rhode Island	11	62	91,679	612,876	1,137,461	524,585
Virginia	7	196	177,102	857,147	1,256,270	399,123
Other States [4]	25	576	585,652	3,628,398	6,076,291	2,447,893

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Percent not computed where base is less than 100.
[4] Alabama, 2 establishments; California, 1; Connecticut, 1; Delaware, 1; Florida, 1; Georgia, 3; Illinois, 2; Louisiana, 1; Maryland, 1; Michigan, 2; Oregon, 1; South Carolina, 2; Tennessee, 6; Wisconsin, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table present statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	1,952	2,058	1,908	1,913	1,958	*1,862*	1,886	1,933	1,919	1,951	1,878	2,163	2,101
1929	2,419	2,370	2,411	2,434	2,465	2,419	2,499	2,425	2,397	*2,364*	2,441	2,386	2,417
1925	2,495	2,538	2,556	2,438	2,493	*2,409*	2,503	2,505	2,493	2,531	2,468	2,524	2,479
1919	4,342	4,278	3,285	4,165	*4,165*	4,214	4,336	4,511	4,472	4,454	4,360	4,488	4,438
1914	2,839	2,719	*2,692*	2,779	2,838	2,848	2,849	2,798	2,785	2,917	2,989	2,967	2,917
1909	2,307	*2,293*	2,351	2,351	2,436	2,344	2,399	2,432	2,479	2,453	2,324	2,450	2,439
States, 1931													
Massachusetts	145	**147**	145	146	145	145	146	*139*	140	146	146	145	**147**
New Jersey	443	433	442	447	447	438	448	444	448	*425*	443	451	450
New York	151	150	152	151	153	150	*145*	146	150	152	155	**157**	156
North Carolina	155	173	122	125	137	124	*121*	161	128	162	137	251	213
Pennsylvania	234	229	*209*	235	237	237	231	246	239	238	226	236	240
Rhode Island	62	58	*54*	65	65	58	**66**	65	64	64	64	60	57
Virginia	196	**267**	198	201	192	188	195	191	193	195	*150*	189	195

TABLE 3.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE: 1925 TO 1931

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9]

	1931	1929	1927	1925
1. Tanning Materials and Dyestuffs industry, all products, total value	$26,469,119	$39,836,035	$35,677,033	$34,783,703
2. Tanning materials, natural dyestuffs, mordants and assistants, and sizes	22,334,694	31,135,085	29,412,928	29,729,163
3. Other products (not normally belonging to the industry)	4,134,425	8,700,950	6,264,105	5,054,540
4. Tanning materials, natural dyestuffs, etc., made as secondary products in other industries, value	1,756,121	2,479,806	1,516,333	1,494,423
Tanning materials, natural dyestuffs, mordants and assistants, and sizes, all industries: Aggregate value (sum of 2 and 4)	$24,090,815	$33,614,891	$30,929,261	$31,223,586
TANNING MATERIALS [1]				
Total value	$7,834,705	$9,957,869	$11,431,396	$10,742,176
Extracts:				
Chestnut:				
Number of establishments	17	17	23	21
Pounds (liquid and solid)	227,539,138	270,162,089	309,678,467	294,425,093
Value	$3,226,683	$4,001,327	$5,312,807	$5,065,347
Quebracho:				
Number of establishments	6	7	10	8
Pounds (liquid)	76,469,460	100,066,938	124,557,358	82,385,107
Value	$1,857,198	$3,229,073	$3,010,125	$2,395,123
Oak:				
Number of establishments	8	6	8	7
Pounds (liquid and solid)	5,123,001	7,826,963	9,476,629	8,664,005
Value	$167,359	$295,084	$358,473	$287,880
Sumac:				
Number of establishments	6	6	4	6
Pounds (liquid)	5,809,278	5,279,069	5,524,944	4,211,892
Value	$369,716	$343,680	$276,553	$261,407

[1] Not including tanning materials made and consumed in the same establishments.

TABLE 3.—PRODUCTS, BY CLASS, KIND, QUANTITY, AND VALUE: 1925 TO 1931—Continued

[See note at head of table]

	1931	1929	1927	1925
Tanning materials, natural dyestuffs, mordants and assistants, and sizes, all industries—Continued				
TANNING MATERIALS—continued				
Extracts—Continued				
Myrobalans:				
Number of establishments	5		4	4
Pounds (liquid)	2,265,579		3,476,552	4,427,127
Value	$66,316		$113,995	$150,941
Wattle:				
Number of establishments	4	$1,936,773	----------	----------
Pounds (liquid and solid)	2,403,091		----------	----------
Value	$65,758		----------	----------
Other extracts, including chrome tannage, value	$1,983,770		$1,950,028	$2,172,627
Other tanning materials, value	$97,905	$151,932	$409,415	$408,851
NATURAL DYESTUFFS				
Total value	$1,615,990	$2,425,984	$2,068,893	$2,015,258
Logwood extract:				
Number of establishments	7	5	7	7
Pounds (liquid and solid)	17,031,756	19,337,708	18,156,825	13,697,714
Value	$1,250,594	$1,843,448	$1,468,045	$1,205,005
Quercitron extract:				
Number of establishments	5	4	6	5
Pounds (liquid and solid)	1,437,530	2,419,874	4,069,449	4,174,435
Value	$63,156	$171,702	$211,782	$251,352
Other extracts and ground, chipped, and dry product, value	$302,240	$410,834	$389,066	$558,901
MORDANTS				
Total value	$866,204	$1,173,427	$959,195	$985,288
Tannic acid:				
Pounds	2,404,212	1,449,375	1,297,232	1,439,957
Value	$667,802	$503,567	$593,465	$585,951
Other, value	$198,402	$669,860	$365,730	$399,337
ASSISTANTS				
Total value	$5,722,206	$6,893,561	$5,182,479	$4,776,364
Turkey-red oil:				
Pounds	13,549,539	24,260,669	15,579,781	14,338,241
Value	$1,291,149	$2,542,042	$1,560,366	$1,552,182
Softeners:				
Pounds	33,111,163	31,612,775	23,330,942	25,341,910
Value	$1,972,320	$2,248,448	$1,797,543	$2,008,641
Other, value	$2,458,737	$2,103,071	$1,824,570	$1,215,541
SIZES				
Total value	$8,051,710	$13,164,050	$11,287,298	$12,704,500
Rosin sizes:				
Pounds	143,924,111	201,289,758	157,690,794	146,858,732
Value	$2,903,298	$6,108,457	$5,869,298	$5,498,011
Dextrin sizes:				
Pounds	25,164,265	33,506,764	31,917,325	56,350,539
Value	$1,513,128	$2,042,926	$2,092,880	$3,335,876
Gum sizes other than rosin:				
Pounds	22,330,203	20,138,178	16,042,060	44,357,864
Value	$1,210,505	$1,400,566	$919,939	$2,279,011
Other sizes (made of starch, glue, etc.):				
Pounds	29,559,510	42,360,549	30,980,240	28,422,387
Value	$2,424,779	$3,612,101	$2,405,181	$1,591,602

WOOD DISTILLATION AND CHARCOAL MANUFACTURE

Description of the industry.—This industry embraces three classes of establishments: (1) Those engaged in hardwood distillation; (2) those engaged in softwood distillation; (3) those engaged in charcoal manufacture by means of kilns or of pits. The principal products of hardwood distillation are methanol, acetate of lime and its derivatives, charcoal, and tar. The principal products of softwood distillation are turpentine, rosin, pine oil, tar, tar oils, and charcoal. Two distinct processes are employed in wood distillation, namely, destructive distillation and the steam process.

In the manufacture of charcoal by the carbonizing of wood in kilns or by the pit method the volatile substances are driven off and lost, leaving charcoal and wood tar as the only products.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	63	2,654	$2,744,963	$6,474,049	$11,440,157	$4,966,108
Hardwood distillation	43	1,578	1,733,319	4,042,344	6,803,460	2,761,116
Softwood distillation	14	1,039	981,663	2,396,808	4,547,606	2,150,798
Charcoal manufacture	6	37	29,981	34,897	89,091	54,194
1929	91	4,648	5,293,240	14,791,111	29,593,672	14,802,561
1927	88	4,537	4,739,153	15,422,575	27,630,487	12,207,912
1925	106	4,217	4,304,904	15,824,055	25,283,432	9,459,377
1923	123	4,123	4,324,848	17,268,950	29,695,423	12,426,473
1921	108	2,130	1,913,503	6,727,787	9,677,552	2,949,765
1919	156	5,155	5,465,761	20,319,973	33,134,732	12,814,759
1914	142	3,010	1,645,335	6,728,188	10,284,597	3,556,409
1909	196	3,352	1,716,245	6,323,428	10,609,520	4,286,092
1904	215	3,195	1,409,660	5,489,548	9,105,237	3,615,689
1899	285	3,342	1,131,865	3,860,354	7,134,661	3,274,307
Percent of increase or decrease (−):						
1929–31	(3)	−42.9	−48.1	−56.2	−61.3	−66.5
1927–29	(3)	2.4	11.7	−4.1	7.1	21.3
1925–27	−17.0	7.6	10.1	−2.5	9.3	29.1
1923–25	−13.8	2.3	−.5	−8.4	−14.9	−23.9
1921–23	13.9	93.6	126.0	156.7	206.8	321.3
1919–21	−30.8	−58.7	−65.0	−66.9	−70.8	−77.0
1921–31	−41.7	24.6	43.5	−3.8	18.2	68.4
1919–29	−41.7	−9.8	−3.2	−27.2	−10.7	15.5
1909–19	−20.4	53.8	218.5	221.3	212.3	199.0
1899–1909	−31.2	.3	51.6	63.8	48.7	30.9

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
States, 1931						
Louisiana	4	150	$141,047	$256,066	$636,149	$380,083
Michigan	7	441	785,248	1,558,310	2,173,331	615,021
Mississippi	3	241	218,304	487,464	890,378	402,914
New York	9	136	109,538	468,322	893,615	425,293
Pennsylvania	18	330	311,380	1,017,483	1,518,006	500,523
Tennessee	3	464	394,210	733,767	1,805,416	1,071,649
Other States [4]	19	892	785,236	1,952,637	3,523,262	1,570,625

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Percent not computed where base is less than 100.
[4] Arkansas, 1 establishment; Delaware, 1; Florida, 4; Georgia, 1; Illinois, 1; Kentucky, 1; Massachusetts, 1; Missouri, 1; North Carolina, 2; Ohio, 1; Oklahoma, 1; Washington, 1; West Virginia, 2; Wisconsin, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	2,654	3,197	3,241	3,051	2,821	2,716	2,418	2,412	*2,305*	2,360	2,459	2,371	2,496
Hardwood distillation	1,578	2,052	2,075	1,995	1,648	1,544	*1,285*	1,297	1,311	1,377	1,481	1,386	1,481
Softwood distillation	1,039	1,100	1,111	1,014	1,133	1,133	1,097	1,080	961	950	*946*	955	987
Charcoal manufacture	37	45	55	42	40	39	36	35	33	33	32	30	*28*
1929	4,648	4,539	4,544	4,613	4,524	*4,495*	4,651	4,588	4,575	4,627	4,788	4,908	4,929
1925	4,217	4,543	4,419	4,198	4,179	4,284	4,153	4,285	4,057	4,061	*4,052*	4,152	4,217
1919	5,155	6,082	5,939	5,555	4,847	4,659	*4,386*	4,699	4,748	4,896	5,192	5,288	5,569
1914	3,010	3,733	3,551	3,123	2,783	2,719	2,681	*2,661*	2,840	2,907	2,962	3,012	3,148
1909	3,352	3,422	3,502	3,420	3,381	3,240	3,169	*2,998*	3,012	3,287	3,425	3,576	3,783
States, 1931													
Louisiana	150	201	201	105	170	172	170	176	*92*	105	98	139	171
Michigan	441	668	671	675	498	443	340	321	*301*	316	370	364	328
Mississippi	241	206	255	251	320	319	295	237	232	204	*191*	192	195
New York	136	199	200	191	183	134	103	85	84	*83*	94	133	150
Pennsylvania	330	479	487	412	374	328	282	*171*	183	247	298	312	388
Tennessee	464	510	511	518	393	463	*392*	487	482	474	476	395	472

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9]

	1931	1929	1927	1925
1. Wood distillation and charcoal manufacture industry, all products, total value	$11,440,157	$29,593,672	$27,630,487	$25,283,432
2. Wood-distillation products and charcoal	11,355,531	29,569,864	27,564,074	25,207,592
3. Other products (not normally belonging to the industry)	84,626	23,808	66,413	75,840
4. Wood-distillation products and charcoal made as secondary products in other industries, value	132,128	718,718	6,429	29,913
Wood-distillation products and charcoal, all industries:				
Total value (sum of 2 and 4)	$11,487,659	$30,288,582	$27,570,503	$25,237,505
Methanol (wood alcohol):				
Number of establishments	46	53	57	67
Crude, total production, gallons	4,283,652	8,355,189	8,008,838	8,643,848
Number of establishments	39	51	55	62
Made and consumed in the same establishments, gallons	2,181,273	3,254,112	2,276,139	2,795,203
For sale:				
Gallons	2,102,379	5,101,077	5,732,699	5,848,645
Value	$288,456	$1,794,392	$2,072,101	$2,025,680
Refined:				
Number of establishments	16	11	9	13
Gallons	2,737,046	6,676,321	5,001,832	5,870,658
Value	$884,531	$3,907,111	$2,951,793	$3,390,223
Acetate of lime:				
Number of establishments	34	49	53	63
Tons	25,796	58,163	69,016	72,652
Value	$869,771	$4,695,449	$4,021,292	$3,437,384
Methyl acetone:				
Number of establishments	6	7	6	6
Pounds	1,925,942	4,675,140	2,603,520	3,644,272
Value	$125,812	$574,736	$352,947	$457,589
Miscellaneous chemicals—acetic acid,[1] acetic anhydride,[1] ethyl acetate,[1] etc., value	$1,593,447	$3,840,575	$1,432,112	$1,355,155
Tar, total production, gallons	6,051,122	10,518,016	8,440,847	8,900,347
Number of establishments	13	25	19	22
Made and consumed in the same establishments, gallons	4,192,636	3,613,653	3,864,004	3,382,410
For sale:				
Gallons	1,858,486	6,904,363	4,576,843	5,517,937
Value	$224,635	$878,668	$798,099	$839,578
Tar oils:				
Number of establishments	12	19	16	18
Gallons	858,542	996,582	1,560,730	1,425,086
Value	$119,339	$200,507	$322,926	$329,022
Pitch:				
Number of establishments	6	8	9	7
Pounds	10,872,023	8,587,287	19,604,571	26,437,865
Value	$94,242	$102,370	$375,608	$327,810
Turpentine, wood:[2]				
Steam distilled:				
Number of establishments	11			
Gallons	2,937,848			
Value	$966,427			
Destructive distilled:		25	15	15
Number of establishments	3	4,619,253	4,333,176	3,166,548
Gallons	212,642	$1,714,139	$1,674,661	$2,078,879
Value	$64,761			
Pine oil:				
Steam distilled:				
Number of establishments	8			
Gallons	2,089,978			
Value	$994,548			
Destructive distilled:		20	15	17
Number of establishments	5	2,722,172	2,892,962	2,029,833
Gallons	59,587	$1,271,641	$1,250,496	$826,648
Value	$19,711			
Rosin, wood:[2]				
Number of establishments	7	11	10	8
Barrels (500 pounds)	333,512	478,555	452,187	286,988
Value	$1,904,730	$5,443,214	$5,232,361	$3,378,343

See footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931—Continued

[See note at head of table]

	1931	1929	1927	1925
Wood-distillation products and charcoal, all industries—Continued.				
Charcoal:				
Number of establishments	51	76	77	92
Total production for sale, bushels	22,912,468	45,355,001	42,306,506	43,835,846
Value	$3,146,500	$5,472,606	$6,274,151	$5,885,630
Hardwood distillation:				
Number of establishments	40	52	55	64
Bushels	21,253,099	40,828,944	39,221,736	40,373,168
Value	$2,912,295	$4,922,591	$5,690,767	$5,293,735
Softwood distillation:				
Number of establishments	5	13	9	10
Bushels	1,143,296	3,656,051	1,601,626	1,983,590
Value	$153,652	$386,743	$290,684	$303,101
Kiln and pit plants:				
Number of establishments	6	11	13	18
Bushels	516,073	870,006	1,483,144	1,479,088
Value	$80,553	$163,272	$292,700	$288,794
Other wood products, value	$190,749	$393,174	$811,956	$905,564

[1] Acetic acid, acetic anhydride, and ethyl acetate are made primarily by establishments in other industries. For total production of these commodities, see report for Chemicals Not Elsewhere Classified.

[2] Only small amounts of turpentine and rosin are produced in the Wood Distillation industry, these commodities being distilled mainly from crude gum by establishments in the Turpentine and Rosin industry. The production in that industry during the crop year ended Mar. 31, 1932, amounted to 24,341,824 gallons of turpentine and 1,570,885 barrels of rosin.

Group 7.—PRODUCTS OF PETROLEUM AND COAL

THE GROUP AS A WHOLE

This group comprises five industries, namely: Coke-Oven Products; Fuel Briquettes; Gas, Manufactured, Illuminating and Heating; Lubricating Oils and Greases, Not Made in Petroleum Refineries; and Petroleum Refining.

Summary statistics for the group by industries, are given in the table below, and detailed reports for the several industries will be found on pages 651 to 677. These reports have been published separately in pamphlet form

SUMMARY FOR GROUP 7.—PRODUCTS OF PETROLEUM AND COAL: 1921 TO 1931

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Total for the group	1931	1,317	120,146	$182,367,608	$1,551,733,861	$2,264,817,027	$713,083,166
	1929	1,497	147,216	229,050,010	2,546,840,193	3,647,747,957	1,100,907,764
	1927	1,418	141,655	217,485,282	2,262,698,554	3,060,225,699	797,527,145
	1925	1,582	136,366	210,033,811	2,356,583,404	3,230,008,511	873,425,107
	1923	1,650	138,330	212,881,574	1,981,370,216	2,778,888,167	797,517,951
	1921	1,560	115,006	180,452,175	1,760,804,612	2,372,039,178	611,234,566
Coke-oven products	1931	112	14,383	22,134,487	162,793,117	226,509,038	63,715,921
	1929	153	20,552	33,389,425	281,592,430	416,348,458	134,756,028
	1927	171	21,082	34,167,692	286,728,701	382,012,617	95,283,916
	1925	237	23,191	36,762,401	277,750,675	378,033,527	100,882,852
	1923	262	28,364	48,107,894	354,030,441	516,922,898	162,892,457
	1921	176	16,070	23,832,946	168,790,864	221,313,363	52,522,499
Fuel briquettes	1931	23	301	356,633	3,034,691	4,567,853	1,533,162
	1929	23	426	584,029	5,918,799	9,497,657	3,578,858
	1927	20	274	445,511	4,873,195	7,203,410	2,330,215
	1925	14	246	369,280	3,935,503	6,019,310	2,083,807
	1923	15	364	510,604	3,907,197	5,584,070	1,676,873
	1921	14	371	484,423	2,280,374	3,177,742	897,368
Gas, manufactured, illuminating and heating	1931	638	34,523	49,442,399	152,579,762	467,751,449	315,171,687
	1929	754	43,065	[2] 61,322,007	188,416,183	512,652,595	324,236,412
	1927	828	48,497	68,356,448	211,785,523	516,705,170	304,919,647
	1925	919	46,998	67,436,443	178,423,145	455,460,053	277,036,908
	1923	939	42,282	59,600,334	191,120,082	450,097,161	258,977,079
	1921	954	34,956	53,306,407	202,253,479	411,195,503	208,942,024
Lubricating oils and greases, not made in petroleum refineries [3]	1931	168	2,115	2,959,972	22,808,976	41,703,690	18,894,714
	1929	177	2,577	3,738,637	39,571,373	69,584,246	30,012,873
Petroleum refining	1931	376	68,824	107,474,117	1,210,517,315	1,524,284,997	313,767,682
	1929	390	80,596	131,176,993	2,031,341,408	2,639,665,001	608,323,593
	1927	354	71,234	113,716,705	1,752,997,043	2,142,648,503	389,651,460
	1925	359	65,324	104,645,391	1,889,678,019	2,376,656,556	486,978,537
	1923	382	66,717	103,833,760	1,425,052,861	1,793,700,087	368,647,226
	1921	366	63,189	102,294,108	1,382,170,434	1,727,440,157	345,269,723

[1] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

[2] Revised; revision not carried into group total.

[3] Because of the transfer, at the census for 1929, of establishments engaged primarily in the manufacture of lubricating oils from the "Oils Not Elsewhere Classified" industry, Group 6, to the "Lubricating Oils and Greases, Not Made in Petroleum Refineries" industry, the figures for the latter industry for years prior to 1929 are not comparable with those for 1929 and 1931 and therefore are not presented separately in this table. They are, however, included in the totals for the group.

FUEL BRIQUETTES

[A preliminary report for this industry was issued under date of July 2, 1932]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of fuels made by pressing into briquettes such materials as anthracite culm, bituminous slack, petroleum coke, charcoal, etc., mixed with asphaltic pitch, coal-tar pitch, or other suitable materials as binders.

SUMMARY FOR THE UNITED STATES, 1909–31, AND FOR WISCONSIN, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and earlier years but not for 1921 and subsequent years. (See sec. 3d, p. 4.) No comparable data can be given for years prior to 1909. Wisconsin is the only State for which it is possible to give separate figures without disclosing, exactly or approximately, the data reported by individual establishments]

	Number of establishments	Wage earners (average for year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
United States						
1931	23	301	$356,633	$3,034,691	$4,567,853	$1,533,162
1929	23	426	584,029	5,918,799	[2] 9,497,657	3,578,858
1927	20	274	445,511	4,873,195	[2] 7,203,410	2,330,215
1925	14	246	369,280	3,935,503	6,019,310	2,083,807
1923	15	364	510,604	3,907,197	5,584,070	1,676,873
1921	14	371	484,423	2,280,374	3,177,742	897,368
1919	11	171	221,545	1,386,394	1,973,877	587,483
1914	14	141	111,774	609,068	862,904	253,836
1909	11	88	49,874	154,648	311,010	156,362
Percent of increase or decrease (−):						
1929–31	----------	−29.3	−38.9	−48.7	−51.9	−57.2
1927–29	(3)	55.5	31.1	21.5	31.8	53.6
1925–27	(3)	11.4	20.6	23.8	19.7	11.8
1923–25	(3)	−32.4	−27.7	0.7	7.8	24.3
1921–23	(3)	−1.9	5.4	71.3	75.7	86.9
1919–21	(3)	117.0	118.7	64.5	61.0	52.7
1921–31	(3)	−18.9	−26.4	33.1	43.7	70.9
1919–29	(3)	149.1	163.6	326.2	381.2	509.2
1909–19	----------	(3)	344.2	796.5	534.7	275.7
States, 1931						
Wisconsin	3	100	$106,409	$1,879,041	$2,684,292	$805,251
Other States [4]	20	201	250,224	1,155,650	1,883,561	727,911

[1] Value of products less cost of materials, fuel, and purchased electric energy. (See sec. 20, p. 11.)

[2] For 1931, value of 611,179 tons (of 2,000 pounds); for 1929, 1,186,577 tons; for 1927, 917,262 tons. In addition, briquets were reported as a secondary product by establishments classified in other industries as follows: For 1931, 60,376 tons, valued at $672,807; for 1929, 48,799 tons, $683,464; and for 1927, 64,867 tons, $889,174.

[3] Percent not computed where base is less than 100.

[4] California, 1 establishment; Indiana, 1; Iowa, 1; Massachusetts, 2; Missouri, 1; New Jersey, 2; New York, 1; North Dakota, 1; Oklahoma, 1; Pennsylvania, 3; Texas, 1; Virginia, 1; Washington, 2; and West Virginia, 2.

LUBRICATING OILS AND GREASES, NOT MADE IN PETROLEUM REFINERIES

Description of the industry.—This industry embraces establishments engaged primarily in manufacturing and compounding lubricating oils and greases from mineral, animal, and vegetable oils and fats. The chief material is partly refined petroleum, used alone or in combination with animal or vegetable oils and fats.

At censuses prior to that for 1929 this classification covered only the manufacture of lubricating greases, and therefore no comparative figures for earlier years can be given.

SUMMARY FOR THE UNITED STATES, 1931 AND 1929, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are not included. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	168	2,115	$2,959,972	$22,808,976	[3] $41,703,690	$18,894,714
1929	177	2,577	3,738,637	39,571,373	[3] 69,584,246	30,012,873
Percent of decrease (−): 1929-31	−5.1	−17.9	−20.8	−42.4	−40.1	−37.0
States, 1931						
California	11	82	$123,054	$855,726	$1,891,027	$1,035,301
Illinois	17	120	160,184	1,942,601	3,676,520	1,733,919
Kansas	9	45	62,382	541,261	1,037,767	496,506
Maryland	7	58	76,394	668,447	1,262,458	594,011
Michigan	5	39	60,207	408,701	741,826	333,125
Missouri	5	75	90,497	697,345	1,426,320	728,975
New Jersey	16	590	922,847	7,073,314	12,474,969	5,401,655
New York	15	115	175,821	1,028,670	1,951,477	922,807
Ohio	26	208	289,525	2,036,544	4,217,121	2,180,577
Pennsylvania	32	597	769,679	5,521,956	9,064,035	3,542,079
Wisconsin	3	12	16,763	247,817	597,495	349,678
Other States [4]	22	174	212,619	1,786,594	3,362,675	1,576,081

[1] For 1931, production; for 1929, manufacturers' sales (shipments or deliveries). See sec. 16 p. 9.

[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

[3] For 1931: Lubricating oils, $28,399,914; lubricating greases, $11,132,890; other products, $2,170,886. For 1929: Lubricating oils, $47,077,021; lubricating greases, $17,349,837; other products, $5,157,388. For statistics on production of lubricating oils and greases in all industries, see table 5, report on Petroleum Refining.

[4] Colorado, 2 establishments; District of Columbia, 1; Indiana, 2; Kentucky, 1; Louisiana, 2; Massachusetts, 3; Minnesota, 3; Oklahoma, 2; Rhode Island, 1; South Dakota, 1; Texas, 4.

MANUFACTURED GAS AND COKE-OVEN PRODUCTS

[Preliminary reports for these industries were issued under date of Dec. 28, 1932]

Establishments engaged primarily in the manufacture of gas for illuminating and heating and those engaged primarily in the manufacture of coke-oven products are assigned to separate classifications for census purposes. The two industries are closely related, however, the products of both being gas, coke, and by-products resulting from distillation of coal, and for this reason combined summary statistics and combined statistics for products are given in the following tables.

COMBINED SUMMARY FOR THE GAS AND COKE-OVEN PRODUCTS INDUSTRIES, FOR THE UNITED STATES: 1899 TO 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3*d*, p. 4]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
1931, total	750	48,906	$71,570,886	$315,372,879	$694,260,487	$378,887,608
Gas industry	638	34,523	49,442,399	152,579,762	467,751,449	315,171,687
Coke-Oven Products industry	112	14,383	22,134,487	162,793,117	226,509,038	63,715,921
1929	907	63,617	[2] 94,711,432	470,008,613	929,001,053	458,992,440
1927	999	69,579	102,524,140	498,514,224	898,717,787	400,203,563
1925	1,156	70,189	104,198,844	456,173,820	834,093,580	377,919,760
1923	1,201	70,646	107,708,228	545,150,523	967,020,059	421,869,536
1921	1,130	51,026	77,139,353	371,044,343	632,508,866	261,464,523
1919	1,300	72,227	95,057,920	381,817,556	645,794,746	263,977,190
1914	1,515	64,899	41,090,616	145,917,616	319,512,810	173,595,194
1909	1,611	66,488	36,385,042	116,452,371	262,510,993	146,058,622
1904	1,297	49,547	26,362,415	67,064,598	176,873,592	109,808,994
1899	1,118	39,458	19,522,032	40,270,888	111,302,138	71,031,250
Percent of increase or decrease (−):						
1929–31	−17.3	−23.1	−24.4	−32.9	−25.3	−17.5
1927–29	−9.2	−8.6	−7.6	−5.7	3.4	14.7
1925–27	−13.6	−0.9	−1.6	9.3	7.7	5.9
1923–25	−3.7	−0.6	−3.3	−16.3	−13.7	−10.4
1921–23	6.3	38.5	39.6	46.9	52.9	61.3
1919–21	−13.1	−29.4	−18.9	−2.8	−2.1	−1.0
1921–31	−33.6	−4.2	−7.2	−15.0	9.8	44.9
1919–29	−30.2	−11.9	−0.4	23.1	43.9	73.9
1909–19	−19.3	8.6	161.3	227.9	146.0	80.7
1899–1909	44.1	65.5	86.4	189.2	135.9	105.6

[1] Value of products less cost of materials, fuel, and purchased electric energy. (See sec. 20, p. 11)
[2] Revised.

COMBINED STATISTICS OF PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE GAS AND COKE-OVEN PRODUCTS INDUSTRIES, FOR THE UNITED STATES: 1931 AND 1929

KIND	TOTAL		GAS INDUSTRY		COKE-OVEN PRODUCTS INDUSTRY [1]	
	1931	1929	1931	1929	1931	1929
Total value of products	$659, 232, 896	$874, 151, 033	[2] $437, 253, 201	[2] $479, 065, 985	$221, 979, 695	$395, 085, 048
Gas:						
Total production, M cu. ft	860, 186, 110	1,237,910,978	397, 096, 693	450, 717, 416	462, 489, 417	787, 193, 562
Sales:						
M cu. ft	634, 032, 105	849, 645, 105	374, 067, 588	408, 401, 395	259, 964, 517	441, 243, 710
Value	$444, 999, 512	$499, 342, 136	$399, 680, 704	$438, 242, 970	$45, 318, 808	$61, 099, 166
Coke:						
Total production, short tons	35, 483, 411	62, 265, 668	5, 548, 343	5, 614, 130	29, 935, 068	56, 651, 538
For sale:						
Short tons	33, 533, 595	60, 095, 277	3, 598, 527	3, 443, 739	29, 935, 068	56, 651, 538
Value	$164, 731, 786	$283, 427, 029	$26, 672, 584	$26, 868, 182	$138, 059, 202	$256, 558, 847
Screenings and breeze:						
Total production, short tons	3, 462, 344	5, 330, 250	648, 941	553, 596	2, 813, 403	4, 776, 654
Sales: [3]						
Short tons	710, 390	1, 017, 181	66, 058	72, 026	644, 332	945, 155
Value	$1, 766, 250	$2, 849, 384	$179, 538	$232, 208	$1, 586, 712	$2, 617, 176
Tar:						
Total production, gallons	589, 655, 767	845, 794, 885	190, 451, 802	209, 408, 472	399, 203, 965	636, 386, 413
Sales: [3]						
Gallons	372, 020, 783	454, 598, 157	149, 891, 320	163, 694, 890	222, 129, 463	290, 903, 267
Value	$16, 611, 593	$22, 821, 639	$6, 631, 144	$8, 169, 807	$9, 980, 449	$14, 651, 832
Ammonia (NH_3 equivalent, all forms):						
Sales: [3]						
Pounds	293, 100, 041	437, 657, 103	37, 852, 903	36, 216, 150	255, 247, 138	401, 440, 953
Value	$14, 580, 804	$20, 034, 931	$1, 720, 916	$2, 173, 491	$12, 859, 888	$20, 861, 440
Crude light oil:						
Total production, gallons	125, 295, 185	203, 497, 484	6, 884, 489	5, 272, 006	118, 410, 696	198, 225, 478
Sales: [3]						
Gallons	9, 648, 866	10, 783, 188	3, 924, 621	505, 954	5, 724, 245	10, 277, 234
Value	$767, 648	$1, 311, 629	$289, 072	$40, 294	$478, 576	$1, 271, 335
Light-oil derivatives:						
Total production, gallons	102, 574, 594	171, 022, 095	4, 880, 764	9, 270, 077	97, 693, 830	161, 752, 018
Sales: [3]						
Gallons	98, 243, 866	154, 076, 479	3, 142, 022	4, 414, 324	95, 101, 844	149, 662, 155
Value	$14, 022, 383	$30, 227, 917	$488, 219	$944, 628	$13, 534, 164	$29, 283, 289
Naphthalene, crude and refined:						
Total production, pounds	8, 630, 617	22, 748, 229	1, 017, 005	3, 063, 738	7, 613, 612	19, 684, 491
Sales: [3]						
Pounds	8, 126, 877	22, 577, 507	775, 885	2, 995, 121	7, 350, 992	19, 582, 476
Value	$90, 308	$369, 648	$11, 502	$50, 529	$78, 806	$319, 119
Other by-products, value	$1, 662, 612	$4, 766, 720	$1, 579, 522	$2, 343, 876	$83, 090	$2, 422, 844

[1] Statistics are based on data compiled and published by the U.S. Bureau of Mines, revised to exclude figures for 21 establishments, both for 1931 and for 1929, classified as gas plants by the Census Bureau and as by-product coke-oven plants by the Bureau of Mines.

[2] Represents total value of the products specified below, and therefore does not include value of products not normally belonging to the industry, nor receipts for rents and sales of lamps and appliances. (See Combined Summary, p. 653, for aggregate value of all products and receipts.)

[3] Products of Gas industry sold and available for sale from production of specified year, and products of Coke-oven Products industry sold within specified year.

GAS, MANUFACTURED, ILLUMINATING AND HEATING

[A preliminary report for this industry was issued under date of Dec. 28, 1932]

Description of the industry.—This industry designation covers establishments, both commercial 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.

Purchased gas.—The total output of gas in 1931, as shown in this report, included 96,225,630 M cubic feet purchased by establishments reporting. (See table 4.) Of this amount, 6,184,801 M cubic feet, representing gas made within the Gas industry (coal gas, water gas, etc.), is duplicated in the figures for the total ouptut, and similar duplication is included in the figures for earlier years.

Commercial and municipal establishments.—Combined statistics for commercial and municipal establishments are given in tables 1 to 6, inclusive, and separate figures for municipal establishments are presented in table 7.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. (See sec. 3d, p. 4.) Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately. A combined summary for the Gas and Coke-oven Products industries is presented in the table on p. 653]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
United States						
1931	638	34,523	$49,442,399	$152,579,762	$467,751,449	$315,171,687
1929	754	43,065	[2] 61,322,007	188,416,183	512,652,595	324,236,412
1927	828	48,497	68,356,448	211,785,523	516,705,170	304,919,647
1925	919	46,998	67,436,443	178,423,145	455,460,053	277,036,908
1923	939	42,282	59,600,334	191,120,082	450,097,161	258,977,079
1921	954	34,956	53,306,407	202,253,479	411,195,503	208,942,024
1919	1,022	42,908	52,758,628	157,550,882	329,278,908	171,728,026
1914	1,284	43,792	26,801,664	76,779,288	220,237,790	143,458,502
1909	1,296	37,215	20,930,097	52,427,844	166,814,371	114,386,527
1904	1,019	30,566	17,057,917	37,180,066	125,144,945	87,964,879
1899	877	22,459	12,436,296	20,605,356	75,716,693	55,111,337

For footnotes, see end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Percent of increase or decrease (−):						
1929-31	−15.4	−19.8	−19.4	−19.0	−8.8	−2.8
1927-29	−8.9	−11.2	−10.3	−11.0	−0.8	6.3
1925-27	−9.9	3.2	1.4	18.7	13.4	10.1
1923-25	−2.1	11.2	13.1	−6.6	1.2	7.0
1921-23	−1.6	21.0	11.8	−5.5	9.5	23.9
1919-21	−6.7	−18.5	1.0	28.4	24.9	21.7
1921-31	−33.1	−1.2	−7.2	−24.6	13.8	50.8
1919-29	−26.2	0.4	15.0	19.6	55.7	88.8
1909-19	−21.1	15.3	152.1	200.5	97.4	50.1
1899-1909	47.8	65.7	68.3	154.4	120.3	107.6
States, 1931						
Alabama	4	26	$23,244	$42,324	$145,611	$103,287
Arizona	10	83	102,471	435,230	1,395,847	960,617
Colorado	5	65	101,727	103,496	337,680	234,184
Connecticut	16	973	1,458,862	4,616,979	12,961,482	8,344,503
Florida	22	363	456,643	1,400,535	5,304,678	3,904,143
Georgia	12	116	122,848	463,287	1,570,855	1,107,568
Idaho	3	29	44,652	87,574	198,116	110,542
Illinois	42	2,720	4,372,194	17,777,580	55,328,383	37,550,803
Indiana	20	969	1,252,066	5,225,897	12,760,407	7,534,510
Iowa	49	475	701,819	2,147,470	7,389,779	5,242,309
Maine	7	222	330,120	735,148	2,177,227	1,442,079
Massachusetts	32	3,304	5,170,219	13,104,100	38,598,658	25,494,558
Michigan	50	2,483	3,470,015	12,459,267	34,718,022	22,258,755
Minnesota	20	486	617,846	2,309,895	6,748,299	4,438,404
Missouri	19	1,080	1,466,534	4,326,968	12,552,781	8,225,813
Nebraska	12	197	296,430	758,829	2,397,098	1,638,269
New Hampshire	10	234	316,537	764,801	2,119,387	1,354,586
New Jersey	22	1,066	1,649,791	11,307,694	39,225,221	27,917,527
New York	46	10,364	14,767,258	43,218,108	131,087,504	87,869,396
North Carolina	26	325	347,573	1,227,092	3,157,078	1,929,986
Ohio	9	191	271,764	465,809	2,162,075	1,696,266
Pennsylvania	57	3,050	4,401,703	9,842,118	28,940,406	19,098,288
South Carolina	9	177	166,666	506,823	1,616,367	1,109,544
South Dakota	8	80	119,572	250,037	815,673	565,636
Tennessee	6	342	340,572	443,506	1,901,351	1,457,845
Vermont	9	70	107,245	259,936	914,632	654,696
Virginia	14	539	675,237	1,317,517	5,393,409	4,075,892
Washington	11	516	608,178	1,390,774	4,398,862	3,008,088
Wisconsin	28	1,319	1,838,836	4,509,985	14,116,836	9,606,851
Other States [3]	60	2,659	3,843,777	11,080,983	37,317,725	26,236,742

[1] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

[2] Revised.

[3] Arkansas, 1 establishment; California, 11; Delaware, 3; District of Columbia, 1; Kentucky, 4; Louisiana 2; Maryland, 11; Montana, 3; Nevada, 2; North Dakota, 5; Oregon, 9; Rhode Island, 4; West Virginia, 3; Wyoming, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	34,523	**35,356**	35,181	35,110	35,124	35,008	34,659	34,369	34,222	34,160	33,979	33,579	*33,534*
1929	43,065	42,359	42,261	*41,946*	42,866	43,117	43,472	43,912	**43,973**	43,660	43,514	43,206	42,489
1925	46,998	46,379	45,506	*45,605*	46,430	46,974	47,197	47,455	47,197	47,342	48,136	48,028	**47,826**
1919	42,908	43,793	42,220	*41,549*	41,750	42,122	42,338	43,237	43,231	42,554	43,754	44,068	**44,280**
1914	43,792	41,603	41,017	41,488	44,276	47,204	47,572	46,962	45,772	44,213	42,999	41,404	*40,994*
1909	37,215	33,115	*32,562*	34,314	37,422	39,456	40,412	40,225	38,486	37,800	38,065	37,566	37,122
States, 1931													
Alabama	26	33	30	27	*22*	*22*	23	28	27	24	27	26	27
Arizona	83	98	97	96	95	90	87	78	71	72	*67*	72	71
Colorado	65	58	59	59	59	59	*57*	62	67	92	92	60	59
Connecticut	973	951	949	990	999	1,011	1,029	997	978	957	943	940	*931*
Florida	363	398	381	375	362	350	350	345	*342*	346	370	385	349
Georgia	116	151	1.0	143	110	108	103	103	103	106	103	104	*102*
Idaho	29	*28*	29	30	29	29	30	30	29	29	30	*28*	29
Illinois	2,720	*2,643*	2,768	2,748	2,700	2,739	2,847	2,747	2,682	2,684	2,670	2,698	2,710
Indiana	969	1,037	1,037	1,032	1,026	1,011	937	922	950	939	917	*908*	915
Iowa	475	481	483	473	502	527	475	473	473	*440*	465	450	460
Maine	222	147	193	*193*	239	270	256	223	229	220	221	214	201
Massachusetts	3,304	3,243	3,329	3,300	3,444	3,373	3,345	3,298	3,339	3,348	3,290	3,192	*3,147*
Michigan	2,483	2,597	2,531	2,532	2,491	2,491	2,472	2,446	2,461	2,453	2,447	*2,433*	2,448
Minnesota	486	514	509	516	495	476	476	478	479	483	483	463	*458*
Missouri	1,080	1,156	1,097	1,100	1,091	1,103	1,076	1,081	1,080	1,079	1,048	1,026	*1,024*
Nebraska	197	203	203	203	203	200	200	198	198	198	187	*185*	*185*
New Hampshire	234	225	223	220	266	266	246	247	238	226	223	219	*210*
New Jersey	1,066	1,031	1,054	1,081	1,080	1,074	1,067	1,070	1,052	1,082	1,101	1,070	*1,026*
New York	10,364	**10,526**	10,405	10,407	10,343	10,398	10,395	10,366	10,310	10,303	10,306	*10,297*	10,310
North Carolina	325	333	321	321	*312*	327	*312*	322	324	361	332	321	317
Ohio	191	205	200	193	214	211	208	121	*115*	208	213	203	199
Pennsylvania	3,050	3,182	3,180	3,166	3,195	3,148	2,968	3,068	3,112	3,007	2,933	2,839	*2,802*
South Carolina	177	196	187	188	173	169	*166*	172	175	172	171	176	183
South Dakota	80	75	76	83	80	80	*72*	76	79	79	88	90	84
Tennessee	342	366	363	358	353	357	344	347	346	315	319	*314*	316
Vermont	70	73	75	73	73	71	69	69	68	68	68	*64*	*64*
Virginia	539	548	551	550	537	537	527	552	529	535	540	*520*	544
Washington	516	561	570	574	586	496	497	485	*479*	491	482	480	495
Wisconsin	1,319	1,352	1,340	1,346	1,341	1,357	1,369	1,349	1,300	1,287	1,270	1,262	*1,254*

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITE STATES: 1931, 1929, 1927, AND 1925

[Combined statistics for products of the Gas and Coke-Oven Products industries for 1931 and 1929 a presented in the table on p. 654]

KIND	1931	1929	1927	1925
Gas industry, all products, aggregate value	$467, 751, 449	$512, 652, 595	$516, 705, 170	$455, 460, 05
Gas and by-products	437, 253, 201	479, 065, 985	485, 099, 542	426, 851, 20
Other products (not normally belonging to the industry)	795, 360	1, 663, 772	1, 945, 950	1, 422, 39
Receipts from rents and sales of lamps and appliances:				
Rents	211, 204	297, 714	390, 193	2, 306, 08
Sales	29, 491, 684	31, 625, 124	29, 269, 485	24, 880, 36
Gas and by-products, total value	$437, 253, 201	$479, 065, 985	$485, 099, 542	$426, 851, 205
Gas				
Total produced and purchased, M cubic feet	397, 696, 693	450, 717, 416	445, 457, 144	395, 520, 627
For sale:				
M cubic feet	374, 067, 588	408, 401, 395	412, 236, 133	359, 401, 849
Value	$399, 680, 704	$438, 242, 970	$446, 244, 677	$395, 968, 502
Plant consumption and loss, M cubic feet	23, 629, 105	42, 316, 021	33, 221, 011	36, 118, 778
By-products				
Total produced for sale, value	$37, 572, 497	$40, 823, 015	$38, 854, 865	$30, 882, 703
Coke:				
Total production, short tons	5, 548, 343	5, 614, 130	4, 805, 119	4, 032, 187
For sale:				
Short tons	3, 598, 527	3, 443, 739	2, 977, 306	2, 398, 391
Value	$26, 672, 584	$26, 868, 182	$25, 514, 288	$20, 721, 381
Consumed in plant, short tons	1, 949, 816	2, 170, 391	1, 827, 813	1, 633, 796
Screenings and breeze:				
Total production, short tons	648, 941	553, 596	562, 669	475, 080
For sale:				
Short tons	66, 058	72, 026	85, 627	62, 697
Value	$179, 538	$232, 208	$321, 554	$169, 455
Consumed in plant, short tons	582, 883	481, 570	477, 042	412, 383
Tar:				
Total production, gallons	190, 451, 802	209, 408, 472	211, 179, 704	179, 633, 672
For sale:				
Gallons	149, 891, 320	163, 694, 890	162, 169, 846	125, 274, 215
Value	$6, 631, 144	$8, 169, 807	$8, 217, 635	$6, 140, 784
Water-gas tar, total:				
Gallons	59, 747, 486	74, 466, 951	82, 528, 822	61, 219, 427
Value	$2, 305, 970	$3, 266, 381	$3, 687, 017	$2, 580, 743
Coal-gas tar:				
Gallons	89, 201, 614	88, 149, 260	78, 690, 507	63, 803, 091
Value	$4, 253, 640	$4, 816, 008	$4, 449, 171	$3, 546, 759
Oil-gas tar:				
Gallons	942, 220	1, 078, 679	950, 517	251, 697
Value	$71, 534	$87, 418	$81, 447	$13, 282
Consumed in plant, gallons	40, 560, 482	45, 713, 582	49, 009, 858	54, 359, 457
Ammonia products:				
Total ammonia (NH_3) content:				
Pounds	37, 852, 903	36, 216, 150	28, 814, 232	24, 339, 955
Value	$1, 720, 916	$2, 173, 491	$1, 753, 432	$1, 816, 092
Reported as—				
Ammonium sulphate:				
Pounds	112, 718, 691	92, 826, 531	56, 078, 150	13, 439, 204
Value	$1, 455, 815	$1, 727, 540	$1, 255, 739	$351, 235
Ammonia (NH_3):				
Pounds	9, 673, 231	13, 009, 518	14, 794, 695	20, 980, 154
Value	$265, 101	$445, 951	$497, 693	$1, 464, 857
Crude light oil:				
Total production, gallons	6, 884, 489	5, 272, 006	7, 873, 042	9, 693, 925
For sale:				
Gallons	3, 924, 621	505, 954	1, 449, 672	1, 901, 864
Value	$289, 072	$40, 294	$115, 792	$116, 534
Plant consumption and loss, gallons	2, 959, 868	4, 766, 052	6, 423, 370	7, 792, 061

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, 1927, AND 1925—Continued

[See note at head of table]

KIND	1931	1929	1927	1925
Light-oil derivatives:				
Total production, gallons	4,880,764	9,270,077	7,782,920	2,654,910
For sale:				
Gallons	3,142,022	4,414,324	3,759,894	2,109,847
Value	$488,219	$944,628	$660,419	$400,712
Plant consumption and loss, gallons	1,738,742	4,855,753	4,023,026	545,063
Drip and holder oil:				
For sale:				
Gallons	3,499,218	4,746,977	4,614,884	4,354,206
Value	$242,836	$375,896	$351,880	$295,394
Naphthalene, crude:				
Total production, pounds	1,017,005	3,063,738	2,971,782	6,158,678
For sale:				
Pounds	775,885	2,995,121	1,814,794	446,791
Value	$11,502	$50,529	$28,760	$2,537
Plant consumption and loss, pounds	241,120	68,617	1,156,988	5,711,887
Other by-products, value	$1,336,686	$1,967,980	$1,891,105	$1,219,814

TABLE 4.—PRODUCTION, PURCHASE, AND DISPOSAL OF GAS, FOR THE UNITED STATES: 1931, 1929, 1927, AND 1925

[M cubic feet]

	1931	1929	1927	1925
Total output (produced and purchased)	397,696,693	450,717,416	445,457,144	395,520,627
Water gas	197,914,324	226,600,975	251,558,877	242,366,248
Coal gas, including coke-oven gas	177,824,517	181,763,830	156,919,315	118,234,212
Oil gas	8,170,875	27,937,279	31,537,829	28,477,204
Natural gas	10,171,578	11,306,295	1,931,430	1,222,461
Liquefied petroleum gases	38,182	(1)	(1)	(1)
Other kinds of gas	3,577,217	3,109,037	3,509,693	5,220,502
Produced in plants reporting, total	301,471,063	347,508,231	348,838,735	330,951,382
Water gas	195,109,177	224,172,017	233,241,841	226,503,490
Coal gas, including coke-oven gas	97,301,756	95,038,355	82,193,994	71,474,279
Oil gas	8,170,875	27,891,530	31,490,022	27,753,111
Other kinds of gas	799,255	406,329	1,912,878	5,220,502
Purchased from other plants, total [2]	96,225,630	103,209,185	96,618,409	64,569,245
Water gas	2,715,147	2,428,958	18,317,036	15,862,758
Coal gas, including coke-oven gas	80,522,761	86,725,475	74,725,321	46,759,933
Oil gas	----------	45,749	47,807	724,093
Natural gas	10,171,578	11,306,295	1,931,430	1,222,461
Liquefied petroleum gases	38,182	(1)	(1)	(1)
Other kinds of gas	2,777,962	2,702,708	1,596,815	----------
Disposal of gas:				
Total	397,696,693	450,717,416	445,457,144	395,520,627
Sold	374,067,588	408,401,395	412,236,133	359,401,849
Consumed on premises	2,924,918	13,255,721	3,062,088	7,345,724
Unaccounted for	20,704,187	29,060,300	30,158,923	28,773,054
Miles of mains	86,002	88,693	87,556	81,000
Number of active meters	9,745,364	10,694,032	10,254,450	(1)
Number of active services	7,486,355	8,088,260	7,569,913	(1)
Rated capacity of gas-storage holders	1,252,764	1,318,945	1,225,930	(1)
Rated daily plant capacity	2,199,347	2,269,124	2,238,666	(1)

[1] No data.
[2] Includes data for gas purchased from establishments within the industry, as follows: For 1931, 6,184,801 M cubic feet; 1929, 5,281,902 M cubic feet; 1927, 19,508,362 M cubic feet. No strictly comparable figure can be given for 1925.

TABLE 5.—SALES OF GAS, BY QUANTITY AND VALUE, AND NUMBER OF CUSTOMERS, BY CLASS, BY STATES: 1931

[Statistics are presented for each State for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," namely, California, Maryland, Oregon, Rhode Island, and the District of Columbia, reported larger sales than some of the States shown separately]

STATE	Total	CLASS OF CONSUMER				
		Domestic except house-heating	House-heating	Industrial	Commercial	Other gas companies, street lighting, etc.
UNITED STATES:						
Number of customers	9,646,386	9,176,607	43,451	69,345	351,760	5,223
M cubic feet	374,067,588	260,519,701	14,797,854	34,462,013	43,476,299	20,811,721
Value	$399,680,704	$307,876,273	$11,792,471	$28,276,708	$41,551,029	$10,184,223
Alabama:						
Number of customers	2,177	2,088	----------	3	86	----------
M cubic feet	63,603	56,105	----------	1,650	5,848	----------
Value	$117,489	$108,641	----------	$1,578	$7,270	----------
Arizona:						
Number of customers	25,032	23,191	40	64	1,703	34
M cubic feet	842,346	613,588	5,912	21,424	193,875	7,547
Value	$1,380,377	$1,101,003	$6,621	$24,856	$238,071	$9,826
Colorado:						
Number of customers	8,178	7,437	60	----------	681	----------
M cubic feet	202,188	145,097	4,414	----------	52,677	----------
Value	$291,379	$234,176	$3,242	----------	$53,961	----------
Connecticut:						
Number of customers	272,955	260,180	1,301	1,273	10,091	110
M cubic feet	9,853,124	6,901,224	684,212	1,089,095	840,337	338,256
Value	$11,749,382	$9,163,358	$541,477	$926,250	$923,961	$194,336
Florida:						
Number of customers	91,311	86,827	555	674	3,135	120
M cubic feet	2,776,514	2,171,430	81,216	131,084	368,064	24,720
Value	$4,946,813	$4,082,574	$73,897	$164,758	$595,564	$30,020
Georgia:						
Number of customers	28,315	26,815	201	46	1,253	----------
M cubic feet	930,222	814,458	9,781	19,060	86,923	----------
Value	$1,437,703	$1,298,925	$8,566	$19,567	$110,645	----------
Idaho:						
Number of customers	4,144	3,985	26	8	125	----------
M cubic feet	100,316	73,574	8,024	8,640	10,078	----------
Value	$167,624	$136,472	$5,891	$12,959	$12,302	----------
Illinois:						
Number of customers	1,184,906	1,108,951	10,731	8,020	56,587	617
M cubic feet	54,136,530	30,910,954	2,813,611	5,345,680	8,946,526	6,119,759
Value	$50,244,820	$35,488,914	$2,273,404	$3,923,634	$6,339,708	$2,219,160
Indiana:						
Number of customers	215,111	206,096	566	1,135	7,239	75
M cubic feet	10,235,309	5,980,451	245,811	2,802,551	892,964	313,532
Value	$9,945,766	$7,017,076	$190,184	$1,647,460	$912,966	$178,080
Iowa:						
Number of customers	171,597	163,865	739	509	6,433	51
M cubic feet	5,190,964	3,974,013	159,363	307,944	598,372	151,272
Value	$6,701,955	$5,594,005	$100,491	$280,629	$683,091	$43,739
Maine:						
Number of customers	39,486	36,198	250	789	2,204	45
M cubic feet	1,212,473	721,507	119,602	139,064	209,320	22,980
Value	$1,656,563	$1,163,138	$97,972	$110,220	$257,711	$27,522
Massachusetts:						
Number of customers	809,240	777,992	5,022	6,552	19,280	394
M cubic feet	28,882,903	19,233,082	2,293,580	2,655,363	1,275,210	3,425,668
Value	$32,688,543	$25,065,531	$1,869,326	$2,396,784	$1,511,777	$1,845,125
Michigan:						
Number of customers	688,608	659,202	1,611	9,148	18,645	2
M cubic feet	33,505,704	24,764,131	974,178	4,460,139	3,215,007	92,249
Value	$30,461,947	$23,984,346	$718,957	$3,042,507	$2,663,111	$53,026
Minnesota:						
Number of customers	154,657	145,074	460	2,797	6,127	199
M cubic feet	5,685,240	4,359,963	126,185	716,588	361,260	121,244
Value	$5,957,015	$4,811,819	$94,792	$576,228	$407,757	$66,419
Missouri:						
Number of customers	256,662	240,476	1,304	2,342	12,532	8
M cubic feet	9,377,040	6,481,520	654,824	846,845	1,313,498	80,353
Value	$9,995,368	$7,610,067	$475,250	$645,801	$1,196,866	$67,384
Nebraska:						
Number of customers	67,219	64,776	925	209	1,268	41
M cubic feet	2,430,074	1,854,611	187,730	234,512	149,138	4,083
Value	$2,219,126	$1,837,590	$111,165	$136,658	$130,889	$2,824

TABLE 5.—SALES OF GAS, BY QUANTITY AND VALUE, AND NUMBER OF CUSTOMERS, BY CLASS, BY STATES: 1931—Continued

[See note at head of table]

STATE	Total	CLASS OF CONSUMER				
		Domestic except house-heating	House-heating	Industrial	Commercial	Other gas companies, street lighting, etc.
New Hampshire:						
Number of customers	38,451	35,675	247	268	2,209	52
M cubic feet	1,151,266	757,234	125,420	109,853	147,630	11,129
Value	$1,629,496	$1,210,066	$105,805	$107,285	$191,437	$14,903
New Jersey:						
Number of customers	896,027	834,031	2,424	6,038	53,381	153
M cubic feet	31,087,782	22,412,054	1,149,068	2,830,192	4,061,229	635,239
Value	$38,118,419	$28,180,113	$1,238,817	$3,325,449	$4,880,880	$493,160
New York:						
Number of customers	2,671,743	2,605,338	5,685	7,608	51,728	1,384
M cubic feet	92,371,899	70,201,228	2,496,694	5,215,188	11,089,805	3,368,984
Value	$104,646,928	$84,937,371	$1,902,369	$4,910,589	$11,087,414	$1,809,185
North Carolina:						
Number of customers	44,181	42,607	47	81	1,398	48
M cubic feet	1,537,208	1,402,215	5,357	6,961	117,600	5,075
Value	$2,601,046	$2,400,132	$4,808	$10,862	$177,540	$7,704
Ohio:						
Number of customers	51,047	50,275	22	193	539	18
M cubic feet	2,044,232	1,878,448	11,230	71,685	47,760	35,109
Value	$2,061,612	$1,899,563	$8,248	$80,254	$52,866	$20,681
Pennsylvania:						
Number of customers	630,806	579,568	2,806	4,756	42,782	894
M cubic feet	24,702,038	17,186,272	981,394	1,783,178	3,402,434	1,348,760
Value	$25,034,080	$18,741,417	$740,106	$1,497,101	$3,347,370	$708,086
South Carolina:						
Number of customers	22,886	21,005	11	68	1,795	7
M cubic feet	878,027	710,580	2,327	33,100	131,807	213
Value	$1,377,405	$1,144,603	$2,156	$35,429	$194,854	$363
South Dakota:						
Number of customers	17,048	15,924	149	14	961	----------
M cubic feet	480,306	336,985	29,915	13,553	99,853	----------
Value	$743,594	$576,367	$23,609	$12,989	$130,629	----------
Tennessee:						
Number of customers	27,958	25,638	62	198	2,023	37
M cubic feet	1,043,506	697,906	29,101	93,760	219,821	2,918
Value	$1,552,968	$1,178,635	$20,343	$86,283	$263,359	$4,348
Vermont:						
Number of customers	20,979	19,670	36	80	1,181	12
M cubic feet	458,720	346,216	13,203	24,986	74,080	235
Value	$839,478	$676,107	$10,535	$32,983	$119,497	$356
Virginia:						
Number of customers	106,377	102,992	106	146	3,132	1
M cubic feet	3,810,369	3,338,391	37,377	167,383	245,899	21,319
Value	$4,977,549	$4,491,719	$28,803	$136,413	$304,238	$16,376
Washington:						
Number of customers	84,691	74,381	3,223	1,150	5,834	103
M cubic feet	2,967,680	1,544,997	409,908	197,687	803,498	11,590
Value	$3,695,166	$2,381,805	$288,553	$194,140	$822,334	$8,334
Wisconsin:						
Number of customers	278,516	263,223	1,812	1,621	11,852	8
M cubic feet	13,228,856	8,315,428	451,769	1,306,404	1,384,708	1,770,547
Value	$11,802,307	$8,792,637	$341,272	$823,817	$1,184,053	$660,528
Other States:						
Number of customers	736,078	693,127	3,030	13,555	25,556	810
M cubic feet	32,881,149	22,336,039	686,648	3,828,444	3,131,078	2,898,940
Value	$30,638,786	$22,568,103	$505,812	$3,113,225	$2,748,908	$1,702,738

TABLE 6.—CONSUMPTION OF GAS-MAKING MATERIALS AND FUELS, PRODUCED IN PLANT AND PURCHASED, BY KIND AND QUANTITY, FOR THE UNITED STATES, 1925 TO 1931, AND FOR STATES, 1931

STATE	COAL					OIL (BARRELS, 42 GALLONS)			COKE AND BREEZE (SHORT TONS)						Gas tars, for fuel (barrels, 42 gallons)
	Anthracite (long tons)		Bituminous (short tons)			Material		Fuel	Produced in plant			Purchased			
	Material	Fuel	Material	Fuel: Boiler	Fuel: Retort and bench	Material: Gas-making	Material: Carbureting		Material	Fuel: Boiler	Fuel: Retort and bench	Material	Fuel: Boiler	Fuel: Retort and bench	
United States															
1931	41,854	74,330	9,054,749	544,578	56,540	1,607,042	13,892,808	498,056	992,637	528,361	933,123	955,190	103,356	28,406	676,528
1929	68,072	110,422	8,917,607	849,234	270,643	4,683,358	16,024,302	1,248,182	1,223,444	522,510	878,386	1,248,111	74,590	139,224	747,288
1927	112,919	151,902	8,101,623	880,750	52,790	5,493,550	16,263,051	1,178,396	892,555	524,731	851,939	1,938,997	129,360	84,869	1,016,284
1925	619,402	202,958	6,870,570	[1] 1,059,374	(2)	5,052,550	16,175,664	1,327,171	782,046	[1] 1,203,980	(2)	1,865,360	[1] 225,504	(2)	(2)
States, 1931															
Alabama			6,058	388			661			680	1,667	316			
Arizona						187,165		4,912							
Colorado			11,313	1,727	424		2,574		113	274	1,373	230			3,838
Connecticut	2,622	4,906	65,730	7,168	32,025		361,321		16,053	5,172	7,839	44,312	11,896		
Florida			30,234	8,093			232,845	33,770	95	2,294	2,356	25,780	338		35,872
Georgia			22,648	4,433	200		65,587			930	2,352	3,418	330		14,521
Idaho			8,389	417			2,102			789	1,720				2,100
Illinois			1,097,862	64,219	237		1,556,565		154,997	58,596	96,774	17,451	4,479	2,405	770
Indiana			554,992	40,117	1,147		281,737		22,145	42,505	15,897	17,237	4,748		29,873
Iowa		1,772	94,902	30,078	339		337,931	2,152	935	2,908	4,849	14,233	145		1,557
Maine	12		63,550	3,150	393		37,467		1,251	5,693	8,181	2,195	770		16,872
Massachusetts	224	5,698	727,172	17,406	26		675,899	38,600	42,539	64,207	69,080	77,636	18,729	7,727	2,431
Michigan	5,639	131	968,715	91,793	11,180		621,970	159	96,137	92,473	132,927	9,689	47	8,853	30,441
Minnesota			98,316	30,963			404,658		1,042	1,287	6,652	6,453	1,482		1,020
Missouri			434,524	29,821			248,883		42,379	12,627	15,951	13,285	1,778	250	14,486
Nebraska			1,369	3,126			179,463	119				31,860	52		342
New Hampshire			60,592	3,249	1,044		33,691		128	4,193	7,127	3,837	356		27,100
New Jersey	42	30,737	66,752	25,506	42		1,443,979		2,171	313	4,733	173,975	4,621		1,226
New York	1,838	8,131	3,143,061	44,311	1,450		4,358,946	8,715	539,998	133,136	402,065	185,987	7,985	3,874	67,546
North Carolina			100,288	5,729	445		48,293		3,664	2,744	9,588	3,668	1,128	1,521	152,884
															1,626

Ohio			17,954	8,004	399		13,979		1,134	800	1,978	20,525		1,134	32
Pennsylvania	30,505	22,205	248,893	25,581	333		1,428,567	249,754	35,803	19,895	13,149	101,357	768		156,887
South Carolina			42,362	2,847			47,782		1,473	2,086	3,807	2,255			633
South Dakota			7,134	4,285	81	952	37,472	388				1,045			2,683
Tennessee			77,575	772	420		11,715		3,627	7,318	11,697				
Vermont			9,066	2,679	24		28,746		439	721	974	2,230	254	725	2,441
Virginia			67,420	10,703			262,706	707	2,791	5,353	7,718	16,811	434		15,442
Washington			138,906	18,451	1,643		180,151		757	11,037	18,576	6	17		8,134
Wisconsin			396,599	18,409	1,842		216,373		7,398	25,804	49,806	38,526	11,567	1,137	4,265
Other States	972	750	492,373	41,153	2,846	1,418,925	770,745	158,780	15,658	24,526	34,317	140,873	31,432	780	82,106

[1] Includes data for retort and bench fuel.
[2] Included in figure for boiler fuel.
[3] No data.

TABLE 7.—MUNICIPAL ESTABLISHMENTS—SUMMARY, AND DETAILED STATISTICS OF PRODUCTS AND MATERIALS, FOR THE UNITED STATES, 1925, 1927, 1929, AND 1931, FOR GEOGRAPHIC DIVISIONS, 1927, 1929, AND 1931

[The figures appearing in this table are included in the corresponding items in tables 1 to 6]

	UNITED STATES				NEW ENGLAND AND MIDDLE ATLANTIC STATES [1]		
	1931	1929	1927	1925	1931	1929	1927
SUMMARY							
Number of establishments	[2] 38	42	46	52	6	6	6
Wage earner (average for the year)	708	673	770	749	143	137	135
Wages	$971,097	$909,861	$1,044,573	$1,003,457	$215,450	$233,660	$223,430
Cost of materials, fuel, and purchased electric energy	$1,967,982	$2,541,760	$2,526,494	$2,483,249	$364,709	$405,648	$462,668
Value of products	$6,638,794	$7,062,806	$7,427,736	$7,242,409	$996,549	$1,017,959	$988,895
Value added by manufacture [3]	$4,670,812	$4,521,106	$4,901,242	$4,759,160	$631,840	$552,311	$526,227
Miles of mains	1,853	1,817	1,799	1,643	226	217	205
PRODUCTS							
Total value	$6,638,794	$7,062,806	$7,427,736	$7,242,409	$996,549	$1,017,959	$988,895
Gas:							
For sale, M cubic feet	5,513,676	5,444,462	5,223,752	5,077,257	665,517	671,759	664,125
Value	$6,189,331	$6,542,202	$6,875,702	$6,707,920	$870,481	$883,547	$868,905
Coke:							
For sale, short tons	22,748	27,651	24,975	26,873	9,582	11,405	9,261
Value	$179,435	$199,067	$186,038	$161,566	$99,353	$93,488	$77,047
Made and consumed, short tons	17,791	22,072	22,577	22,539	10,966	11,487	10,465
Coal tars:							
For sale, gallons	1,471,308	933,744	2,505,362	2,147,277	311,165	325,977	243,861
Value	$58,463	$52,961	$126,194	$87,619	$13,399	$17,914	$10,597
Other products, value	$19,231	$40,406	$55,097	$7,775	--------	$940	$331
Receipts from rents and sales of lamps and appliances	$192,334	$228,170	$184,705	$277,529	$13,316	$22,070	$32,015
PRINCIPAL MATERIALS							
Coal used for gas making:							
Anthracite, long tons	296	3,055	2,165	1,698	296	1,024	1,490
Bituminous, short tons	86,262	101,226	105,227	96,444	30,087	34,519	31,811
Coke used for gas making:							
Purchased, short tons	29,947	43,172	34,206	48,718	551	397	375
Made and consumed in plant, short tons	3,948	4,461	5,523	6,952	1,439	2,028	2,271
Oil used for gas making and enriching, gallons	15,353,310	16,324,751	15,471,596	16,132,294	966,627	1,131,457	1,108,601

For footnotes, see end of table.

TABLE 7.—MUNICIPAL ESTABLISHMENTS—SUMMARY, AND DETAILED STATISTICS OF PRODUCTS AND MATERIALS, FOR THE UNITED STATES, 1925, 1927, 1929, AND 1931, FOR GEOGRAPHIC DIVISIONS, 1927, 1929, AND 1931—Continued

[See note at head of table]

	EAST NORTH CENTRAL AND EAST SOUTH CENTRAL STATES [5]			WEST NORTH CENTRAL STATES [6]		
	1931	1929	1927	1931	1929	1927
SUMMARY						
Number of establishments	4	7	6	9	9	10
Wage earners (average for the year)	54	90	69	183	173	118
Wages	$68,893	$87,015	$72,534	$288,336	$221,693	$194,824
Cost of materials, fuel, and purchased electric energy	$117,413	$239,000	$187,923	$689,522	$758,564	$723,610
Value of products	$321,531	$497,469	$466,037	$2,094,846	$2,155,679	$2,450,253
Value added by manufacture [3]	$204,118	$258,469	$278,114	$1,405,324	$1,397,115	$1,726,643
Miles of mains	100	138	112	587	564	565
PRODUCTS						
Total value	$321,531	$497,469	$466,037	$2,094,846	$2,155,679	$2,450,253
Gas:						
For sale, M cubic feet	221,768	290,905	252,187	2,255,766	2,035,734	1,825,524
Value	$241,160	$399,474	$373,512	$1,928,845	$1,968,531	$2,249,190
Coke:						
For sale, short tons	8,119	11,017	7,967			
Value	$52,971	$73,198	$61,107			
Made and consumed, short tons	1,667	2,312	2,485			
Gas tars:						
For sale, gallons	214,577	259,324	205,629	635,618	29,600	1,111,291
Value	$13,001	$17,900	$13,929	$19,236	$1,083	$59,759
Other products, value	$4,191	$5,016	$848	$200	$315	$18,863
Receipts from rents and sales of lamps and appliances	$10,208	$1,881	$16,641	$146,565	$185,750	$122,441
PRINCIPAL MATERIALS						
Coal used for gas making:						
Anthracite, long tons						
Bituminous, short tons	15,725	20,263	16,360	1,057	1,449	4,560
Coke used for gas making:						
Purchased, short tons	1,002	2,502	2,451	16,940	28,905	18,158
Made and consumed in plant, short tons	1,154	33				
Oil used for gas making and enriching, gallons	219,943	356,080	287,641	6,982,233	[8] 6,913,884	6,153,693

For footnotes, see end of table.

TABLE 7.—MUNICIPAL ESTABLISHMENTS—SUMMARY, AND DETAILED STATISTICS OF PRODUCTS AND MATERIALS, FOR THE UNITED STATES, 1925, 1927, 1929, AND 1931, FOR GEOGRAPHIC DIVISIONS, 1927, 1929, AND 1931—Continued

[See note at head of table]

	SOUTH ATLANTIC STATES [7]			MOUNTAIN AND PACIFIC STATES [8]		
	1931	1929	1927	1931	1929	1927
SUMMARY						
Number of establishments	16	16	18	3	4	6
Wage earners (average for the year)	281	238	375	47	35	73
Wages	$322,638	$306,695	$460,893	$75,780	$60,798	$92,892
Cost of materials, fuel, and purchased electric energy	$722,195	$991,911	$1,046,078	$74,143	$86,577	$106,215
Value of products	$2,986,207	$3,099,100	$3,190,137	$239,661	$292,599	$332,414
Value added by manufacture [3]	$2,264,012	$2,107,189	$2,144,059	$165,518	$206,022	$226,199
Miles of mains	846	807	814	94	91	103
PRODUCTS						
Total value	$2,986,207	$3,099,100	$3,190,137	$239,661	$292,599	$332,414
Gas:						
For sale, M cubic feet	2,221,810	2,280,100	2,306,020	148,815	165,964	175,896
Value	$2,932,901	$3,025,249	$3,081,893	$215,944	$265,401	$302,202
Coke:						
For sale, short tons	1,652	2,441	4,610	3,395	2,788	3,137
Value	$10,132	$14,147	$26,434	$16,979	$18,234	$21,450
Made and consumed, short tons	3,703	5,213	7,444	1,455	3,060	2,183
Gas tars:						
For sale, gallons	212,239	227,908	861,709	97,709	90,935	82,872
Value	$8,431	$11,123	$37,463	$4,396	$4,941	$4,446
Other products, value	$12,498	$30,216	$30,739	$2,342	$3,919	$4,316
Receipts from rents and sales of lamps and appliances	$22,245	$18,365	$13,608	----------	$104	----------
PRINCIPAL MATERIALS						
Coal used for gas making:						
Anthracite, long tons	----------	2,031	675	----------	----------	----------
Bituminous, short tons	31,931	35,992	44,346	7,462	8,997	8,150
Coke used for gas making:						
Purchased, short tons	11,454	11,368	13,222	----------	----------	----------
Made and consumed in plant, short tons	1,242	2,090	2,386	113	310	866
Oil used for gas making and enriching, gallons	6,809,821	7,388,345	6,961,999	379,686	534,985	959,662

[1] Represented by Massachusetts, Connecticut, New York, New Jersey, and Pennsylvania.
[2] Arizona, 1 municipal establishment; California, 1; Colorado, 1; Connecticut, 1; Florida, 4; Georgia, 4; Iowa, 3; Maryland, 1; Massachusetts, 2; Michigan, 2; Minnesota, 2; Nebraska, 2; New Jersey, 1; New York, 1; North Carolina, 3; Ohio, 2; Pennsylvania, 1; South Dakota, 2; and Virginia, 4.
[3] Value of products less cost of materials, fuel, and purchased electric energy. (See sec. 20, p. 11.)
[4] Revised.
[5] Represented by Ohio and Michigan.
[6] Represented by Minnesota, Iowa, South Dakota, and Nebraska.
[7] Represented by Maryland, Virginia, North Carolina, Georgia, and Florida.
[8] Represented by Arizona, Colorado, and California.

COKE-OVEN PRODUCTS

[A preliminary report for this industry was issued under date of Dec. 28, 1932]

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 statistics as to the quantities and values of the various classes of coke-oven products are compiled by the Census Bureau, as such statistics are published annually by the United States Bureau of Mines. The detailed figures for coke and by-products in table 3 of this report are based on those compiled by the Bureau of Mines, adjusted to exclude data for 21 establishments each for 1931 and 1929, 17 for 1927, and 13 for 1925, 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-Oven Products 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 chiefly to the fact that, whereas the Census statistics for all items and the Bureau of Mines statistics for coke represent production, the Bureau of Mines figures for by-products refer to sales from production and stocks.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. (See sec. 3d, p. 4.) Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately. A combined summary for the Coke-oven Products and Gas industries is given on p. 653]

	NUMBER OF ESTABLISHMENTS			Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture[1]
	Total	(A) Beehive	(B) By-product					
United States								
The industry:								
1931	112	45	67	14,383	$22,134,487	$162,793,117	$226,509,038	$63,715,921
1929	153	86	67	20,552	33,389,425	281,592,430	416,348,458	134,756,028
1927	171	109	62	21,082	34,167,692	286,728,701	382,012,617	95,283,916
1925	237	176	61	23,191	36,762,401	277,750,675	378,633,527	100,882,852
1923	262	205	57	28,364	48,107,894	354,030,441	516,922,898	162,892,457
1921	176	117	59	16,070	23,832,946	168,790,864	221,313,363	52,522,499
1919	278	222	56	29,319	42,299,292	224,266,674	316,515,838	92,249,164
1914	231	(2)	(2)	21,107	14,288,952	69,138,328	99,275,020	30,136,692
1909	315	(2)	(2)	29,273	15,454,345	64,024,527	95,696,622	31,672,095
1904	278	(2)	(2)	18,981	9,304,498	29,884,532	51,728,647	21,844,115
1899	241	(2)	(2)	16,999	7,085,736	19,665,532	35,585,445	15,919,913
Percent of increase or decrease (−):								
1929-31	−26.8	(3)	-------	−30.0	−33.7	−42.2	−45.6	−52.7
1927-29	−10.5	−21.1	(3)	−2.5	−2.3	−1.8	9.0	41.4
1925-27	−27.8	−38.1	(3)	−9.1	−7.1	3.2	0.9	−5.6
1923-25	−9.5	−14.1	(3)	−18.2	−23.6	−21.5	−26.8	−38.1
1921-23	48.9	75.2	(3)	76.5	101.9	109.7	133.6	210.1
1919-21	−36.7	−47.3	(3)	−45.2	−43.7	−24.7	−30.1	−43.1
1921-31	−36.4	−61.5	(3)	−10.5	−7.1	−3.6	2.3	21.3
1919-29	−45.0	−61.3	(3)	−29.9	−21.1	25.6	31.5	46.1
1909-19	−11.7	-------	-------	0.2	173.7	250.3	230.7	191.3
1899-1909	30.7	-------	-------	72.2	118.1	225.6	168.9	98.9
(A) Beehive plants:								
1931	45	45	-------	841	$672,611	$2,186,674	$3,482,875	$1,296,201
1929	86	86	-------	2,706	3,025,834	17,984,140	22,782,746	4,798,606
1927	109	109	-------	3,284	4,070,573	23,336,686	30,891,944	7,555,258
1925	176	176	-------	5,617	7,351,324	38,204,137	52,453,221	14,249,084
(B) By-product plants:								
1931	67	-------	67	13,542	21,461,876	160,606,443	223,026,163	62,419,720
1929	67	-------	67	17,846	30,363,591	263,608,290	393,565,712	129,957,422
1927	62	-------	62	17,798	30,097,119	263,392,015	351,120,673	87,728,658
1925	61	-------	61	17,574	29,411,077	239,546,538	326,180,306	86,633,768
States, 1931								
The industry:								
Alabama	8	-------	8	1,147	1,250,308	10,019,792	13,648,575	3,628,783
Illinois	6	-------	6	1,227	1,828,617	13,191,655	17,473,313	4,281,658
Indiana	4	-------	4	950	1,565,323	16,167,694	19,411,476	3,243,782
New York	4	-------	4	844	1,494,586	11,125,150	17,731,920	6,606,770
Ohio	15	-------	15	1,916	3,004,541	21,257,378	28,315,240	7,057,862
Pennsylvania	38	27	11	3,383	4,929,812	36,565,130	53,934,294	17,369,164
Virginia	6	6	-------	97	49,396	253,013	374,411	121,398
West Virginia	11	8	3	640	972,372	4,619,754	7,878,042	3,258,288
Other States[4]	20	4	16	4,179	7,039,532	49,593,551	67,741,767	18,148,216

[1] Value of products less cost of materials, fuel, and purchased electric energy. (See sec. 20, p. 11.)
[2] No data.
[3] Percent not computed where base is less than 100.
[4] Colorado, 2 establishments—1 (A), 1 (B); Connecticut, 1 (B); Kentucky, 1 (B); Maryland, 1 (B); Massachusetts, 1 (B); Michigan, 3 (B); Minnesota, 3 (B); New Jersey, 2 (B); Tennessee, 2—1 (A), 1 (B); Utah, 2—1 (A), 1 (B); Washington, 1 (A); Wisconsin, 1 (B).

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures. (See sec. 13, p. 8)]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	14,383	16,368	16,281	16,371	15,827	15,139	14,284	13,625	13,101	12,805	13,092	*12,775*	12,924
1929	20,552	19,879	20,584	20,607	20,485	20,787	20,905	21,122	21,039	20,601	20,753	20,264	*19,595*
1925	23,191	24,996	24,585	24,010	22,912	21,404	20,969	*20,651*	20,734	21,800	23,723	26,022	**26,486**
1919	29,319	34,557	32,159	30,479	28,452	26,579	*26,434*	27,917	30,418	30,378	26,817	28,181	29,452
1914	21,107	22,339	22,845	24,205	23,257	22,072	21,476	21,386	20,759	20,255	19,077	17,903	*17,710*
1909	29,273	27,668	27,121	27,003	*26,461*	27,022	28,301	29,106	29,475	30,852	32,390	32,789	**33,094**
States, 1931													
Alabama	1,147	1,273	1,262	1,250	1,224	1,197	1,158	1,128	1,091	1,082	1,044	1,040	*1,020*
Illinois	1,227	1,433	1,452	1,443	1,339	1,240	1,214	1,160	1,149	*1,068*	1,077	*1,068*	1,080
Indiana	950	1,157	1,153	1,222	1,186	1,121	1,023	845	781	789	710	708	*705*
New York	844	886	905	883	872	811	*803*	828	835	851	839	809	810
Ohio	1,916	2,267	2,223	2,135	2,138	2,053	1,972	1,777	*1,639*	1,680	1,710	1,703	1,695
Pennsylvania	3,383	4,216	4,126	4,222	3,917	3,721	3,220	3,088	2,859	*2,646*	2,952	2,776	2,850
Virginia	97	125	125	128	123	84	87	82	81	82	*80*	82	*80*
West Virginia	640	693	705	714	691	663	656	648	614	558	558	*554*	629

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, 1927, AND 1925

[The figures in this table are based on statistics compiled and published by the U.S. Bureau of Mines, revised to exclude data for 21 establishments for 1931 and 1929, 17 for 1927, and 13 for 1925, classified as gas plants by the Census Bureau and as by-product coke-oven plants by the Bureau of Mines. Combined statistics for the products of the Coke-Oven Products and Gas Industries for 1929 and 1931 are given on p. 654]

KIND	1931	1929	1927	1925
Coke-oven products, total value [1]	$221,979,695	$395,085,048	$368,851,467	$365,526,544
Coke:				
Total production, short tons	29,935,068	56,651,538	49,132,213	50,141,774
Made in—				
By-product ovens	28,806,731	50,179,519	41,924,796	38,786,990
Beehive ovens	1,128,337	6,472,019	7,207,417	11,354,784
Value	$138,059,202	$256,558,847	$247,187,630	$253,650,656
Screenings and breeze:				
Total production, short tons	2,813,403	4,776,654	4,039,773	3,706,587
Sold:				
Tons	644,332	945,155	751,912	907,055
Value	$1,586,712	$2,617,176	$2,114,033	$3,203,801
By-products:				
Gas:				
Production, M cubic feet	462,489,417	787,193,562	667,161,377	621,407,582
Sold:				
M cubic feet	259,964,517	441,243,710	355,548,382	325,080,645
Value	$45,318,808	$61,099,166	$53,724,663	$49,050,966
Tar:				
Production, gallons	399,203,965	636,386,413	519,378,540	467,344,530
Sold:				
Gallons	222,129,463	290,903,267	278,473,948	225,533,874
Value	$9,980,449	$14,651,832	$14,570,126	$11,107,156

For footnote, see end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, 1927, AND 1925—Continued

[See note at head of table]

KIND	1931	1929	1927	1925
By-products—Continued.				
Ammonia:				
NH_3 equivalent of all forms:				
Pounds	255,247,138	401,440,953	349,619,116	310,744,721
Value	$12,859,888	$26,861,440	$26,239,840	$26,850,266
Liquor (NH_3 content):				
Production, pounds	35,757,003	52,302,845	49,825,891	57,425,326
Sold:				
Pounds	33,982,437	51,762,440	49,011,372	47,128,790
Value	$1,390,392	$2,687,053	$2,335,047	$4,385,501
Sulphate:				
Production, pounds	877,960,541	1,396,552,434	1,172,643,719	1,013,277,580
Sold:				
Pounds	905,244,708	1,350,154,009	1,225,624,762	986,179,337
Value	$11,469,496	$24,174,387	$23,904,793	$22,464,765
Crude light oil:				
Production, gallons	118,410,696	198,225,478	161,956,695	145,285,887
Sold:				
Gallons	5,724,245	10,277,234	8,264,543	9,719,992
Value	$478,576	$1,271,335	$954,635	$1,002,813
Light-oil derivatives:				
Production, gallons	97,693,830	161,752,018	127,992,291	115,885,817
Sold:				
Gallons	95,101,844	149,662,155	123,821,774	112,552,884
Value	$13,534,164	$29,283,289	$23,881,757	$20,431,928
Naphthalene, crude and refined:				
Production, pounds	7,613,612	19,684,491	8,228,400	9,154,771
Sold:				
Pounds	7,350,992	19,582,476	7,773,779	9,603,066
Value	$78,806	$319,119	$84,992	$91,368
Other by-products, value	$83,090	$2,422,844	$93,791	$137,590

[1] See "Comparison of Census and Bureau of Mines production statistics," p. 667.

PETROLEUM REFINING

[A preliminary report for this industry was issued under date of Sept. 20, 1932]

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 gasoline from natural gas at the wells. The principal products, named in the order of their importance as measured by value, are gasoline, fuel oils, lubricating oils, and illuminating oils.

Detailed statistics of products.—The total value of products for this industry includes a comparatively small amount of duplication due to the fact that the "partially refined oils, sold for rerunning," and to some extent the "tops," reported as products by some establishments, become materials for others.

The production of natural gasoline, as reported by the United States Bureau of Mines, is shown in footnote 1, table 3.

Duplication in "Cost of materials, containers, fuel, and purchased electric energy."—The amounts shown under this heading for 1931 and for 1927 and prior years include duplication in the amount of the cost of fuel oil produced and consumed in the same refineries. This duplication results from the fact that the cost of the crude oil used as a material in the production of the fuel oil and the cost of the fuel oil itself are both included in the cost of materials as reported to the Bureau of the Census. The cost of the fuel oil consumed was reported separately by the refiners for 1929 but not for other census years; and as a result the figure for cost of materials, etc., for that year is free from duplication, but the corresponding figures for other years include duplication probably amounting to less than 5 percent of the total (assuming that the cost of the fuel oil consumed bore approximately the same ratio to the totals for other years as for 1929). This results also in a considerable understatement—probably between 15 and 20 percent—of the item "Value added by manufacture."

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy [1]	Value of products [2]	Value added by manufacture [1,3]
United States						
1931	376	68,824	$107,474,117	$1,210,517,315	$1,524,284,097	$313,767,682
1929	390	80,596	131,176,993	2,031,341,408	2,639,665,001	608,323,593
1927	354	71,234	113,716,705	1,752,997,043	2,142,648,503	389,651,460
1925	339	65,324	104,645,391	1,889,678,019	2,376,656,556	486,978,537
1923	382	66,717	103,833,760	1,425,052,861	1,793,700,087	368,647,226
1921	366	63,189	102,294,108	1,382,170,434	1,727,440,157	345,269,723
1919	320	58,889	89,749,637	1,247,908,355	1,632,532,766	384,624,411
1914	176	25,366	19,397,466	325,264,509	396,361,406	71,096,897
1909	147	13,929	9,830,078	199,273,402	236,997,659	37,724,257
1904	98	16,770	9,989,367	139,387,213	175,005,320	35,618,107
1899	67	12,199	6,717,087	102,859,341	123,929,384	21,070,043
Percent of increase or decrease (−):						
1929-31	−3.5	−14.6	−18.1	−40.4	−42.3	−48.4
1927-29	10.2	13.1	15.4	15.9	23.2	56.1
1925-27	−1.4	9.0	8.7	−7.2	−9.8	−20.0
1923-25	−6.0	−2.1	.8	32.6	32.5	32.1
1921-23	4.4	5.6	1.5	3.1	3.8	6.8
1919-21	14.4	7.3	14.0	10.8	5.8	−10.2
1921-31	2.7	8.9	5.1	−12.4	−11.8	−9.1
1919-29	21.9	36.9	46.2	62.8	61.7	58.2
1899-19	117.7	322.8	813.0	526.2	588.8	919.6
1899-1909	(4)	14.2	46.3	93.7	91.2	79.0
States 1931						
Arkansas	9	556	$772,941	$7,544,616	$9,548,155	$2,003,539
California	58	6,676	11,763,260	189,838,938	249,161,044	59,322,106
Illinois	10	3,265	5,190,542	47,596,519	63,051,586	15,455,067
Indiana	5	4,699	7,752,474	94,673,414	127,036,732	32,363,318
Kansas	16	2,637	3,983,099	33,875,415	52,024,808	18,149,393
Kentucky	8	643	906,492	10,108,455	12,891,634	2,783,179
Louisiana	10	4,585	6,712,641	60,598,865	68,005,906	7,407,041
Michigan	5	187	315,835	4,923,427	7,293,414	2,369,987
Montana	15	160	261,755	3,429,506	4,815,640	1,386,134
New Jersey	10	7,632	12,950,758	131,342,232	168,978,503	37,636,271
New York	5	2,204	3,375,322	28,754,615	31,007,107	2,252,492
Ohio	14	2,370	3,473,243	43,931,946	50,922,817	6,990,871
Oklahoma	41	4,717	7,117,283	69,898,267	82,998,964	13,100,697
Pennsylvania	42	7,610	11,923,520	137,203,589	172,894,397	35,690,808
Texas	82	16,099	23,468,848	254,998,774	310,336,851	55,338,077
West Virginia	5	498	711,624	8,044,772	10,328,697	2,283,925
Wyoming	16	1,215	2,177,736	25,147,193	31,442,359	6,295,166
Other States [5]	25	3,071	4,616,744	58,606,772	71,546,383	12,939,611

[1] See "Duplication in 'Cost of materials, containers, fuel, and purchased electric energy,'" p. 671.
[2] For 1929, refiners' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[3] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[4] Percent not computed where base is less than 100.
[5] Colorado, 5 establishments; Delaware, 1; Georgia, 2; Iowa, 1; Maryland, 3; Massachusetts, 2; Missouri, 2; New Mexico, 4; Rhode Island, 2; South Carolina, 1; Utah, 1; Virginia, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	68, 824	73, 272	72, 331	72, 019	70, 450	69, 841	68, 715	67, 530	67, 210	66, 614	66, 463	65, 848	*65, 594*
1929	80, 596	*74, 444*	75, 913	77, 063	79, 001	80, 641	82, 662	82, 972	84, 176	82, 969	82, 551	82, 191	82, 571
1925	65, 324	*62, 190*	62, 744	63, 784	64, 439	64, 977	66, 955	67, 825	67, 168	66, 647	65, 955	65, 462	65, 738
1919	58, 889	*54, 342*	54, 883	54, 822	55, 935	57, 705	59, 018	61, 079	60, 550	61, 489	62, 507	61, 739	62, 599
1914	25, 366	25, 068	25, 053	25, 833	25, 565	25, 138	25, 572	25, 849	24, 946	25, 516	25, 773	25, 211	*24, 868*
1909	13, 929	13, 319	13, 079	*12, 952*	13, 070	13, 206	13, 617	14, 156	14, 221	14, 434	15, 032	15, 249	14, 805
States, 1931													
Arkansas	556	474	508	560	593	578	558	609	674	583	532	534	*469*
California	6, 676	7, 084	7, 112	7, 093	7, 168	7, 058	6, 792	6, 578	6, 382	6, 358	6, 222	*6, 103*	6, 167
Illinois	3, 265	3, 687	3, 386	3, 428	3, 442	3, 358	3, 188	3, 217	3, 265	3, 175	3, 116	*2, 941*	2, 972
Indiana	4, 699	4, 965	4, 656	4, 552	4, 598	4, 748	4, 767	4, 725	4, 668	*4, 477*	4, 755	4, 690	4, 785
Kansas	2, 637	2, 842	2, 582	2, 684	2, 721	2, 641	2, 568	2, 658	2, 731	2, 718	2, 600	2, 455	*2, 442*
Kentucky	643	634	753	729	635	720	776	707	641	541	511	505	*505*
Louisiana	4, 585	5, 808	5, 815	5, 531	4, 891	4, 708	4, 471	4, 304	4, 166	3, 918	3, 859	3, 789	*3, 763*
Michigan	187	195	191	180	193	185	185	*176*	195	186	187	183	191
Montana	160	142	158	197	202	193	162	148	164	151	138	*128*	140
New Jersey	7, 632	7, 924	7, 912	7, 847	7, 667	7, 642	7, 415	*7, 340*	7, 382	7, 548	7, 591	7, 625	7, 687
New York	2, 204	*2, 166*	2, 175	2, 210	2, 194	2, 173	2, 174	2, 185	2, 205	2, 183	2, 194	2, 290	2, 303
Ohio	2, 370	*1, 886*	1, 941	2, 217	2, 266	2, 266	2, 441	2, 349	2, 436	2, 536	2, 724	2, 715	2, 667
Oklahoma	4, 717	4, 907	4, 954	4, 929	4, 888	4, 791	4, 782	4, 742	4, 628	4, 598	4, 487	4, 469	*4, 429*
Pennsylvania	7, 610	7, 492	7, 480	*7, 465*	7, 572	7, 661	7, 518	7, 636	7, 680	7, 778	7, 839	7, 687	7, 516
Texas	16, 099	18, 049	17, 814	17, 477	16, 514	16, 365	16, 247	15, 565	15, 307	15, 131	14, 956	14, 981	*14, 778*
West Virginia	498	511	503	510	538	491	*470*	474	515	503	489	485	491
Wyoming	1, 215	1, 225	1, 208	1, 229	1, 272	1, 215	1, 225	1, 198	1, 216	1, 221	1, 219	1, 180	*1, 167*

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931

[The figures given for 1929 refer to sales (shipments or deliveries) by refiners; those for other years represent production. See sec. 16, p. 9]

PRODUCT	1931	1929	1927	1925
Petroleum Refining industry, all products, total value	$1, 524, 284, 997	$2, 639, 665, 001	$2, 142, 648, 503	$2, 376, 656, 556
Refinery products	$1, 520, 420, 376	$2, 627, 533, 212	$2, 133, 922, 688	$2, 364, 069, 067
Other products (not normally belonging to the industry)	$2, 960, 956	$12, 131, 789	$8, 725, 815	$12, 587, 489
Receipts for contract work on materials owned by others	$903, 665			
Refinery products, aggregate value	$1, 520, 420, 376	$2, 627, 533, 212	$2, 133, 922, 688	$2, 364, 069, 067
Light products of distillation:				
Total gallons	17, 609, 203, 078	18, 406, 526, 510	13, 391, 340, 090	11, 278, 871, 093
Total value	$854, 075, 911	$1, 610, 044, 440	$1, 102, 154, 007	$1, 265, 284, 305
Gasoline: [1]				
Number of establishments	349	354	318	320
Gallons	17, 100, 620, 661	17, 538, 788, 709	12, 729, 536, 213	10, 726, 262, 144
Value	$831, 385, 803	$1, 531, 242, 047	$1, 048, 471, 338	$1, 218, 235, 713
Naphtha:				
Number of establishments	85	82	94	85
Gallons	461, 174, 457	662, 642, 001	451, 343, 947	294, 946, 777
Value	$20, 667, 599	$64, 904, 197	$42, 483, 571	$29, 938, 400
Benzine:				
Number of establishments	11	7	14	10
Gallons	33, 247, 395	49, 940, 970	50, 556, 058	41, 714, 476
Value	$1, 808, 462	$5, 276, 195	$4, 625, 309	$4, 992, 842

For footnotes, see end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931—Continued

[See note at head of table]

PRODUCT	1931	1929	1927	1925
Light products of distillation—Contd.				
Tops:				
Number of establishments	10	16	22	26
Gallons	14,160,565	155,154,830	159,903,872	215,947,696
Value	$214,047	$8,622,001	$6,573,789	$12,117,350
Illuminating oils:				
Number of establishments	233	261	249	252
Gallons	1,745,447,137	2,338,928,885	2,217,590,680	2,305,301,739
Value	$72,743,168	$164,835,912	$147,925,073	$161,880,676
Fuel oils:				
Total gallons	14,209,691,768	16,390,954,087	15,415,859,725	14,604,037,579
Total value	$271,568,034	$384,630,297	$456,959,052	$488,957,806
Distillates:				
Number of establishments	184	200	174	150
Gallons	1,055,596,536	1,024,364,025	976,669,534	1,204,936,795
Value	$28,117,151	$39,338,451	$44,286,925	$51,743,145
Gas oils:				
Number of establishments	233	229	212	189
Gallons	2,562,147,555	2,882,958,043	2,576,590,816	1,812,644,984
Value	$68,429,729	$96,094,037	$99,327,969	$79,601,622
Residual fuel oils:				
Number of establishments	294	278	250	235
Gallons	10,591,947,677	12,483,631,419	11,862,599,375	11,586,455,800
Value	$175,021,154	$249,197,809	$313,344,158	$357,613,039
Partially refined oils, sold for rerunning:				
Number of establishments	72	88	93	72
Total gallons	1,313,269,850	1,466,861,399	1,583,726,709	1,497,878,926
Above fuel oil, gallons	891,279,911	869,055,523	821,599,896	787,402,238
Fuel oil, gallons	383,803,374	567,533,199	724,090,305	692,440,284
Below fuel oil, gallons	38,186,565	30,272,677	38,036,508	18,036,404
Total value	$28,457,923	$49,142,865	$62,210,130	$65,305,061
Lubricating oils: [1]				
Total gallons	1,147,766,773	1,553,710,762	1,381,901,726	1,361,071,547
Total value	$197,371,938	$304,672,655	$244,629,175	$252,104,578
Pale or paraffin; viscosity less than 100° Universal, or flash under 400° F., closed cup:				
Number of establishments	66	71	88	75
Gallons	89,448,463	157,669,411	227,197,875	270,344,631
Value	$9,442,217	$19,652,929	$30,616,659	$38,763,249
Red or neutral; viscosity 100° Universal or higher, or flash 400° F. or over, closed cup (not including cylinder oils):				
Number of establishments	81	84	87	81
Gallons	456,493,434	564,640,109	531,627,390	528,755,778
Value	$65,939,289	$90,602,524	$87,243,433	$92,403,658
Cylinder oils:				
Number of establishments	81	86	95	93
Gallons	178,070,670	218,560,891	219,673,302	206,883,675
Value	$27,211,595	$59,109,268	$43,036,477	$47,225,926
Other lubricating oils, including compounded and undistributed (except cylinder) oils:				
Number of establishments	88	100	86	77
Gallons	423,754,206	612,840,351	403,403,159	355,087,463
Value	$94,778,837	$135,307,934	$83,732,606	$73,711,745
Liquid asphaltic road oils:				
Number of establishments	75	66	47	38
Gallons	377,747,552	323,001,799	204,798,873	274,316,604
Value	$10,424,992	$11,041,285	$9,307,838	$12,511,739
Residuum or tar:				
Gallons	67,468,366	104,111,494	118,467,420	125,114,608
Value	$1,663,465	$3,148,630	$5,117,722	$5,581,753
Greases:				
Total gallons	45,816,331	52,017,128	44,911,851	45,820,361
Total value	$12,375,653	$16,645,858	$12,961,205	$13,920,627
Petrolatum, mineral jelly, etc.:				
Number of establishments	33	28	37	30
Gallons	16,958,628	13,663,503	15,334,428	13,862,225
Value	$2,222,226	$2,547,531	$2,974,472	$3,559,207
Lubricating greases, other than axle grease: [2]				
Number of establishments	43	53	46	41
Gallons	27,283,804	34,605,242	26,524,534	26,301,450
Value	$9,640,707	$12,729,391	$9,051,121	$8,262,744

For footnotes, see end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES, 1925 TO 1931—Continued

[See note at head of table]

PRODUCT	1931	1929	1927	1925
Greases—Continued				
Axle grease:[2]				
Number of establishments	19	23	21	22
Gallons	1,573,899	3,748,383	3,052,889	5,656,686
Value	$512,720	$1,368,936	$935,612	$2,098,676
Paraffin wax:				
Gallons	79,483,315	84,639,316	94,257,226	89,761,623
Value	$13,353,136	$22,328,375	$23,432,260	$30,590,464
Acid oil:				
Gallons	84,559,997	34,766,976	90,607,047	59,550,136
Value	$1,119,987	$662,611	$1,848,797	$1,139,310
Asphalt, other than liquid asphalt:				
Tons (2,000 pounds)	2,462,102	3,115,197	2,642,324	2,275,803
Value	$21,750,784	$34,506,067	$37,884,108	$30,460,927
Coke, petroleum:				
Tons (2,000 pounds)	2,028,726	1,264,576	1,243,510	923,763
Value	$7,182,209	$5,461,210	$7,169,596	$6,437,483
Liquefied petroleum gases:				
Number of establishments	26	(3)	(3)	(3)
Gallons	255,139,669	(3)	(3)	(3)
Value	$5,778,926	$20,413,007	$22,323,725	$29,894,338
Other refinery products, value	$22,554,250			

[1] The production of natural gasoline, not covered by the Census, was reported by the U.S. Bureau of Mines as follows:

Year	Number of plants	Gallons	Value
1931	937	1,831,918,000	$63,732,000
1929	1,087	2,233,688,000	158,410,000
1927	1,119	1,641,144,000	118,688,000
1925	1,080	1,127,437,000	120,378,000

[2] Production by petroleum refineries only. For statistics on production of lubricating oils and greases in all industries, for 1931 and 1929, see table 5, p. 677.

[3] No data.

TABLE 4.—GASOLINE; NAPHTHA, BENZINE, AND TOPS; ILLUMINATING OILS; AND FUEL OILS—PRODUCTION, FOR THE UNITED STATES, 1931 AND 1929, AND FOR STATES, 1931

[Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the manufacture of the specified classes of products than some of the States shown separately. The figures for 1931 represent production; those for 1929 refer to sales (shipments or deliveries) by refiners. See sec. 16, p. 9]

STATE	Gasoline	Naphtha, benzine, and tops	Illuminating oils	Fuel oils
United States				
1931:				
Gallons	17,100,620,661	508,582,417	1,745,447,137	14,209,691,768
Value	$831,385,803	$22,690,108	$72,743,168	$271,568,034
1929:				
Gallons	17,538,788,709	867,737,801	2,338,928,885	16,390,954,087
Value	$1,531,242,047	$78,802,393	$164,835,912	$384,630,297
States, 1931				
Arkansas:				
Gallons	127,377,294	1,725,234	5,888,907	177,073,437
Value	$4,660,312	$92,297	$173,322	$3,001,455
California:				
Gallons	2,801,643,675	31,296,062	206,208,140	4,372,341,041
Value	$132,827,290	$1,233,974	$11,271,082	$73,287,563
Illinois:				
Gallons	795,453,025	6,473,463	48,456,518	281,899,915
Value	$42,233,391	$341,741	$1,907,366	$6,626,983
Indiana:				
Gallons	1,433,941,736	23,896,202	77,269,557	471,057,120
Value	$83,761,038	$1,475,666	$3,431,753	$13,923,681
Kansas:				
Gallons	845,227,583	412,588	115,355,731	364,446,772
Value	$34,746,561	$22,894	$3,251,889	$6,560,784
Kentucky:				
Gallons	168,489,125	282,882	12,236,527	80,377,687
Value	$9,713,618	$21,144	$530,195	$1,911,680
Louisiana:				
Gallons	675,139,712	243,351,242	149,615,765	776,224,752
Value	$28,106,661	$10,419,787	$5,142,986	$12,800,056
Michigan:				
Gallons	68,762,425	8,962,438	3,014,222	48,144,155
Value	$4,708,767	$496,499	$132,958	$1,604,051
Montana:				
Gallons	47,670,571	354,320	2,855,423	41,936,491
Value	$2,932,453	$25,329	$176,346	$1,325,681
New Jersey:				
Gallons	1,084,163,258	18,974,807	161,689,576	1,410,867,804
Value	$56,021,265	$1,326,638	$9,975,720	$33,967,978
New York:				
Gallons	203,553,507	----------	64,201,680	74,701,932
Value	$11,141,785	----------	$3,033,410	$2,420,299
Ohio:				
Gallons	576,608,764	6,554,689	27,458,308	228,053,631
Value	$36,369,174	$572,133	$1,367,467	$5,059,848
Oklahoma:				
Gallons	1,476,476,460	45,060,358	181,365,181	703,898,179
Value	$54,482,587	$1,619,554	$4,207,155	$8,154,446
Pennsylvania:				
Gallons	1,430,477,054	17,537,380	171,078,353	1,149,534,508
Value	$81,561,552	$1,324,544	$8,459,748	$27,187,772
Texas:				
Gallons	4,124,147,842	100,368,808	454,632,533	3,230,743,628
Value	$183,277,711	$3,546,019	$17,353,543	$54,137,055
West Virginia:				
Gallons	82,909,997	----------	21,373,734	43,059,161
Value	$4,726,353	----------	$839,518	$1,040,117
Wyoming:				
Gallons	407,501,307	206,752	25,734,825	101,173,596
Value	$18,940,155	$7,939	$762,721	$2,177,255
Other States:				
Gallons	751,077,326	3,125,192	17,012,157	654,157,959
Value	$41,175,130	$163,950	$725,989	$16,381,330

TABLE 5.—LUBRICATING OILS AND GREASES—PRODUCTION, FOR THE UNITED STATES, 1931 AND 1929, AND FOR STATES, 1931

[This table gives statistics for each State for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments. Certain of the "Other States," however, are more important in the manufacture of the specified classes of products than some of the States for which separate figures are given. The figures for 1931 represent production; those for 1929 refer to sales (shipments or deliveries) by refiners and manufacturers. See sec. 16, p. 9]

	LUBRICATING OILS		LUBRICATING GREASES	
	Gallons	Value	Gallons	Value
United States				
Total:				
1931	1,253,255,499	$226,456,369	55,616,665	$22,266,187
1929	(1)	353,091,581	(1)	32,781,470
Made in—				
(a) Petroleum Refining industry:				
1931	1,147,766,773	197,371,938	28,857,703	10,153,427
1929	1,553,710,762	304,672,655	38,353,625	14,098,327
(b) "Lubricating Oils and Greases, Not Made in Petroleum Refineries" industry:				
1931	103,282,171	28,399,914	[2] 25,364,999	11,132,890
1929	(1)	47,077,021	(1)	17,349,837
(c) Other industries:				
1931	2,206,555	684,517	1,393,963	979,870
1929	(1)	1,341,905	(1)	1,333,306
States, 1931				
California	91,293,716	19,515,796	4,469,588	2,093,126
Illinois	55,406,491	9,840,166	1,189,427	552,584
Kansas	29,650,209	6,696,940	1,455,602	432,288
Maryland	10,756,935	1,915,751	[3] 1,568,667	[3] 556,459
Massachusetts	3,987,002	753,806		
Michigan	2,027,885	480,265	543,115	267,724
Missouri	861,378	229,865	4,337,099	1,202,016
New Jersey	261,017,757	61,103,759	6,236,635	2,610,365
New York	66,939,291	11,724,915	2,216,772	1,058,893
Ohio	30,067,371	5,367,508	5,740,425	2,192,993
Oklahoma	87,469,240	11,783,235	1,557,742	515,275
Pennsylvania	281,875,990	46,963,248	11,183,844	4,095,034
Texas	227,268,436	28,068,976	7,187,431	2,868,188
West Virginia	14,167,447	2,614,049	----------	----------
Wisconsin	971,078	498,860	130,051	67,759
Wyoming	13,751,696	3,059,659	693,091	330,292
Other States[4]	75,743,577	15,839,571	7,107,176	3,423,191

[1] Data incomplete.
[2] Reported in pounds; converted on basis of 8 pounds per gallon.
[3] Combined to avoid disclosing approximations of the output of individual establishments.
[4] Arkansas, Colorado, District of Columbia, Indiana, Iowa, Kentucky, Louisiana, Minnesota, Montana, Rhode Island, South Carolina, South Dakota, and Utah.

TABLE 6.—PRINCIPAL MATERIALS CONSUMED, IN THE PETROLEUM-REFINING INDUSTRY, BY KIND AND QUANTITY, FOR THE UNITED STATES: 1925 TO 1931

MATERIAL	1931	1929	1927	1925
	Barrels (42 gal.)	*Barrels (42 gal.)*	*Barrels (42 gal.)*	*Barrels (42 gal.)*
Crude petroleum	909,419,575	1,039,921,589	831,331,822	739,489,345
Partially refined oils, tops, waxes, etc	36,881,122	51,549,133	33,939,307	57,844,880
Natural gasoline, total	29,920,059	42,381,002	26,383,114	23,223,116
Purchased	26,176,835	37,098,958	24,779,504	21,274,369
Extracted and used	3,743,224	5,282,044	1,603,610	1,948,747
	Tons (2,000 lb.)	*Tons (2,000 lb.)*	*Tons (2,000 lb.)*	*Tons (2,000 lb.)*
Soda ash	9,438	18,441	21,221	20,944
Sulphuric acid:				
Purchased and produced in plant	900,247	1,007,590	872,956	820,371
Reclaimed and reused	[1] 461,585	476,273	343,787	345,453
Caustic soda, purchased	103,845	134,054	95,026	60,419

[1] Basis 50° Baumé.

Group 8.—THE RUBBER INDUSTRIES

THE GROUP AS A WHOLE

[Preliminary reports for Rubber Tires and Inner Tubes and for Boots and Shoes, Rubber, were issued on August 2, 1932; and for Rubber Goods, Other Than Tires and Inner Tubes and Boots and Shoes on November 2, 1932.]

This group comprises three industries, namely (1) Rubber Tires and Inner Tubes; (2) Boots and Shoes, Rubber; and (3) Rubber Goods Other than Tires, Inner Tubes, and Boots and Shoes. The establishments in each of these industries use india rubber or guttapercha as an important constituent in the manufacture of their products of chief value.

Description of the industries.—The Rubber Tires and Inner Tubes industry embraces those establishments which are engaged primarily in the manufacture of pneumatic tires, inner tubes, and solid and cushion rubber tires, for any class of vehicles.

The establishments assigned to the Rubber Boots and Shoes industry are those whose leading products are rubber boots, shoes, overshoes, and rubber-soled canvas shoes. (Statistics for the manufacture of boots and shoes from materials other than rubber are presented in a separate report.)

The principal products of the Rubber Goods Other than Tires, Inner Tubes, and Boots and Shoes industry are rubber belting and hose, rubber heels and soles, reclaimed rubber, rubberized fabrics, and hard-rubber goods. (This 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.)

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 Specified, but at the censuses for 1921 and subsequent years 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 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 quantities 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.

SUMMARY FOR GROUP 8.—THE RUBBER INDUSTRIES, FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3*d*, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data for individual establishments. Certain of the "Other States," however, are more important in the respective industries than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
THE GROUP AS A WHOLE						
United States						
1931	453	99,259	$112,596,379	$252,867,163	$614,265,307	$361,398,144
1929	525	149,148	207,305,857	578,677,681	1,117,460,252	538,782,571
1927	516	141,997	198,073,743	660,370,209	1,225,077,114	564,706,905
1925	530	141,869	191,285,520	721,729,675	1,260,805,063	539,075,388
1923	529	137,868	182,084,056	501,162,768	958,517,634	457,354,866
1921	496	103,273	123,612,873	377,879,372	704,903,133	327,023,761
1919	477	158,549	193,763,089	594,343,590	1,138,216,019	543,872,429
1914	342	74,022	44,167,402	163,034,713	300,993,796	137,959,083
1909	267	49,264	25,136,976	122,745,102	197,394,638	74,649,536
1904	265	43,873	20,084,166	80,002,476	148,015,391	68,012,915
1899	301	36,566	15,426,573	60,240,559	99,880,693	39,640,134
Percent of increase or decrease (—):						
1929-31	—13.7	—33.4	—45.7	—56.3	—45.0	—32.9
1927-29	1.7	5.0	4.7	—12.4	—8.8	—4.6
1925-27	—2.6	0.1	3.5	—8.5	—2.8	4.8
1923-25	0.2	2.9	5.1	44.0	31.5	17.9
1921-23	6.7	33.5	47.3	32.6	36.0	39.9
1919-21	4.0	—34.9	—36.2	—36.4	—38.1	—39.9
1921-31	—8.7	—3.9	—8.9	—33.1	—12.9	10.5
1919-29	10.1	—5.9	7.0	—2.6	—1.8	—0.9
1909-19	78.7	221.8	670.8	384.2	476.6	628.6
1899-1909	—11.3	34.7	62.9	103.8	97.6	88.3
RUBBER TIRES AND INNER TUBES [3]						
United States						
1931	48	49,159	$63,088,584	$173,604,186	$406,283,123	$232,678,937
1929	91	83,263	127,081,975	429,606,971	770,176,890	340,569,919
1927	109	78,256	120,063,854	499,220,642	869,688,063	370,467,421
1925	126	81,640	120,614,081	559,939,811	925,001,520	365,061,709
1923	160	73,963	108,623,102	365,165,016	644,193,697	279,028,681
1921	178	55,496	75,054,148	291,554,377	496,123,335	204,568,958
Percent of increase or decrease (—):						
1929-31	(4)	—41.0	—50.4	—59.6	—47.2	—31.7
1927-29	—16.5	6.4	5.8	—13.9	—11.4	—8.1
1925-27	—13.5	—4.1	—0.5	—10.8	—6.0	1.5
1923-25	—21.3	10.4	11.0	53.3	43.6	30.8
1921-23	—10.1	33.3	44.7	25.2	29.8	36.4
1921-31	—73.0	—11.4	—15.9	—40.5	—18.1	13.7
States, 1931						
California	5	3,756	$4,930,577	$17,378,029	$36,437,618	$19,059,589
Ohio	18	32,180	41,933,457	105,532,867	255,981,224	150,448,357
Other States [4,5]	25	13,223	16,224,550	50,693,290	113,864,281	63,170,991
RUBBER BOOTS AND SHOES						
United States						
1931	15	15,882	$13,769,928	$12,298,297	$47,905,467	$35,607,170
1929	22	25,659	29,945,265	34,396,466	102,537,625	68,141,159
1927	22	26,848	32,078,955	43,372,916	124,607,801	81,234,885
1925	23	24,999	28,057,948	40,566,085	115,934,554	75,368,469
1923	25	29,435	33,670,810	45,268,988	131,739,742	86,470,754
1921	24	23,888	23,428,115	32,132,942	94,032,524	61,899,582
1919	25	32,875	30,882,722	50,346,880	116,917,434	66,570,554
1914	23	18,687	9,986,454	23,956,036	53,822,123	29,866,087
1909	22	17,612	8,544,252	29,577,176	49,720,567	20,143,391
1904	22	18,991	8,866,806	32,000,464	70,065,296	38,064,832
1899	22	14,391	6,426,579	22,682 543	41,089,819	18,407,276
Percent of increase or decrease (—):						
1929-31	(4)	—38.1	—54.0	—64.2	—53.3	—47.7
1927-29	-------	—4.4	—6.7	—20.7	—17.7	—16.1
1925-27	(4)	7.4	14.3	6.9	7.5	7.8
1923-25	(4)	—15.1	—16.7	—10.4	—12.0	—12.8
1921-23	(4)	23.2	43.7	40.9	40.1	39.7
1919-21	(4)	—27.3	—24.1	—36.2	—19.6	—7.0
1921-31	(4)	—33.5	—41.2	—61.7	—49.1	—42.5
1919-29	(4)	—21.9	—3.0	—31.7	—12.3	2.4
1909-19	(4)	86.7	261.4	70.2	135.1	230.5
1899-1909	-------	22.4	33.0	30.4	21.0	9.4

See footnotes at end of table.

SUMMARY FOR GROUP 8—THE RUBBER INDUSTRIES, FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of this table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
RUBBER BOOTS AND SHOES—con.						
States, 1931						
Massachusetts	4	6,277	$6,393,391	$4,635,529	$19,116,144	$14,480,615
Other States [7]	11	9,605	7,376,537	7,662,768	28,789,323	21,126,555
RUBBER GOODS OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES [3]						
United States						
1931	390	34,218	$35,737,867	$66,964,680	$160,076,717	$93,112,037
1929	412	40,226	50,278,617	114,674,244	244,745,737	130,071,493
1927	385	36,893	45,930,934	117,776,651	230,781,250	113,004,599
1925	381	35,230	42,613,491	121,223,779	219,868,989	98,645,210
1923	344	34,470	39,790,144	90,728,764	182,584,195	91,855,431
1921	294	23,889	25,130,610	54,192,053	114,747,274	60,555,221
Percent of increase or decrease (−):						
1929-31	−5.3	−14.9	−28.9	−41.6	−34.6	−28.4
1927-29	7.0	9.0	9.5	−2.6	6.1	15.1
1925-27	1.0	4.7	7.8	−2.8	5.0	14.6
1923-25	10.8	2.2	7.1	33.6	20.4	7.4
1921-23	17.0	44.3	58.3	67.4	59.1	51.7
1921-31	32.7	43.2	42.2	23.6	39.5	53.8
States, 1931						
California	23	686	$900,620	$1,712,141	$4,234,417	$2,522,276
Connecticut	15	2,323	2,276,511	4,815,747	10,795,292	5,979,545
Illinois	23	1,003	1,159,738	1,865,796	4,424,976	2,559,180
Indiana	12	1,032	1,060,653	1,900,040	4,389,912	2,489,872
Michigan	9	371	432,657	1,083,909	2,618,675	1,534,766
Missouri	9	758	731,885	1,832,520	4,236,676	2,404,156
New Jersey	45	6,664	7,657,622	11,668,412	29,812,024	18,143,612
New York	42	4,361	4,751,930	9,160,825	21,026,024	11,865,199
Ohio	81	6,151	5,948,046	8,508,313	24,308,578	15,800,265
Pennsylvania	19	1,498	1,654,603	3,174,625	7,470,006	4,295,381
Rhode Island	7	2,645	2,354,527	3,519,779	10,296,090	6,776,311
Texas	6	71	61,351	88,965	272,710	183,745
Wisconsin	6	306	256,870	522,003	1,034,544	512,541
Other States [5,8]	93	6,349	6,490,854	17,111,605	35,156,793	18,045,188

[1] The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16 p. 9.

[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

[3] No comparable data are available for years prior to 1921 for "Rubber tires and inner tubes" or for "Rubber goods other than tires, inner tubes, and boots and shoes."

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

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

Number of establishments	60	Cost of materials, containers, fuel, and purchased electric energy	$19,928,837
Wage earners (average for the year)	6,728	Value of products	$46,371,115
Wages	$7,758,324	Value added by manufacture	$26,442,278

[6] Alabama, 1 establishment; Colorado, 1; Connecticut, 2; Illinois, 1; Indiana, 1; Iowa, 2; Maryland, 2; Massachusetts, 1 (see footnote 5); Michigan, 2; Minnesota, 1; New Jersey, 3; New York, 1; North Carolina, 1; Pennsylvania, 4; Wisconsin, 2.

[7] Connecticut, 2 establishments; Illinois, 1; Indiana, 1; New Jersey, 2; Pennsylvania, 1; Rhode Island, 3; Wisconsin, 1.

[8] Arkansas, 1 establishment; Colorado, 1; Delaware, 2; Georgia, 3; Iowa, 2; Kansas, 1; Kentucky, 2; Louisiana, 1; Maine, 2; Maryland, 4; Massachusetts, 59 (see footnote 5); Minnesota, 2; Mississippi, 1; New Hampshire, 1; North Carolina, 2; Oregon, 3; Tennessee, 1; Virginia, 3; Washington, 2.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, AND 1914, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—					
		January	February	March	April	May	June
THE GROUP AS A WHOLE							
United States							
1931	99,259	101,411	100,716	101,255	101,251	102,882	103,557
1929	149,148	149,117	152,089	153,870	155,477	156,512	157,835
1925	141,869	*135,345*	137,881	138,875	140,776	143,453	143,990
1919	158,549	*144,931*	149,354	148,683	150,259	152,769	154,825
1914	74,022	70,590	74,157	77,759	80,967	82,193	78,650
RUBBER TIRES AND INNER TUBES							
United States							
1931	49,159	49,832	49,446	49,607	49,956	51,576	52,013
1929	83,263	84,751	86,757	87,579	89,106	90,912	91,777
1925	81,640	*75,307*	76,879	78,395	81,473	84,730	85,544
States, 1931							
California	3,756	3,545	3,710	3,822	4,150	4,323	4,336
Ohio	32,180	33,265	32,499	32,212	31,779	32,987	33,607
RUBBER BOOTS AND SHOES							
United States							
1931	15,882	17,816	16,971	16,188	15,531	15,616	16,253
1929	25,659	25,270	24,947	25,031	24,632	*23,887*	24,671
1925	24,999	25,298	25,797	25,633	25,318	24,854	24,598
1919	32,875	34,591	35,339	33,977	32,455	31,298	*30,642*
1914	18,687	18,286	18,325	18,613	18,513	18,776	18,752
1909	17,612	16,921	*16,551*	17,433	17,510	17,601	17,868
States, 1931							
Massachusetts	6,277	6,439	6,479	*5,597*	5,660	5,948	6,372
RUBBER GOODS OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES							
United States							
1931	34,218	33,763	34,299	35,460	35,764	35,690	35,291
1929	40,226	39,096	40,385	41,260	41,739	41,713	41,387
1925	35,230	34,740	35,205	34,847	33,985	33,809	*33,848*
States, 1931							
California	686	640	613	623	776	841	750
Connecticut	2,323	*2,241*	2,363	2,427	2,417	2,367	2,334
Illinois	1,003	994	977	1,194	1,206	1,200	1,044
Indiana	1,032	1,065	1,078	991	1,047	1,052	1,024
Michigan	371	361	376	419	420	427	398
Missouri	758	*646*	676	654	670	763	852
New Jersey	6,664	6,912	6,944	6,834	6,946	7,014	6,884
New York	4,361	4,276	4,574	4,803	4,739	4,600	4,462
Ohio	6,151	6,192	6,149	6,759	6,656	6,584	6,388
Pennsylvania	1,498	1,515	1,538	1,555	1,556	1,529	1,560
Rhode Island	2,645	*2,397*	2,421	2,535	2,610	2,716	2,817
Texas	71	*62*	64	71	72	78	77
Wisconsin	306	294	299	287	285	278	278

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, AND 1914, AND FOR STATES, 1931—Continued

[See note at head of this table]

	NUMBER REPORTED FOR—					
	July	August	September	October	November	December
THE GROUP AS A WHOLE						
United States						
1931	98,740	96,833	97,180	96,378	95,734	*95,180*
1929	157,061	153,646	147,828	141,721	134,204	*130,417*
1925	145,203	145,211	145,061	141,914	141,336	143,380
1919	160,358	165,973	166,948	173,824	166,223	168,441
1914	74,148	*68,414*	70,412	70,441	69,954	70,579
RUBBER TIRES AND INNER TUBES						
United States						
1931	50,555	49,368	47,762	46,664	46,625	*46,507*
1929	90,584	86,542	80,764	74,813	69,117	*66,452*
1925	87,814	88,491	84,756	80,108	77,408	78,771
States, 1931						
California	3,914	3,704	3,550	*3,306*	3,347	3,364
Ohio	33,076	32,450	31,550	30,951	30,942	*30,846*
RUBBER BOOTS AND SHOES						
United States						
1931	*13,832*	14,011	15,339	16,131	16,422	16,479
1929	25,177	26,123	26,713	27,104	27,013	27,342
1925	23,173	*22,337*	24,631	25,199	26,304	26,842
1919	31,304	31,561	31,578	32,953	34,145	34,657
1914	17,491	*16,756*	18,617	19,377	20,340	20,398
1909	17,670	16,687	17,965	18,386	18,528	18,223
States, 1931						
Massachusetts	6,189	6,431	6,565	6,752	6,584	6,311
RUBBER GOODS OTHER THAN TIRES, INNER TUBES, AND BOOTS AND SHOES						
United States						
1931	34,353	33,454	34,079	33,583	32,687	*32,194*
1929	41,300	40,981	40,352	39,804	38,074	*36,623*
1925	34,216	34,383	35,674	36,607	37,624	37,767
States, 1931						
California	787	696	*599*	665	626	611
Connecticut	2,324	2,276	2,273	2,290	2,300	2,265
Illinois	969	912	910	*846*	855	923
Indiana	*978*	1,000	1,019	1,038	1,052	1,040
Michigan	328	357	373	319	*313*	361
Missouri	872	908	906	747	705	702
New Jersey	6,657	6,501	6,482	6,373	6,255	*6,165*
New York	4,269	*4,075*	4,106	4,248	4,099	4,087
Ohio	6,184	5,838	5,887	5,818	5,686	*5,673*
Pennsylvania	1,546	1,526	1,486	1,452	1,406	*1,311*
Rhode Island	2,831	2,818	2,717	2,684	2,608	2,589
Texas	82	77	73	68	67	63
Wisconsin	*268*	281	364	406	327	303

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9]

	1931	1929	1927	1925
1. The rubber group as a whole, all products, total value	$614, 265, 307	$1, 117, 460, 252	$1, 225, 077, 114	$1, 260, 805, 063
2. Rubber goods	$609, 393, 566	$1, 109, 863, 874	$1, 219, 585, 811	$1, 258, 445, 924
3. Other products (not normally belonging to the industries)	$4, 871, 741	$7, 596, 378	$5, 491, 303	$2, 359, 139
4. Rubber goods made as secondary products in other industries, value	$3, 018, 895	$1, 766, 630	$6, 893, 317	$10, 999, 067
Rubber goods, all industries: Aggregate value (sum of 2 and 4)	$612, 412, 461	$1, 111, 630, 504	$1, 226, 479, 128	$1, 269, 444, 991
(a) Tires and inner tubes, total value	$366, 864, 981	$676, 909, 812	$779, 533, 129	$824, 548, 604
Pneumatic:				
Motor-vehicle, except motorcycle:				
Casings:				
Total number	49, 142, 622	69, 765, 223	63, 549, 949	58, 784, 073
Total value	$314, 380, 924	$573, 527, 425	$633, 582, 246	$656, 491, 733
Balloon:				
Number	42, 325, 675	51, 640, 430	32, 786, 832	(1)
Value	$256, 067, 678	$382, 425, 638	$326, 062, 731	
High-pressure:				
Number	6, 816, 947	18, 124, 793	30, 763, 117	
Value	$58, 313, 246	$191, 101, 787	$307, 519, 515	
Inner tubes:				
Total number	49, 166, 765	74, 043, 041	70, 855, 455	77, 387, 836
Total value	$44, 615, 809	$80, 575, 518	$105, 487, 386	$118, 234, 658
Balloon:				
Number	39, 100, 773	50, 478, 997	33, 642, 868	(1)
Value	$34, 784, 598	$53, 435, 412	$52, 193, 080	
High-pressure:				
Number	10, 065, 992	23, 564, 044	37, 212, 587	
Value	$9, 831, 211	$27, 140, 106	$53, 294, 306	
Motorcycle and bicycle casings, inner tubes, and single-tube tires:[2]				
Number	2, 834, 700	3, 736, 817	3, 046, 260	2, 511, 661
Value	$2, 410, 657	$3, 634, 167	$3, 695, 309	$3, 961, 327
Solid and cushion:				
Truck				
Number	112, 351	423, 998		
Value	$4, 054, 654	$14, 896, 551	[3] $36, 768, 098	$45, 860, 886
Other (tractor, trailer, industrial-truck, carriage tiring, etc.) value	[3] $1, 402, 937	[3] $4, 276, 151		
(b) Rubber boots and shoes, total value	$48, 308, 066	$111, 359, 622	$133, 195, 913	$119, 922, 826
Rubber boots:				
Pairs	1, 970, 785	5, 453, 865	5, 361, 667	4, 739, 423
Value	$4, 775, 242	$16, 140, 851	$16, 746, 281	$16, 027, 904
Rubber shoes and overshoes:				
Total pairs	27, 144, 516	51, 356, 618	71, 576, 570	52, 338, 782
Total value	$26, 377, 815	$64, 883, 492	$90, 993, 833	$80, 076, 608
Lumbermen's:				
Pairs	983, 378	1, 817, 078	3, 772, 632	(1)
Value	$2, 088, 921	$4, 171, 728	$8, 851, 138	
Arctics and gaiters:				
Pairs	10, 989, 516	19, 244, 673	36, 721, 378	
Value	$14, 661, 143	$31, 722, 333	$54, 405, 051	
Other rubber shoes, rubbers, and footholds:				
Pairs	15, 171, 622	30, 294, 867	31, 082, 560	
Value	$9, 627, 751	$28, 989, 431	$27, 737, 644	
Rubber-soled canvas shoes:				
Pairs	28, 081, 610	43, 954, 011	28, 810, 061	24, 999, 932
Value	$17, 155, 009	$30, 335, 279	$25, 455, 799	$23, 818, 314

See footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931—Continued

[See note at head of this table]

	1931	1929	1927	1925
Rubber goods, all industries—Continued.				
(c) Rubber goods, other than tires, inner tubes, and boots and shoes, total value	$197,239,414	$323,361,070	$313,750,086	$313,974,494
Rubber heels, for sale as such:				
Pairs	248,256,981	292,719,416	318,346,037	342,195,710
Value	$11,647,513	$17,926,991	$25,503,609	$26,091,662
Rubber soles, including composition or fiber, for sale as such:				
Pairs	59,608,736	46,188,879	40,820,386	36,064,367
Value	$8,387,744	$8,959,690	$9,341,312	$10,384,577
Rubber soling strips:				
Square feet	8,916,641	4,313,026	(4)	(4)
Value	$1,981,465	$1,717,212		
Rubberized fabrics, for sale as such, total value	$17,653,482	$29,754,104	$26,540,938	$21,632,878
Automobile and carriage:				
Yards	10,425,174	22,407,668	17,362,711	25,232,299
Value	$5,398,259	$11,864,090	$11,047,634	$13,873,238
Hospital sheeting:				
Yards	2,684,894	3,048,105	3,421,754	3,185,141
Value	$1,047,174	$1,444,348	$1,841,679	$1,397,983
Raincoat fabrics:				
Yards	15,092,137	25,575,960	23,687,744	22,654,627
Value	$4,238,513	$9,681,803	$9,741,516	$6,361,657
Other:				
Yards	35,797,203	41,935,695	11,335,603	
Value	$6,969,536	$6,763,863	$3,910,109	
Mechanical rubber goods:				
Rubber belting:				
Transmission:				
Pounds	14,507,702	21,574,539	23,172,883	(4)
Value	$6,720,782	$13,146,125	$12,601,016	$15,145,579
Conveyor:				
Pounds	10,762,853	15,442,548	15,758,579	(4)
Value	$3,884,480	$8,213,067	$5,973,031	$5,868,238
Other:				
Pounds	5,335,209	8,006,483	4,456,179	(4)
Value	$3,003,129	$4,417,253	$3,372,903	$2,467,255
Rubber hose:				
Garden:				
Feet	123,754,022	145,254,766	106,051,971	131,274,543
Value	$6,038,148	$9,049,483	$8,091,923	$11,514,092
Fire:				
Feet	11,631,091	15,566,761	16,023,978	10,835,829
Value	$3,856,491	$5,988,345	$6,203,430	$5,400,619
Other:				
Feet	57,942,673	111,157,168	$27,176,797	$18,729,111
Value	$11,035,621	$22,399,751		
Rubber tubing:				
Pounds	5,706,673	16,235,064		
Value	$1,183,430	$3,494,446		
Rubber packing:				
Pounds	9,266,371	17,923,100	15,019,157	(4)
Value	$2,208,619	$5,032,921	$4,853,217	$4,443,803
Washers, gaskets, valves, pump sleeves, liner strips:				
Pounds	5,980,608	13,320,192	12,938,468	(4)
Value	$2,483,959	$5,107,348	$7,728,633	
Rubber and friction tape:				
Pounds	14,922,764	20,426,381	16,998,847	
Value	$2,822,369	$4,950,125	$4,038,755	
Plumbers' rubber goods, value	$732,736	$1,041,470	$697,329	
Rubber-covered rolls (all sizes), value	$2,349,766	$2,528,375	$2,162,066	
Other mechanical rubber goods, value	$17,047,636	$30,479,563	$17,077,156	
Hard-rubber goods, total value	$11,456,511	$17,937,397	$18,891,286	$29,110,589
Battery jars, boxes, and parts, value	$5,577,029	$5,809,715	$9,862,375	(1)
Other, value	$5,879,482	$12,127,682	$9,028,911	

See footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931—Continued

[See note at head of this table]

	1931	1929	1927	1925
Rubber goods, all industries—Continued.				
(c) Rubber goods, other than tires, etc.—Continued.				
Reclaimed rubber, for sale as such:				
Pounds	216,509,189	363,695,965	330,435,663	243,851,873
Value	$9,984,625	$23,906,089	$27,372,579	$23,020,517
Druggists' and medical sundries (except rubber gloves):				
Water bottles and fountain syringes:				
Dozens	487,001	692,638	513,946	
Value	$2,383,660	$4,959,599	$4,767,399	
Other, value	$6,115,178	$5,986,062	$7,116,678	
Rubber erasers:				
Pounds	1,306,143	1,832,683		
Value	$662,716	$1,065,186		
Rubber bands:				
Pounds	3,436,484	3,488,731	1,738,379	$18,462,585
Value	$1,158,696	$1,955,005	$1,424,752	
Rubber gloves:				
Surgeons':				
Dozen pairs	442,052	473,547		
Value	$733,244	$991,083		
Electricians:				
Dozen pairs	5,515		817,211	
Value	$186,819	576,619	$2,422,916	
Other rubber gloves:		$1,936,739		
Dozen pairs	549,504			
Value	$1,092,839			
Rubber cement:				
Gallons	5,342,709	6,050,395	4,827,059	(4)
Value	$3,261,663	$4,697,407	$3,883,627	$2,807,356
Rubber flooring:				
Square feet	7,524,013	8,565,615	8,778,253	11,959,542
Value	$2,924,186	$4,267,010	$4,503,436	$6,123,362
Rubber mats and matting, value	$4,616,464	$8,805,670	$7,272,675	
Tire sundries and repair materials, value	$9,582,691	$17,168,002	$24,209,727	
Rubber thread:				
Pounds	5,498,257	5,726,490	5,281,597	
Value	$2,903,796	$5,189,600	$5,339,743	$112,772,271
Jar rings:				
Gross	10,949,958	8,437,696	6,768,841	
Value	$3,114,815	$3,001,475	$3,053,640	
Bathing caps:				
Dozens	1,177,624	1,090,054	740,860	
Value	$1,795,157	$1,842,401	$1,701,220	
Other manufactures of rubber, value	[6] $32,228,984	$45,446,076	$40,428,293	
(d) Not distributed by class or kind, value				$10,999,067

[1] Not reported in detail.
[2] Data called for separately on schedule but combined to avoid disclosing approximations of data for individual establishments.
[3] Includes data for a small quantity of casings and tubes other than those for motor vehicles, motorcycles, and bicycles.
[4] No data.
[5] Included in item for "Other manufactures of rubber."
[6] Includes data for rubber clothing, $8,881,309, toy ballons, $2,725,322; and play balls and other rubber toys, $2,354,159. For total value of rubber clothing made in rubber industries and wearing-apparel industries, see report on men's clothing; and for total value of rubber toys, see "Toys (not including children's wheel goods or sleds), games, and playground equipment" report.

TABLE 4.—SELECTED PRODUCTS, BY QUANTITY AND VALUE, BY STATES: 1931

[This table gives statistics for each State for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments. Certain of the "Other States," however, are more important in the manufacture of the respective products than some of the States shown separately]

	Quantity	Value
Tires and inner tubes:		
Pneumatic:		
Motor-vehicle, except motorcycle:	*Number*	
Casings, total	49,142,622	$314,380,924
Balloon, total	42,325,675	256,067,678
California	4,264,652	25,289,139
Ohio	24,629,709	155,609,540
Other States	13,431,314	75,168,999
High-pressure, total	6,816,947	58,313,246
California	856,979	6,070,472
Ohio	3,788,669	32,512,922
Other States	2,171,299	19,729,852
Inner tubes, total	49,166,765	44,615,809
Balloon, total	39,100,773	34,784,598
California	3,962,175	3,635,920
Ohio	23,884,275	22,487,324
Other States	11,254,323	8,661,354
High-pressure, total	10,065,992	9,831,211
California	1,046,938	1,054,574
Ohio	5,059,450	5,491,982
Other States	3,959,604	3,284,655
Solid and cushion, truck, total	112,351	4,054,654
Ohio	82,934	3,061,452
Other States	29,417	993,202
	Pairs	
Arctics and gaiters, total	10,989,516	14,661,143
Massachusetts	4,991,937	6,065,503
Other States	5,997,579	8,595,640
Rubber-soled canvas shoes, total	28,081,610	17,155,009
Massachusetts	8,590,923	5,343,221
Other States	19,490,687	11,811,788
Rubber heels, for sale as such, total	248,256,981	11,647,513
Massachusetts	47,665,512	2,138,123
Ohio	86,480,521	4,547,657
Other States	114,110,948	4,961,733
Rubber soles, including composition or fiber, for sale as such, total	59,608,736	8,387,744
Massachusetts	14,403,404	2,689,846
Ohio	7,781,925	1,101,055
Other States	37,423,407	4,596,843

TABLE 5.—CRUDE AND RECLAIMED RUBBER CONSUMED AND ON HAND, FOR THE RUBBER INDUSTRIES: 1931, 1929, AND 1927

[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
Crude rubber:				
Consumed:				
1931:				
Tons	345,533	286,635	11,210	47,688
Cost	$73,060,717	$59,972,477	$2,550,335	$10,537,905
1929:				
Tons	462,101	400,364	18,938	42,799
Cost	$209,458,746	$180,592,960	$8,907,713	$19,958,073
1927, tons	364,057	316,295	16,424	31,338
Stocks on hand Dec. 31, tons:				
1931	168,438	146,057	2,607	19,774
1929	49,060	37,005	2,952	9,103
1927	45,733	36,933	2,878	5,922
Afloat Dec. 31, tons:				
1931	11,265	11,113		152
1929	39,994	31,998	(1)	(1)
1927	10,713	10,299	(1)	(1)
Reclaimed rubber:				
Consumed:				
1931:				
Tons	124,035	74,047	2,788	47,200
Cost	$11,974,302	$7,013,917	$286,205	$4,674,180
1929:				
Tons	206,091	115,855	10,019	80,217
Cost	$26,864,425	$16,639,046	$1,350,141	$8,875,238
1927, tons	175,774	105,718	11,923	58,133
Stocks on hand Dec. 31, tons:				
1931	8,477	4,494	468	3,515
1929	13,501	6,444	751	6,306
1927	16,581	9,344	870	6,367

[1] Withheld to avoid disclosing approximations of data for individual establishments.

TABLE 6.—CRUDE RUBBER CONSUMED BY ESTABLISHMENTS IN THE RUBBER-INDUSTRIES GROUP, BY CLASS OF PRODUCTS MADE: 1931, 1929, AND 1927

PRODUCTS MADE	CRUDE RUBBER CONSUMED (TONS OF 2,240 POUNDS)		
	1931	1929	1927
Total	345,533	462,101	364,057
Rubber tires and inner tubes:			
Pneumatic:			
Motor-vehicle, except motorcycle:			
Casings	225,867	303,375	231,505
Inner tubes	42,505	62,902	52,009
Motorcycle, bicycle, and other casings and tubes	1,099	1,497	1,177
Solid and cushion	4,022	10,874	15,724
Boots and shoes	11,611	20,798	17,164
Rubber heels and soles, including slab soling	12,020	9,104	6,690
Rubberized fabrics and rubberized and rubber clothing (finished)	7,375	7,665	5,390
Mechanical rubber goods:			
Belting	3,357	4,828	3,821
Hose and tubing	5,147	7,170	4,885
Other	9,288	10,159	5,387
Rubber flooring and rubber mats and matting	2,672	1,906	1,713
Hard-rubber goods	1,406	2,148	1,485
Tire sundries and repair materials	3,438	4,421	4,830
Rubber thread	2,547	3,080	2,781
Rubber cement	1,540	1,824	1,487
Rubber gloves	519	549	2,022
Druggists' and medical sundries	2,230	2,091	
Toys	2,216	2,267	1,407
Stationers' rubber goods, bathing caps, and golf and tennis balls	2,015	2,319	4,580
Other manufactures of rubber	4,659	3,124	

Group 9.—LEATHER AND ITS MANUFACTURES

THE GROUP AS A WHOLE

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, Harness, and Whips; (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 Tanning, Currying, and Finishing 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.

SUMMARY FOR GROUP 9.—LEATHER AND ITS MANUFACTURES: 1914–31

[Data for establishments with products under $5,000 in value included for 1919 and 1914 but not for 1921 and subsequent years. See sec. 3d, p. 4]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Total for the group	1931	3,702	272,757	$262,129,700	$666,200,319	$1,189,876,183	$523,675,864
	1929	4,285	318,472	359,460,686	1,132,022,266	1,906,200,994	774,178,728
	1927	4,272	316,081	364,536,761	1,088,816,473	1,869,615,351	780,798,878
	1925	4,252	314,128	355,419,415	1,013,012,574	1,764,017,400	751,004,826
	1923	4,880	344,745	388,811,212	1,083,647,088	1,880,827,861	797,180,773
	1921	4,827	280,363	314,651,603	934,825,339	1,545,207,369	610,382,030
	1919	6,423	350,079	364,035,649	1,714,903,978	2,613,217,012	898,313,034
	1914	6,798	308,223	169,917,008	754,476,297	1,107,756,467	353,280,170
Leather: Tanned, curried, and finished	1931	418	42,047	49,541,526	172,785,669	271,137,694	98,352,025
	1929	471	49,932	63,413,707	337,597,868	481,340,299	143,742,431
	1927	494	52,924	67,887,231	331,984,736	494,255,838	162,271,102
	1925	531	52,263	65,834,112	296,953,488	452,186,000	155,232,512
	1923	597	59,703	73,784,340	321,749,551	488,897,835	167,148,284
	1921	608	48,955	57,740,510	277,724,919	383,365,048	105,640,129
	1919	680	72,476	88,205,473	646,521,527	928,591,701	282,070,174
	1914	741	55,936	31,914,497	284,245,420	367,201,705	82,956,285
Finished products of leather [2], total	1931	3,284	230,710	[3] 212,588,274	493,414,650	918,738,489	425,323,839
	1929	3,814	268,540	296,046,979	794,424,398	1,424,860,695	630,436,297
	1927	3,778	263,157	296,649,530	756,831,737	1,375,359,513	618,527,776
	1925	3,721	261,865	289,585,303	716,059,086	1,311,831,400	595,772,314
	[3] 1923	4,284	285,947	315,893,186	775,366,657	1,405,477,550	630,110,893
	1921	4,219	231,408	256,911,093	657,100,420	1,161,842,321	504,741,901
	1919	5,743	277,603	275,830,176	1,068,382,451	1,684,625,311	616,242,860
	1914	6,057	252,287	138,002,511	470,230,877	740,554,762	270,323,885
Belting	1931	178	1,640	1,967,521	7,302,010	14,521,751	7,219,741
	1929	207	2,602	3,549,721	20,679,778	35,631,682	14,951,904
	1927	173	2,164	2,925,416	16,185,267	27,265,752	11,080,485
	1925	168	2,644	3,505,450	18,868,230	31,810,926	12,942,696
	1923	169	3,160	3,895,419	24,569,125	37,723,518	13,154,393
	1921	164	2,268	2,841,644	13,075,740	19,168,255	6,092,515
	1919	172	2,765	3,260,439	28,156,711	40,480,654	12,323,943
	1914	151	2,951	2,069,545	15,480,110	23,035,951	7,555,841
Boot and shoe cut stock not made in boot and shoe factories	1931	191	8,584	8,148,093	64,132,247	79,734,359	15,602,112
	1929	210	9,499	10,319,996	107,545,777	133,447,914	25,902,137
	1927	201	8,611	9,354,049	97,966,431	121,022,421	23,055,990
	1925	245	7,977	8,906,159	75,326,204	94,047,681	18,721,477
	[3] 1923	228	8,038	7,980,851	82,031,754	102,838,245	20,806,491
	1921	226	7,049	7,613,216	56,922,902	72,691,564	15,768,662
	1919	252	9,715	9,124,778	133,887,276	161,203,310	27,316,034
	1914	236	7,819	4,052,123	51,450,498	59,964,523	8,514,025
Boot and shoe findings, not made in boot and shoe factories.	1931	361	9,088	[3] 8,263,507	18,141,709	37,366,416	19,224,707
	1929	382	10,376	11,058,252	31,964,401	58,625,445	26,661,044
	1927	379	9,950	11,201,872	31,862,322	57,433,389	25,571,067
	1925	326	8,605	9,695,136	29,248,469	52,063,829	22,815,360
	1923	364	7,865	8,274,016	27,653,235	48,012,533	20,359,298
	1921	344	5,917	6,608,798	22,930,700	39,116,538	16,185,838
	1919	427	8,941	8,187,196	40,428,347	62,825,408	22,397,061
	1914	369	6,714	3,225,683	20,304,183	28,303,186	7,999,003
Boots and shoes, other than rubber.	1931	1,156	181,374	163,271,281	337,627,472	653,879,746	316,252,274
	1929	1,341	205,640	222,407,732	515,055,246	965,922,694	450,867,448
	1927	1,357	203,110	225,090,242	494,553,016	944,714,463	450,161,447
	1925	1,460	206,992	225,787,981	481,631,964	925,383,422	443,751,458
	1923	1,606	225,216	250,345,922	527,456,868	1,000,078,022	472,621,154
	1921	1,505	183,502	204,954,095	478,432,445	867,475,896	389,043,451
	1919	1,449	211,049	210,734,610	715,269,315	1,155,041,436	439,772,121
	1914	1,355	191,555	105,695,404	310,356,586	501,760,458	191,403,872

Footnotes at end of table.

SUMMARY FOR GROUP 9—LEATHER AND ITS MANUFACTURES: 1914–31—Contd.

[See note at head of table]

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Gloves and mittens [4]	1931	227	7,884	$7,553,974	$13,136,380	$28,023,634	$14,887,254
	1929	257	9,203	9,203,911	20,205,740	39,122,729	18,916,989
	1927	232	9,106	8,813,912	19,276,416	36,662,053	17,385,637
	1925	226	7,115	6,914,788	17,778,693	33,292,916	15,514,223
	1923	260	10,010	8,544,709	20,223,924	38,080,575	17,856,651
	1921	272	7,907	5,842,784	13,844,159	24,855,321	11,011,162
	1919	355	10,685	8,150,784	26,286,129	46,940,511	20,654,382
	1914	352	10,668	4,558,360	12,170,694	21,614,109	9,443,415
Pocketbooks, purses, and cardcases.	1931	260	8,747	9,792,878	22,600,817	43,147,053	20,546,236
	1929	290	10,430	15,229,422	35,351,605	68,627,515	33,275,910
	1927	257	8,570	13,169,509	29,618,524	57,344,655	27,726,131
	1925	190	6,826	9,021,720	22,442,200	43,105,213	20,663,013
	1923	207	5,518	7,291,112	16,235,882	32,731,725	16,495,843
	1921	115	2,715	3,224,244	6,221,200	13,084,969	6,863,769
	1919	139	2,905	3,061,903	7,557,155	14,549,659	6,992,504
	1914	64	1,466	702,314	1,783,840	3,350,552	1,566,712
Saddlery, harness, and whips.[2]	1931	185	1,974	1,926,404	5,268,042	9,339,203	4,071,161
	1929	268	3,396	3,761,442	13,914,427	23,562,774	9,648,347
	1927	271	4,113	4,630,763	16,701,936	27,666,547	10,964,611
	1925	267	4,673	5,132,566	18,907,960	30,391,594	11,483,634
	1923	484	6,817	7,096,785	24,762,113	42,855,445	18,093,332
	1921	607	4,781	5,236,595	18,092,615	31,185,719	13,093,104
	1919	1,849	11,128	11,431,296	53,539,549	86,699,295	33,159,746
	1914	2,591	14,132	8,555,060	34,427,385	56,720,522	22,293,137
Trunks, suitcases, and bags.	1931	371	6,198	6,343,130	13,232,015	26,714,702	13,482,687
	1929	467	11,359	13,756,761	31,693,935	63,968,929	32,274,994
	1927	495	10,345	13,034,687	29,128,235	59,958,681	30,830,446
	1925	475	10,348	13,225,966	31,381,851	61,223,867	29,842,016
	1923	505	11,441	13,520,094	32,836,895	63,023,072	30,186,177
	1921	504	8,712	10,260,364	23,882,610	46,548,977	22,666,367
	1919	597	11,470	12,463,767	33,222,432	63,932,266	30,709,834
	1914	561	9,911	5,540,157	13,625,457	26,471,527	12,846,070
Leather goods not elsewhere classified.	1931	355	5,221	5,321,486	11,973,958	26,011,625	14,037,667
	1929	392	6,035	6,759,742	18,013,489	35,951,013	17,937,524
	1927	413	7,188	8,379,080	21,539,590	43,291,552	21,751,962
	1925	364	6,685	7,395,537	20,473,515	40,511,952	20,038,437
	1923	461	7,882	8,944,278	19,596,861	40,134,415	20,537,554
	1921	482	8,557	10,329,353	23,698,049	47,715,082	24,017,033
	1919	503	8,945	9,415,403	30,035,537	52,952,772	22,917,235
	1914	378	7,071	3,603,865	10,632,124	19,333,934	8,701,810

[1] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

[2] The figures for 1929 and earlier years differ from those previously published because of the transfer of the statistics for Whips to this group from Group 16. The manufacture of whips was formerly treated as a separate industry in Group 16, but at the census for 1931 was combined with Saddlery and Harness under the new title "Saddlery, Harness, and Whips."

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

[4] The figures for 1925 and subsequent years are not comparable with those for 1923 and prior years because of the inclusion in the figures for earlier years of data for certain establishments which manufactured gloves and mittens of cloth and leather combined. For later years, such establishments were classified in the cloth gloves and mittens industry.

LEATHER: TANNED, CURRIED, AND FINISHED

[A preliminary report for this industry was issued under date of Nov. 16, 1932]

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. Establishments engaged in tanning, etc., on contract for others are requested to report the amounts received for work done, but not the value of the leather produced nor the cost of the hides and skins treated. Some of this work is done for establishments in this industry which report the value of their entire output of finished leather, including that tanned or otherwise treated on contract for them. A considerable amount of contract tanning is, however, done on leather owned by manufacturers in the Glove, Clothing, and other industries, and therefore the value of such leather, which is used as a material by these manufacturers, is not included in the figures given for leather in the second line of table 3; consequently these figures understate somewhat the total values of leather produced in the 2 years. The statistics for 1925, 1923, and 1921 (table 1) include data for the cost of hides and skins treated and the value of leather produced by a few of the larger contract establishments, but the items thus included are not of sufficient magnitude to affect materially the comparableness of the figures with those for prior and for subsequent years. 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, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Cost of contract work	Value of products	Value added by manufacture [1]
United States							
1931	418	42,047	$49,541,526	$172,785,669	$2,267,839	$271,137,694	$98,352,025
1929	471	49,932	63,413,707	337,597,868	(2)	481,340,299	143,742,431
1927	494	52,924	67,887,231	331,984,736	(2)	494,255,838	162,271,102
1925	531	52,263	65,834,112	296,953,488	2,630,984	452,186,000	155,232,512
1923	597	59,703	73,784,340	321,749,551	2,698,615	488,897,835	167,148,284
1921	608	48,955	57,740,510	277,724,919	1,552,572	383,365,048	105,640,129
1919	680	72,476	88,205,473	646,521,527	2,337,011	928,591,701	282,070,174
1914	741	55,936	31,914,497	284,245,420	1,152,642	367,201,705	82,956,285
1909	919	62,202	32,102,845	248,278,933	473,869	327,874,187	79,595,254
1904	1,049	57,239	27,049,152	191,179,073	881,168	252,620,986	61,441,913
1899	1,306	52,109	22,591,091	155,000,004	53,396	204,038,127	49,038,123
Percent of increase or decrease (−):							
1929-31	−11.3	−15.8	−21.9	−48.8	----------	−43.7	−31.6
1927-29	−4.7	−5.7	−6.6	1.7	----------	−2.6	−11.4
1925-27	−7.0	1.3	3.1	11.8	----------	9.3	4.5
1923-25	−11.1	−12.5	−10.8	−7.7	−2.5	−7.5	−7.1
1921-23	−1.8	22.0	27.8	15.9	73.8	27.5	58.2
1919-21	−10.6	−32.5	−34.5	−57.0	−33.6	−58.7	−62.5
1921-31	−31.2	−14.1	−14.2	−37.8	46.1	−29.3	−6.9
1919-29	−30.7	−31.1	−28.1	−47.8	----------	−48.2	−49.0
1909-19	−26.0	16.5	174.8	160.4	393.2	183.2	254.4
1899-1909	−29.6	19.4	42.1	60.2	787.5	60.7	62.3
States, 1931							
California	11	389	$507,209	$1,508,501	----------	$2,546,218	$1,037,717
Connecticut	4	140	169,416	285,245	----------	544,806	259,561
Delaware	9	1,964	2,239,117	4,940,563	----------	10,859,731	5,919,168
Illinois	25	3,479	4,076,325	13,847,744	$18,434	20,500,969	6,653,225
Indiana	6	264	210,738	1,298,596	----------	1,718,232	419,636
Kentucky	5	440	422,389	2,790,971	----------	3,440,152	649,181
Maine	4	79	80,129	246,789	----------	407,792	161,003
Maryland	4	553	506,747	1,678,951	----------	2,621,304	942,353
Massachusetts	98	8,657	10,697,504	29,966,431	796,830	50,051,338	20,084,907
Michigan	13	1,990	2,067,725	6,941,894	----------	10,143,078	3,201,184
Missouri	4	240	217,944	966,436	----------	1,706,618	740,182
New Jersey	44	3,380	4,478,396	12,656,744	519,139	22,404,578	9,747,834
New York	56	4,715	6,497,315	21,935,675	209,154	33,287,768	11,352,093
North Carolina	8	1,008	720,552	6,265,629	----------	8,464,617	2,198,988
Ohio	17	1,361	1,692,831	5,916,253	----------	9,379,097	3,462,844
Oregon	3	28	21,122	47,600	----------	88,668	41,068
Pennsylvania	57	7,924	9,463,120	40,816,443	208,743	60,281,771	19,465,328
Virginia	7	572	525,715	2,894,687	----------	4,517,416	1,622,729
West Virginia	8	785	715,432	4,683,797	----------	6,374,380	1,690,583
Wisconsin	17	2,916	3,059,452	8,070,495	7,305	14,077,249	6,006,754
Other States [3]	18	1,163	1,172,348	5,026,225	508,234	7,721,912	2,695,687

[1] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[2] Not called for on schedule.
[3] Georgia, 2 establishments; Minnesota, 2; New Hampshire, 5; Rhode Island, 1; Tennessee, 4; Texas, 2; Vermont, 1; Washington, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	42,047	41,977	42,558	42,665	42,560	42,866	42,641	43,292	43,642	42,748	41,118	39,472	*39,026*
1929	49,932	49,572	49,962	49,160	48,552	*48,335*	48,613	49,764	50,976	51,795	51,833	50,933	49,692
1925	52,263	52,407	53,281	53,901	52,249	51,231	50,856	*50,498*	51,622	52,508	53,081	52,813	52,704
1919	72,476	65,519	*65,515*	65,979	67,423	69,655	72,725	72,902	77,202	77,586	77,855	78,341	79,010
1914	55,936	58,250	58,455	58,743	58,001	57,009	56,530	*55,216*	54,294	53,715	*53,491*	53,793	53,735
1909	62,202	62,063	62,373	61,726	60,095	*60,075*	60,559	61,039	61,166	62,049	63,383	65,174	66,694
States, 1931													
California	389	390	388	405	425	398	384	379	378	384	385	*375*	376
Connecticut	140	145	145	145	142	140	142	138	143	136	*130*	137	140
Delaware	1,964	2,199	2,244	2,104	2,043	1,996	1,926	1,942	2,013	1,992	1,697	*1,682*	1,829
Illinois	3,479	3,343	3,340	3,413	3,417	3,417	3,624	3,685	3,704	3,702	3,524	3,340	*3,242*
Indiana	264	279	290	289	301	285	267	267	274	262	215	*208*	227
Kentucky	440	412	400	440	456	457	469	466	461	467	459	396	*394*
Maine	79	87	92	92	80	81	83	76	*70*	71	72	76	75
Maryland	553	546	546	557	560	552	571	567	565	559	565	*521*	530
Massachusetts	8,657	8,372	8,819	8,976	8,807	9,052	8,989	9,243	9,377	8,880	8,183	7,709	*7,484*
Michigan	1,990	2,112	2,108	2,153	2,104	2,038	1,915	1,918	1,888	*1,847*	1,965	1,913	1,923
Missouri	240	*190*	201	224	228	252	257	266	266	258	240	250	251
New Jersey	3,380	3,456	3,493	3,469	3,452	3,495	3,427	3,471	3,533	3,262	3,162	3,197	*3,144*
New York	4,715	4,522	*4,511*	4,549	4,604	4,628	4,716	4,810	4,877	4,879	4,888	4,835	4,760
North Carolina	1,008	1,073	1,019	1,014	1,063	1,063	1,072	1,004	953	983	956	961	*935*
Ohio	1,361	*1,246*	1,317	1,325	1,360	1,414	1,372	1,416	1,432	1,376	1,362	1,343	1,364
Oregon	28	27	26	28	29	30	31	30	31	27	28	*25*	*25*
Pennsylvania	7,924	8,167	8,180	8,015	7,941	8,043	8,008	8,156	8,191	8,129	7,767	7,374	*7,111*
Virginia	572	625	607	572	584	557	*540*	576	546	567	577	563	545
West Virginia	785	897	830	876	891	828	768	750	719	720	714	*791*	726
Wisconsin	2,916	*2,697*	2,876	2,919	2,932	2,953	2,919	2,949	3,056	3,044	3,011	2,816	2,826

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931 AND 1929

[This table does not include data for the value of leather produced for manufacturers in other industries by establishments operating on a contract basis. See "Description of the industry," p. 691]

KIND	1931	1929
Leather: Tanned, Curried, and Finished industry, all products, total value	$271,137,694	$481,340,299
Leather	253,682,239	458,307,954
By-products of tanning, currying, and finishing (hair, glue stock, fleshings, etc.)	3,975,066	5,575,527
Other products (not normally belonging to the industry)	1,508,383	
Receipts for contract work on materials owned by others	11,972,006	17,456,818
Leather:		
Aggregate value	$253,682,239	$458,307,954
Sole and belting leather (not including horse butts), total value	$76,102,481	$139,495,787
Oak and union sole:		
Backs, bends, and sides	11,746,135	13,750,273
Value	$55,030,073	$93,911,933
Chrome and combination sole:		
Backs, bends, and sides	447,424	595,789
Value	$2,174,538	$3,994,127

For footnotes, see end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931 AND 1929—Continued

[See note at head of table]

KIND	1931	1929
Leather—Continued:		
Sole and belting leather—Continued:		
Belting butts, rough:		
Butts and butt bends	369,484	705,084
Value	$2,919,921	$9,043,116
Belting butts, curried:		
Butts and butt bends	266,240	670,011
Value	$2,784,529	$8,878,754
Offal (heads, bellies, shoulders, etc.):		
Pounds	86,161,457	94,642,502
Value	$13,193,420	$23,667,857
Harness leather, total value	$2,166,068	$6,092,336
Union black:		
Sides	96,345	284,238
Value	$513,451	$2,476,107
Oak black and russet:		
Sides	278,910	460,690
Value	$1,652,617	$3,616,229
Bag, case, and strap leather:		
Sides	786,684	1,054,724
Value	$3,656,258	$7,307,793
Skirting leather:		
Sides	30,448	63,146
Value	$255,130	$597,480
Collar leather:		
Sides	180,474	362,588
Value	$627,129	$1,554,003
Lace leather:		
Sides	127,823	142,823
Value	$575,400	$911,733
Welting leather:		
Pounds	2,076,568	(1)
Value	$711,545	
Upholstery leather (automobile, furniture, and carriage), total value	$5,199,798	$15,401,442
Whole-hide grains and machine-buffed:		
Hides	318,096	623,451
Value	$2,892,432	$8,907,105
Bufflings (russet):		
Hides	137,938	255,088
Value	$554,731	$1,437,319
Splits (main and second):		
Pieces	410,113	723,550
Value	$1,752,635	$5,057,018
Upper leather (other than patent), total value	$107,985,029	$185,201,616
Cattle (including kip side):		
Sides	12,513,552	12,303,702
Value	$32,535,963	$51,963,247
Calf:		
Skins	10,276,354	12,932,950
Value	$26,031,058	$43,355,540
Kip (except kip side):		
Whole skins	268,130	1,316,702
Value	$1,104,223	$5,766,200
Goat and kid:		
Skins	34,978,323	50,148,623
Value	$37,285,482	$64,659,815
Sheep and lamb (shoe stock) and cabretta:		
Skins	9,990,842	14,323,794
Value	$7,683,773	$15,523,386
Kangaroo and wallaby:		
Skins	1,156,143	891,734
Value	$1,047,904	$1,439,274
Horse, colt, ass, and mule:		
Half and whole fronts:		
Equivalent half fronts	90,306	115,959
Value	$253,089	$429,306
Butts and shanks, value	$642,527	$1,160,531
Deer and elk:		
Skins	692,994	
Value	$1,114,380	$904,257
Other, value	$286,630	

For footnotes, see end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931 AND 1929—Continued

[See note at head of table]

KIND	1931	1929
Leather—Continued.		
Patent leather (other than upholstery), total value	$11,429,866	$24,839,570
Cattle (including kip side):		
Sides	3,606,416	5,374,691
Value	$10,799,524	$23,503,897
Other, value	$630,342	$1,335,673
Glove and garment leather, total value	$16,728,647	$23,024,659
Cattle grains (including foreign-tanned kip):		
Sides	96,383	
Value	$270,454	
Bellies, cowhide:		[2] $1,190,760
Bellies	581,556	
Value	$509,462	
Horse, colt, ass, and mule:		
Half and whole fronts:		
Equivalent half fronts	1,508,586	1,856,264
Value	$3,261,290	$6,378,662
Butts and shanks, value	$422,920	$631,546
Sheep and lamb (except shearlings):		
Skins	9,039,333	5,618,478
Value	$6,835,249	$7,449,133
Shearlings:		
Skins	1,999,541	3,027,262
Value	$1,736,793	$5,405,075
Deer and elk:		
Skins	257,348	181,126
Value	$385,716	$476,210
Other, value	$3,306,763	$1,493,273
Fancy and bookbinders' leather, total value	$10,494,804	$16,390,197
Cowhide:		
Sides	110,376	156,565
Value	$478,543	$930,066
Buffings (finished):		
Hides	40,762	96,840
Value	$281,313	$776,701
Sheep and lamb and cabretta:		
Skins	2,814,370	3,972,282
Value	$2,992,454	$6,186,085
Calf and kip:		
Skins	248,750	496,110
Value	$743,348	$1,993,900
Reptile (alligator, snake, lizard, etc.):		
Skins	2,437,318	
Value	$2,665,911	$6,503,445
Other, value	$3,333,235	
Splits (other than upholstery), finished:		
Side splits	14,771,961	21,210,302
Value	$10,012,233	$19,517,063
Miscellaneous leather, total value	$7,737,851	$17,974,275
Roller leather:		
Skins	649,177	979,126
Value	$1,029,485	$1,706,828
Skivers (including hat-sweat):		
Dozens	191,992	344,613
Value	$1,684,872	$5,464,024
Chamois:		
Dozens	175,330	195,649
Value	$2,294,415	$2,998,715
Rough splits, for sale in the rough:		
Equivalent side splits	1,221,753	1,213,022
Value	$283,695	$1,111,576
Other leather, value	$2,445,384	$6,693,132

[1] Included in figure for "Other leather."
[2] Includes value of calf and kip; none reported for 1931.

TABLE 4.—PRODUCTS, BY KIND AND QUANTITY, FOR THE UNITED STATES: 1931, 1930, AND 1929

[The statistics in this table were compiled from data reported at the Monthly Census of Hides, Skins, and Leather. The differences between certain items in this table and the corresponding ones in table 3 are due to the fact that data for leather produced by contract tanners are included in this table but not in table 3. See "Description of the industry," p. 691]

KIND		1931	1930	1929
Sole and belting leather:				
Sole—cattle, total	backs, bends, and sides	12,755,313	15,513,124	14,516,339
Oak and union	do	12,342,496	14,972,497	13,938,855
Chrome	do	412,817	540,627	577,484
Sole—horse (chrome)	whole butts	385,563	332,545	331,082
Belting butts:				
Rough	butts and butt bends	531,631	822,252	990,315
Curried	do	399,847	609,527	1,077,560
Offal, total	pounds	92,504,871	117,249,128	106,858,400
Heads	do	5,852,137	10,218,725	9,977,337
Bellies	do	53,699,817	70,089,303	66,421,140
Shoulders—sole leather	do	20,518,500	23,807,648	16,198,032
Shoulders—rough	do	11,287,936	11,967,118	13,154,116
All other	do	1,146,481	1,166,334	1,107,775
Harness leather, total	sides	358,356	505,526	641,805
Union black	do	86,488	188,593	255,624
Oak black and russet	do	271,868	316,933	386,181
Bag, case, and strap leather	do	623,506	750,958	946,630
Skirting leather	do	23,643	37,904	47,914
Collar leather	do	160,955	279,640	309,184
Latigo leather	do	11,060	13,121	20,368
Lace leather	do	96,257	106,110	117,658
Welting leather:				
Cattle, total	pounds	10,642,190	12,010,528	11,417,729
Sides—curried	do	1,327,985	1,535,705	1,669,885
Shoulders—curried	do	9,314,205	10,474,823	9,747,844
Pigskin strips (including fancy)	do	1,964,274	3,276,028	5,824,089
Upholstery leather, total	pieces	680,188	711,978	1,205,626
Whole-hide grains	hides	201,493	186,298	272,821
Buffings (russet)	do	38,872	84,502	118,946
Machine-buffed	do	46,559	52,637	141,418
Main splits	pieces	260,085	263,584	436,586
Second splits	do	133,179	124,957	235,855
Upper leather (other than patent):				
Cattle (including kip side), total	sides	12,084,220	11,111,842	12,609,956
Chrome	do	10,779,950	9,930,553	11,164,691
Dress shoe	do	7,264,184	5,845,151	6,504,545
Work shoe	do	3,515,766	4,085,402	4,660,146
Combination (chrome and vegetable)	do	1,275,263	1,130,449	1,341,676
Dress shoe	do	1,178	10,736	8,345
Work shoe	do	1,274,085	1,119,713	1,333,331
Vegetable	do	29,007	50,840	103,589
Dress shoe	do	17,590	34,813	78,754
Work shoe	do	11,417	16,027	24,835
Calf, total	skins	11,655,949	13,134,309	14,023,487
Blacks	do	7,403,945	7,457,621	6,327,091
Colors	do	4,282,004	5,676,688	7,696,396
Kip, total	whole skins	343,707	454,260	517,432
Blacks	do	168,205	204,484	211,415
Colors	do	175,502	249,776	306,017
Goat and kid, total	skins	47,979,723	54,451,426	54,355,132
Blacks	do	21,680,496	22,840,953	20,018,267
Colors	do	26,299,227	31,610,473	34,336,865
Cabretta	do	1,770,387	1,971,626	1,672,252
Sheep and lamb	do	12,307,330	10,954,632	17,751,590
Deer and elk	do	308,609	284,406	351,673
Kangaroo and wallaby	do	966,642	925,621	853,849
Horse, colt, ass, and mule:				
Half and whole fronts	equivalent half fronts	92,339	130,207	105,749
Butts	whole butts	396,913	359,382	345,523
Shanks	shanks	191,057	374,462	404,126
Patent leather (other than upholstery):				
Cattle (including kip side)	sides	4,501,413	4,626,470	5,953,557
Calf and kip	whole skins	1,701	2,247	36,958
Goat and kid	skins	159,132	494,986	302,123
Horse and colt	equivalent half fronts	109,535	124,433	271,373
Glove and garment leather:				
Cattle grains (including kip side)	sides	75,125	64,822	63,582
Calf and kip	whole skins	27,019	17,516	24,112
Bellies (cowhide)	bellies	310,824	361,255	288,348
Horse, colt, ass, and mule:				
Half and whole fronts	equivalent half fronts	1,646,078	2,170,247	1,856,695
Butts	whole butts	118,220	95,319	78,468
Shanks	shanks	1,522,619	1,497,241	1,419,522
Pig and hog	skins	834,124	640,751	573,038
Goat and kid	do	77,985	99,189	138,448

TABLE 4.—PRODUCTS, BY KIND AND QUANTITY, FOR THE UNITED STATES: 1931, 1930, AND 1929—Continued

[See note at head of table]

KIND	1931	1930	1929
Glove and garment leather—Continued			
Cabretta ... skins	1,351,664	1,154,877	1,066,320
Sheep and lamb (except shearlings) ... do	10,933,668	9,297,899	8,633,253
Shearlings ... do	3,171,737	3,551,002	3,989,769
Deer and elk ... do	545,831	558,130	613,744
Fancy and bookbinders' leather:			
Cowhide ... sides	185,224	182,471	239,777
Buffings (finished) ... hides	33,337	50,305	63,671
Goat and kid ... skins	422,362	398,300	888,798
Cabretta ... do	22,009	86,355	163,160
Sheep and lamb ... do	2,043,543	1,911,805	2,618,152
Calf and kip ... do	380,807	504,117	765,737
Pig and hog ... do	81,561	59,779	133,077
Seal ... do	199,365	222,287	243,979
Splits (other than upholstery) finished and rough ... equivalent side splits	17,666,156	19,315,177	22,465,304
Miscellaneous leather:			
Sheep and lamb:			
Roller leather ... skins	769,179	841,582	1,082,589
Skivers, total ... dozens	79,234	132,199	211,813
Hat sweats ... do	24,310	28,395	47,100
Other skivers ... do	54,924	103,804	164,713
Fleshers, total ... do	212,205	161,286	160,309
Chamois ... do	203,488	155,985	153,783
Other fleshers ... do	8,717	5,301	6,526
Sheep and lamb, not elsewhere specified ... skins	2,282,748	2,247,431	2,363,578
Cowhide, not elsewhere specified ... sides	1,465	15,055	4,708
Rough leather ... equivalent sides	39,479	19,534	12,578

BELTING, LEATHER

[A preliminary report for this industry was issued under date of Nov. 16, 1932]

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 wear on the person are products of the Leather Goods not Elsewhere Classified industry. The manufacture of rubber belting is included in the Rubber Goods, Other than Tires, Inner Tubes, and Boots and Shoes industry.)

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	178	1,640	$1,967,521	$7,302,010	$14,521,751	$7,219,741
1929	207	2,602	3,549,721	20,679,778	35,631,682	14,951,904
1927	173	2,164	2,925,416	16,185,267	27,265,752	11,080,485
1925	168	2,644	3,505,450	18,868,230	31,810,926	12,942,696
1923	169	3,160	3,895,419	24,569,125	37,723,518	13,154,393
1921	164	2,268	2,841,644	13,075,740	19,168,255	6,092,515
1919	172	2,765	3,260,439	28,156,711	40,480,654	12,323,943
1914	151	2,951	2,069,545	15,480,110	23,035,951	7,555,841
1909	139	3,006	1,860,880	15,622,603	23,691,887	8,069,284
1904	117	2,092	1,164,548	9,317,206	14,220,306	4,903,100
1899	104	1,667	913,877	7,499,952	10,622,522	3,122,570
Percent of increase or decrease (—):						
1929-31	—14.0	—37.0	—44.6	—64.7	—59.2	—51.7
1927-29	19.7	20.2	21.3	27.8	30.6	34.9
1925-27	3.0	—18.2	—16.5	—14.2	—14.3	—14.4
1923-25	—0.6	—16.3	—10.0	—23.2	—15.7	—1.6
1921-23	3.0	39.3	37.1	87.9	96.8	115.9
1919-21	—4.7	—18.0	—12.8	—53.6	—52.6	—50.6
1921-31	8.5	—27.7	—30.8	—44.2	—24.2	18.5
1919-29	20.3	—5.9	8.9	—26.6	—12.0	21.3
1909-19	23.7	—8.0	75.2	80.2	70.9	52.7
1899-1909	33.7	80.3	103.6	108.3	123.0	158.4
States, 1931						
California	9	41	$67,089	$175,145	$384,694	$209,549
Connecticut	6	13	20,350	73,800	122,052	48,252
Illinois	10	244	225,606	689,108	1,541,198	852,090
Indiana	5	16	17,487	53,849	120,886	67,037
Massachusetts	18	300	334,509	1,464,059	2,916,219	1,452,160
Michigan	8	168	194,614	833,970	1,617,271	783,301
Missouri	8	43	52,820	203,037	397,198	194,161
New Jersey	7	13	19,388	51,647	105,046	53,399
New York	29	174	270,024	1,073,906	1,876,100	802,194
Ohio	13	49	61,188	178,908	394,620	215,712
Pennsylvania	15	178	228,264	896,222	1,768,638	872,416
Texas	4	12	19,897	32,914	97,352	64,438
Other States [3]	46	389	455,785	1,575,445	3,180,477	1,605,032

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Colorado, 2 establishments; Delaware, 2; Georgia, 3; Kentucky, 2; Louisiana, 4; Maryland, 2; Minnesota, 3; Mississippi, 1; Nebraska, 1; New Hampshire, 2; North Carolina, 4; Rhode Island, 3; South Carolina, 3; Tennessee, 5; Virginia, 2; Washington, 4; Wisconsin, 3.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	1,640	1,748	1,735	1,742	1,703	1,672	1,640	1,601	1,615	1,599	1,553	1,536	*1,530*
1929	2,602	2,616	2,624	2,635	2,626	2,622	2,604	2,611	2,639	2,623	2,584	2,537	*2,497*
1925	2,644	2,601	2,624	2,634	2,716	2,637	2,658	2,600	2,619	*2,513*	2,691	2,719	2,715
1919	2,765	2,830	2,684	2,683	2,586	2,567	*2,566*	2,651	2,782	2,870	2,914	2,976	3,071
1914	2,951	3,004	3,004	2,988	2,940	2,913	*2,879*	2,894	2,914	2,954	2,958	2,975	2,989
1909	3,006	2,980	2,952	2,943	2,877	*2,863*	2,889	2,915	3,052	3,092	3,106	3,184	3,210
States, 1931													
California	41	42	44	42	42	41	42	39	41	41	*38*	*38*	*38*
Connecticut	13	16	15	15	15	15	13	13	12	12	12	*11*	*11*
Illinois	244	268	268	267	242	242	240	238	239	240	227	*226*	*226*
Indiana	16	19	19	18	17	16	16	16	17	17	*12*	16	14
Massachusetts	300	311	303	318	309	309	302	*285*	299	294	292	289	292
Michigan	168	175	181	182	181	183	176	167	161	161	157	144	*142*
Missouri	43	43	43	43	44	44	44	43	43	*42*	*42*	*42*	*42*
New Jersey	13	13	13	13	*12*	*12*	13	13	*12*	*12*	13	*12*	*12*
New York	174	186	188	186	187	179	179	171	169	161	163	161	*158*
Ohio	49	51	55	56	57	55	40	45	51	48	*39*	40	51
Pennsylvania	178	201	189	192	186	174	171	168	176	169	169	167	*166*
Texas	12	12	12	12	12	12	14	14	12	12	12	*11*	*11*

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, BY STATES: 1931, 1929, AND 1927

[This table gives statistics for each State (a) for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments, and (b) which contributed at least 2 percent of the total value of the specified class of products. In many cases, however, certain of the "Other States" outranked some of the States for which separate figures are given]

	1931	1929	1927
1. Leather Belting industry, all products, total value	$14, 521, 751	$35, 631, 682	$27, 265, 752
2. Leather belting and packing	12, 286, 560	29, 224, 573	22, 304, 674
3. Belt repairs (including rebuilding and reworking)	468, 421	1, 127, 295	681, 000
4. Other products (not normally belonging to the industry)	1, 766, 770	5, 279, 814	4, 280, 078
5. Leather belting made as a secondary product in other industries, value	460, 250	125, 130	507, 293
Leather belting and packing, all industries: Aggregate value (sum of 2 and 5)	$12, 746, 810	$29, 349, 703	$22, 811, 967
Flat belting:			
Total pounds	5, 548, 107	13, 051, 299	9, 739, 859
Total value	$8, 839, 401	$23, 478, 916	$16, 811, 558
California:			
Pounds	169, 188	298, 682	(1)
Value	$286, 472	$555, 092	(1)
Illinois:			
Pounds	331, 529	1, 113, 556	967, 809
Value	$562, 755	$1, 946, 407	$1, 582, 833
Massachusetts:			
Pounds	1, 227, 937	2, 932, 657	2, 025, 489
Value	$1, 940, 956	$4, 976, 175	$3, 540, 057
Michigan:			
Pounds	189, 545	440, 313	(1)
Value	$243, 295	$763, 339	(1)
Missouri:			
Pounds	201, 513	299, 641	468, 365
Value	$299, 205	$519, 170	$705, 794
New York:			
Pounds	835, 507	2, 241, 657	1, 564, 225
Value	$1, 301, 732	$4, 293, 284	$3, 083, 774
Ohio:			
Pounds	188, 804	476, 089	380, 803
Value	$306, 122	$902, 700	$601, 295
Pennsylvania:			
Pounds	668, 685	1, 549, 282	1, 633, 707
Value	$1, 128, 090	$2, 883, 022	$2, 475, 667
Other States:			
Pounds	1, 735, 399	3, 699, 422	2, 699, 461
Value	$2, 761, 774	$6, 639, 727	$4, 822, 138
Kind not specified, value	$802, 811	$2, 145, 077	$4, 965, 239
Leather packing (cup, U, valve, oil-retainer-seal, etc.), value	$3, 104, 598	$3, 725, 710	$1, 035, 170

[1] Withheld from publication to avoid disclosing approximations of data for individual establishments. Included in item for "Other States."

BOOT AND SHOE CUT STOCK

Description of the industry.—The establishments covered by this industry designation are 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.

SUMMARY FOR THE UNITED STATES, 1899–1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States"—in particular, Missouri—are, however, more important in the industry than Illinois or New York]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	191	8,584	$8,148,093	$64,132,247	$79,734,359	$15,602,112
1929	210	9,499	10,319,996	107,545,777	133,447,914	25,902,137
1927	201	8,611	9,354,049	97,966,431	121,022,421	23,055,990
1925	245	7,977	8,906,159	75,326,204	94,047,681	18,721,477
1923	228	8,038	7,980,851	82,031,754	102,838,245	20,806,491
1921	226	7,049	7,613,216	56,922,902	72,691,564	15,768,662
1919	252	9,715	9,124,778	133,887,276	161,203,310	27,316,034
1914	236	7,819	4,052,123	51,450,498	59,964,523	8,514,025
1909	232	6,693	3,156,460	36,919,919	44,661,497	7,741,578
1904	290	5,936	2,364,209	21,586,872	27,675,815	6,088,943
1899	342	6,155	2,230,691	17,800,282	23,242,892	5,442,610
Percent of increase or decrease (−):						
1929–31	−9.0	−9.6	−21.0	−40.4	−40.3	−39.8
1927–29	4.5	10.3	10.3	9.8	10.3	12.3
1925–27	−18.0	7.9	5.0	30.1	28.7	23.2
1923–25	7.5	−.8	11.6	−8.2	−8.5	−10.0
1921–23	.9	14.0	4.8	44.1	41.5	31.9
1919–21	−10.3	−27.4	−16.6	−57.5	−54.9	−42.3
1921–31	−15.5	21.8	7.0	12.7	9.7	−1.1
1919–29	−16.7	−2.2	13.1	−19.7	−17.2	−5.2
1909–19	8.6	45.2	189.1	262.6	260.9	252.8
1899–1909	−32.2	8.7	41.5	107.4	92.2	42.2
States, 1931						
Illinois	5	219	$242,979	$2,165,180	$3,048,383	$883,203
Massachusetts	130	2,262	2,446,236	21,833,484	27,064,600	5,231,116
New York	15	166	164,906	506,581	789,930	283,349
Other States [3]	41	5,937	5,293,972	39,627,002	48,831,446	9,204,444

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] California, 2 establishments; Connecticut, 1; Kansas, 1; Maine, 2; Maryland, 1; Michigan, 2; Missouri, 8; New Hampshire, 8; New Jersey, 2; Ohio, 3; Pennsylvania, 10; Virginia, 1.

BOOT AND SHOE FINDINGS

[A preliminary report for this industry was issued under date of Nov. 18, 1932]

Description of the industry.—The establishments covered by this industry designation are engaged 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, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	361	9,088	$8,263,507	$18,141,709	$37,366,416	$19,224,707
1929	382	10,376	11,058,252	31,964,401	58,625,445	26,661,044
1927	379	9,950	11,201,872	31,862,322	57,433,389	25,571,067
1925	326	8,605	9,695,136	29,248,469	52,063,829	22,815,360
1923	364	7,865	8,274,016	27,653,235	48,012,533	20,359,298
1921	344	5,917	6,608,798	22,930,700	39,116,538	16,185,838
1919	427	8,941	8,187,196	40,428,347	62,825,408	22,397,061
1914	369	6,714	3,225,683	20,304,183	28,303,186	7,999,003
1909	343	6,488	2,947,083	18,350,551	25,505,419	7,154,868
1904	289	4,434	1,647,877	6,337,810	9,904,887	3,567,077
1899	312	3,246	1,252,491	5,022,591	7,834,615	2,812,024
Percent of increase of decrease (—):						
1929-31	—5.5	—12.4	—25.3	—43.2	—36.3	—27.9
1927-29	.8	4.3	—1.3	.3	2.1	4.3
1925-27	16.3	15.6	15.5	8.9	10.3	12.1
1923-25	—10.4	9.4	17.2	5.8	8.4	12.1
1921-23	5.8	32.9	25.2	20.6	22.7	25.8
1919-21	—19.4	—33.8	—19.3	—43.3	—37.7	—27.7
1921-31	4.9	53.6	25.0	—20.9	—4.5	18.8
1919-29	—10.5	16.0	35.1	—20.9	—6.7	19.0
1909-19	24.5	37.8	177.8	120.3	146.3	213.0
1899-1909	9.9	99.9	135.3	265.4	225.5	154.4
States, 1931						
Maine	6	207	$161,267	$320,092	$723,386	$403,294
Massachusetts	221	4,201	3,917,165	9,941,661	19,283,903	9,342,242
Missouri	18	908	739,520	1,077,609	2,716,438	1,638,829
New Hampshire	24	819	733,884	1,992,559	3,766,813	1,774,254
New York	43	1,142	1,102,099	1,900,271	4,324,591	2,424,320
Ohio	9	265	249,211	262,810	822,078	559,268
Pennsylvania	8	346	208,151	770,327	1,237,733	467,406
Rhode Island	9	153	147,898	160,029	477,686	317,657
Wisconsin	5	175	173,477	504,839	861,058	356,219
Other States [3]	18	872	830,835	1,211,512	3,152,730	1,941,218

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] California, 2 establishments; Connecticut, 3; Delaware, 1; Georgia, 1; Illinois, 4; Kentucky, 1; Nebraska, 1; New Jersey, 2; Vermont, 2; Virginia, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, page 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	9,088	8,505	9,492	9,930	9,699	9,481	8,905	9,292	10,001	9,981	8,682	*7,437*	7,653
1929	10,376	*9,813*	10,359	10,272	10,095	9,915	9,914	10,371	11,185	11,448	11,194	10,098	9,847
1925	8,605	7,985	8,535	8,787	8,435	8,095	7,*620*	8,400	9,243	9,522	9,336	8,748	8,555
1919	8,941	*7,815*	8,156	8,217	8,447	8,486	8,762	8,906	9,242	9,493	9,588	9,957	10,223
1914	6,714	7,617	7,476	7,169	6,825	6,631	6,309	6,272	6,449	*6,252*	6,336	6,496	6,736
1909	6,488	6,274	6,381	6,487	*6,265*	6,308	6,441	6,408	6,645	6,572	6,524	6,682	6,876
States, 1931													
Maine	207	210	229	233	221	222	203	207	229	213	199	161	*157*
Massachusetts	4,201	4,043	4,404	4,614	4,520	4,446	4,040	4,214	4,652	4,744	4,009	*3,296*	3,431
Missouri	908	903	984	968	912	928	915	1,026	1,066	982	816	*629*	764
New Hampshire	819	799	902	879	923	899	829	816	865	893	738	643	*639*
New York	1,142	*936*	1,163	1,271	1,247	1,176	1,083	1,106	1,231	1,221	1,178	1,081	1,014
Ohio	265	273	298	304	280	254	240	288	281	300	238	*212*	217
Pennsylvania	346	333	352	364	365	363	346	333	343	351	356	328	*315*
Rhode Island	153	140	182	177	155	152	148	161	157	157	146	*125*	133
Wisconsin	175	*132*	166	187	182	186	183	189	203	215	162	153	149

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931

KIND	Value
1. Boots and Shoe Findings industry, all products, total value	$37,366,416
2. Boot and shoe findings	36,649,650
3. Other products (not normally belonging to the industry)	571,464
4. Receipts for contract work	145,302
5. Boot and shoe findings made as secondary products in other industries	1,323,828

KIND	Total	DOZEN PAIRS			
		Cuban	Louis	Style not specified	
Boot and shoe findings, all industries: Aggregate value (sum of 2 and 5)					37,973,478
Wood heel blocks, made for sale as such	5,459,242	1,972,003	3,003,837	483,402	4,365,697
Finished wood heels: Manufactured complete	2,221,368	887,072	959,379	374,917	4,185,800
Leather-covered	1,321,319	480,948	610,435	229,936	2,424,259
Celluloid-covered	548,046	312,558	212,841	22,647	1,086,020
Fabric-covered	182,088	72,845	108,124	1,119	261,745
Other	169,915	20,721	27,979	121,215	413,776
Finished from purchased blocks	2,474,287	534,447	739,570	1,200,270	4,298,568
Leather-covered	1,333,463	285,364	339,021	709,078	2,335,382
Celluloid-covered	296,264	125,441	167,643	3,180	490,399
Fabric-covered	561,297	93,727	114,450	353,120	904,390
Other	283,263	29,915	118,456	134,892	568,397
Other shoe findings					25,123,413

BOOTS AND SHOES, OTHER THAN RUBBER

[A preliminary report for this industry was issued under date of Dec. 27, 1932]

Description of the industry.—The establishments covered by this industry designation are engaged 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. Some establishments make only moccasins, sandals, spats, etc.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [1]
United States						
1931	1,156	181,374	$163,271,281	$337,627,472	$653,879,746	$316,252,274
1929	1,341	205,640	222,407,732	515,055,246	965,922,694	450,867,448
1927	1,357	203,110	225,090,242	494,553,016	944,714,463	450,161,447
1925	1,460	206,992	225,787,981	481,631,964	925,383,422	443,751,458
1923	1,606	225,216	250,345,922	527,456,868	1,000,078,022	472,621,154
1921	1,505	183,502	204,954,095	478,432,445	867,475,896	389,043,451
1919	1,449	211,049	210,734,610	715,269,315	1,155,041,436	439,772,121
1914	1,355	191,555	105,695,404	310,356,586	501,760,458	191,403,872
1909	1,343	185,116	92,359,152	277,467,743	442,630,726	165,162,983
1904	1,316	149,924	69,059,680	197,363,495	320,107,458	122,743,963
1899	1,599	141,830	58,440,883	168,632,654	258,969,580	90,336,926
Percent of increase or decrease (—):						
1929-31	—13.8	—11.8	—26.6	—34.4	—32.3	—29.9
1927-29	—1.2	1.2	—1.2	4.1	2.2	.2
1925-27	—7.1	—1.9	—.3	2.7	2.1	1.4
1923-25	—9.1	—8.1	—9.8	—8.7	—7.5	—6.1
1921-23	6.7	22.7	22.1	10.2	15.3	21.5
1919-21	3.9	—13.1	—2.7	—33.1	—24.9	—11.5
1921-31	—23.2	—1.2	—20.3	—29.4	—24.6	—18.7
1919-29	—7.5	—2.6	5.5	—28.0	—16.4	2.5
1909-19	7.9	14.0	128.2	157.8	160.9	166.3
1899-1909	—16.0	30.5	58.0	64.5	70.9	82.8
States, 1931						
California	10	453	$347,967	$710,385	$1,623,598	$913,213
Illinois	60	13,526	9,652,248	26,658,524	52,456,807	25,798,283
Indiana	8	1,456	974,403	2,694,842	4,805,200	2,110,358
Iowa	4	243	177,517	398,222	705,091	306,869
Kansas	5	68	68,651	91,080	256,984	165,904
Kentucky	6	1,280	773,582	2,035,700	3,711,854	1,676,154
Maine	38	9,138	7,514,768	14,228,000	27,444,438	13,216,438
Maryland	12	2,308	1,579,655	3,212,135	6,567,007	3,354,872
Massachusetts	397	47,664	45,679,225	79,519,951	160,666,398	81,146,447
Michigan	8	675	538,834	1,450,720	3,019,606	1,568,886
Minnesota	7	689	586,442	1,275,048	2,634,080	1,359,032
Missouri	49	19,878	16,193,083	49,076,129	86,296,106	37,219,977
New Hampshire	63	13,847	12,511,157	27,809,980	49,946,264	22,136,284
New Jersey	16	1,108	967,547	1,633,300	3,839,719	2,206,419
New York	266	33,804	37,764,381	65,416,706	128,632,032	63,215,326
Ohio	36	10,739	8,638,237	16,633,371	34,440,339	17,806,968
Pennsylvania	88	9,297	7,445,789	13,510,540	27,871,280	14,360,740
Tennessee	5	2,140	1,569,794	5,393,374	10,125,812	4,732,438
Washington	5	50	59,239	123,983	243,380	119,397
Wisconsin	47	9,589	7,724,928	17,043,664	35,011,803	17,968,139
Other States [2]	26	3,422	2,503,834	8,711,818	13,581,948	4,870,130

[1] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

[2] Connecticut, 3 establishments; Delaware, 1; Georgia, 4; Louisiana, 1; Nebraska, 2; Oregon, 1; Texas, 4; Vermont, 1; Virginia, 7; West Virginia, 2.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States													
1931	181,374	170,203	181,711	191,281	190,105	189,287	181,289	187,082	197,636	194,970	179,603	156,666	*156,654*
1929	205,640	195,120	205,944	207,829	201,795	197,265	195,023	205,169	217,921	223,616	220,552	203,954	*193,491*
1925	206,992	202,793	211,439	216,493	209,907	200,734	*191,822*	200,349	213,282	216,565	216,330	204,195	199,992
1919	211,049	202,905	204,440	201,295	*199,025*	201,710	206,562	211,811	215,596	217,031	219,604	224,197	228,412
1914	191,555	200,739	203,135	198,772	189,856	188,934	191,110	193,354	191,036	186,740	183,653	*183,212*	188,119
1909	185,116	185,981	188,742	186,357	179,606	*177,475*	179,116	183,006	186,888	186,377	186,494	187,572	193,762
States, 1931													
California	453	424	453	465	500	455	447	445	462	476	462	450	*392*
Illinois	13,526	12,367	12,876	13,426	13,392	13,777	14,287	14,700	14,981	14,580	13,263	*11,747*	12,919
Indiana	1,456	1,479	1,522	1,514	1,456	1,425	1,422	1,533	1,575	1,521	1,412	*1,295*	1,321
Iowa	243	*209*	223	257	259	233	227	254	250	257	287	234	226
Kansas	68	66	66	69	68	72	72	*60*	67	69	70	73	66
Kentucky	1,280	1,714	1,633	1,544	1,237	1,211	1,274	1,346	1,348	1,161	*794*	1,061	1,032
Maine	9,138	8,535	9,330	9,746	9,856	9,972	9,531	9,471	9,705	9,672	9,098	7,486	*7,255*
Maryland	2,308	2,211	2,306	2,403	2,459	2,406	2,359	2,347	2,431	2,376	2,201	2,108	*2,034*
Massachusetts	47,664	44,501	48,968	52,342	51,346	50,914	46,977	47,989	52,338	52,290	47,509	38,801	*37,988*
Michigan	675	690	*600*	697	683	682	660	676	684	682	688	684	679
Minnesota	689	*547*	674	760	779	741	615	626	721	752	738	695	621
Missouri	19,878	18,093	19,750	20,766	20,962	20,994	20,432	21,702	22,377	21,606	19,289	*15,483*	17,097
New Hampshire	13,847	13,746	14,486	15,167	14,945	14,932	13,934	14,577	15,392	15,068	12,761	*10,290*	10,869
New Jersey	1,108	*816*	883	1,026	1,141	1,139	1,181	1,181	1,245	1,317	1,259	1,169	941
New York	33,804	32,047	33,758	35,277	35,211	34,978	33,283	33,830	35,921	35,394	33,981	31,333	*30,690*
Ohio	10,739	10,066	10,740	11,134	11,027	10,617	10,804	11,648	12,088	11,487	10,296	*9,408*	9,546
Pennsylvania	9,297	8,874	9,468	9,814	9,887	9,403	8,631	9,008	9,664	9,861	9,486	9,049	*8,417*
Tennessee	2,140	1,947	*1,914*	1,968	2,014	2,128	2,138	2,158	2,241	2,394	2,377	2,275	2,127
Washington	50	36	54	51	49	53	50	*34*	53	55	57	57	54
Wisconsin	9,589	8,808	*8,776*	9,526	9,445	9,610	9,474	9,930	10,475	10,320	9,966	9,438	9,298

TABLE 3.—PRODUCTS, BY KIND, METHOD OF MANUFACTURE, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, AND 1927

KIND	Census year	TOTAL		NUMBER OF PAIRS, BY METHOD OF MANUFACTURE					
		Value	Number of pairs	Welted	McKay	Wood or metal fastened	Stitchdown	Turned	Cemented
Aggregate value, all products	1931	[1] $653,879,746							
	1929	[1] 965,922,694							
	1927	[1] 944,714,463							
Boots, shoes, slippers, and other footwear, total	1931	650,586,138	[2] 316,057,030	98,203,923	104,464,290	17,955,662	46,006,378	38,513,427	10,913,350
	1929	958,689,737	[2] 371,207,607	124,409,101	126,850,340	61,496,500		[3] 58,451,666	
	1927	931,523,722	[1] 367,067,065	123,565,686	112,339,827	71,596,034		52,744,077	
Boots and shoes, total	1931	620,687,633	281,578,962	97,733,212	99,292,560	17,955,662	39,100,793	17,554,240	9,942,495
	1929	916,289,305	333,143,156	123,825,994	121,176,697	57,371,933		30,768,532	
	1927	892,875,042	325,611,282	123,395,593	106,680,833	62,736,144		32,798,712	
Leather, total	1931	610,185,149	276,855,265	97,654,359	95,887,833	17,955,662	39,077,106	16,622,653	9,657,652
	1929	904,641,759	329,511,439	123,528,439	118,571,446	57,227,836		30,183,718	
	1927	872,815,973	320,335,038	122,923,617	102,869,013	62,692,160		31,850,248	
Other than athletic and sporting, total	1931	600,761,436	272,518,892	96,944,912	93,350,013	[5] 17,955,662	39,077,106	[5] 16,622,653	[5] 9,657,652
	1929	895,810,118	326,654,277	122,606,967	116,935,987	57,209,242		29,902,081	
	1927	868,656,370	318,931,901	122,496,998	101,990,953	62,680,633		31,763,317	
Men's	1931	203,502,924	79,152,244	57,469,868	3,427,140	14,038,437	4,203,965	(6)	(6)
	1929	312,510,718	100,747,087	71,001,045	5,454,337	23,525,894		765,811	
	1927	298,683,879	93,012,560	71,201,494	3,559,380	17,937,339		314,347	
Youths' and boys'	1931	31,112,049	19,523,765	8,155,477	3,150,297	3,843,498	4,374,493		
	1929	49,091,184	22,616,080	9,614,644	7,039,221	5,942,492		19,723	
	1927	60,810,145	26,914,871	10,597,386	3,668,460	12,107,449		541,576	
Women's	1931	295,067,637	115,260,759	19,933,558	75,474,817	(6)	(6)	8,333,214	8,345,128
	1929	432,261,640	136,009,501	29,126,988	88,619,932	3,634,791		14,627,790	
	1927	394,327,726	123,516,708	29,815,364	74,724,090	4,128,172		14,849,082	
Misses' and children's	1931	57,347,332	42,351,527	9,103,283	10,272,398	(6)	20,656,165	2,106,095	(6)
	1929	77,707,381	44,205,717	8,623,371	13,345,386	18,401,567		3,835,393	
	1927	89,499,333	51,386,467	8,785,449	17,900,545	19,006,700		5,693,773	
Infants'	1931	13,731,494	16,230,597	2,282,726	1,025,361	(6)	(6)	(6)	(6)
	1929	24,239,195	23,075,892	4,240,919	2,477,111	5,704,498		10,653,364	
	1927	25,335,287	24,101,295	2,097,305	2,138,478	9,500,973		10,364,539	

Athletic and sporting, total	1931	$9,423,713	4,336,373	709,447	2,537,820	(6)			(6)		(6)
	1929	8,831,641	2,857,162	921,472	1,635,459	18,594			281,637		
	1927	4,159,603	1,403,137	[7] 426,619	878,060	[8] 11,527			86,931		
Men's	1931	2,931,107	952,061	371,121	331,443	(6)			(6)		(6)
	1929	3,543,674	1,208,389	407,914	(6)	(6)			79,344		
	1927	3,321,801	1,142,019	238,025	822,010	8,639			73,345		
Women's	1931	6,492,606	3,384,312	338,326	2,206,377				(6)		(6)
	1929	5,287,967	1,648,773	513,558	(6)	(6)			202,293		
	1927	837,802	261,118	[7] 188,594	56,050	[8] 2,888			13,586		
Canvas and other textile fabrics, total	1931	10,502,484	4,723,697	78,853	3,404,727			23,687	931,587		284,843
	1929	11,647,546	3,631,717	297,555	2,605,251	144,007			584,814		
	1927	20,059,069	5,276,244	471,976	3,811,820	43,984			948,464		
Men's	1931	396,002	164,602	21,132	78,186			(6)	(6)		(6)
	1929	465,928	281,671	(6)	134,771	(6)					
	1927	223,412	110,731	9,192	91,178	10,361					
Women's	1931	10,106,482	4,559,095	57,721	3,326,541			(6)	(6)		(6)
	1929	11,181,618	3,350,046	(6)	2,470,480	(6)			584,814		
	1927	19,829,657	5,165,513	462,784	3,720,642	33,623			948,464		
Slippers for house wear, total	1931	26,426,018	34,478,068	470,711	5,171,730			6,905,585	20,959,187		970,855
	1929	35,816,503	38,064,451	583,107	5,673,643	4,124,567			27,683,134		
	1927	30,562,485	34,634,342	170,093	5,658,994	8,859,890			19,945,365		
All-leather, total	1931	14,031,668	13,730,761	330,333	2,161,152			893,277	9,457,328		888,671
	1929	16,094,732	12,952,833	403,104	1,391,364	1,058,086			9,800,279		
	1927	14,541,137	12,940,606	103,093	2,193,319	3,380,753			7,263,441		
Men's, youths', and boys'	1931	4,631,823	3,982,698	(6)	1,135,919			(6)	2,142,734		122,811
	1929	7,374,700	5,996,859	230,500	(6)	(6)			4,339,713		
	1927	6,583,101	5,023,013	42,109	991,657	1,687,840			2,301,407		
Women's and misses'	1931	9,399,845	9,748,063	(6)	1,025,233			(6)	7,314,594		765,860
	1929	8,720,032	6,955,974	172,604	(6)	(6)			5,460,566		
	1927	7,958,036	7,917,593	60,984	1,201,662	1,692,913			4,962,034		
Other than all-leather, total	1931	12,394,359	20,747,307	140,378	3,010,578			6,012,308	11,501,859		82,184
	1929	19,721,771	25,111,618	180,003	3,982,279	3,066,481			17,882,855		
	1927	16,021,348	21,693,736	67,000	3,465,675	5,479,137			12,681,924		
Men's	1931	3,208,346	4,874,078	(6)	1,205,413			(6)	2,769,094		(6)
	1929	5,943,615	6,711,814	72,000	1,101,834	2,631,863			2,906,117		
	1927	4,252,314	4,833,715	55,000	835,628	1,250,735			2,692,352		
Women's	1931	9,186,004	15,873,229	(6)	1,805,165			(6)	8,732,765		(6)
	1929	13,778,156	18,399,804	108,003	2,880,445	434,618			14,976,738		
	1927	11,769,034	16,860,021	12,000	2,630,047	4,228,402			9,989,572		
Other footwear [9]	1931	3,472,487									
	1929	6,583,929									
	1927	8,086,195	6,821,441	(10)	(10)	(10)		(10)	(10)		(10)

Footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, METHOD OF MANUFACTURE, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, AND 1927—Continued

KIND	Census year	TOTAL		NUMBER OF PAIRS, BY METHOD OF MANUFACTURE					
		Value	Number of pairs	Welted	McKay	Wood or metal fastened	Stitchdown	Turned	Cemented
Leggings, overgaiters, puttees, etc.:									
Leather	1931	785,660	----------	----------	----------	----------	----------	----------	----------
	1929	1,432,532	----------	----------	----------	----------	----------	----------	----------
	1927	1,067,151	----------	----------	----------	----------	----------	----------	----------
Other than leather	1931	1,173,050	----------	----------	----------	----------	----------	----------	----------
	1929	2,739,759	----------	----------	----------	----------	----------	----------	----------
	1927	1,198,362	----------	----------	----------	----------	----------	----------	----------
Other products	1931	639,732	----------	----------	----------	----------	----------	----------	----------
	1929	[11] 1,467,781	----------	----------	----------	----------	----------	----------	----------
	1927	[11] 9,691,851	----------	----------	----------	----------	----------	----------	----------
Receipts for contract work	1931	695,166	----------	----------	----------	----------	----------	----------	----------
	1929	1,592,885	----------	----------	----------	----------	----------	----------	----------
	1927	1,233,377	----------	----------	----------	----------	----------	----------	----------

[1] In addition products normally belonging to the Boot and Shoe industry, valued as follows, were reported as secondary products by establishments engaged primarily in other lines of manufacture: For 1931 $558,897; 1929, $481,016; 1927, $208,082.
[2] The numbers of pairs of ballet slippers are not included in the totals for 1929 and 1931, as given in this table, but are included in the corresponding totals in tables 4 and 5.
[3] Includes 2,561,524 pairs of shoes (principally women's, misses', and children's leather shoes) made by the cemented process, which cannot be separately distributed as to kind without disclosing the output of individual establishments. No data on the number of pairs made by the cemented process were collected for 1927.
[4] Includes 6,821,441 pairs ("Other footwear") not reported according to method of manufacture.
[5] Includes a small number of athletic and sporting shoes to avoid disclosing approximations of data for individual establishments.
[6] Withheld from publication to avoid disclosing approximations of data for individual establishments.
[7] Includes data for "Wood or metal fastened." (Not reported separately.)
[8] Exclusive of data for "Wood or metal fastened."
[9] Principally bathing slippers, ballet slippers, moccasins, sandals, wooden-soled shoes, sheepskin shoes, and "comfy" slippers.
[10] No data.
[11] Principally cut stock.

TABLE 4.—BOOTS, SHOES, AND SLIPPERS—PRODUCTION, BY METHOD OF MANUFACTURE, BY STATES: 1931, 1929, AND 1927

[Statistics for 1931 are given for each State which can be shown separately without disclosing, exactly or approximately, the output of individual establishments. In some cases certain of the "Other States," however, reported larger numbers of pairs than some of the States for which separate figures are given]

	Census year	NUMBER OF PAIRS				
		Welted	McKay	Wood or metal fastened and stitch-down	Turned	Cemented
United States	1931	98,203,923	104,465,807	63,965,040	38,608,465	10,918,555
	1929	124,409,101	126,850,340	61,496,500	58,763,298	
	1927	123,565,086	112,339,827	[1] 78,417,475	52,744,077	
Illinois	1931	4,774,117	8,723,937	3,875,101	3,552,029	1,560,775
	1929	7,733,813	11,101,382	3,859,692	5,534,904	
	1927	8,039,411	9,168,218	5,438,808	4,368,395.	
Maine	1931	4,986,760	7,898,276	82,761	(2)	1,100,554
	1929	5,320,848	9,001,700	151,265	1,880,722	
	1927	6,317,294	6,852,936	267,927	2,295,536	
Massachusetts	1931	20,068,897	39,126,277	5,000,812	8,123,256	3,353,386
	1929	25,581,388	42,329,573	4,740,496	14,159,534	
	1927	30,420,127	38,732,731	6,043,816	11,934,419	
Missouri	1931	(2)	15,835,621	(2)	(2)	1,317,539
	1929	12,282,689	21,000,148	(2)	(2)	
	1927	13,598,002	20,305,888	(2)	(2)	
New Hampshire	1931	11,301,732	11,626,783	----------	324,111	622,253
	1929	14,231,929	10,917,964	(2)	1,005,145	
	1927	12,298,737	9,416,652	(2)	517,460	
New York	1931	17,343,647	9,242,109	26,529,282	18,730,789	853,463
	1929	18,959,515	15,932,478	21,211,040	25,205,089	
	1927	17,866,462	9,118,604	35,044,302	22,301,444	
Ohio	1931	3,906,694	5,834,646	(2)	(2)	786,943
	1929	5,359,288	7,958,265	(2)	225,320	
	1927	5,744,185	8,451,913	(2)	253,050	
Pennsylvania	1931	8,090,229	1,932,767	1,909,978	2,113,151	298,788
	1929	8,483,263	2,519,750	3,273,017	3,900,256	
	1927	8,196,528	2,855,055	1,855,139	5,424,062	
Wisconsin	1931	8,042,055	1,559,764	3,334,765	70,593	(2)
	1929	11,682,301	1,465,721	4,531,386	751,242	
	1927	9,780,921	2,417,519	5,399,715	675,642	
Other States	1931	19,689,792	2,685,627	23,232,341	5,694,536	1,024,854
	1929	14,774,067	4,623,359	23,729,604	6,101,086	
	1927	11,304,019	5,020,311	23,767,768	4,974,069	

[1] Includes data for 6,821,441 pairs not reported according to method of manufacture.
[2] Withheld from publication to avoid disclosing approximations of data for individual establishments. Included in figure for "Other States."

TABLE 5.—BOOTS, SHOES, AND SLIPPERS—PRODUCTION, BY KIND, NUMBER, AND VALUE, 1931, AND BY KIND AND NUMBER, 1929, BY STATES

[This table gives statistics for each State (*a*) for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments, and (*b*) which contributed at least 2 percent of the total value of the specified kind of products. In many cases, however, certain of the "Other States" outranked some of the States for which separate figures are given]

KIND	VALUE	NUMBER OF PAIRS	
	1931	1931	1929
Boots, shoes, slippers, and other footwear, total	$650, 586, 138	[1] 316, 161, 790	[1] 371, 519, 239
Illinois	51, 994, 034	22, 485, 959	28, 229, 791
Maine	27, 414, 896	14, 906, 006	16, 354, 535
Massachusetts	159, 907, 024	75, 672, 628	86, 810, 991
Missouri	86, 232, 350	39, 184, 339	49, 617, 679
New Hampshire	49, 946, 264	23, 874, 879	26, 166, 206
New York	127, 493, 010	72, 699, 290	81, 308, 122
Ohio	33, 957, 046	11, 259, 889	(2)
Pennsylvania	27, 802, 237	14, 344, 913	18, 176, 286
Wisconsin	34, 896, 780	13, 461, 635	18, 430, 450
Other States	50, 942, 497	28, 272, 252	46, 425, 179
Boots and shoes:			
Leather, except athletic and sporting, total	600, 761, 436	272, 518, 892	326, 654, 277
Illinois	49, 799, 712	21, 712, 186	26, 844, 749
Maine	23, 666, 641	13, 056, 022	(2)
Massachusetts	144, 038, 816	62, 789, 745	74, 171, 241
Missouri	83, 878, 052	37, 701, 633	47, 972, 257
New Hampshire	47, 893, 809	22, 977, 910	(2)
New York	109, 497, 408	54, 138, 858	60, 542, 140
Ohio	33, 782, 925	11, 186, 809	(2)
Pennsylvania	27, 123, 870	13, 952, 183	17, 826, 018
Wisconsin	34, 225, 604	13, 232, 474	17, 997, 825
Other States	46, 854, 599	21, 771, 072	31, 300, 047
Men's, total	203, 502, 924	79, 152, 244	100, 747, 087
Illinois	11, 664, 521	2, 233, 577	4, 394, 277
Maine	8, 775, 374	3, 851, 131	3, 641, 744
Massachusetts	52, 644, 718	16, 507, 400	21, 567, 519
New Hampshire	19, 753, 753	7, 875, 627	10, 556, 634
New York	29, 148, 876	17, 445, 884	21, 679, 144
Pennsylvania	5, 941, 258	2, 239, 263	2, 144, 473
Other States	75, 574, 424	28, 999, 362	36, 763, 246
Youths' and boys', total	31, 112, 049	19, 523, 765	22, 616, 080
Illinois	1, 886, 164	840, 330	1, 404, 052
Massachusetts	4, 260, 061	2, 395, 609	3, 105, 454
New Hampshire	3, 583, 253	1, 874, 879	1, 611, 195
Pennsylvania	1, 785, 256	952, 640	1, 853, 277
Wisconsin	1, 733, 725	927, 544	1, 281, 511
Other States	17, 863, 590	12, 532, 763	13, 300, 591
Women's, total	295, 067, 637	115, 260, 759	136, 009, 501
Illinois	27, 226, 438	10, 010, 396	10, 270, 077
Maine	13, 470, 812	7, 594, 064	9, 116, 419
Massachusetts	81, 016, 303	38, 042, 122	40, 803, 498
Missouri	36, 313, 821	13, 164, 551	19, 125, 382
New Hampshire	21, 019, 566	11, 013, 078	10, 755, 549
New York	60, 085, 375	16, 788, 515	22, 847, 115
Ohio	29, 263, 960	8, 551, 523	(2)
Pennsylvania	8, 264, 490	2, 755, 504	3, 656, 288
Other States	18, 406, 872	7, 341, 006	19, 435, 173
Misses' and children's, total	57, 347, 332	42, 351, 527	44, 205, 717
Massachusetts	5, 078, 101	4, 658, 254	6, 741, 872
New Hampshire	3, 497, 197	2, 191, 657	2, 318, 187
New York	11, 233, 437	10, 850, 835	6, 718, 585
Pennsylvania	8, 994, 252	5, 345, 177	6, 472, 600
Wisconsin	5, 449, 773	2, 893, 943	3, 354, 013
Other States	23, 094, 572	16, 411, 661	18, 600, 460

Footnotes at end of table.

TABLE 5.—BOOTS, SHOES, AND SLIPPERS—PRODUCTION, BY KIND, NUMBER, AND VALUE, 1931, AND BY KIND AND NUMBER, 1929, BY STATES—Continued

[See note at head of table]

KIND	VALUE	NUMBER OF PAIRS	
	1931	1931	1929
Boots, shoes, slippers, and other footwear—Continued.			
Boots and shoes—Continued.			
Leather, except athletic and sporting—Continued.			
Infants', total	$13,731,494	16,230,597	23,075,892
Illinois	4,287,008	5,636,425	6,231,854
Massachusetts	1,039,633	1,186,360	1,892,898
New York	2,206,125	2,890,062	4,232,965
Pennsylvania	2,138,614	2,659,599	3,699,380
Wisconsin	818,180	572,534	915,695
Other States	3,241,934	3,285,617	6,103,100
Athletic and sporting, total	9,423,713	4,336,373	2,857,162
Men's	2,931,107	952,061	1,208,389
Women's	6,492,606	3,384,312	1,648,773
Canvas and other textile fabrics, total	10,502,484	4,723,697	3,631,717
Men's	396,002	164,602	281,671
Women's	10,106,482	4,559,095	3,350,046
Slippers (for house wear), total	26,426,018	34,478,068	38,064,451
Massachusetts	7,714,788	8,521,687	10,569,879
New York	13,323,605	17,757,988	19,390,154
Other States	5,387,625	8,198,393	8,104,418
All-leather, total	14,031,668	13,730,761	12,952,833
Massachusetts	5,497,231	5,018,515	4,386,831
New York	6,316,234	6,503,872	6,382,940
Other States	2,218,203	2,208,374	2,183,062
Men's, youths', and boys', total	4,631,823	3,982,698	5,996,859
Massachusetts	2,194,848	1,461,326	1,804,709
New York	1,363,102	1,662,365	2,961,706
Other States	1,073,873	859,007	1,230,444
Women's and misses', total	9,399,845	9,748,063	6,955,974
Massachusetts	3,302,383	3,557,189	2,582,122
New York	4,953,132	4,841,507	3,421,234
Other States	1,144,330	1,349,367	952,618
Other than all-leather, total	12,394,350	20,747,307	25,111,618
Massachusetts	2,217,557	3,503,172	6,183,048
New York	7,007,371	11,254,116	13,007,214
Other States	3,169,422	5,990,019	5,921,356
Men's, total	3,208,346	4,874,078	6,711,814
Massachusetts	544,898	734,550	1,162,371
New York	2,158,117	3,165,507	3,248,011
Other States	505,331	974,021	2,301,432
Women's, total	9,186,004	15,873,229	18,399,804
Massachusetts	1,672,659	2,768,622	5,020,677
New York	4,849,254	8,088,609	9,759,203
Other States	2,664,091	5,015,998	3,619,924
Ballet slippers	280,081	104,760	311,632
Other footwear	3,192,406	(3)	(3)

[1] Exclusive of data for "Other footwear." See note 3.
[2] Included in figure for "Other States."
[3] Not called for on schedule.

GLOVES AND MITTENS, LEATHER

[A preliminary report on the manufacture of gloves and mittens was issued under date of Sept. 14, 1932]

Description of the industry.—The establishments classified in the Leather Glove and Mitten industry are engaged primarily in the manufacture of gloves (except baseball and boxing gloves, which are products of the Sporting and Athletic Goods industry) and mittens, 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 two-thirds and Gloversville more than two-fifths of the total value of products of the industry for 1931.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
United States							
1931	227	7,884	$7,553,974	$1,203,969	$13,136,380	$28,023,634	$14,887,254
1929	257	9,203	9,203,911	(2)	20,205,740	39,122,729	18,916,989
1927	232	9,106	8,813,912	(2)	19,276,416	36,662,053	17,385,637
1925	226	7,115	6,914,788	841,400	17,778,693	33,292,916	15,514,223
1923	260	10,010	8,544,709	767,384	20,223,924	38,080,575	17,856,651
1921	272	7,907	5,842,784	414,049	13,844,159	24,855,321	11,011,162
1919	355	10,685	8,150,784	1,559,224	26,286,129	46,940,511	20,654,382
1914	352	10,668	4,558,360	927,164	12,170,694	21,614,109	9,443,415
1909	377	11,354	4,763,830	992,216	13,208,001	23,630,598	10,422,597
1904	339	10,645	3,840,253	393,723	10,000,889	17,740,385	7,739,496
1899	394	14,345	4,182,518	93,795	9,483,130	16,926,156	7,443,026
Percent of increase or decrease (—):							
1929–31	−11.7	−14.3	−17.9	----------	−35.0	−28.4	−21.3
1927–29	10.8	1.1	4.4	----------	4.8	6.7	8.8
1925–27	2.7	28.0	27.5	----------	8.4	10.1	12.1
1923–25	−13.1	−28.9	−19.1	9.6	−12.1	−12.6	−13.1
1921–23	−4.4	26.6	46.2	85.3	46.1	53.2	62.2
1919–21	−23.4	−26.0	−28.3	−73.4	−47.3	−47.0	−46.7
1921–31	−16.5	−.3	29.3	190.8	−5.1	12.7	35.2
1919–29	−27.6	−13.9	12.9	----------	−23.1	−16.7	−8.4
1909–19	−5.8	−5.9	71.1	57.1	99.0	98.6	98.2
1899–1909	−4.3	−20.9	13.9	957.9	39.3	39.6	40.0

Footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Paid for contract work	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
State, 1931							
California	15	161	$145,729	----------	$261,158	$562,140	$300,982
Illinois	15	395	336,704	(4)	568,508	1,234,827	666,319
Michigan	3	274	157,053	----------	340,089	535,514	195,425
New York	153	5,470	5,695,733	$1,194,733	9,515,209	20,782,717	11,267,508
Washington	3	21	19,813	(4)	24,564	71,744	47,180
Wisconsin	21	1,034	834,240	(4)	1,712,509	3,426,945	1,714,436
Other States [5]	17	529	364,702	9,236	714,343	1,409,747	695,404

[1] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[2] Not tabulated.
[3] Not called for on schedule.
[4] Withheld from publication to avoid disclosing approximations of data for individual establishments. Included in figure for "Other States."
[5] Indiana, 1 establishment; Iowa, 3; Massachusetts, 2; Minnesota, 1; Missouri, 1; New Hampshire, 2; Ohio, 2; Oregon, 1; Pennsylvania, 3; Vermont, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	7,884	*6,956*	7,376	7,758	7,733	7,770	7,912	7,533	8,139	8,404	8,663	8,556	7,811
1929	9,203	*8,297*	8,677	8,873	8,928	8,973	9,050	9,269	9,571	9,675	9,740	9,825	9,561
1925 [1]	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
1919	10,685	10,175	10,044	*9,984*	10,046	10,190	10,515	10,887	11,125	11,042	11,286	11,303	11,623
1914	10,668	11,762	11,745	11,791	11,573	11,379	11,348	11,012	11,059	9,788	9,417	*8,561*	8,581
1909	11,354	*10,659*	10,985	11,145	11,139	11,188	11,333	11,299	11,372	11,590	11,583	11,961	12,007
States, 1931													
California	161	142	179	181	172	166	166	*130*	158	168	171	162	132
Illinois	395	*268*	388	396	395	396	394	383	395	401	429	466	433
Michigan	274	*248*	268	270	278	274	276	268	280	287	297	299	254
New York	5,470	*4,858*	5,094	5,389	5,340	5,379	5,436	5,248	5,593	5,708	6,002	6,069	5,436
Washington	21	26	27	26	26	25	22	22	20	18	15	16	*13*
Wisconsin	1,034	*846*	878	930	954	1,004	1,068	1,064	1,154	1,175	1,201	1,126	1,010

[1] No comparable figures can be given for 1925.

TABLE 3.—GLOVES AND MITTENS, LEATHER, CLOTH, AND KNIT—PRODUCTION IN ALL INDUSTRIES, BY KIND, QUANTITY, AND VALUE, BY STATES: 1931 AND 1929

[This table presents statistics for each State for which separate figures can be given without disclosing, exactly or approximately, the output of individual establishments. Certain of the "Other States," however, reported larger quantities and values of the specified kinds of gloves and mittens than some of the States shown separately]

KIND	1931		1929	
	Dozen pairs	Value	Dozen pairs	Value
1. Leather Glove and Mitten industry, all products, total value		$28,023,634		$39,122,729
2. Gloves and mittens, total	2,436,583	27,662,404	3,545,119	38,410,514
3. Leather	2,278,355	26,964,680	2,976,037	36,491,328
4. Cloth and cloth-and-leather	140,184	505,580	562,766	1,817,934
5. Other	18,044	192,144	6,316	101,252
6. Other products (not normally belonging to the industry)		271,436		596,092
7. Receipts for contract work		89,794		115,223
8. Cloth Gloves and Mittens industry, all products, total value		14,539,422		29,882,058
9. Gloves and mittens, total	10,881,007	14,199,820	16,007,186	28,620,693
10. Cloth and cloth-and-leather	10,843,514	13,997,939	15,921,288	28,170,873
11. Leather	33,389	182,983	52,936	391,478
12. Other	4,104	18,898	32,962	67,342
13. Other products (not normally belonging to the industry)		339,602		1,228,700
14. Receipts for contract work				24,565
15. Gloves and mittens made in the Knit Goods industry	421,301	1,810,942	654,151	3,786,204
16. Gloves and mittens made as secondary products in other industries, total	64,503	514,049	104,008	520,231
17. Leather	14,157	158,981	11,249	110,000
18. Cloth	50,346	355,068	92,759	410,231
Gloves and mittens, all industries: Aggregate (sum of 2, 9, 15, and 16)	13,803,394	44,187,215	20,310,464	71,346,642
All-woven fabric, total	6,688,627	7,005,168	10,308,087	14,260,205
Indiana	1,548,476	1,672,494	2,838,303	3,857,210
Iowa	450,933	585,498	668,519	1,001,807
Ohio	1,821,731	1,885,057	3,192,600	4,458,680
Other States	2,867,487	2,862,119	3,608,665	4,942,469
All-knit fabric, total	2,724,672	4,883,722	3,727,761	8,897,272
Gloves, total	2,572,640	4,412,186	3,479,067	8,171,812
Cotton, total	2,250,400	2,694,688	3,022,094	4,782,482
Warp-knit, total	2,250,400	2,694,688	2,972,659	4,709,333
Sueded	145,269	309,028	1,202,729	1,981,833
Other than sueded	2,105,131	2,385,660	1,769,930	2,727,500
Cone-knit			49,435	73,149
Woolen and worsted	183,274	760,007	117,068	618,081
Silk	96,136	730,577	322,651	2,721,442
Other	42,830	226,914	17,254	48,067
Mittens, total	152,032	471,536	248,694	725,400
Woolen and worsted	91,183	335,960	116,647	404,910
Wool and cotton	60,849	135,576	132,047	320,550
Combination of woven or knit fabric and leather	2,042,046	4,780,639	3,195,116	11,027,765
All-leather, lined and unlined, total	2,325,901	27,306,644	3,040,222	36,992,800
California	43,850	525,225	69,578	986,307
Illinois	136,242	1,089,063	206,050	1,980,146
New York	1,441,900	20,603,032	1,648,926	24,501,625
Wisconsin	435,795	3,318,142	619,480	5,031,420
Other States	268,114	1,771,182	496,188	3,503,318
Other gloves and mittens	22,148	211,042	39,278	108,594

TABLE 4.—THE LEATHER GLOVE AND MITTEN INDUSTRY—SUMMARY FOR FULTON COUNTY AND FOR GLOVERSVILLE AND JOHNSTOWN, N.Y., 1931, AND PERCENTAGES OF UNITED STATES TOTALS FOR THE INDUSTRY, 1931, 1929, AND 1927

[For United States totals, see table 1]

	FULTON COUNTY, N.Y.				GLOVERSVILLE				JOHNSTOWN				REMAINDER OF COUNTY			
	Number or amount	Percent of total for United States			Number or amount	Percent of total for United States			Number or amount	Percent of total for United States			Number or amount	Percent of total for United States		
	1931	1931	1929	1927	1931	1931	1929	1927	1931	1931	1929	1927	1931	1931	1929	1927
Number of establishments	121	53.3	53.7	58.6	76	33.5	34.2	40.5	32	14.1	14.4	14.7	13	5.7	5.1	3.4
Wage earners (average for the year)	4,953	62.8	53.5	58.6	3,295	41.8	35.4	39.8	1,241	15.7	12.7	13.5	417	5.3	5.5	5.3
Wages	$5,173,385	68.5	60.0	61.6	$3,343,688	44.3	39.5	42.2	$1,361,693	18.0	13.0	14.2	$468,054	6.2	5.5	5.2
Paid for contract work	1,126,944	93.6	95.9	100.0	712,994	59.2	62.4	63.0	340,039	28.2	25.5	35.2	73,911	6.1	8.0	1.8
Cost of materials, containers, fuel, and purchased electric energy	8,862,473	67.5	56.3	60.2	5,947,815	45.3	37.3	41.0	2,159,369	16.4	12.9	13.6	755,289	5.7	6.1	5.6
Value of products	19,174,653	68.4	57.9	60.2	12,433,611	44.4	38.7	41.0	4,995,792	17.8	13.3	14.1	1,745,250	6.2	5.9	5.1
Value added by manufacture	10,312,180	69.3	59.7	60.1	6,485,796	43.6	40.1	40.9	2,836,423	19.1	15.9	14.6	989,961	6.6	5.8	4.6

POCKETBOOKS, PURSES, AND CARDCASES

[A preliminary report for this industry was issued Nov. 30, 1932]

Description of the industry.—The establishments covered by this industry designation are engaged primarily in the manufacture of leather pocketbooks, purses, women's purse-handbags, cardcases, wallets, coin purses, bill folds, etc.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	260	8,747	$9,792,878	$22,600,817	$43,147,053	$20,546,236
1929	290	10,430	15,229,422	35,351,605	68,627,515	33,275,910
1927	257	8,570	13,169,509	29,618,524	57,344,655	27,726,131
1925	190	6,826	9,021,720	22,442,200	43,105,213	20,663,013
1923	207	5,518	7,291,112	16,235,882	32,731,725	16,495,843
1921	115	2,715	3,224,244	6,221,200	13,084,969	6,863,769
1919	139	2,905	3,061,903	7,557,155	14,549,659	6,992,504
1914	64	1,466	702,314	1,783,840	3,350,552	1,566,712
1909	79	1,472	688,615	1,929,327	3,628,161	1,698,834
1904	46	2,281	796,985	1,926,723	3,767,446	1,840,723
1899	68	1,653	588,595	1,278,226	2,495,188	1,216,962
Percent of increase or decrease (—):						
1929-31	—10.3	—16.1	—35.7	—36.1	—37.1	—38.3
1927-29	12.8	21.7	15.6	19.4	19.7	20.0
1925-27	35.3	25.5	46.0	32.0	33.0	34.2
1923-25	—8.2	23.7	23.7	38.2	31.7	25.3
1921-23	80.0	103.2	126.1	161.0	150.1	140.3
1919-21	—17.3	—6.5	5.3	—17.7	—10.1	—1.8
1921-31	126.1	222.2	203.7	263.3	229.7	199.3
1919-29	108.6	259.0	397.4	367.8	371.7	375.9
1909-19	(3)	97.4	344.6	291.7	301.0	311.6
1899-1909	(3)	—10.9	17.0	50.9	45.4	39.6
States, 1931						
California	6	67	$100,160	$146,490	$299,703	$153,213
Connecticut	5	177	152,038	340,025	580,322	240,297
Illinois	13	350	369,398	693,201	1,360,682	667,481
Maryland	5	175	153,296	336,663	609,431	272,768
Massachusetts	24	1,073	829,087	1,706,425	3,617,707	1,911,282
Missouri	5	106	69,567	109,482	355,718	246,236
New Jersey	7	390	342,804	680,064	1,469,361	789,297
New York	153	4,318	6,201,083	15,026,703	27,601,397	12,574,694
Ohio	8	271	179,182	419,141	895,551	476,410
Pennsylvania	18	1,182	944,785	2,096,722	4,027,775	1,931,053
Wisconsin	5	391	233,117	473,053	1,274,004	800,951
Other States [4]	11	247	218,361	572,848	1,055,402	482,554

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Percent not computed where base is less than 100.
[4] Kansas, 1 establishment; Kentucky, 1; Maine, 2; Michigan, 1; Rhode Island, 2; Texas, 3; Virginia, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	8,747	7,959	8,725	8,975	9,040	8,472	7,737	*7,060*	8,650	10,321	10,771	9,404	7,847
1929	10,430	9,934	10,097	10,299	10,256	9,153	*8,318*	9,321	10,552	11,593	12,285	12,161	11,194
1925	6,826	6,611	6,726	6,843	6,534	*6,174*	6,182	6,240	6,810	7,356	7,697	7,605	7,141
1919	2,905	*2,605*	2,718	2,778	2,760	2,754	2,791	2,892	3,013	3,060	3,126	3,194	3,169
1914	1,466	1,300	1,399	1,545	1,506	1,432	1,398	1,438	1,517	1,627	1,695	1,492	*1,243*
1909	1,472	1,380	1,467	1,431	1,358	*1,324*	1,403	1,347	1,460	1,539	1,653	1,695	1,614
States, 1931													
California	67	74	71	78	71	67	62	53	72	76	74	58	*49*
Connecticut	177	*111*	180	182	177	174	218	188	166	214	232	173	112
Illinois	350	341	360	364	376	371	329	277	387	432	478	259	*224*
Maryland	175	*120*	177	205	185	177	160	137	170	213	208	190	162
Massachusetts	1,073	*751*	969	1,076	1,076	1,011	1,020	804	1,004	1,533	1,499	1,190	947
Missouri	106	*72*	84	*72*	83	98	114	96	130	143	139	131	108
New Jersey	390	364	356	356	343	394	454	444	453	432	452	331	*302*
New York	4,318	4,192	4,523	4,644	4,721	4,193	*3,407*	3,432	4,131	4,827	5,166	4,685	3,898
Ohio	271	341	335	279	256	267	239	*191*	203	285	326	281	252
Pennsylvania	1,182	993	1,042	1,085	1,119	1,111	1,138	*896*	1,349	1,489	1,467	1,366	1,131
Wisconsin	391	375	384	409	393	365	347	*343*	358	413	435	452	414

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1931 AND 1929

[The 1931 figures represent production; those for 1929 refer to sales (shipments or deliveries) by manufacturers. See sec. 16, p. 9]

KIND	1931	1929
1. "Pocketbooks, Purses, and Cardcases" industry, all products, total	$43,147,053	$68,627,515
2. Pocketbooks, purses, and cardcases	41,238,528	64,692,179
3. Other products (not normally belonging to the industry)	1,578,763	3,301,469
4. Receipts for contract work	93,765	522,342
5. Receipts for custom and repair work	235,997	111,525
6. Pocketbooks, purses, and cardcases made as secondary products in other industries	961,817	507,686
Pocketbooks, purses, and cardcases, all industries: Aggregate value (sum of 2 and 6)	42,200,345	65,199,865
Women's purse-handbags	35,215,834	40,521,323
Pocketbooks	2,879,502	16,965,613
Billfolds	2,786,266	5,116,929
Coin purses	941,924	1,365,976
Cardcases	376,819	1,230,024

SADDLERY, HARNESS, AND WHIPS

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of saddles and parts, harness and parts, halters, horse boots, turf goods, feed bags, whips and crops, whipstocks, whip handles, whiplashes, etc. At the census for 1931 the former industry classification "Whips" was discontinued, and the statistics for whips and crops, whipstocks, etc., have been combined with those for saddlery and harness, etc., under the present industry classification.

SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. One of the other States, namely, Georgia, is, however, more important in the industry than any of the States shown separately except Illinois]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	185	1,974	$1,926,404	$5,268,042	$9,339,203	$4,071,161
1929	268	3,396	3,761,442	13,914,427	23,562,774	9,648,347
1927	271	4,113	4,630,763	16,701,936	27,666,547	10,964,611
1925	267	4,673	5,132,566	18,907,960	30,391,594	11,483,634
1923	484	6,817	7,096,785	24,762,113	42,855,445	18,093,332
1921	607	4,781	5,236,595	18,092,615	31,185,719	13,093,104
1919	1,849	11,128	11,431,296	53,539,549	86,699,295	33,159,746
1914	2,591	14,132	8,555,060	34,427,385	56,720,522	22,293,137
1909	1,404	16,178	8,775,011	34,762,680	58,173,245	23,410,565
1904	1,134	16,586	8,237,514	25,027,357	45,202,170	20,174,813
1899	933	15,651	6,732,638	21,048,898	36,437,034	15,388,136
Percent of increase or decrease (−):						
1929–31	−31.0	−41.9	−48.8	−62.1	−60.4	−57.8
1927–29	−1.1	−17.4	−18.8	−16.7	−14.8	−12.0
1925–27	1.5	−12.0	−9.8	−11.7	−9.0	−4.5
1923–25	−44.8	−31.5	−27.7	−23.6	−29.1	−36.5
1921–23	−20.3	42.6	35.5	36.9	37.4	38.2
1919–21	−67.2	−57.0	−54.2	−66.2	−64.0	−60.5
1921–31	−69.5	−58.7	−63.2	−70.9	−70.1	−68.9
1919–29	−85.5	−69.5	−67.1	−74.0	−72.8	−70.9
1909–19	31.7	−31.2	30.3	54.0	49.0	41.6
1899–1909	50.5	3.4	30.3	65.2	59.7	52.1
States, 1931						
California	9	65	$87,548	$133,345	$275,929	$142,584
Colorado	8	50	46,914	112,993	227,408	114,415
Illinois	17	207	240,724	610,787	1,087,376	476,589
Iowa	10	110	128,497	500,952	757,864	256,912
Kentucky	8	166	116,991	310,199	558,570	248,371
Minnesota	8	96	100,303	338,612	550,131	211,519
Missouri	7	84	87,487	199,734	365,683	165,949
New York	17	118	136,053	285,633	540,792	255,159
Ohio	9	62	65,580	139,991	283,015	143,024
Oregon	6	71	82,549	162,589	309,564	146,975
Pennsylvania	10	56	57,660	107,369	241,174	133,805
Tennessee	6	114	98,532	258,406	588,079	329,673
Texas	12	117	101,631	274,847	488,310	213,463
Wisconsin	8	40	50,613	183,839	342,152	158,313
Other States [3]	50	618	525,322	1,648,746	2,723,156	1,074,410

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Alabama, 2 establishments; Arizona, 1; Connecticut, 4; Delaware, 1; Georgia, 5; Indiana, 4; Kansas, 2; Maryland, 1; Massachusetts, 5; Michigan, 3; Montana, 3; Nebraska, 4; New Jersey, 1; New Mexico, 1; North Carolina, 1; North Dakota, 1; Oklahoma, 1; South Dakota ,2; Utah, 4; Virginia, 1; West Virginia, 3.

TRUNKS, SUITCASES, AND BAGS

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

SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	371	6,198	$6,343,130	$13,232,015	$26,714,702	$13,482,687
1929	467	11,359	13,756,761	31,693,935	63,968,929	32,274,994
1927	495	10,345	13,084,687	29,128,235	59,958,681	30,830,446
1925	475	10,348	13,225,966	31,381,851	61,223,867	29,842,016
1923	505	11,441	13,520,094	32,836,895	63,023,072	30,186,177
1921	504	8,712	10,260,364	23,882,610	46,548,977	22,666,367
1919	597	11,470	12,463,767	33,222,432	63,932,266	30,709,834
1914	561	9,911	5,540,157	13,625,457	26,471,527	12,846,070
1909	524	11,122	5,537,329	14,629,005	28,027,964	13,398,899
1904	373	9,091	4,139,034	9,107,785	18,643,580	9,535,795
1899	312	6,964	2,777,016	5,954,718	12,428,646	6,473,928
Percent of increase or decrease (—):						
1929–31	—20.6	—45.4	—53.9	—58.3	—58.2	—58.2
1927–29	—5.7	9.8	5.1	8.8	6.7	4.7
1925–27	4.2	(3)	—1.1	—7.2	—2.1	3.3
1923–25	—5.9	—9.6	—2.2	—4.4	—2.9	—1.1
1921–23	0.2	31.3	31.8	37.5	35.4	33.2
1919–21	—15.6	—24.0	—17.7	—28.1	—27.2	—26.2
1921–31	—26.4	—28.9	—38.2	—44.6	—42.6	—40.5
1919–29	—21.8	—1.0	10.4	—4.6	0.1	5.1
1909–19	13.9	3.1	125.1	127.1	128.1	129.2
1899–1909	67.9	59.7	99.4	145.7	125.5	107.0
States, 1931						
California	33	252	$305,712	$667,420	$1,282,119	$614,699
Illinois	43	668	781,622	1,460,926	3,075,829	1,614,903
Indiana	7	85	73,006	121,163	286,329	165,166
Massachusetts	20	220	207,919	410,395	1,014,966	604,571
Michigan	6	268	199,473	449,811	978,120	528,309
Minnesota	6	31	31,114	86,625	174,635	88,010
Missouri	16	484	485,655	708,412	1,548,089	839,677
New Jersey	17	547	603,239	1,259,539	2,468,213	1,208,674
New York	123	1,160	1,373,361	3,001,874	6,218,273	3,216,399
Ohio	17	238	253,725	436,638	1,006,842	570,204
Pennsylvania	30	413	574,485	1,505,489	2,766,271	1,260,782
Texas	8	120	83,671	154,050	283,440	129,390
Washington	5	56	74,911	94,231	269,735	175,504
Wisconsin	16	487	434,441	987,787	2,131,107	1,143,320
Other States [4]	24	1,169	860,796	1,887,655	3,210,734	1,323,079

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Less than one-tenth of 1 percent.
[4] Colorado, 4 establishments; Connecticut, 1; District of Columbia, 1; Iowa, 1; Kansas, 1; Kentucky, 3; Louisiana, 1; Maine, 1; Maryland, 4; Oregon, 1; Rhode Island, 2; Tennessee, 2; Virginia, 2.

LEATHER GOODS NOT ELSEWHERE CLASSIFIED

[A preliminary report for this industry was issued under date of Dec. 30, 1932]

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 wear on the person); desk sets; handles, corners, straps, etc., for luggage; embossed and burnt leather; check-book covers; dog furnishings; key cases; vanity cases; cigar and cigarette cases; washers; and other miscellaneous leather products.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	355	5,221	$5,321,486	$11,973,958	$26,011,625	$14,037,667
1929	392	6,035	6,759,742	18,013,489	35,951,013	17,937,524
1927	413	7,188	8,379,080	21,539,590	43,291,552	21,751,962
1925	364	6,685	7,395,537	20,473,515	40,511,952	20,038,437
1923	461	7,882	8,944,278	19,596,861	40,134,415	20,537,554
1921	482	8,557	10,329,353	23,698,049	47,715,082	24,017,033
1919	503	8,945	9,415,403	30,035,537	52,952,772	22,917,235
1914	378	7,071	3,603,865	10,632,124	19,333,934	8,701,810
1909	425	7,681	3,623,200	10,290,439	18,838,281	8,547,842
1904	423	7,785	3,137,125	9,626,614	17,655,345	8,028,731
1899	315	6,293	2,271,755	6,191,058	11,787,611	5,596,553
Percent of increase or decrease (—):						
1929-31	—9.4	—13.5	—21.3	—33.5	—27.6	—21.7
1927-29	—5.1	—16.0	—19.3	—16.4	—17.0	—17.5
1925-27	13.5	7.5	13.3	5.2	6.9	8.6
1923-25	—21.0	—15.2	—17.3	4.5	0.9	—2.4
1921-23	—4.4	—7.9	—13.4	—17.3	—15.9	—14.5
1919-21	—4.2	—4.3	9.7	—21.1	—9.9	4.8
1921-31	—26.3	—39.0	—48.5	—49.5	—45.5	—41.6
1919-29	—22.1	—32.5	—28.2	—40.0	—32.1	—21.7
1909-19	18.4	16.5	159.9	191.9	181.1	168.1
1899-1909	34.9	22.1	59.5	66.2	59.8	52.7
States, 1931						
California	22	100	$105,095	$218,528	$485,445	$266,917
Connecticut	8	69	56,919	105,944	232,729	126,785
Illinois	35	391	443,187	1,004,731	2,192,788	1,188,057
Maryland	6	49	39,690	80,062	190,309	110,247
Massachusetts	34	552	442,229	851,277	1,866,031	1,014,754
Michigan	8	92	105,852	239,099	470,788	231,689
Missouri	6	164	139,552	308,664	928,562	619,898
New Jersey	14	487	503,739	828,245	1,984,854	1,156,609
New York	163	2,632	2,830,907	7,281,906	14,935,775	7,653,869
Ohio	9	108	95,675	235,855	459,656	223,801
Oregon	4	14	13,901	23,754	48,629	24,875
Pennsylvania	22	167	159,678	331,672	731,750	400,078
Other States [3]	24	396	385,062	464,221	1,484,309	1,020,088

[1] For 1929, manufacturers' sales (shipment or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Colorado, 3 establishments; Georgia, 2; Indiana, 3; Kansas, 1; Kentucky, 1; Minnesota, 2; North Carolina, 1; Rhode Island, 2; Texas, 2; Vermont, 1; Virginia, 1; Washington, 1; Wisconsin, 4.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	5,221	*4,524*	4,909	5,209	5,526	5,497	5,524	5,316	5,384	5,594	5,491	5,056	4,618
1929	6,035	*5,496*	5,748	6,014	6,110	6,054	5,935	6,046	6,044	6,234	6,444	6,363	5,928
1925	6,685	*6,157*	6,469	6,392	6,309	6,266	6,469	6,573	6,743	7,117	7,469	7,481	6,781
1919	8,945	*8,019*	8,082	8,097	8,314	8,458	8,575	9,012	9,240	9,328	9,973	10,153	10,089
1914	7,071	*6,677*	6,820	6,881	6,860	6,807	6,939	6,988	7,115	7,553	7,854	7,417	6,941
1909	7,681	*7,129*	7,242	7,293	7,259	7,248	7,252	7,418	7,789	8,139	8,489	8,623	8,264
States, 1931													
California	100	*91*	95	*91*	95	98	98	94	100	111	111	108	103
Connecticut	69	67	*58*	72	71	67	64	61	69	73	78	75	72
Illinois	391	418	405	418	442	449	439	364	363	354	372	348	*324*
Maryland	49	*26*	40	40	51	56	66	66	59	54	50	45	40
Massachusetts	552	*486*	517	546	546	553	533	555	598	592	562	570	561
Michigan	92	84	91	97	104	98	95	85	79	78	93	102	97
Missouri	164	*121*	134	144	172	166	168	177	198	194	188	171	139
New Jersey	487	464	476	481	473	488	502	521	506	494	502	493	*443*
New York	2,632	*2,167*	2,480	2,674	2,871	2,808	2,806	2,649	2,050	2,902	2,872	2,495	2,211
Ohio	108	*90*	94	99	106	109	110	114	126	121	119	112	97
Oregon	14	14	14	13	14	14	13	14	13	14	13	13	*12*
Pennsylvania	167	157	157	157	172	177	179	188	191	175	164	144	*139*

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1931 AND 1929

[The figures for 1931 represent production; those for 1929 refer to sales (shipments or deliveries) by manufacturers. See sec. 16, p. 9]

KIND	1931	1929
1. "Leather Goods Not Elsewhere Classified" industry, all products, total value	$26,011,625	$35,951,013
2. Miscellaneous leather products	22,489,157	32,520,062
3. Other products (not normally belonging to the industry)	3,017,730	2,567,127
4. Receipts for contract work	354,087	670,251
5. Receipts for custom and repair work	150,651	193,573
6. Miscellaneous leather products made as secondary products in other industries	3,054,382	10,493,151
Miscellaneous leather products, all industries: Aggregate value (sum of 2 and 6)	25,543,539	43,013,213
Belts (for wear on the person)	12,516,605	14,582,261
Handles, corners, straps, etc., for luggage	1,632,093	4,036,555
Key cases	782,053	914,739
Dog furnishings	781,886	955,497
Vanity cases	456,757	733,699
Embossed leather	386,211	1,673,580
Check-book covers	363,317	1,338,137
Cigar and cigarette cases	296,386	315,722
Washers	287,509	557,794
Desk sets	157,027	1,200,933
Burnt leather	139,296	357,218
Razor strops	1,220,480	16,347,078
Leather suspenders	339,850	
Holsters	189,507	
Helmets	143,186	
Other leather products not classified in other industries [1]	5,851,376	

[1] Leather trimmings, police goods, textile leathers, wristbands, souvenirs, picture frames, novelties, etc.

Group 10.—STONE, CLAY, AND GLASS PRODUCTS

THE GROUP AS A WHOLE

The industries in Group 10 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 on any similarity in the character or uses of the finished products.

In several of the industries in this group—namely, "Cement," "Clay Products," "Lime," "Marble, Granite, Slate, and Other Stone Products," and "Pottery"—both mining or quarrying operations and manufacturing are in some cases carried on by the same establishment. 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 separate the data for mining or quarrying from those for manufacturing.

Group 10 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.

This group differs slightly from the corresponding one as constituted at the census for 1929, as a result of the combination of the former "Sandpaper, Emery Paper, and Other Abrasive Paper and Cloth" industry in Group 16 with the former "Emery Wheels and Other Abrasive and Polishing Appliances" and "Hones, Whetstones, and Similar Products" industries in Group 10 under the new title "Abrasive Wheels, Stones, Paper, and Cloth, and Related Products."

The table beginning on this page presents summary statistics for the group as a whole, by subgroups and industries; and detailed reports for the individual industries follow in order. All these reports have been published separately in pamphlet form.

SUMMARY FOR GROUP 10.—STONE, CLAY, AND GLASS PRODUCTS: 1921 TO 1931

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Aggregate for the group	1931	6,408	222,856	$248,859,500	$316,468,149	$925,318,329	$608,850,180
	1929	8,514	328,417	432,817,393	526,339,979	1,561,414,590	1,035,074,611
	1927	8,673	350,017	464,272,991	594,774,314	1,612,548,765	1,017,774,451
	1925	8,478	353,036	467,012,428	603,426,910	1,640,651,985	1,037,225,075
	1923	8,317	351,692	453,567,361	573,472,386	1,563,120,627	989,648,241
	1921	8,347	252,990	307,064,599	428,258,661	1,033,091,070	604,832,409
Industries using stone as a material, total.	1931	3,762	84,787	107,105,021	165,666,416	463,440,519	297,774,103
	1929	5,146	116,411	171,789,939	268,245,775	751,210,410	482,964,635
	1927	5,156	126,569	187,878,839	303,631,823	787,843,224	484,211,401
	1925	4,852	123,699	178,644,390	300,793,054	779,030,905	478,237,851
	1923	4,621	118,560	167,466,066	273,368,200	697,460,550	424,092,350
	1921	4,752	84,565	109,833,103	212,557,002	464,614,448	252,057,446

For footnotes, see p. 724.

SUMMARY FOR GROUP 10.—STONE, CLAY, AND GLASS PRODUCTS: 1921 TO 1931—Continued

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Abrasive wheels, stones, paper, and cloth, and related products.[2]	1931	73	4,614	$5,540,243	$11,727,464	$31,646,800	$19,919,336
Asbestos products other than steam packing and pipe and boiler covering.	1931	67	6,009	6,451,954	13,837,404	35,174,002	21,336,598
	1929	67	8,092	10,776,712	25,408,002	56,164,036	30,756,034
	1927	62	6,337	8,375,502	21,517,740	44,156,388	22,638,648
	1925	49	6,129	7,691,801	19,225,002	36,273,797	17,048,795
	1923	56	6,078	6,640,022	20,026,265	36,820,444	16,794,179
	1921	40	2,026	1,947,698	6,076,000	13,030,440	6,954,440
Cement	1931	164	24,317	29,883,507	56,097,888	148,845,075	92,747,187
	1929	174	33,368	48,849,096	95,242,497	267,509,260	172,266,763
	1927	161	36,322	53,110,745	120,012,025	293,565,293	173,553,268
	1925	145	38,437	53,911,519	114,168,969	300,895,070	186,726,101
	1923	133	35,091	49,707,992	[3] 100,766,747	264,098,497	163,331,750
	1921	125	26,231	34,415,677	102,359,637	203,626,929	101,267,292
Concrete products	1931	1,432	9,253	10,727,729	22,372,872	53,191,710	30,818,838
	1929	2,438	16,505	22,688,062	34,035,184	92,900,749	58,865,565
	1927	2,330	17,808	24,897,709	33,913,086	93,259,206	59,346,120
	1925	1,666	14,722	20,761,376	27,792,116	75,213,986	47,421,870
	1923	1,128	10,766	14,834,042	20,485,547	53,602,321	33,116,774
	1921	1,123	6,984	8,690,770	13,483,392	31,768,143	18,284,751
Emery wheels and other abrasive and polishing appliances.[3]	1929	67	3,873	5,820,143	12,416,663	32,154,311	19,737,648
	1927	68	3,261	4,608,167	10,839,973	24,181,837	13,341,864
	1925	63	3,352	4,770,354	11,104,457	25,730,434	14,625,977
	1923	57	3,595	4,707,834	10,698,320	25,306,812	14,608,492
	1921	53	2,849	2,876,413	6,183,515	12,558,834	6,375,319
Grindstones, pulpstones, and millstones.[4]	1927	23	468	559,510	257,829	1,620,697	1,362,868
	1925	21	454	559,654	291,126	1,630,566	1,339,440
	1923	21	647	691,324	559,551	2,096,131	1,536,580
	1921	17	503	514,476	458,453	1,498,897	1,040,444
Hones, whetstones, and similar products.[3]	1929	6	174	182,155	340,669	868,811	528,142
Lime	1931	203	6,706	6,012,411	8,895,504	22,199,792	13,304,288
	1929	237	8,554	9,476,314	13,907,760	35,815,658	21,907,898
	1927	260	10,903	12,190,918	17,269,467	41,587,458	24,317,991
	1925	283	12,095	14,002,128	20,049,363	50,736,499	30,687,136
	1923	301	12,290	13,522,069	19,700,191	47,243,756	27,543,565
	1921	292	10,345	9,801,651	14,214,205	31,015,487	16,801,282
Marble, granite, slate, and other stone products.	1931	1,588	27,700	41,650,574	34,405,109	119,395,105	84,989,996
	1929	1,881	37,817	63,040,864	57,637,838	192,163,916	134,526,078
	1927	1,978	40,474	68,490,655	66,328,248	201,181,281	134,853,033
	1925	2,356	36,575	59,592,678	66,976,305	193,046,836	126,070,531
	1923	2,691	40,056	61,599,519	66,882,788	191,537,444	124,654,656
	1921	2,925	30,260	44,135,464	53,067,050	137,241,121	84,174,071
Sand-lime brick	1931	31	322	356,853	461,418	1,267,538	806,120
	1929	40	566	776,202	944,534	2,970,923	2,026,389
	1927	45	790	1,051,495	1,157,965	3,616,456	2,458,491
	1925	41	801	1,118,634	1,237,970	3,759,729	2,521,759
	1923	31	582	697,850	945,931	2,408,106	1,462,175
	1921	26	374	361,182	500,689	1,220,425	719,736
Wall plaster, wall board, insulating board, and floor composition.	1931	204	5,866	6,481,750	17,868,757	51,720,497	33,851,740
	1929	236	7,462	10,180,391	28,312,628	70,662,746	42,350,118
	1927	221	10,014	14,411,777	31,998,385	83,856,008	51,857,623
	1925	222	10,978	16,078,362	39,553,463	90,957,045	51,403,582
	[5] 1923	195	9,289	14,893,572	33,124,267	73,800,539	40,676,272
Industries using clay as a material, total.	1931	1,807	80,969	75,223,029	59,977,302	209,286,121	149,308,819
	1929	2,370	133,668	158,475,816	122,822,579	441,269,877	318,447,298
	1927	2,598	148,850	182,466,053	156,263,845	488,558,687	332,294,842
	1925	2,688	150,953	189,011,741	155,937,194	502,770,104	346,832,910
	1923	2,734	151,176	185,282,100	155,033,889	497,812,136	342,778,247
	1921	2,624	106,627	120,199,863	108,775,214	316,056,292	207,281,078

For footnotes, see p. 724

SUMMARY FOR GROUP 10.—STONE, CLAY, AND GLASS PRODUCTS: 1921 TO 1931—Continued

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
China firing and decorating, not done in potteries.	1931	21	220	$235,832	$550,885	$1,127,619	$576,734
	1929	27	317	420,303	640,361	1,554,003	913,642
	1927	31	366	428,232	681,653	1,692,079	1,010,426
	1925	31	333	385,912	672,277	1,589,832	917,555
	1923	33	355	460,411	609,519	1,492,609	883,090
	1921	34	325	397,835	504,270	1,241,964	737,694
Clay products (other than pottery) and nonclay refractories.[2]	1931	1,264	51,128	44,368,195	36,968,681	127,335,611	90,366,930
	1929	1,760	93,657	107,348,468	82,734,156	297,879,237	215,145,081
	1927	1,857	101,230	122,311,059	100,641,824	321,889,978	221,248,154
	1925	1,950	103,061	127,508,268	100,767,901	335,821,935	235,054,034
	1923	1,996	103,239	124,399,679	104,543,709	336,884,147	232,340,438
	1921	1,898	69,171	74,221,958	69,103,193	196,299,351	127,196,158
Graphite, ground and refined.	1931	9	183	183,040	975,974	1,961,920	985,946
	1929	11	494	627,235	1,457,860	3,759,969	2,302,109
	1927	13	289	340,510	1,319,161	2,931,584	1,612,423
	1925	11	228	278,224	1,328,188	2,569,487	1,241,299
	1923	8	244	304,437	1,082,018	2,184,609	1,102,591
	1921	11	152	185,468	703,441	1,456,864	753,423
Minerals and earths, ground or otherwise treated.[7]	1931	88	1,090	1,126,538	3,817,099	7,294,967	3,477,868
	1929	88	1,679	2,187,923	8,937,883	17,409,056	8,471,173
Pottery, including porcelain ware.	1931	275	27,023	26,981,468	16,393,292	65,866,119	49,472,827
	1929	313	35,409	43,655,980	27,007,364	110,622,453	83,615,089
	1927	316	36,667	45,149,818	33,580,795	110,597,338	77,016,543
	1925	309	36,536	46,768,867	33,925,756	111,078,028	77,152,272
	1923	304	36,824	46,706,308	33,599,885	114,392,033	80,792,148
	1921	271	28,458	35,355,509	25,227,227	84,217,427	58,990,200
Statuary and art goods (except concrete), factory production.	1931	150	1,325	2,327,956	1,271,371	5,699,885	4,428,514
	1929	171	2,112	4,235,907	2,044,955	10,045,159	8,000,204
	1927	136	2,028	4,403,742	2,414,919	10,187,247	7,772,328
	1925	137	2,033	4,188,087	2,078,478	9,329,892	7,251,414
	1923	150	1,807	3,243,690	1,897,528	7,550,015	5,652,487
	1921	138	1,634	2,741,429	1,715,217	6,666,964	4,951,747
Glass and manufactures of glass, total.	1931	839	57,100	66,531,450	90,824,431	252,591,689	161,767,258
	1929	998	78,338	102,551,638	135,271,625	368,934,303	233,662,678
	1927	919	74,598	93,928,099	134,878,646	336,146,854	201,268,208
	1925	938	78,384	99,356,297	146,696,662	358,850,976	212,154,314
	1923	962	81,956	100,819,195	145,070,297	367,847,941	222,777,644
	1921	971	61,798	77,031,633	106,926,445	252,420,330	145,493,885
Glass	1931	229	49,917	57,881,550	73,574,568	216,264,830	142,690,262
	1929	263	67,527	87,795,111	103,293,943	303,818,560	200,524,617
	1927	269	65,825	81,352,734	109,911,464	282,394,330	172,482,866
	1925	310	69,371	86,735,571	113,652,436	295,959,424	182,306,988
	1923	333	73,335	89,897,948	113,170,262	309,353,411	196,183,149
	1921	329	54,748	68,224,248	86,036,406	213,471,309	127,434,903
Mirrors and other glass products made of purchased glass.[8]	1931	610	7,183	8,649,900	17,249,863	36,326,859	19,076,996
	1929	735	10,811	14,756,527	31,977,682	65,115,743	33,138,061
	1927	650	8,773	12,575,365	24,967,182	53,752,524	28,785,342
	1925	628	9,013	12,620,726	33,044,226	62,891,552	29,847,326
	1923	629	8,621	10,921,247	31,900,035	58,494,530	26,594,495
	1921	642	7,050	8,807,385	20,890,039	38,949,021	18,058,982

[1] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

[2] This industry is a combination of three industries classified separately at former censuses, namely, "Emery Wheels and Other Abrasive and Polishing Appliances" and "Hones, Whetstones, and Similar Products" in this group and "Sandpaper, Emery Paper, and Other Abrasive Paper and Cloth" in group 16. Because of changes in the classification of certain establishments, no comparable figures can be given for earlier years.

[3] Abandoned as a separate industry classification; see footnote 2.

[4] Abandoned as a manufacturing industry; now treated as a quarrying operation.

[5] No comparable figures for earlier years.

[6] The statistics for 1929 and earlier years differ from those previously published because of the inclusion of figures for the manufacture of crucibles, formerly treated as a separate industry.

[7] No comparable figures for earlier years.

[8] This industry is a combination of two industries classified separately at former censuses, namely, "Glass Products (Except Mirrors) Made from Purchased Glass" and "Mirrors, Framed and Unframed."

ABRASIVE WHEELS, STONES, PAPER, AND CLOTH, AND RELATED PRODUCTS

[A preliminary report for this industry was issued under date of Aug. 26, 1932]

Description of the industry.—This industry classification covers establishments engaged primarily in the manufacture of abrasive grinding wheels of emery, corundum, and other materials; abrasive sticks, stones, and bricks made from purchased materials; abrasive paper and cloth; and buffing and polishing wheels. The manufacture of grindstones, which is usually carried on at the quarry, is not covered by the Census of Manufactures.

Change in classification.—At censuses prior to that for 1931, establishments engaged in manufacturing the several classes of products covered by the present industry classification were distributed among three separate industries, as follows: Emery Wheels and Other Abrasive and Polishing Appliances; Hones, Whetstones, and Similar Products; Sandpaper, Emery Paper, and Other Abrasive Paper and Cloth. Because of a change in the 1931 classification of an important manufacturer of abrasives, it is impossible to present comparable summary statistics for the industry for 1929 without disclosing data for this manufacturer; and it is impossible to present comparable figures for earlier censuses because prior to 1929 the statistics for the Hones, Whetstones, and Similar Products industry included data for quarrying operations.

The schedule used for this industry at prior censuses did not call specifically for data on the several classes of products made, and therefore no comparable figures for earlier years, except for a few items for 1929, are presented in table 3.

TABLE 1.—SUMMARY: 1931

Number of establishments [1]	73
Wage earners (average for the year)	4, 614
Wages	$5, 540, 243
Cost of materials, fuel, and purchased electric energy	$11, 727, 464
Value of products	$31, 646, 800
Value added by manufacture [2]	$19, 919, 336

[1] California, 1 establishment; Connecticut, 5; Illinois, 9; Massachusetts, 14; Michigan, 5; Minnesota, 1; Missouri, 1; New Hampshire, 1; New Jersey, 2; New York, 13; Ohio, 9; Pennsylvania, 8; Rhode Island, 1; Washington, 1; Wisconsin, 2. Because of the fact that the publication of statistics for the leading States would disclose, exactly or approximately, the data reported by individual establishments, no State figures are given in this table.

[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

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TABLE 2.—WAGE EARNERS, BY MONTHS: 1931

[Because of the fact that the publication of statistics for the leading States would disclose, exactly or approximately, the data reported by individual establishments, no State figures are given in this table. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

MONTH	Number reported	MONTH	Number reported
Average number employed during year	4,614	June	4,806
January	4,836	July	4,565
February	4,886	August	4,466
March	4,911	September	4,357
April	4,895	October	4,254
May	4,889	November	4,315
		December	*4,187*

TABLE 3.—PRODUCTS, BY KIND AND VALUE: 1931

[These figures represent the values of the respective classes of products manufactured in 1931]

KIND	Value
1. "Abrasive Wheels, Stones, Paper, and Cloth, and Related Products" industry, all products, total value	$31,646,800
2. Abrasive wheels, stones, paper, and cloth, and related products	24,934,040
3. Other products (not normally belonging to the industry)	6,698,671
4. Receipts for custom and contract work	14,089
5. Abrasive wheels, stones, paper, and cloth, and related products, made as secondary products in other industries	1,451,305
Abrasive wheels, stones, paper, and cloth, and related products, all industries: Aggregate value (sum of 2 and 5)	26,385,345
Abrasive grinding wheels, value	[1] $11,751,977
Artificial abrasive sticks, stones, and bricks, value	$1,214,378
Natural-stone oilstones, scythestones, and other whetstones, hones, and rubbing stones, value	$57,180
Abrasive paper and cloth:	
Reams	827,097
Value	[1] $11,054,041
Buffing and polishing wheels, value	[1] $2,307,769

[1] The corresponding items for 1929, reported as manufacturers' sales (shipments or deliveries), are as follows:

Abrasive grinding wheels	$30,937,825
Abrasive paper and cloth	19,268,003
Buffing and polishing wheels	4,585,451

ASBESTOS PRODUCTS; STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS

THIS REPORT COVERS TWO INDUSTRIES IN DIFFERENT GROUPS; NAMELY, "ASBESTOS PRODUCTS OTHER THAN STEAM PACKING AND PIPE AND BOILER COVERING," [GROUP 10, AND "STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS, NOT ELSEWHERE CLASSIFIED," GROUP 16]

Description of the industries.—This report covers two closely related and overlapping industries, namely (1) Asbestos Products Other Than Steam Packing and Pipe and Boiler Covering and (2) Steam and Other Packing, Pipe and Boiler Covering, and Gaskets, Not Elsewhere Classified. The products of the first industry comprise asbestos textiles, asbestos building materials, and other commodities composed wholly or chiefly of asbestos, not including steam and other packing, pipe and boiler covering, and gaskets. Establishments classified in the secondary industry are engaged primarily in the manufacture of packing for steam, water, and other pipe joints, and for engines, air compressors, etc.; insulating materials for covering boilers and pipes; and gaskets made of fiber, paper, or any combination of materials. Manufacturers whose principal products are (a) cork gaskets, or (b) rubber gaskets, or (c) leather gaskets, are classified in (a) the Cork Products industry, or (b) the Rubber Goods Other than Tires, Inner Tubes, and Boots and Shoes industry, or (c) the Leather Goods Not Elsewhere Classified industry, as the case may be; but an establishment which makes two or more classes of gaskets is assigned to the Steam and Other Packing, Pipe and Boiler Covering, and Gaskets, Not Elsewhere Classified industry. The total value of all gaskets manufactured, so far as separately reported to the Bureau of the Census, is, however, given in table 3.

Detailed statistics of products.—Because of the similarity of materials used in the two industries, the commodities which are the primary products of each are made to a considerable extent as secondary products in the other, and for this reason the detailed production statistics for both industries are presented in combination in table 3. At censuses prior to that for 1929 the steam-packing industry was canvassed by means of the "general schedule," which did not call specifically for data on the quantities and values of the several classes of products made in this industry, and for this reason it is impossible to give comparative figures for 1927 and earlier years in table 3.

TABLE 1.—SUMMARY FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES, 1899 TO 1931, AND FOR THE STEAM AND OTHER PACKING INDUSTRY, FOR STATES, 1931

Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
ASBESTOS PRODUCTS; STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS						
1931	208	10,714	$11,625,768	$25,134,762	$60,574,579	$35,439,817
1929	238	15,358	20,437,126	47,004,491	101,597,171	54,592,680
1927	221	12,283	16,280,105	41,311,945	87,200,889	45,888,944
1925	221	12,215	15,763,990	39,596,865	80,144,936	40,548,071
1923	198	11,142	13,071,768	35,875,462	69,811,681	33,936,219
1921	197	6,903	7,276,481	22,059,691	42,142,897	20,083,206
1919	215	9,801	10,835,249	35,672,263	64,502,336	28,830,073
1914	181	5,175	3,008,239	9,535,815	17,026,173	7,490,358
Percent of increase or decrease (−):						
1929–31	−12.6	−30.2	−43.1	−46.5	−40.4	−35.1
1927–29	7.7	25.0	25.5	13.8	16.5	19.0
1925–27	-------	0.6	3.3	4.3	8.8	13.2
1923–25	11.6	9.6	20.6	10.4	14.8	19.5
1921–23	0.5	61.4	79.6	62.6	65.7	69.0
1919–21	−8.4	−29.6	−32.8	−38.2	−34.7	−30.3
1921–31	5.6	55.2	59.8	13.9	43.7	76.5
1919–29	10.7	56.7	88.6	31.8	57.5	89.4
ASBESTOS PRODUCTS OTHER THAN STEAM PACKING AND PIPE AND BOILER COVERING						
1931 [3]	[4] 67	6,009	$6,451,954	$13,837,404	$35,174,002	$21,336,598
1929	67	8,092	10,776,712	25,408,002	56,164,036	30,756,034
1927	62	6,337	8,375,502	21,517,740	44,156,388	22,638,648
1925	49	6,129	7,691,801	19,225,002	36,273,797	17,048,795
1923	56	6,078	6,640,022	20,026,265	36,820,444	16,794,179
1921	40	2,026	1,947,698	6,076,000	13,030,440	6,954,440
1919	46	3,654	3,731,974	12,947,702	23,977,557	11,029,855
1914	32	962	483,736	1,360,185	2,813,578	1,453,393
Percent of increase or decrease (−):						
1929–31	-------	−25.7	−40.1	−45.5	−37.4	−30.6
1927–29	(5)	27.7	28.7	18.1	27.2	35.9
1925–27	(5)	3.4	8.9	11.9	21.7	32.8
1923–25	(5)	0.8	15.8	−4.0	−1.5	1.5
1921–23	(5)	200.0	240.9	229.6	182.6	141.5
1919–21	(5)	−44.6	−47.8	−53.1	−45.7	−36.9
1921–31	(5)	196.6	231.3	127.7	169.9	206.8
1919–29	(5)	121.5	188.8	96.2	134.2	178.8
STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS, NOT ELSEWHERE CLASSIFIED						
United States						
1931	141	4,705	$5,173,814	$11,297,358	$25,400,577	$14,103,219
1929	171	7,266	9,660,414	21,596,489	45,433,135	23,836,646
1927	159	5,946	7,904,003	19,794,205	43,044,501	23,250,296
1925	172	6,086	8,072,189	20,371,863	43,871,139	23,499,276
1923	142	5,064	6,431,746	15,849,197	32,991,237	17,142,040
1921	157	4,877	5,328,783	15,983,691	29,112,457	13,128,766
1919	169	6,147	7,103,275	22,724,561	40,524,779	17,800,218
1914	149	4,213	2,524,503	8,175,630	14,212,595	6,036,965
1909	153	3,648	1,811,421	6,650,293	12,159,989	5,509,696
1904	106	2,734	1,273,144	3,896,317	8,951,705	5,055,388
1899	97	1,147	525,332	1,546,398	3,493,710	1,947,312

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Because of the fact that the publication of statistics for the leading States would disclose, exactly or approximately, the data reported by individual establishments, no State figures for this industry are given.
[4] California, 7 establishments; Connecticut, 4; Illinois, 7; Indiana, 2; Louisiana, 2; Massachusetts, 4; Michigan, 3; Missouri, 5; New Hampshire, 2; New Jersey, 6; New York, 4; North Carolina, 5; Ohio, 8; Pennsylvania, 7; South Carolina, 1.
[5] Percent not computed where base is less than 100.

TABLE 1.—SUMMARY FOR THE INDUSTRIES, IN COMBINATION AND SEPARATELY, FOR THE UNITED STATES, 1899 TO 1931, AND FOR THE STEAM AND OTHER PACKING INDUSTRY, FOR STATES, 1931—Continued

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS, NOT ELSEWHERE CLASSIFIED—Con.						
Percent of increase or decrease (—):						
1929-31	—17.5	—35.2	—46.4	—47.7	—44.1	—40.8
1927-29	7.5	22.2	22.2	9.1	5.5	2.5
1925-27	—7.6	—2.3	—2.1	—2.8	—1.9	—1.1
1923-25	21.1	20.2	25.5	28.5	33.0	37.1
1921-23	—9.6	3.8	20.7	—0.8	13.3	30.6
1919-21	—7.1	—20.7	—25.0	—29.7	—28.2	—26.2
1921-31	—10.2	—3.5	—2.9	—29.3	—12.8	7.4
1919-29	1.2	18.2	36.0	—5.0	12.1	33.9
1909-19	10.5	68.5	292.3	241.7	233.3	223.1
1899-1909	(3)	218.0	244.8	330.1	248.1	182.9
States, 1931						
California	12	127	$178,247	$313,207	$854,291	$541,084
Illinois	18	737	761,796	1,598,664	4,506,846	2,908,182
Indiana	6	529	553,778	895,136	2,401,234	1,506,098
Massachusetts	7	97	146,367	214,510	638,415	423,905
Michigan	9	527	579,234	1,939,267	3,682,556	1,743,289
New Jersey	10	149	246,947	515,662	991,862	476,200
New York	31	693	815,184	1,653,971	3,329,178	1,675,207
Ohio	10	96	111,289	195,123	479,833	284,710
Pennsylvania	21	971	1,051,966	2,674,685	5,477,786	2,803,101
Other States [6]	17	779	729,006	1,297,133	3,038,576	1,741,443

For footnotes 1, 2, and 5, see p. 728.

[6] Alabama, 2 establishments; Colorado, 2; Connecticut, 1; Georgia, 1; Kentucky, 1; Louisiana, 1; Minnesota, 1; Missouri, 2; Nebraska, 1; Oregon, 2; Washington, 1; Wisconsin, 2. Separate statistics for these States can not be published without disclosing, exactly or approximately, the data reported by individual establishments. One of these States, however, is more important in the industry than some of the States shown separately.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR EACH INDUSTRY, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR THE STEAM AND OTHER PACKING INDUSTRY, FOR STATES, 1931

The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
ASBESTOS PRODUCTS OTHER THAN STEAM PACKING AND PIPE AND BOILER COVERING													
United States													
1931 [1]	6,009	6,117	6,324	6,386	6,307	6,469	6,241	5,999	5,796	5,661	5,647	*5,563*	5,600
1929	8,092	7,567	7,809	8,019	8,284	8,461	8,481	8,550	8,742	8,543	8,060	7,556	*7,038*
1925	6,129	5,647	*5,586*	5,783	5,921	5,931	6,073	6,236	6,397	6,416	6,444	6,526	6,587
1919	3,654	3,441	3,435	3,464	*3,316*	3,455	3,339	3,637	3,823	3,948	4,002	3,952	4,036
1914 [2]	962	986	1,008	1,024	971	922	*883*	1,030	960	916	933	989	922

[1] See table 1, footnote 3.

[2] No comparable data for 1909.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR EACH INDUSTRY, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR THE STEAM AND OTHER PACKING INDUSTRY, FOR STATES, 1931—Continued

[See note at head of table]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
STEAM AND OTHER PACKING, PIPE AND BOILER COVERING, AND GASKETS, NOT ELSEWHERE CLASSIFIED [3]													
United States													
1931	4,705	4,655	4,879	5,042	4,948	5,107	4,967	4,721	4,593	4,407	4,405	4,395	*4,340*
1929	7,266	6,603	7,083	7,215	7,539	7,948	8,061	7,913	7,412	7,106	7,038	6,804	*6,468*
1925	6,086	*5,648*	5,848	5,874	5,934	6,003	6,046	6,136	6,187	6,296	6,291	6,363	6,406
1919	6,147	6,329	6,096	5,902	5,683	*5,656*	5,693	5,869	6,205	6,375	6,642	6,532	6,782
1914	4,213	4,506	4,499	4,473	4,293	4,185	4,241	4,095	*3,949*	4,045	4,153	4,085	4,032
1909	3,648	3,605	3,500	*3,312*	3,334	3,354	3,381	3,364	3,496	3,795	4,071	4,274	4,284
States, 1931													
California	127	135	138	137	135	129	128	133	122	117	117	117	*116*
Illinois	737	707	757	815	803	879	802	799	759	*606*	626	656	638
Indiana	529	*457*	464	506	500	593	644	591	553	516	511	505	511
Massachusetts	97	97	99	103	108	105	101	97	93	94	92	92	*88*
Michigan	527	501	504	540	589	618	611	544	524	486	*460*	472	470
New Jersey	149	152	155	154	157	159	156	*136*	137	141	146	149	143
New York	693	737	733	741	735	728	679	675	669	666	654	648	*645*
Ohio	96	82	95	103	110	109	95	88	89	105	102	87	*81*
Pennsylvania	971	1,116	1,139	1,143	1,010	949	924	873	906	919	915	887	*870*

[3] Statistics are presented for this industry for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931 AND 1929

[The figures for 1931 represent production; those for 1929, manufacturers' sales (shipments or deliveries). See sec. 16, p. 9. No comparable data for years prior to 1929. See "Detailed statistics of products," p. 727.]

	1931	1929
1. "Asbestos products other than steam packing and pipe and boiler covering" and "Steam and other packing, pipe and boiler covering, and gaskets, not elsewhere classified" industries, all products, total value	$60,574,579	$101,597,171
2. Asbestos products, steam and other packing, pipe and boiler covering, and gaskets	54,052,895	96,920,700
3. Other products (not normally belonging to the industries)	6,396,256	4,517,364
4. Receipts for contract and custom work	125,428	159,107
5. Asbestos products, steam and other packing, pipe and boiler covering, and gaskets, made as secondary products in other industries, value	7,885,029	10,440,402
Asbestos products, steam and other packing, pipe and boiler covering, and gaskets, all industries:		
Aggregate value (sum of 2 and 5)	$61,937,924	$107,361,102
Asbestos textiles and textile products, total value	$18,539,249	$36,161,993
Brake lining (not molded): [1]		
Feet	56,059,659	110,246,479
Value	$8,367,492	$16,447,438
Clutch facings:		
Pieces	21,340,773	38,096,113
Value	$1,796,761	$3,910,727
Yarn:		
Pounds	9,512,686	15,378,407
Value	$2,471,388	$5,173,568

[1] Figures for molded asbestos brake lining and for asbestos brake lining not reported by kind (i. e., molded or not molded) are shown under the heading "Asbestos products other than textiles," etc.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931 AND 1929—Continued

[See note at head of table]

	1931	1929
Asbestos products, steam and other packing, etc.—Continued		
Asbestos textiles and textile products—Continued		
Cloth:		
Pounds	4,629,158	6,666,589
Value	$1,413,959	$2,767,049
Tape, listings, and tubular lagging:		
Pounds	2,350,548	2,225,852
Value	$880,538	$1,202,231
Packing, compressed sheet:		
Pounds	3,235,906	3,430,525
Value	$671,305	$787,116
Packing, fabric, flat:		
Pounds	871,940	1,676,301
Value	$343,325	$692,369
Packing, woven and molded to special sections (with or without other materials):		
Pounds	2,639,276	3,516,455
Value	$1,319,326	$2,366,225
Gaskets (see below):		
Pounds	1,441,325	3,012,335
Value	$644,385	$1,726,804
Other asbestos textiles and textile products, value	$630,770	$1,088,466
Asbestos building materials, total value	$5,647,532	$10,423,618
Asbestos shingles:		
Squares	565,997	894,164
Value	$3,266,054	$5,277,308
Asbestos lumber, plain:		
Square feet	7,744,735	16,770,928
Value	$738,928	$1,638,687
Asbestos lumber, corrugated:		
Square feet	9,163,085	18,624,266
Value	$824,207	$1,455,739
Other asbestos building materials,[2] value	$818,343	$2,051,884
Asbestos products other than textiles, textile products, and building materials, total value	$17,442,050	$27,931,157
Molded asbestos brake lining:[3]		
Feet	24,180,184	22,410,872
Value	$2,823,738	$2,534,646
Asbestos brake lining not reported by quantity or by kind (i. e., molded or not molded), value[3]	$3,116,045	$5,484,654
Pipe and boiler covering, air-cell asbestos:		
Lineal feet	39,083,826	67,331,323
Value	$2,755,354	$4,657,666
Pipe and boiler covering, asbestos other than air-cell:		
Lineal feet	8,797,834	27,686,503
Value	$938,149	$2,516,009
Pipe and boiler covering, 85 percent magnesia:		
Lineal feet	19,323,303	23,959,209
Value	$2,511,795	$3,045,324
Molded blocks, 85 percent magnesia:		
Board feet	11,740,953	21,479,103
Value	$1,209,015	$2,457,337
Millboard:		
Pounds	12,056,691	7,280,221
Value	$272,213	$345,375
Insulating cements, asbestos:		
Pounds	36,801,457	68,472,386
Value	$517,109	$917,846
Insulating cement, 85 percent magnesia:		
Pounds	2,298,570	2,725,244
Value	$85,744	$100,118
Table mats and protectors:		
Pounds	1,174,904	1,615,631
Value	$404,397	$766,222
Other asbestos products,[4] value	$2,808,491	$5,105,960
Gaskets other than asbestos-textile,[5] value	$10,153,121	$15,741,964
Metallic and semimetallic packing, value	$2,110,725	$3,066,578
Steam and other packing, not including asbestos-textile, metallic, or semimetallic, value	[6] $5,172,017	[6] $11,658,468
Mineral-wool products, value	$2,873,230	$2,377,324

[2] Asbestos flexible roofing, asbestos wall tile, and miscellaneous asbestos building materials. Values combined to avoid disclosing data for individual establishments.

[3] Figures for brake linings (not molded) are shown under the heading "Asbestos textiles and textile products."

[4] Asbestos paper, molded asbestos blocks, molded composition insulators, high-temperature cements, asbestos ebony, and miscellaneous asbestos products. Values combined to avoid disclosing approximations of the data for individual establishments.

[5] See "Description of the industries," p. 727.

[6] Includes values of leather packings made by establishments classified in the leather-belting industry: For 1931, $2,900,004; for 1929, $3,725,710.

CEMENT

Description of the industry.—This industry consists in the manufacture of hydraulic cement from rock usually quarried by the manufacturing establishments. The principal product is Portland cement, but small quantities of natural, puzzolan, and masonry cements are also manufactured.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. No comparable data are available for years prior to 1904. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	164	24,317	$29,883,507	$56,097,888	$148,845,075	$92,747,187
1929	174	33,368	48,849,096	95,242,497	267,509,260	172,266,763
1927	161	36,322	53,110,745	120,012,025	293,565,293	173,553,268
1925	145	38,437	53,911,519	114,168,969	300,895,070	186,726,101
1923	133	35,091	49,707,992	[3] 100,766,747	264,098,497	163,331,750
1921	125	26,231	34,415,677	102,359,637	203,626,929	101,267,292
1919	123	25,524	33,194,920	79,509,800	175,264,910	95,755,110
1914	133	27,916	18,192,282	51,986,798	101,756,444	49,769,646
1909	135	26,775	15,319,662	29,343,791	63,205,455	33,861,664
1904	129	17,478	8,814,077	12,215,113	29,873,122	17,658,009
Percent of increase or decrease (−):						
1929–1931	−5.7	−27.1	−38.8	−41.1	−44.4	−46.2
1927–1929	8.1	−8.1	−8.0	−20.6	−8.9	−0.7
1925–1927	11.0	−5.5	−1.5	5.1	−2.4	−7.1
1923–1925	9.0	9.5	8.5	(3)	13.9	14.3
1921–1923	6.4	33.8	44.4	(3)	29.7	61.3
1919–1921	1.6	2.8	3.7	28.7	16.2	5.8
1921–1931	31.2	−7.3	−13.2	−45.2	−26.9	−8.4
1919–1929	41.5	30.7	47.2	19.8	52.6	79.9
1909–1919	−8.9	−4.7	116.7	171.0	177.3	182.8
States, 1931						
Alabama	7	796	$898,935	$1,972,853	$5,804,473	$3,831,620
California	10	1,384	2,047,365	4,203,989	11,741,805	7,537,816
Georgia	3	331	277,936	468,790	1,363,875	895,085
Illinois	5	1,050	1,260,570	1,711,917	5,968,929	4,257,012
Indiana	5	1,643	1,978,007	2,896,141	7,503,534	4,607,393
Iowa	5	1,078	1,368,274	1,928,403	5,560,546	3,632,143
Kansas	8	816	824,943	1,604,596	4,053,945	2,449,349
Michigan	14	1,305	1,984,905	3,022,821	6,428,847	3,406,026
Missouri	5	1,446	1,304,773	2,345,624	5,831,971	3,486,347
New York	12	1,817	2,381,634	4,448,200	11,318,720	6,870,520

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
States, 1931—Continued						
Ohio	11	1,184	$1,600,543	$2,756,177	$6,419,616	$3,663,439
Pennsylvania	24	5,412	6,862,930	12,146,477	33,285,917	21,139,440
Tennessee	6	476	580,028	1,260,294	3,898,271	2,637,977
Texas	9	1,127	987,586	2,434,998	8,302,049	5,867,051
Utah	3	117	180,878	342,130	931,094	588,964
Washington	6	437	608,036	1,348,348	3,429,474	2,081,126
West Virginia	3	235	236,055	944,193	1,439,341	495,148
Other States [4]	28	3,663	4,500,109	10,261,937	25,562,668	15,300,731

[1] For 1929, sales (shipments or deliveries) by manufacturers; for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] The item for 1923 does not include cost of containers (nonreturnable) for sale with products and therefore is not comparable with the figures for other years. No percentages are given where items are not comparable.
[4] Arkansas, 1 establishment; Colorado, 2; Florida, 1; Idaho, 1; Kentucky, 1; Louisiana, 1; Maine, 1; Maryland, 2; Minnesota, 2; Montana, 2; Nebraska, 2; New Jersey, 2; Oklahoma, 2; Oregon, 3; South Dakota, 1; Virginia, 2; Wisconsin, 1; Wyoming, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	24,317	23,506	23,738	24,758	26,733	26,864	26,531	26,131	25,284	23,905	23,409	20,730	***20,213***
1929	33,368	31,257	30,915	32,464	33,776	34,948	35,585	35,539	35,690	34,613	33,461	32,167	***30,002***
1925	38,437	35,400	***34,978***	36,713	38,233	38,616	40,127	40,793	40,800	40,826	39,997	38,357	36,403
1919	25,524	***20,234***	20,563	21,964	23,864	25,083	26,028	27,600	28,445	29,062	28,811	28,133	26,411
1914	27,916	27,127	25,131	26,246	28,498	29,330	30,105	29,864	29,932	29,948	29,199	25,581	***24,031***
1909	26,775	***21,167***	22,119	24,058	25,983	27,337	27,786	28,474	28,052	29,782	29,970	29,044	27,529
States, 1931													
Alabama	796	740	838	776	929	842	936	925	796	770	683	***618***	699
California	1,384	1,294	1,569	1,640	1,700	1,603	1,585	1,129	***1,088***	1,198	1,339	1,239	1,227
Georgia	331	311	324	335	342	333	342	342	319	347	316	***310***	347
Illinois	1,050	1,046	983	960	1,131	1,134	1,175	1,153	1,181	1,156	1,005	***794***	877
Indiana	1,643	***1,392***	1,647	1,522	1,619	1,742	1,684	2,101	1,794	1,601	1,739	1,484	1,396
Iowa	1,078	1,111	1,052	1,132	1,206	1,200	1,139	1,231	1,169	1,110	975	***757***	853
Kansas	816	833	834	832	1,044	941	947	824	801	786	818	***555***	572
Michigan	1,305	1,207	1,293	1,389	1,699	1,774	1,447	1,273	1,283	1,164	1,332	975	***824***
Missouri	1,446	1,495	1,516	1,636	1,500	1,322	1,399	1,424	1,569	1,501	1,367	1,371	***1,250***
New York	1,817	1,639	***1,422***	1,845	1,952	1,912	1,989	1,984	2,031	1,919	1,796	1,672	1,648
Ohio	1,184	1,054	1,099	1,045	1,255	1,374	1,403	1,426	1,339	1,174	1,065	1,018	***955***
Pennsylvania	5,412	5,510	5,376	5,603	5,777	5,881	5,760	5,763	5,679	5,219	4,988	4,719	***4,673***
Tennessee	476	436	431	451	543	560	558	521	487	495	482	381	***367***
Texas	1,127	1,146	1,199	1,215	1,275	1,227	1,218	1,138	1,106	1,088	1,100	942	***870***
Utah	117	104	111	120	161	187	197	142	101	***59***	64	100	65
Washington	437	448	379	411	427	478	485	505	516	497	461	334	***310***
West Virginia	235	227	234	219	229	243	204	261	266	267	257	234	***174***

TABLE 3.—CEMENT—PRODUCTION, BY QUANTITY, AND SHIPMENTS, BY QUANTITY AND VALUE, FOR THE UNITED STATES, 1925 TO 1931, AND FOR STATES, 1931

[The statistics given in this table are compiled from annual reports published by the Bureau of Mines, Department of the Interior]

	Production (barrels)	SHIPMENTS	
		Barrels	Value
PORTLAND CEMENT			
United States			
1931	125,429,071	127,150,534	$140,959,906
1929	170,646,036	169,868,322	252,153,789
1927	173,206,513	171,864,728	278,854,647
1925	161,658,901	157,295,212	278,524,108
States, 1931			
Alabama	4,446,902	4,476,400	5,283,085
California	7,740,168	7,496,080	11,557,442
Illinois	6,407,191	6,425,909	5,342,446
Iowa	5,804,462	5,790,087	5,453,320
Kansas	4,145,195	4,478,823	4,112,809
Michigan	6,132,768	7,168,720	6,984,725
Missouri	5,666,869	5,103,287	5,052,840
New York	9,486,659	9,833,048	10,638,666
Ohio	6,068,958	6,211,789	6,146,302
Pennsylvania	28,510,231	28,412,975	30,952,302
Tennessee	3,302,720	3,287,966	3,810,271
Texas	6,189,137	6,265,016	8,280,913
Other States [1]	31,527,811	32,200,434	37,344,785
NATURAL, PUZZOLAN, AND MASONRY CEMENT			
United States			
1931	1,241,803	1,226,850	1,619,920
1929	2,209,465	2,159,130	2,950,717
1927	2,123,868	2,158,323	2,881,029
1925	1,729,343	1,751,725	2,551,583

[1] Arkansas, Colorado, Florida, Georgia, Idaho, Indiana, Kentucky, Louisiana, Maine, Maryland, Minnesota, Montana, Nebraska, New Jersey, Oklahoma, Oregon, South Dakota, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming.

CHINA FIRING AND DECORATING, NOT DONE IN POTTERIES

Description of the industry.—This industry classification covers establishments engaged primarily in firing and decorating china for the trade. Small establishments engaged in such work for private customers or to individual order are not canvassed.

SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than California, shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products[1] [2]	Value added by manufacture[3]
United States						
1931	21	220	$235,832	$550,885	$1,127,619	$576,734
1929	27	317	420,303	640,361	1,554,003	913,642
1927	31	366	428,232	681,653	1,692,079	1,010,426
1925	31	333	385,912	672,277	1,589,832	917,555
1923	33	355	460,411	609,519	1,492,609	883,090
1921	34	325	397,835	504,270	1,241,964	737,694
1919	43	244	244,211	310,785	866,762	555,977
1914	51	295	159,471	330,190	726,960	396,770
1909	40	328	190,860	311,117	786,293	475,176
1904	28	225	99,137	107,647	326,679	219,032
1899	49	298	122,423	207,356	484,891	277,535
Percent of increase or decrease (−):						
1929–31	(4)	−30.6	−43.9	−14.0	−27.4	−36.9
1927–29	(4)	−13.4	−1.9	−6.1	−8.2	−9.6
1925–27	----------	9.9	11.0	1.4	6.4	10.1
1923–25	(4)	−6.2	−16.2	10.3	6.5	3.9
1921–23	(4)	9.2	15.7	20.9	20.2	19.7
1919–21	(4)	33.2	62.9	62.3	43.3	32.7
1921–31	(4)	−32.3	−40.7	9.2	−9.2	−21.8
1919–29	(4)	29.9	72.1	106.0	79.3	64.3
1900–19	(4)	−25.6	28.0	−0.1	10.2	17.0
1899–1909	(4)	10.1	55.9	50.0	62.2	71.2
States, 1931						
California	3	7	$9,142	$12,926	$38,648	$25,722
Illinois	6	115	113,565	295,920	574,954	279,034
New York	6	58	81,338	152,395	348,456	196,061
Other States[5]	6	40	31,787	89,644	165,561	75,917

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Figures for 1931 include $17,450, value of products normally belonging to other industries, made as secondary products by establishments engaged primarily in firing and decorating china. Figures do not include following values of decorated china reported as secondary products by establishments classified in other industries: For 1931, $96,552; 1929, $123,984; 1927, $68,846; 1923, $199,673; 1921, $46,551; 1919, $58,398. No comparable data for 1925 or for years prior to 1919.
[3] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[4] Percent not computed where base is less than 100.
[5] Connecticut, 1 establishment; Maryland, 1; New Jersey, 3; Pennsylvania, 1.

THE CLAY-PRODUCTS INDUSTRIES

[A preliminary report for "Clay products (other than pottery) and nonclay refractories" was issued on Sept. 15, 1932, and for "Pottery, including porcelain ware" on Aug. 19, 1932]

Because of the close relationship existing between the two clay-products industries—(1) "Clay products (other than pottery) and nonclay refractories" and (2) "Pottery, including porcelain ware"—the statistics are given both separately and in combination in the tables herewith.

Description of the industries.—The "Clay products (other than pottery) and nonclay refractories" industry embraces those establishments which are 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.

The establishments assigned to the "Pottery, including porcelain ware" industry are those whose leading products are stoneware, earthenware, porcelain ware, vitreous-china plumbing fixtures, and allied products.

Consolidation of clay products and crucibles industries.—The former classification, "Crucibles," has been abandoned as a separate industry and consolidated with "Clay products (other than pottery) and nonclay refractories." The figures for the two industries as published for 1929 and earlier years have been combined in this report for comparison with 1931.

Scope of the canvass.—The clay-products industries have been canvassed annually since 1921 by the Bureau of the Census, the reports for the odd-numbered years being included in the series presenting the reports of the biennial censuses of manufactures. The data collected for the even-numbered years relate only to production and stocks on hand, except for 1922, for which year data on production only were collected. The biennial-census canvasses, in addition to covering the same statistical field for these industries as for manufacturing industries in general, call for data relating to stocks, in order to make possible the presentation of statistics on stocks for consecutive years. Annual statistics on production were compiled by the Geological Survey, Department of the Interior, prior to 1921.

Establishments reporting products valued at less than $5,000.—Although the canvass for the biennial census of manufactures is confined, for the most part, to establishments with a yearly output valued at $5,000 or more, it has been found desirable in the case of the clay-products industries to collect data on production and stocks from all establishments without regard to amount of output. (See tables 3, 4, and 5.)

TABLE 1.—SUMMARY FOR THE CLAY-PRODUCTS INDUSTRIES, FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the respective industries than some of the States shown separately. The figures for 1929 and earlier years have been revised for comparison with 1931. See "Consolidation of clay-products and crucibles industries," p. 736]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
THE CLAY-PRODUCTS INDUSTRIES [2]						
United States						
1931	1,539	78,151	$71,349,663	$53,361,973	$193,201,730	$139,839,757
1929	2,073	129,066	151,004,448	109,741,520	408,501,690	298,760,170
1927	2,173	137,897	167,460,877	134,222,619	432,487,316	298,264,697
1925	2,259	139,597	174,277,135	134,693,657	446,899,963	312,206,306
1923	2,300	140,063	171,105,987	138,143,594	451,276,180	313,132,586
1921	2,169	97,629	109,577,467	94,330,420	280,516,778	186,186,358
1919	2,776	105,697	108,999,650	90,515,261	288,635,794	198,120,533
1914	3,599	127,189	71,745,247	56,024,579	174,750,180	118,725,601
Percent of increase or decrease (—):						
1929-31	—25.8	—39.4	—52.7	—51.4	—52.7	—53.2
1927-29	—4.6	—6.4	—9.8	—18.2	—5.5	0.2
1925-27	—3.8	—1.2	—3.9	—0.3	—3.2	—4.5
1923-25	—1.8	—0.3	1.9	—2.5	—1.0	—0.3
1921-23	6.0	43.5	56.2	46.4	60.9	68.2
1919-21	—21.9	—7.6	0.5	4.2	—2.8	—6.0
1921-31	—29.1	—20.0	—34.9	—43.4	—31.1	—24.9
1919-29	—25.3	22.1	38.5	21.2	41.5	50.8
CLAY PRODUCTS (OTHER THAN POTTERY) AND NONCLAY REFRACTORIES [2]						
United States						
1931	1,264	51,128	$44,368,195	$36,968,681	$127,335,611	$90,366,930
1929	1,760	93,657	107,348,468	82,734,156	297,879,237	215,145,081
1927	1,857	101,230	122,311,059	100,641,824	321,889,978	221,248,154
1925	1,950	103,061	127,508,268	100,767,901	335,821,935	235,054,034
1923	1,996	103,239	124,399,679	104,543,709	336,884,147	232,340,438
1921	1,898	69,171	74,221,958	69,103,193	196,299,351	127,196,158
1919	2,436	77,763	79,179,372	69,721,185	213,716,608	143,995,423
1914	3,249	100,484	55,078,917	43,993,023	137,807,574	93,814,551
Percent of increase or decrease (—):						
1929-31	—28.2	—45.4	—58.7	—55.3	—57.3	—58.0
1927-29	—5.2	—7.5	—12.2	—17.8	—7.5	—2.8
1925-27	—4.8	—1.8	—4.1	—0.1	—4.1	—5.9
1923-25	—2.3	—0.2	2.5	—3.6	—0.3	1.2
1921-23	5.2	49.3	67.6	51.3	71.6	82.7
1919-21	—22.1	—11.0	—6.3	—0.9	—8.1	—11.7
1921-31	—33.4	—26.1	—40.2	—46.5	—35.1	—29.0
1919-29	—27.8	20.4	35.6	18.7	39.4	49.4
States, 1931						
Alabama	22	927	$434,947	$497,601	$1,619,582	$1,121,981
Arizona	4	33	33,450	29,961	154,479	124,518
Arkansas	5	250	151,371	138,208	434,582	296,374
California	77	2,880	3,014,551	2,172,961	8,394,569	6,221,608
Colorado	32	600	634,771	443,800	1,607,831	1,164,031
Connecticut	22	480	473,231	305,562	1,133,175	827,613
Florida	3	20	14,626	11,639	38,240	26,601
Georgia	19	840	433,942	422,794	1,184,256	761,462
Idaho	4	31	27,921	25,867	97,259	71,392
Illinois	70	2,644	2,794,666	1,935,465	7,351,775	5,416,310
Indiana	49	2,237	1,764,683	1,828,331	5,020,724	3,192,393
Iowa	28	914	821,593	668,171	2,264,348	1,656,177
Kansas	14	518	470,017	257,994	1,216,458	958,464
Kentucky	32	1,785	1,165,939	998,824	3,581,198	2,582,374
Louisiana	11	171	91,426	69,535	244,681	175,146

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE CLAY-PRODUCTS INDUSTRIES, FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
CLAY PRODUCTS (OTHER THAN POTTERY) AND NONCLAY REFRACTORIES—continued						
States, 1931—Continued						
Maine	9	140	$145,379	$112,822	$339,786	$226,964
Maryland	19	759	510,876	919,115	2,014,997	1,095,882
Massachusetts	20	422	465,456	273,699	1,054,153	780,454
Michigan	19	353	321,653	215,769	768,242	552,473
Minnesota	8	244	266,651	407,053	868,473	461,420
Mississippi	11	176	85,624	78,144	316,140	237,996
Missouri	41	2,432	1,926,222	2,254,775	7,010,925	4,756,150
Montana	6	43	59,202	62,558	173,332	110,774
Nebraska	11	158	129,989	127,142	372,887	245,745
New Hampshire	10	155	166,614	84,996	349,508	264,512
New Jersey	58	3,480	3,268,327	3,066,608	10,458,378	7,391,770
New Mexico	3	113	55,972	58,321	120,419	62,098
New York	59	2,650	2,877,914	2,289,987	7,811,880	5,521,893
North Carolina	29	590	284,498	363,684	1,099,008	735,324
North Dakota	3	22	22,938	19,886	76,085	56,199
Ohio	177	9,738	9,175,374	5,591,009	23,170,703	17,579,694
Oregon	9	105	95,206	44,713	198,548	153,835
Pennsylvania	199	10,262	8,178,045	8,016,531	25,289,216	17,272,685
South Carolina	13	284	110,893	105,928	386,865	280,937
Tennessee	16	591	326,440	224,348	1,096,192	871,844
Texas	39	1,020	634,155	567,064	2,015,318	1,448,254
Utah	7	216	165,398	151,148	357,014	205,866
Virginia	28	674	473,625	331,414	1,244,105	912,691
Washington	17	589	747,601	566,349	1,908,864	1,342,515
West Virginia	20	1,023	1,018,193	902,690	3,001,304	2,098,614
Wisconsin	19	135	118,394	113,887	360,956	247,069
Other States [3]	22	424	410,422	272,328	1,129,156	856,828
POTTERY						
United States						
1931	275	27,023	26,981,468	16,393,292	65,866,119	49,472,827
1929	313	35,409	43,655,980	27,007,364	110,622,453	83,615,089
1927	316	36,667	45,149,818	33,580,795	110,597,338	77,016,543
1925	309	36,536	46,768,867	33,925,756	111,078,028	77,152,272
1923	304	36,824	46,706,308	33,599,885	114,392,033	80,792,148
1921	271	28,458	35,355,509	25,227,227	84,217,427	58,990,200
1919	340	27,934	29,820,278	20,794,076	74,919,186	54,125,110
1914	350	26,705	16,666,330	12,031,556	36,942,606	24,911,050
1909	822	56,168	29,753,495	21,910,905	76,118,861	54,207,956
1904	873	52,428	25,177,665	16,591,462	64,200,792	47,609,330
1899	1,000	43,714	17,691,737	11,915,236	44,263,386	32,348,150
Percent of increase or decrease (—):						
1929-31	—12.1	—23.7	—38.2	—39.3	—40.5	—40.8
1927-29	—0.9	—3.4	—3.3	—19.6	(4)	8.6
1925-27	2.3	0.4	—3.5	—1.0	—0.4	—0.2
1923-25	1.6	—0.8	0.1	1.0	—2.9	—4.5
1921-23	12.2	29.4	32.1	33.2	35.8	37.0
1919-21	—20.3	1.9	18.6	21.3	12.4	9.0
1921-31	1.5	—5.0	—23.7	—35.0	—21.8	—16.1
1919-29	—7.9	26.8	46.4	29.9	47.7	54.5
1909-19	—58.6	—50.3	0.2	—5.1	—1.6	—0.2
1899-1909	—17.8	28.5	68.2	83.9	72.0	67.6

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE CLAY-PRODUCTS INDUSTRIES, FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
POTTERY—continued						
States, 1931						
California	16	644	$730,668	$506,628	$2,165,089	$1,658,461
Illinois	17	1,098	1,040,092	1,009,668	3,612,210	2,602,542
Indiana	6	621	513,252	338,831	1,251,501	912,670
New Jersey	50	4,055	4,522,506	2,006,660	10,849,161	8,842,501
New York	11	1,874	1,735,765	1,152,155	4,617,592	3,465,437
North Carolina	4	20	14,392	5,950	33,358	27,408
Ohio	77	7,770	7,171,682	4,529,433	17,470,664	12,941,231
Pennsylvania	21	2,375	2,445,485	1,672,877	5,891,545	4,218,668
Tennessee	6	509	395,898	336,362	1,066,836	730,474
Texas	5	42	34,348	11,448	102,265	90,817
Washington	3	9	6,312	5,220	23,123	17,903
West Virginia	17	5,011	5,310,217	3,152,286	11,370,477	8,218,191
Other States [5]	42	2,995	3,060,851	1,665,774	7,412,298	5,746,524

[1] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

[2] No comparable figures for years prior to 1914 can be given for the clay-products group as a whole nor for "Clay products (other than pottery) and nonclay refractories."

[3] Delaware, 2 establishments; District of Columbia, 3; Nevada, 1; Oklahoma, 11; Rhode Island, 1; Vermont, 1; Wyoming, 3.

[4] Less than one-tenth of 1 percent.

[5] Arkansas, 2 establishments; Colorado, 3; Connecticut, 3; District of Columbia, 1; Georgia, 1; Iowa, 1; Kansas, 1; Kentucky, 3; Louisiana, 1; Maryland, 3; Massachusetts, 5; Michigan, 5; Minnesota, 1; Mississippi, 1; Missouri, 2; Nebraska, 1; Oregon, 2; South Carolina, 2; Virginia, 1; Wisconsin, 3.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8. The figures for 1929 and earlier years have been revised for comparison with 1931. See "Consolidation of clay products and crucibles industries," p. 736]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
THE CLAY PRODUCTS INDUSTRIES													
United States													
1931	78,151	74,759	75,859	80,609	84,301	86,370	85,279	82,141	79,939	77,324	75,038	70,877	*65,325*
1929	129,066	115,554	115,375	122,201	131,280	139,040	140,586	140,004	139,904	135,689	131,490	123,850	*113,818*
1925	139,597	*123,704*	125,589	132,611	141,414	146,723	148,561	147,502	147,472	146,238	143,189	137,626	134,531
1919	105,697	83,575	*82,856*	87,386	97,811	107,309	113,062	117,543	120,404	120,245	119,406	112,913	105,854
1914 [1]	127,189	104,314	103,488	111,281	129,398	145,147	150,841	149,417	148,551	140,518	127,139	112,984	*103,190*
CLAY PRODUCTS (EXCEPT POTTERY) AND NONCLAY REFRACTORIES													
United States													
1931	51,128	47,135	47,648	52,425	56,167	57,857	57,413	55,628	53,291	50,938	49,225	45,234	*40,580*
1929	93,657	81,232	80,093	86,496	95,359	103,004	104,822	105,911	104,574	100,076	95,186	88,156	*78,971*
1925	103,061	*87,301*	88,316	95,137	104,328	110,293	112,396	112,883	111,621	109,658	106,229	100,722	97,848
1919	77,763	57,144	*56,750*	61,119	71,173	80,400	85,768	89,520	91,715	91,415	89,768	82,872	75,512
1914 [1]	100,484	78,280	76,756	84,041	102,097	118,048	124,173	123,852	121,797	113,555	99,951	86,247	77,011
States, 1931													
Alabama	927	736	1,102	972	991	1,004	1,251	1,005	816	856	1,020	783	*585*
Arizona	33	10	7	50	57	40	29	67	37	24	38	21	12
Arkansas	250	262	247	247	257	265	267	264	257	260	271	217	*185*
California	2,880	2,840	2,782	2,985	3,051	3,134	3,121	3,138	2,956	2,783	2,701	2,620	*2,456*
Colorado	600	514	560	574	590	658	685	705	704	680	547	508	*474*
Connecticut	480	278	*248*	346	375	543	649	731	715	724	530	309	313
Florida	20	61	60	25	14	6	6	6	6	6	14	24	14
Georgia	840	736	821	740	764	703	*675*	718	881	994	1,061	1,069	916
Idaho	31	18	20	28	22	45	56	57	42	40	24	11	11
Illinois	2,644	2,132	2,236	2,920	3,383	3,491	3,089	2,984	2,624	2,718	2,336	2,038	*1,774*
Indiana	2,237	2,056	1,997	1,976	2,393	2,552	2,647	2,586	2,410	2,074	2,107	2,102	*1,940*
Iowa	914	631	739	977	1,158	1,240	1,181	983	1,027	991	835	685	*519*
Kansas	518	530	492	537	505	514	591	668	548	497	484	452	*406*
Kentucky	1,785	1,812	1,824	1,835	1,876	1,745	1,739	1,808	1,827	1,785	1,843	1,639	*1,585*
Louisiana	171	56	68	98	160	193	239	263	268	264	204	164	*77*

Maine	140	89	88	95	116	148	175	192	196	196	172	116	92
Maryland	759	756	763	848	809	773	836	840	744	692	681	717	648
Massachusetts	422	286	290	280	287	393	600	714	583	518	446	383	287
Michigan	353	510	400	375	352	352	437	307	341	238	266	306	357
Minnesota	244	135	151	272	317	344	285	288	290	255	249	227	116
Mississippi	176	146	127	187	149	227	166	213	219	227	176	156	125
Missouri	2,432	2,730	2,676	2,566	2,528	2,488	2,326	2,297	2,324	2,392	2,346	2,393	2,116
Montana	43	13	25	38	53	49	49	62	68	48	59	39	17
Nebraska	158	72	52	104	139	260	298	278	273	135	121	120	45
New Hampshire	155	54	52	59	87	193	295	317	292	223	149	94	46
New Jersey	3,480	3,602	3,329	3,450	3,583	3,795	3,693	3,670	3,584	3,494	3,472	3,157	2,926
New Mexico	113	100	102	114	124	113	115	131	136	111	119	103	93
New York	2,650	1,434	1,278	2,469	3,137	3,526	3,475	3,084	2,901	2,848	2,810	2,611	2,232
North Carolina	590	530	341	363	621	758	816	747	826	674	599	547	459
North Dakota	22	6	6	9	33	49	63	49	34	10	3	3	4
Ohio	9,738	9,381	9,637	10,576	11,077	11,350	10,764	9,996	9,742	9,315	9,296	8,252	7,475
Oregon	105	44	94	124	129	131	125	116	114	113	113	98	56
Pennsylvania	10,262	10,492	10,560	11,147	11,627	11,172	10,901	10,611	10,047	9,596	9,521	8,971	8,496
South Carolina	284	235	206	253	309	377	354	257	285	287	303	334	202
Tennessee	591	532	587	596	641	562	723	654	667	644	574	488	423
Texas	1,020	949	978	1,195	1,098	1,133	1,141	1,096	1,047	990	930	904	775
Utah	216	163	150	253	270	252	243	256	243	271	232	151	108
Virginia	674	530	566	679	717	828	832	902	809	738	572	487	425
Washington	589	552	606	562	609	676	704	667	617	576	550	483	463
West Virginia	1,023	923	1,015	1,010	1,169	1,095	1,069	1,037	1,079	1,025	950	965	937
Wisconsin	135	49	57	67	112	184	208	274	229	184	115	78	68
POTTERY (INCLUDING PORCELAIN WARE)													
United States													
1931	27,023	27,624	28,211	28,184	28,134	28,513	27,866	26,513	26,648	26,386	25,813	25,643	24,745
1929	35,409	34,322	35,282	35,705	35,921	36,036	35,764	34,093	35,330	35,613	36,304	35,694	34,847
1925	36,536	36,403	37,273	37,474	37,086	36,430	36,165	34,619	35,851	36,580	36,960	36,904	36,683
1919	27,934	26,431	26,106	26,267	26,638	26,909	27,294	28,023	28,689	28,830	29,638	30,041	30,342
1914	26,705	26,034	26,732	27,240	27,301	27,099	26,668	25,565	26,754	26,963	27,188	26,737	26,179
1909	56,168	50,385	52,284	54,419	55,088	55,509	56,094	56,485	57,715	58,299	59,200	59,355	59,202
States, 1931													
California	644	609	663	683	691	678	678	661	647	630	619	621	544
Illinois	1,098	1,114	1,090	1,096	1,071	1,108	1,143	1,161	1,127	1,046	1,096	1,069	1,057
Indiana	621	698	641	625	625	594	631	599	616	614	605	605	595
New Jersey	4,055	4,282	4,344	4,300	4,305	4,277	4,161	4,028	3,924	3,880	3,846	3,782	3,527

[1] No comparable figures available for prior years.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931—Con.

[See note at head of table]

	Average number employed during year	NUMBER REPORTED FOR—											
		January	February	March	April	May	June	July	August	September	October	November	December
POTTERY (INCLUDING PORCELAIN WARE)—continued													
States, 1931—Continued													
New York	1,874	2,026	2,058	2,053	1,889	2,002	1,892	*1,691*	1,759	1,824	1,736	1,799	1,753
North Carolina	20	18	19	22	22	22	22	23	23	21	20	20	*13*
Ohio	7,770	8,037	8,422	8,397	8,279	8,271	8,087	7,756	7,857	7,494	7,044	6,970	*6,632*
Pennsylvania	2,375	2,390	2,411	2,382	2,381	2,435	2,422	2,356	2,339	*2,315*	2,370	2,351	2,346
Tennessee	509	518	509	494	509	*487*	493	510	524	528	514	520	498
Texas	42	*27*	40	43	45	46	48	48	49	43	39	39	33
Washington	9	9	8	9	10	11	10	11	9	9	10	8	*6*
West Virginia	5,011	4,908	4,882	4,953	5,190	5,514	5,307	4,807	4,890	5,017	4,941	4,936	*4,789*

TABLE 3.—CLAY PRODUCTS (INCLUDING POTTERY) AND NONCLAY REFRACTORIES—SUMMARY FOR INDUSTRIES AND FOR PRODUCTS, FOR THE UNITED STATES: 1931, 1930, AND 1929

	1931	1930 [1]	1929 [2]
SUMMARY FOR INDUSTRIES			
Clay-products industries (sum of 1 and 2): All products, total value	$193, 201, 730	$301, 442, 498	$408, 501, 690
Clay products (other than pottery) and nonclay refractories	126, 112, 908	215, 114, 848	295, 950, 105
Pottery	65, 922, 059	85, 581, 083	111, 071, 355
Other products (not normally belonging to the industries)	1, 166, 763	746, 567	1, 480, 230
1. "Clay products (other than pottery) and nonclay refractories" industry: All products, total value	127, 335, 611	(3)	297, 879, 237
Clay products (other than pottery) and nonclay refractories	125, 824, 674	(3)	295, 501, 509
Pottery	680, 796	(3)	1, 085, 873
Other products (not normally belonging to the industry)	830, 141	(3)	1, 291, 855
2. "Pottery, including porcelain ware" industry: All products, total value	65, 866, 119	(3)	110, 622, 453
Clay products (other than pottery) and nonclay refractories	288, 234	(3)	448, 596
Pottery	65, 241, 263	(3)	109, 985, 482
Other products (not normally belonging to the industry)	336, 622	(3)	188, 375
SUMMARY FOR PRODUCTS			
Aggregate value (sum of 3 and 4)	194, 050, 480	300, 695, 931	409, 259, 511
3. Clay products (other than pottery) and nonclay refractories (sum of 5, 6, 7, and 8), total	127, 467, 979	215, 114, 848	297, 240, 294
Clay products (other than pottery)	113, 299, 867	193, 356, 778	265, 282, 661
Nonclay refractories	14, 168, 112	21, 758, 070	31, 957, 633
4. Pottery (sum of 9, 10, 11, and 12)	66, 582, 501	85, 581, 083	112, 019, 217
Clay products (other than pottery) and nonclay refractories: Made in—			
5. Clay products and nonclay refractories industry	125, 824, 674	(3)	295, 501, 509
6. Pottery industry	288, 234	(3)	448, 596
7. Other industries (as secondary products)	985, 614	(3)	979, 321
8. Establishments reporting products valued at less than $5,000 (see p. 1)	369, 457	(3)	310, 868
Pottery, including porcelain ware: Made in—			
9. "Clay products and nonclay refractories" industry	680, 796	(3)	1, 085, 873
10. "Pottery" industry	65, 241, 263	(3)	109, 985, 482
11. Other industries (as secondary products)	620, 462	(3)	833, 089
12 Establishments reporting products valued at less than $5,000 (see p. 1)	39, 980	(3)	114, 773

[1] The figures for 1930 do not include data for graphite crucibles (no such data having been collected for that year) and therefore are not strictly comparable with those for 1929 and 1931. See "Consolidation of clay products and crucibles industries," p. 736.

[2] The figures for 1929 have been revised for comparison with 1931. See "Consolidation of clay products and crucibles industries," p. 736.

[3] Not tabulated separately for years alternating with biennial-census years.

TABLE 4.—CLAY PRODUCTS (INCLUDING POTTERY) AND NONCLAY REFRACTORIES—STOCKS ON HAND DEC. 31, 1931, AND PRODUCTION, BY KIND, QUANTITY, AND VALUE, 1931, 1930, AND 1929, FOR THE UNITED STATES

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

KIND	Stocks on hand Dec. 31, 1931, quantity	PRODUCTION					
		1931		1930		1929	
		Quantity	Value	Quantity	Value	Quantity	Value
CLAY PRODUCTS OTHER THAN POTTERY	*Thousands*	*Thousands*		*Thousands*		*Thousands*	
Common brick	1,028,592	2,314,664	$21,652,130	3,631,436	$37,432,814	5,505,359	$58,732,635
Vitrified brick or block:							
For paving	88,154	178,693	3,844,575	229,523	5,215,620	274,155	5,970,969
For other purposes	36,467	28,693	421,831	70,342	1,031,347	93,495	1,532,961
Face brick	660,623	903,226	13,271,068	1,481,825	24,614,992	2,139,408	36,119,826
Fancy or ornamental brick	7,659	10,317	445,479	(1)	(1)	(1)	(1)
Enameled brick	11,961	8,605	484,339	13,402	940,774	17,137	1,259,248
Hollow brick	4,256	6,175	58,266	12,063	134,869	25,803	345,380
	Tons	*Tons*		*Tons*		*Tons*	
Terra cotta	12,123	54,706	5,491,609	96,396	10,016,166	133,958	13,921,244
Hollow building tile:							
Partition, load-bearing, furring, and book tile	832,894	1,646,254	8,774,441	2,650,170	15,855,491	3,317,829	19,835,086
Conduit	116,784	121,423	1,628,028	354,152	5,351,797	503,710	8,169,309
Floor-arch, silo, and corncrib tile; radial chimney blocks; fireproofing tile	69,163	159,981	769,337	143,683	1,011,594	341,982	2,137,872
	Squares	*Squares*		*Squares*		*Squares*	
Roofing tile	154,231	285,253	3,125,175	297,429	3,899,885	370,771	3,943,847
	Sq. ft.	*Sq. ft.*		*Sq. ft.*		*Sq. ft.*	
Floor tile (plain, vitreous, encaustic, quarry, etc.)	6,104,030	12,180,913	2,051,826	12,041,068	2,735,659	15,887,490	3,773,281
Ceramic mosaic tile (vitreous and semi-vitreous, unglazed)	4,045,535	8,743,806	1,780,795	10,573,167	2,358,043	18,051,525	3,738,393
Enameled tile (bright, dull, matt, and semimatt finishes) and glazed ceramic mosaic	5,265,086	19,430,354	6,482,910	15,488,552	6,699,170	15,977,773	7,446,171
Faïence tile (including hand-decorated tile)	1,623,596	2,000,878	1,266,086	2,947,227	2,348,946	3,379,486	2,689,823
Wall tile (white and bright-glazed), including trim	7,491,334	17,716,046	4,992,817	17,675,364	5,892,748	30,442,775	11,254,320
	Tons	*Tons*		*Tons*		*Tons*	
Draintile	177,854	253,308	1,666,970	675,276	5,011,653	858,521	6,515,718
Sewer pipe	450,531	823,303	9,448,473	1,270,527	15,963,712	1,675,453	21,330,167
Stove lining	2,671	8,877	316,600	9,386	329,665	16,805	403,248
Flue lining	33,683	85,718	838,985	(1)	(1)	243,333	2,499,320
Chimney pipe and tops	2,813	4,151	134,127	7,295	160,718	19,885	310,113
Wall coping	5,261	13,098	148,654	33,638	389,936	41,698	507,080
Fire-clay products:							
Brick, block, or tile for locomotive and other fire-box lining, etc. (9-inch equivalent)	*Thousands* 208,407	*Thousands* 416,041	15,685,507	*Thousands* 738,934	29,737,369	*Thousands* 938,218	36,168,898
High-alumina brick (over 40 percent Al_2O_3)	6,606	7,020	733,579	11,833	1,592,390	23,911	2,114,925
	Tons	*Tons*		*Tons*		*Tons*	
Special shapes	54,169	126,811	3,068,302	191,539	4,724,184	182,280	4,092,295
Glass-house tank blocks, melting pots, stoppers, floaters, and rings	20,355	22,853	1,258,546	34,417	1,953,644	35,012	2,276,009
Refractory cement (clay)	9,642	38,578	1,349,922	37,042	1,579,590	57,532	1,692,535
Clay sold, raw or prepared, including fire-clay dust		214,168	970,421	542,155	2,223,949	464,215	2,199,952
Other clay products			1,139,069		[2] 4,150,053		[2] 4,237,036
NONCLAY REFRACTORIES	*Thousands*	*Thousands*		*Thousands*		*Thousands*	
Silica brick	60,506	103,557	5,131,514	212,640	11,523,169	294,402	15,105,260
Magnesite and chrome brick	4,802	8,365	2,233,810	13,432	3,878,054	17,399	5,630,647
Crucibles, graphite			1,113,972		(3)		2,751,736
	Tons	*Tons*		*Tons*		*Tons*	
Refractory cement (nonclay)	1,107	35,641	920,067	60,720	1,416,555	80,802	1,420,773
Other nonclay refractories, including those of alumina and silicon carbide			4,768,749		4,940,292		6,989,217

TABLE 4.—CLAY PRODUCTS (INCLUDING POTTERY) AND NONCLAY REFRACTORIES—STOCKS ON HAND DEC. 31, 1931, AND PRODUCTION, BY KIND, QUANTITY, AND VALUE, 1931, 1930, AND 1929, FOR THE UNITED STATES—Continued

KIND	PRODUCTION					
	1931		1930		1929	
	Quantity	Value	Quantity	Value	Quantity	Value
POTTERY						
Vitreous-china plumbing fixtures (exclusive of fittings):[1]	*Number of pieces*		*Number of pieces*		*Number of pieces*	
Total value	----------	$12,894,277	----------	$17,646,927	----------	$24,992,047
Bathroom and toilet fixtures:						
Closet bowls:						
Siphon jets	170,918	1,355,858	210,031	1,750,447	317,672	2,095,647
Wash downs	746,264	2,745,752	962,516	3,658,316	1,364,804	5,651,120
Reverse traps	87,658	443,288	111,727	567,795	207,221	1,005,491
Flush tanks:						
Lowdown (large and small)	788,415	3,799,317	957,064	4,767,158	1,202,396	6,476,911
Other	3,985	21,773	13,617	97,166	19,776	137,840
Lavatories	226,346	2,513,179	273,748	3,667,802	347,809	4,779,710
Other bathroom and toilet fixtures	----------	1,382,828	----------	2,164,827	----------	3,393,279
Other vitreous-china fixtures	----------	632,282	----------	973,416	----------	1,452,049
Semivitreous or porcelain (all-clay) plumbing fixtures (exclusive of fittings):[1]						
Total value	----------	1,995,179	----------	2,703,440	----------	3,965,429
Lavatories and bath tubs	7,637	64,589	12,829	234,167	----------	231,600
Laundry tubs and kitchen sinks	54,920	453,001	65,076	585,048	----------	529,032
Other semivitreous fixtures	----------	1,477,589	----------	1,884,225	----------	3,204,797
Red earthenware	----------	2,034,299	----------	2,218,580	----------	2,798,161
Stoneware (except chemical) and yellow and Rockingham ware:						
Stoneware	----------	3,085,557	----------	3,256,139	----------	3,819,138
Yellow and Rockingham ware	----------	213,713	----------	230,278	----------	324,918
Chemical stoneware	----------	661,639	----------	887,619	----------	1,064,562
Chemical porcelain	----------	307,661	----------	368,805	----------	277,549
Whiteware, including cream-color, white granite, semiporcelain, and semivitreous porcelain ware	----------	20,108,359	----------	24,194,055	----------	32,066,498
Hotel china	----------	6,594,495	----------	9,181,677	----------	10,476,285
Porcelain electrical supplies (exclusive of fittings):						
Total value	----------	13,154,077	----------	17,165,419	----------	22,135,474
Insulators, total value	----------	6,283,577	----------	8,482,815	----------	15,475,080
Pin type:						
Up to, but not including, 7,500 volts	----------	391,667	----------	487,289	----------	
7,500 volts to, but not including, 17,000 volts	----------	402,128	----------	614,587	----------	13,899,795
17,000 volts to, but not including, 45,000 volts	----------	533,369	----------	892,910	----------	
45,000 volts and over	----------	380,686	----------	1,269,713	----------	
Suspension type	----------	3,256,136	----------	4,232,577	----------	
Knobs, tubes, and cleats	----------	1,319,591	----------	985,739	----------	1,575,285
Other electrical supplies	----------	6,870,500	----------	8,682,604	----------	6,660,394
Garden pottery	----------	308,363	----------	406,218	----------	368,634
Art pottery	----------	1,614,543	----------	1,988,437	----------	2,325,123
Saggers	----------	645,086	----------	1,167,205	----------	1,307,960
Other pottery products (including red and brown white-lined cooking ware, porcelain china, and gas and electric logs)	----------	2,965,253	----------	4,166,284	----------	6,097,439

[1] The figures for "Fancy or ornamental brick" for 1929 and 1930 and for "Flue lining" for 1930 are included in those for "Other clay products" to avoid disclosing approximations of the productions reported by individual establishments.
[2] See footnote 1.
[3] No data.
[4] For statistics on total production of plumbing fixtures (made of clay, iron, cement, etc.), see report on Plumbers' Supplies.

TABLE 5.—SELECTED PRODUCTS, BY QUANTITY AND VALUE, AND STOCKS ON HAND DEC. 31, BY STATES: 1931

[This table gives statistics for each State for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments, and for the remaining States in groups. Certain of the States for which combined figures are given, however, reported larger quantities of the specified classes of products than some of those shown separately]

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

	Quantity	Value	Stocks on hand Dec. 31
	Thousands		*Thousands*
Common brick, total	2,314,664	$21,652,130	1,028,592
Alabama	58,994	421,198	21,725
Arizona	10,121	125,156	1,968
Arkansas	13,551	93,855	5,357
California	94,709	881,105	84,197
Colorado	25,501	277,576	17,192
Connecticut	86,010	956,448	48,221
Georgia	47,653	281,437	13,330
Idaho	2,257	26,334	2,194
Illinois	143,022	1,296,606	131,401
Indiana	20,874	189,574	18,629
Iowa	33,814	403,547	6,480
Kansas	27,892	170,103	22,327
Kentucky	25,617	226,040	12,431
Louisiana	27,312	203,948	7,719
Maine	8,145	114,570	6,450
Maryland	43,031	496,268	21,427
Massachusetts	50,926	655,904	26,850
Michigan	28,152	300,942	27,210
Minnesota	20,134	194,059	6,471
Mississippi	25,774	202,160	9,739
Missouri	42,953	427,637	15,010
Montana	2,810	39,621	5,559
Nebraska	18,728	178,590	10,259
New Hampshire	20,440	307,620	20,190
New Jersey	134,784	1,508,243	33,104
New Mexico	4,916	58,673	2,691
New York	601,462	4,969,521	184,545
North Carolina	94,737	652,459	19,434
Ohio	86,650	891,149	38,502
Oklahoma	28,364	228,394	6,356
Oregon	5,762	61,529	5,090
Pennsylvania	162,178	1,814,991	70,586
South Carolina	37,686	244,695	6,470
Tennessee	28,706	284,486	8,340
Texas	64,889	521,806	27,760
Utah	14,632	105,438	6,128
Virginia	66,032	702,099	27,471
Washington	17,035	191,736	9,183
West Virginia	17,883	184,360	6,556
Wisconsin	23,561	228,213	15,864
Wyoming	1,446	21,997	816
Other States (Del., D.C., Fla., Nev., N.D., R.I., Vt.)	45,521	507,043	17,222
Face brick, total	903,226	13,271,068	660,623
Alabama	10,205	127,354	4,904
Arkansas	21,792	249,177	20,295
California	3,274	117,969	10,834
Colorado	10,168	201,498	9,133
Georgia	11,115	100,279	6,846
Illinois	80,601	1,145,019	67,540
Indiana	49,595	721,431	48,369
Iowa	16,024	239,036	8,429
Kansas	9,825	132,054	18,076
Kentucky	5,844	68,752	2,502
Mississippi	10,507	112,232	5,696
Missouri	24,166	365,471	23,383
Montana	2,149	47,926	1,237
Nebraska	4,403	56,805	2,700
New Jersey	2,065	43,986	4,805

TABLE 5.—SELECTED PRODUCTS, BY QUANTITY AND VALUE, AND STOCKS ON HAND DEC. 31, BY STATES: 1931—Continued

[See note at head of table]

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

	Quantity	Value	Stocks on hand Dec. 31
Face brick—Continued	*Thousands*		*Thousands*
North Carolina	15,382	$160,522	2,825
Ohio	218,162	3,280,113	155,090
Oklahoma	7,097	93,531	9,235
Pennsylvania	210,725	3,094,143	145,609
South Carolina	4,826	39,532	2,962
Texas	42,795	541,353	38,500
Utah	3,848	76,914	4,649
Virginia	21,597	398,361	11,650
Washington	17,475	339,543	7,971
West Virginia	21,358	323,613	9,857
Arizona, Nevada, New Mexico, Oregon	3,917	80,310	4,096
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island	10,766	216,468	8,804
Idaho, Wyoming	580	13,945	266
Maryland, New York	25,588	370,316	11,441
Minnesota, North Dakota, Wisconsin	17,850	276,478	9,714
Other States (Mich., Tenn.)	19,467	236,937	13,109
	Tons		*Tons*
Terra cotta, total	54,706	5,491,609	12,123
Missouri	3,110	299,614	1,974
New York	9,779	785,055	2,313
New Jersey and Pennsylvania	14,595	1,577,384	3,528
Other States (Calif., Colo., Ga., Ill., Ind., Kans., Wash.)	27,222	2,829,556	4,308
Hollow building tile (partition, load-bearing, furring, book tile), total	1,646,254	8,774,441	832,894
California	51,972	385,243	60,875
Colorado	12,376	88,207	5,473
Illinois	101,433	385,242	78,814
Indiana	85,787	776,079	81,235
Iowa	112,890	694,789	70,060
Kansas	25,447	106,823	21,175
Kentucky	8,513	48,296	5,672
Missouri	26,170	135,225	10,370
Montana	4,308	39,282	3,801
Nebraska	29,906	139,631	20,271
New Jersey	247,855	1,696,160	56,584
New York	45,203	210,588	16,355
North Carolina	14,158	65,477	5,095
Ohio	399,216	1,638,743	169,300
Oregon	11,088	58,732	3,375
Pennsylvania	109,757	447,730	59,416
Texas	53,281	286,916	23,454
Washington	16,146	151,330	11,771
West Virginia	65,764	297,580	15,024
Alabama, Georgia, Tennessee	45,068	227,238	28,046
Arizona, New Mexico, Utah, Wyoming	22,340	156,061	12,634
Arkansas, Louisiana, Oklahoma	78,273	275,540	37,023
Maryland, Virginia	26,573	138,392	12,619
Other States (Conn., Mass., Mich., Minn., N.Dak., Wis.)	52,730	325,137	24,452
	Square feet		*Square feet*
Enameled tile (bright, dull, matt, and semimatt finishes) and glazed ceramic mosaic, total	19,430,354	6,482,910	5,265,086
California	2,120,852	868,232	364,101
New Jersey	2,587,769	930,241	965,612
Ohio	7,388,535	2,265,390	2,316,390
Pennsylvania	3,603,032	1,051,210	1,095,718
Other States (Fla., Ind., Mich., Wash., W.Va., Wis.)	3,730,166	1,367,837	523,265

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
States, 1931—Continued						
Nebraska	19	91	$96,455	$174,479	$453,985	$279,506
New Jersey	109	730	891,068	1,506,567	3,977,691	2,471,124
New York	170	1,054	1,502,479	1,915,191	5,651,616	3,736,425
North Carolina	6	42	26,717	52,657	121,240	68,583
North Dakota	5	25	25,404	47,734	127,681	79,947
Ohio	98	471	541,015	1,086,457	2,558,009	1,471,552
Oklahoma	8	85	69,820	254,988	466,036	211,048
Oregon	14	62	72,066	167,810	365,052	197,242
Pennsylvania	152	768	920,098	3,911,336	8,016,643	4,105,307
Rhode Island	8	43	57,395	41,853	140,253	98,400
South Dakota	8	23	30,377	84,883	165,556	80,673
Tennessee	14	190	172,550	282,633	676,005	393,372
Texas	39	334	304,639	713,835	1,687,064	973,229
Virginia	18	186	167,671	426,001	894,082	468,081
Washington	34	197	245,662	536,004	1,237,922	701,918
West Virginia	13	40	43,869	82,479	263,127	180,648
Wisconsin	50	245	271,475	510,174	1,232,794	722,620
Other States [3]	27	427	375,414	982,318	2,411,137	1,428,819

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy.
[3] Arizona, 5 establishments; Arkansas, 2; Idaho, 1; Maine, 5; Montana, 1; Nevada, 1; New Hampshire, 3; New Mexico, 2; South Carolina, 5; Utah, 2.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	9,253	8,291	8,364	9,208	10,100	10,224	10,062	9,818	9,914	9,823	9,192	8,540	*7,495*
1929	16,505	*13,399*	13,502	14,780	16,939	17,832	18,175	18,292	18,491	18,506	17,770	16,034	14,330
1925	14,722	*11,024*	11,459	13,096	14,939	15,672	16,479	16,562	16,536	16,472	15,928	14,832	13,671
1919	8,378	*5,049*	5,184	5,972	8,123	9,268	9,897	10,092	10,483	10,528	9,805	8,609	7,526
1914	10,255	*6,186*	6,311	7,843	11,372	12,840	13,201	13,118	12,779	12,360	10,951	8,942	7,157
1909	9,957	*4,856*	5,221	7,115	10,445	12,037	12,748	12,759	12,884	12,785	11,426	9,613	7,607
States, 1931													
Alabama	119	106	102	122	105	104	100	*89*	160	172	145	137	*89*
California	757	838	825	899	868	800	740	696	668	*637*	678	715	725
Colorado	25	7	8	66	77	31	20	12	25	22	14	12	12
Connecticut	225	228	*165*	199	228	234	267	220	214	243	258	234	205
Delaware	68	117	106	88	109	94	60	43	44	45	39	36	*35*
Dist. of Columbia	103	91	92	*50*	99	110	116	131	114	95	96	99	99
Florida	62	*52*	53	61	69	82	73	67	61	55	59	55	58
Georgia	92	92	103	106	98	85	*70*	87	88	97	93	94	90
Illinois	511	483	511	516	549	537	538	564	543	543	503	451	*390*
Indiana	276	249	252	243	274	315	326	318	321	339	231	241	*207*
Iowa	100	49	59	103	123	132	129	133	143	124	93	79	*57*
Kansas	109	79	89	119	132	130	137	125	116	110	91	103	74
Kentucky	104	45	48	46	*40*	46	84	164	197	190	181	120	82
Louisiana	133	133	140	149	143	138	133	135	128	*119*	125	124	130
Maryland	125	*90*	94	99	103	113	111	110	119	185	161	162	158
Massachusetts	475	490	443	448	483	497	473	470	486	517	501	459	*434*
Michigan	313	277	296	330	371	363	346	331	312	285	261	323	*255*
Minnesota	286	160	158	199	350	399	372	359	379	360	313	228	*155*
Mississippi	34	36	35	36	27	28	*26*	43	43	42	35	31	27
Missouri	323	303	277	305	313	356	385	339	405	377	337	277	*197*

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931—Continued

[See note at head of table]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
States, 1931—Con.													
Nebraska	91	*60*	69	91	104	106	94	95	102	100	99	95	73
New Jersey	730	*555*	583	614	713	746	703	741	829	876	830	791	778
New York	1,054	865	*856*	979	1,136	1,187	1,194	1,141	1,148	1,125	1,117	1,008	889
North Carolina	42	42	36	42	45	41	52	47	52	46	37	*33*	*33*
North Dakota	25	*3*	7	12	28	40	47	44	34	30	28	19	*3*
Ohio	471	412	436	469	498	502	526	506	525	538	465	408	*368*
Oklahoma	85	78	*69*	74	77	88	93	107	96	81	99	80	74
Oregon	62	60	67	69	68	67	80	55	55	60	62	59	*41*
Pennsylvania	768	733	696	786	877	826	790	778	793	812	828	713	*585*
Rhode Island	43	40	40	44	43	40	39	48	43	*36*	48	54	44
South Dakota	23	*3*	4	8	39	49	49	48	34	26	6	5	4
Tennessee	190	*173*	183	186	195	195	216	205	202	185	180	187	176
Texas	334	400	401	416	419	389	344	345	299	270	237	249	*233*
Virginia	186	*151*	159	162	191	205	195	200	189	185	177	224	197
Washington	197	185	189	195	205	214	213	218	237	193	190	*154*	168
West Virginia	40	*19*	26	33	42	48	54	53	52	49	43	31	28
Wisconsin	245	*173*	192	209	258	275	267	273	279	297	272	251	192

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, 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 concrete and do not include data for brick made of clay. The figures for 1929 represent manufacturers' sales (shipments or deliveries); those for other years, production. See sec. 16, p. 9]

KIND	1931	1929	1927	1925
1. Concrete Products industry, all products, total value	$53,191,710	$92,900,749	$93,259,206	[1] $78,546,515
2. Concrete products	52,624,125	92,244,077	92,506,987	[1] 78,546,515
3. Other products (not normally belonging to the industry)	434,844	483,959	752,219	([2])
4. Receipts for contract and custom work	132,741	172,713		
5. Concrete products made as secondary products in other industries, value	362,105	1,011,935	1,212,885	1,247,860
Concrete products, all industries: Aggregate value (sum of 2 and 5)	$52,986,230	$93,256,012	$93,719,872	$79,794,375
Building materials, total value	$17,151,179	$48,595,161	[3] $56,203,240	[3] $50,467,753
Art-marble and Spanish floor tile, value	$336,684	$738,205	$522,510	$359,953
Block and tile, except roofing tile:				
Tons	1,661,381	4,327,452	5,007,574	4,183,945
Value	$10,600,641	$30,471,526	$37,151,488	$31,193,535
Brick:				
Tons	52,389	162,512	227,266	363,858
Value	$342,295	$1,064,633	$1,636,368	$2,532,246
Cast stone:				
Tons	130,811	332,318	320,101	354,164
Value	$4,823,414	$12,927,249	$13,714,584	$12,843,418
Fireplaces and mantels, value	$185,948	$624,456	([4])	([4])
Roofing tile:				
Total tons	31,860	137,052	118,365	[5] 116,555
Total value	$862,197	$2,869,092	$3,178,290	[5] $3,538,601
Large:				
Tons	27,639	125,961	91,717	([6])
Value	$774,451	$2,587,893	$2,401,426	([6])
Small:				
Tons	4,221	11,091	26,648	([6])
Value	$87,746	$281,199	$776,864	([6])

See footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, 1927, AND 1925—Continued

[See note at head of table]

KIND	1931	1929	1927	1925
Concrete products—Continued.				
Circular structures:				
Total tons	78,246	213,357	151,738	111,392
Total value	$814,685	$2,216,123	$1,724,257	$1,424,406
Cistern and manhole blocks:				
Tons	17,080	63,521	44,299	27,940
Value	$136,630	$494,405	$373,030	$223,199
Silo blocks:				
Tons	9,596	27,873	43,636	34,043
Value	$105,977	$361,619	$554,100	$517,179
Staves and slabs:				
Tons	51,570	121,963	63,803	49,409
Value	$572,069	$1,360,099	$797,127	$684,028
Conduit and pipe:				
Total tons	1,236,955	1,818,587	1,860,217	1,283,429
Total value	$15,468,744	$23,189,021	$24,291,427	$17,761,052
Culvert pipe:				
Tons	403,022	357,587	[7] 344,774	[7] 349,389
Value	$4,648,648	$4,379,229	[7] $4,406,814	[7] $4,480,831
Draintile:				
Tons	56,354	75,563	95,033	79,919
Value	$543,139	$714,879	$840,254	$704,033
Electric conduit:				
Tons	6,699	12,578	11,473	1,857
Value	$151,353	$295,602	$267,097	$43,762
Hand-made pipe:				
Tons	(6)	(6)	66,175	(6)
Value	(6)	(6)	$928,559	(6)
Irrigation pipe:				
Tons	139,843	254,801	[7] 94,360	[7] 138,806
Value	$1,591,116	$3,054,609	[7] $1,252,901	[7] $1,783,874
Machine-made pipe:				
Tons	(6)	(6)	345,468	261,813
Value	(6)	(6)	$3,947,138	$3,617,445
Meter boxes:				
Tons	2,491	2,748	4,778	4,960
Value	$71,550	$82,182	$128,708	$138,425
Pressure pipe, reinforced:				
Tons	147,161	111,637	[7] 78,184	[7] 46,503
Value	$3,142,643	$2,291,833	[7] $2,157,144	[7] $1,832,673
Sewer pipe, plain and reinforced:				
Total tons	481,385	1,003,673	[7] 819,972	[7] 400,182
Total value	$5,320,295	$12,370,687	[7] $10,362,812	[7] $5,160,009
Plain (4" to 24"):				
Tons	141,748	310,894	(6)	(6)
Value	$1,519,555	$3,777,615	(6)	(6)
Reinforced (24" to 108"):				
Tons	339,637	692,779	(6)	(6)
Value	$3,800,740	$8,593,072	(6)	(6)
Household and other accessories:				
Total tons	36,178	78,068	60,776	81,480
Total value	$1,262,456	$2,815,944	$2,312,487	$2,650,772
Garbage boxes:				
Tons	1,497	4,990	3,730	2,361
Value	$62,347	$202,142	$209,977	$128,095
Garden furniture:				
Tons	3,760	7,995	7,197	4,860
Value	$225,160	$497,001	$453,068	$467,173
Incinerators:				
Tons	2,615	1,270	(4)	(4)
Value	$112,376	$51,789	(4)	(4)
Laundry trays:				
Tons	19,438	36,430	36,382	60,455
Value	$546,513	$1,101,829	$1,199,784	$1,620,920
Septic tanks and sanitary fittings:				
Tons	8,868	27,383	13,467	13,804
Value	$316,060	$963,183	$449,658	$434,584
Monuments and grave markers:				
Tons	1,113	3,702	2,000	2,245
Value	$45,632	$189,770	$131,162	$92,794
Vaults:				
Tons	68,467	82,640	52,023	34,529
Value	$2,756,577	$3,270,846	$2,088,037	$1,681,853

See footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, 1927, AND 1925—Continued

[See note at head of table]

KIND	1931	1929	1927	1925
Concrete products—Continued				
Paving materials:				
Total tons	22,613	54,163	55,728	28,395
Total value	$294,863	$694,793	$649,748	$422,766
Crossing slabs:				
Tons	5,423	15,492	4,197	1,223
Value	$94,024	$213,602	$60,049	$17,107
Precast sidewalk slabs and curbing:				
Tons	10,313	28,849	38,447	22,229
Value	$89,412	$353,479	$417,100	$296,003
Precast units for railroad use:				
Tons	6,877	9,822	13,084	4,943
Value	$111,427	$127,712	$172,599	$109,656
Poles and posts:				
Total tons	16,104	28,203	37,498	21,934
Total value	$692,673	$1,412,405	$1,808,120	$1,339,335
Fence posts:				
Tons	6,842	8,884	13,601	7,540
Value	$92,081	$129,229	$223,798	$146,736
Lighting standards:				
Tons	5,540	17,801	23,264	13,776
Value	$460,539	$1,247,494	$1,565,245	$1,171,620
Mail-box posts and transmission poles:				
Tons	3,722	1,518	633	618
Value	$140,053	$35,682	$19,077	$20,979
Premixed concrete:				
Cubic yards	2,086,209	(8)	----------	----------
Value	$12,806,585	$7,618,099	(4)	(4)
Other concrete products,[9] value	$1,692,836	[10]$3,253,850	$3,298,509	$2,705,784
Concrete products not distributed by kind, value	----------	----------	[11]$1,212,885	[11] $1,247,860

[1] 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, for 1925, 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.

[2] Not tabulated separately.

[3] Does not include value of fireplaces and mantels, which were reported under "Other concrete products" for 1927 and 1925.

[4] Not called for separately on schedule; included in value of "Other concrete products."

[5] Does not include data for concrete roofing tile, valued at $476,075 (quantity not reported), made in establishments classified in the roofing-materials industry for 1925. Establishments manufacturing concrete roofing tile have been included in the Concrete Products industry at subsequent censuses.

[6] Not reported separately.

[7] A part of the production of this class of pipe may have been reported as "handmade" and "machine-made" for 1927 or "machine-made" for 1925, but the 1931 and 1929 schedules did not call for data under these headings.

[8] Not called for on schedule.

[9] Battery wells and boxes, concrete-filled columns, cribbing, grease traps, piling, terrazzo steps, and well curbing; figures for 1927 and 1925 also include data for fireplaces and mantels, incinerators, and premixed concrete.

[10] Includes $1,334,020, value of concrete products not reported in detail.

[11] See item 5 in first section of table.

TABLE 4.—PRINCIPAL CONCRETE PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR SELECTED STATES: 1931

[In this table statistics are given for each State for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments, and which contributed at least 2 percent of the total value of the specified class of products. In many cases, however, certain of the "Other States" outranked some of the States for which separate figures are given]

KIND AND STATE	Number of establishments	Tons	Value
Block and tile, except roofing tile, total	746	1,661,381	$10,600,641
Illinois	39	64,120	445,955
Maryland	18	49,626	350,375
Massachusetts	28	92,913	621,808
Michigan	51	128,394	695,767
Minnesota	37	71,835	366,860
Missouri	11	39,616	250,044
New Jersey	83	242,053	1,538,163
New York	107	306,558	1,939,418
Ohio	50	97,920	589,668
Pennsylvania	104	230,052	1,635,095
Virginia	7	26,152	245,112
Wisconsin	36	82,572	518,587
Other States	175	229,570	1,403,789
Cast stone, total	203	130,811	4,823,414
California	18	10,693	555,704
Illinois	12	3,850	124,824
Massachusetts	10	17,901	695,868
New Jersey	8	4,460	153,977
New York	27	31,724	1,102,043
Ohio	11	3,584	136,253
Pennsylvania	17	5,341	187,153
Washington	7	2,285	128,178
Other States	93	50,973	1,739,414
Culvert pipe, total	172	403,022	4,648,648
Georgia	3	9,512	96,487
Illinois	6	9,528	137,051
Iowa	10	14,719	119,922
Louisiana	5	14,207	144,463
Michigan	5	12,703	161,206
Minnesota	14	46,885	465,388
New Jersey	4	13,244	167,629
New York	14	49,246	627,273
North Dakota	3	10,151	113,178
Oregon	9	9,609	126,025
Pennsylvania	8	23,563	312,289
South Dakota	6	15,078	146,695
Texas	9	8,169	106,252
Washington	19	26,475	321,247
Other States	57	139,933	1,603,543
Irrigation pipe, total	75	139,843	1,591,116
California	57	105,963	1,175,634
Texas	5	9,490	121,322
Other States	13	24,390	294,160
Sewer pipe, plain (4" to 24"), total	114	141,748	$1,519,555
California	12	7,427	109,451
Florida	5	3,432	47,041
Louisiana	4	12,838	123,808
Michigan	4	10,611	82,644
New York	7	15,924	191,170
Oregon	8	4,374	53,311
Texas	12	18,560	207,435
Washington	16	5,354	88,510
Other States	46	63,228	616,185
Sewer pipe, reinforced (24" to 108"), total	109	339,637	3,800,740
California	5	18,183	235,854
Connecticut	5	9,870	113,173
Illinois	5	17,128	217,511
Indiana	8	17,523	151,528
Michigan	8	28,884	301,389
New Jersey	8	75,498	890,531
New York	12	44,641	535,851
Ohio	10	17,700	143,834
Pennsylvania	7	19,321	205,963
Other States	41	90,889	1,005,106
Vaults, total	226	68,467	2,756,577
California	6	3,239	96,242
Illinois	24	17,137	588,306
Indiana	18	4,655	174,205
Massachusetts	8	2,197	71,719
Michigan	13	2,656	111,039
Missouri	4	1,507	63,660
New Jersey	6	4,249	246,609
New York	17	5,757	307,616
Ohio	28	5,589	242,697
Pennsylvania	36	11,299	442,695
Other States	66	10,182	411,889
Premixed concrete, total	89	*Cu. yards* 2,086,209	12,806,585
Alabama	5	74,115	357,374
District of Columbia	3	157,519	987,278
Ohio	10	92,130	534,835
Texas	6	160,877	703,049
Other States	65	1,601,568	10,134,049

GLASS

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of glass from raw materials, but does not include glass beveling, bending sheet glass, engraving glass, making glass labels, staining and ornamenting glass, or making glassware from purchased "blanks," except to the extent to which these activities are carried on by the same establishments 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, bulbs for electric lamps, tubing, etc.; containers for food products, beverages, and medicinal and toilet preparations; and general-purpose containers. A small amount of cutting and decorating is reported by establishments in the "Glass" industry, but most of this is done by those classified in the "Mirrors and other glass products made of purchased glass" industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	229	49,917	$57,881,550	$73,574,568	$216,264,830	$142,690,262
1929	263	67,527	87,795,111	103,293,943	303,818,560	200,524,617
1927	269	65,825	81,352,734	109,911,464	282,394,330	172,482,866
1925	310	69,371	86,735,571	113,652,436	295,959,424	182,306,988
1923	333	73,335	89,897,948	113,170,262	309,353,411	196,183,149
1921	329	54,748	68,224,248	86,036,406	213,471,309	127,434,903
1919	371	77,520	87,526,625	90,780,124	261,884,080	171,103,956
1914	348	74,502	48,655,819	46,016,504	123,085,019	77,068,515
1909	363	68,911	39,299,624	32,119,499	92,095,203	59,975,704
1904	399	63,969	37,288,148	26,145,522	79,607,998	53,462,476
1899	355	52,818	27,084,710	16,731,009	56,539,712	39,808,703
Percent of increase or decrease (—):						
1929-31	—12.9	—26.1	—34.1	—28.8	—28.8	—28.8
1927-29	—2.2	2.6	7.9	—6.0	7.6	16.3
1925-27	—13.2	—5.1	—6.2	—3.3	—4.6	—5.4
1923-25	—6.9	—5.4	—3.5	0.4	—4.3	—7.1
1921-23	1.2	34.0	31.8	31.5	44.9	53.9
1919-21	—11.3	—29.4	—22.1	—5.2	—18.5	—25.5
1921-31	—30.4	—8.8	—15.2	—14.5	1.3	12.0
1919-29	—29.1	—12.9	0.3	13.8	16.0	17.2
1909-19	2.2	12.5	122.7	182.6	184.4	185.3
1899-1909	2.3	30.5	45.1	92.0	62.9	50.7

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
States, 1931						
California	12	1,304	$1,986,530	$2,540,127	$7,394,164	$4,854,037
Illinois	13	3,363	4,405,254	5,753,773	19,482,757	13,728,984
Indiana	24	4,930	5,402,087	8,971,419	28,086,354	19,114,935
Maryland	6	1,384	1,379,149	1,029,665	3,265,619	2,235,954
New Jersey	8	3,222	3,641,418	3,488,641	12,534,496	9,045,855
New York	13	2,512	3,256,389	3,315,385	11,589,358	8,273,973
Ohio	24	7,661	8,777,715	11,381,533	32,083,496	20,701,963
Oklahoma	11	956	1,168,422	2,095,337	4,309,032	2,213,695
Pennsylvania	61	12,992	14,408,004	18,674,514	50,334,543	31,660,029
West Virginia	41	8,670	9,813,735	10,802,141	32,444,234	21,642,093
Other States [3]	16	2,923	3,642,847	5,522,033	14,740,777	9,218,744

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Arkansas, 2 establishments; Florida, 1; Louisiana, 2; Massachusetts, 1; Michigan, 1; Minnesota, 1; Missouri, 1; Rhode Island, 1; South Carolina, 1; Tennessee, 2; Texas, 3.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data reported for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	49,917	47,922	50,620	51,529	52,631	52,720	52,296	49,635	49,079	50,476	48,733	46,862	*46,506*
1929	67,527	65,646	68,024	68,850	69,391	68,718	69,288	65,822	67,072	67,915	68,732	67,439	*63,430*
1925	69,371	67,400	69,438	71,323	70,663	69,194	67,997	*65,598*	65,833	68,501	71,767	72,670	72,068
1919	77,520	74,571	78,413	79,693	79,450	78,191	74,719	*65,055*	68,993	78,072	83,190	85,416	84,477
1914	74,502	83,002	85,875	86,461	85,644	82,973	74,347	55,433	*49,861*	62,683	72,075	77,383	78,287
1909	68,911	72,931	75,720	78,921	77,692	76,550	73,038	*40,222*	43,839	56,127	71,746	78,454	81,065
States, 1931													
California	1,304	1,325	1,267	1,377	1,409	1,430	1,425	1,471	1,337	1,234	1,155	1,122	*1,098*
Illinois	3,363	3,477	3,588	3,553	3,742	3,833	3,901	3,815	3,393	3,029	2,812	*2,599*	2,620
Indiana	4,930	*4,126*	4,563	4,614	4,686	5,010	5,258	5,089	5,228	5,745	5,207	4,890	4,743
Maryland	1,384	1,433	1,374	1,434	1,450	1,475	1,381	1,320	1,321	*1,309*	1,346	1,367	1,394
New Jersey	3,222	3,171	3,344	3,209	3,490	3,454	3,390	3,384	3,222	3,158	3,026	3,006	*2,807*
New York	2,512	2,464	2,545	2,549	2,610	2,488	2,593	*2,124*	2,508	2,433	2,620	2,623	2,589
Ohio	7,661	*6,504*	7,577	7,702	7,799	7,797	7,677	7,488	8,087	7,979	7,673	7,888	7,755
Oklahoma	956	974	924	*822*	996	992	1,101	1,010	930	1,013	907	843	956
Pennsylvania	12,992	12,674	13,256	13,542	13,593	13,700	13,542	13,289	12,524	13,115	12,917	12,068	*11,685*
West Virginia	8,670	8,594	9,073	9,530	9,558	9,290	8,895	*7,676*	7,821	8,671	8,582	8,007	8,346

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9]

KIND	1931	1929	1927	1925
1. Glass industry, all products, total value	$216,264,830	$303,818,560	$282,394,330	$295,959,424
2. Glass and glassware	211,955,360	299,717,063	276,762,183	286,481,704
3. Other products (not normally belonging to the industry)	4,309,470	4,101,497	5,632,147	9,477,720
Glass and glassware: Aggregate value	$211,955,360	$299,717,063	$276,762,183	$286,481,704
Polished plate-glass—				
Number of establishments	12	15	18	19
Square feet	87,017,237	148,742,970	118,123,960	117,369,400
Value	$25,765,129	$50,191,535	$44,258,486	$57,207,447
Window glass—				
Number of establishments	17	20	23	42
Square feet	266,772,159	402,558,961	481,021,350	567,159,590
Value	$10,307,396	$25,962,167	$26,813,507	$37,524,728
Obscured glass, including cathedral and skylight glass, and opalescent sheet glass—				
Number of establishments	22	19	20	21
Square feet	17,796,456	34,293,632	41,544,699	53,951,313
Value	$2,388,939	$5,255,514	$5,092,992	$6,915,578
Wire glass—				
Rough (for sale as such)—				
Number of establishments	11	11	11	12
Square feet	14,215,553	38,924,249	25,795,402	28,743,480
Value	$1,249,681	$4,278,321	$2,746,466	$3,546,039
Polished—				
Number of establishments	6	7	6	6
Square feet	1,448,284	3,893,008	3,319,647	4,165,466
Value	$550,725	$1,713,885	$1,631,238	$2,263,599
Pressed and blown glass (except containers)—				
Tableware and ovenware [1]—				
Number of establishments	43	47	38	37
Value	$13,764,295	$17,264,957	$13,140,897	$12,230,261
Pressed tumblers and goblets—				
Number of establishments	15	21	22	18
Dozens	8,333,679	[2] 17,542,236	27,280,521	29,678,011
Value	$2,089,207	[2] $5,670,462	$7,773,776	$8,678,725
Blown tumblers, stem ware, and bar goods—				
Number of establishments	25	26	29	32
Value	$7,809,897	[2] $9,109,783	$8,702,482	$7,099,853
Lenses—				
Motor-vehicle—				
Number of establishments	9	9	11	18
Dozens	1,397,634	2,321,171	(3)	(3)
Value	$884,009	$2,032,982	$1,579,031	$2,743,674
Other, value	$477,860	$932,949		
Lamps—				
Number of establishments	11	8	9	8
Value	$542,307	$571,205	$458,019	$426,615
Chimneys—				
Number of establishments	14	16	18	18
Dozens	1,597,144	3,018,753	2,987,483	3,438,879
Value	$1,100,251	$1,951,567	$2,280,935	$2,657,910
Lantern globes—				
Number of establishments	13	16	16	13
Dozens	403,759	942,014	869,247	1,079,683
Value	$382,904	$671,665	$636,099	$866,822
Shades, globes, and other gas and electric goods (except electric bulbs and insulators)—				
Number of establishments	28	27	27	30
Value	$6,590,032	$9,976,886	$8,153,569	$10,314,792
Tubing—				
Number of establishments	6	7	7	6
Pounds	17,291,889	23,066,504	21,519,336	16,859,946
Value	$3,140,005	$4,750,300	$4,023,458	$3,934,680
Insulators—				
Number of establishments	5			
Value	$806,744			
Opal ware, other than containers—				
Number of establishments	5			
Dozens	180,985	$32,619,035	$29,908,625	$23,132,488
Value	$494,727			
Bulbs for electric lamps,[1] specialties, and other pressed and blown glass products, value	$17,830,327			

See footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931—Continued

[See note at head of table]

KIND	1931	1929	1927	1925
Glass and glassware—Continued				
Glass containers—				
Beverage containers—				
Pressure ware—				
Number of establishments	34	33	35	
Gross	3,537,799	4,130,462	3,739,876	
Value	$13,096,958	$16,689,679	$15,995,378	
Nonpressure ware—				
Number of establishments	23	18	18	
Gross	577,411	437,414	412,892	
Value	$2,544,970	$1,775,863	$1,724,379	
Medicinal and toilet preparation containers (both pressed and blown)—				
Number of establishments	46	51		
Gross	12,765,353	15,791,724		
Value	$30,280,297	$41,486,352		
General-purpose containers—				
Number of establishments	33	29		
Gross	1,028,709	1,357,841		
Value	$6,615,310	$5,733,827		$83,072,345
Food-product containers—				
Narrow-neck blown bottles (packers' ware)—			22,049,187	
Number of establishments	37	37	$71,376,945	
Gross	2,637,291	2,956,480		
Value	$8,408,136	$10,208,782		
Wide-mouth blown bottles and jars (packers' ware)—				
Number of establishments	46	44		
Gross	6,338,362	6,488,966		
Value	$17,390,404	$22,946,043		
Pressed ware (packers' ware)—				
Number of establishments	10	6	5	
Gross	822,395	761,480	762,708	
Value	$1,861,760	$2,592,803	$2,446,561	
Milk bottles—				
Number of establishments	21	25	21	27
Gross	2,135,692	2,610,083	2,180,575	2,086,360
Value	$10,027,315	$11,695,602	$11,479,596	$10,588,306
Fruit jars (home-pack)—				
Number of establishments	14	11	10	14
Gross	2,082,185	1,153,374	1,515,363	1,288,425
Value	$15,103,062	$8,524,974	$11,357,687	$6,640,756
Other glass products, value	$9,852,713	$5,109,925	$5,182,057	$6,637,146

[1] Data called for separately on schedule but combined to avoid disclosing approximations of output of individual establishments.
[2] Revised.
[3] Data incomplete.

TABLE 4.—PRINCIPAL MATERIALS CONSUMED IN THE INDUSTRY, BY KIND AND QUANTITY, FOR THE UNITED STATES: 1931, 1929, AND 1927

[Tons, 2,000 pounds]

MATERIAL	1931	1929	1927
Silica sand	1,428,681	1,973,644	1,758,839
Grinding sand	306,387	1,154,285	1,151,267
Soda ash	502,425	678,461	604,048
Salt cake	23,446	47,284	42,607
Lime	163,080	138,645	127,533
Limestone	118,597	264,302	235,056

GRAPHITE, GROUND AND REFINED

Description of the industry.—This industry classification covers establishments engaged primarily in the extraction from the ore and the refining of graphite (plumbago or black lead). Graphite is reported to a considerable extent as a secondary product by establishments engaged primarily in other lines of manufacture, but the value of such production outside the industry cannot be shown without disclosing the output of individual establishments.

SUMMARY: 1899 TO 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. No statistics for States can be given without disclosing, exactly or approximately, the data reported by individual establishments]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
1931	[3] 9	183	$183,040	$975,974	$1,961,920	$985,946
1929	11	494	627,235	1,457,860	3,759,969	2,302,109
1927	13	289	340,510	1,319,161	2,931,584	1,612,423
1925	11	228	278,224	1,328,188	2,569,487	1,241,299
1923	8	244	304,437	1,082,018	2,184,609	1,102,591
1921	11	152	185,468	703,441	1,456,864	753,423
1919	24	497	434,317	1,092,684	2,239,587	1,146,903
1914	11	250	181,125	723,190	1,724,330	1,001,140
1909	9	162	88,768	405,479	1,139,587	734,108
1904	11	218	107,810	117,300	342,379	225,079
1899	11	137	64,376	216,560	429,173	212,613
Percent of increase or decrease (—):						
1929-31	(4)	—63.0	—70.8	—33.1	—47.8	—57.2
1927-29	(4)	70.9	84.2	10.5	28.3	42.8
1925-27	(4)	26.8	22.4	—0.7	14.1	29.9
1923-25	(4)	—6.6	—8.6	22.8	17.6	12.6
1921-23	(4)	60.5	64.1	53.8	50.0	46.3
1919-21	(4)	—69.4	—57.3	—35.6	—34.9	—34.3
1921-31	(4)	20.4	—1.3	38.7	34.7	30.9
1919-29	(4)	—0.6	44.4	33.4	67.9	100.7
1909-19	(4)	206.8	389.3	169.5	96.5	56.2
1899-1909	(4)	18.2	37.9	87.2	165.5	245.3

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years' production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] California, 1 establishment; Michigan, 2; New Jersey, 2; New York, 1; Pennsylvania, 3.
[4] Percent not computed where base is less than 100.

LIME

[A preliminary report for this industry was issued under date of Sept. 20, 1932]

Description of the industry.—This industry designation is applied to establishments engaged in the production 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 establishment, and for such establishments the statistics given cover both branches of the work. (Establishments engaged exclusively in the quarrying of limestone are not classified in this industry.)

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	203	6,706	$6,012,411	$8,895,504	$22,199,792	$13,304,288
1929	237	8,554	9,476,314	13,907,760	35,815,658	21,907,898
1927	260	10,903	12,190,918	17,269,467	41,587,458	24,317,991
1925	283	12,095	14,002,128	20,049,363	50,736,499	30,687,136
1923	301	12,290	13,522,069	19,700,191	47,243,756	27,543,565
1921	292	10,345	9,801,651	14,214,205	31,015,487	16,801,282
1919	476	11,405	10,869,196	14,296,925	33,970,463	19,673,538
1914	627	12,429	6,039,608	7,557,670	18,390,805	10,833,135
1909	853	13,897	5,980,174	6,730,906	17,951,987	11,221,081
1904 [3]	526	11,152	4,597,113	5,437,150	14,751,170	9,314,020
Percent of increase or decrease (−):						
1929–31	−14.3	−21.6	−36.6	−36.0	−38.0	−39.3
1927–29	−8.8	−21.5	−22.3	−19.5	−13.9	−9.9
1925–27	−8.1	−9.9	−12.9	−13.9	−18.0	−20.8
1923–25	−6.0	−1.6	3.6	1.8	7.4	11.4
1921–23	3.1	18.8	38.0	38.6	52.3	63.9
1919–21	−38.7	−9.3	−9.8	−.6	−8.7	−14.6
1921–31	−30.5	−35.2	−38.7	−37.4	−28.4	−20.8
1919–29	−50.2	−25.0	−12.8	−2.7	5.4	11.4
1909–19	−44.2	−17.9	81.8	112.4	89.2	75.3
States, 1931						
Alabama	7	319	$205,507	$442,126	$865,372	$423,246
California	9	145	200,152	215,818	552,380	336,562
Illinois	8	204	160,610	366,999	725,813	358,814
Indiana	8	288	229,181	300,105	639,646	339,541
Maryland	6	222	149,025	183,241	518,211	334,970
Massachusetts	5	280	320,129	563,708	1,446,250	882,542
Missouri	13	507	457,946	627,423	1,698,244	1,070,821
New York	5	72	92,510	141,402	356,628	215,226
Ohio	19	1,110	1,090,085	1,829,715	4,263,504	2,433,789
Pennsylvania	25	1,214	1,191,091	1,274,442	4,042,711	2,768,269

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
States, 1931—Continued						
Tennessee	10	398	$250,347	$293,758	$848,615	$554,857
Texas	7	233	169,812	238,029	667,296	429,267
Utah	5	33	35,759	20,923	105,329	84,406
Vermont	6	92	92,723	164,163	330,879	166,716
Virginia	22	580	391,511	531,027	1,247,069	716,042
Washington	4	109	112,113	106,170	323,802	217,632
West Virginia	6	221	225,911	593,697	1,166,463	572,766
Wisconsin	13	150	155,723	189,428	509,415	319,987
Other States [4]	25	529	482,276	813,330	1,892,165	1,078,835

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] No comparable data for years prior to 1904.
[4] Arizona, 1 establishment; Arkansas, 2; Colorado, 2; Connecticut, 2; Georgia, 1; Idaho, 1; Kentucky, 1; Maine, 1; Michigan, 4; Minnesota, 3; Montana, 2; Nevada, 1; New Mexico, 1; North Carolina, 2; Rhode Island, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by **bold-faced** figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	6,706	6,089	6,358	6,770	7,354	7,324	7,024	7,094	6,927	6,722	6,651	6,336	*5,821*
1929	8,554	7,938	7,994	8,744	9,177	9,237	9,010	9,025	8,920	8,720	8,452	8,039	*7,394*
1925	12,095	*10,686*	11,154	11,909	12,748	12,755	12,637	12,529	12,827	12,700	12,339	11,671	11,187
1919	11,405	10,442	*10,370*	10,844	11,515	11,572	11,306	11,445	12,034	12,143	11,869	11,809	11,511
1914	12,429	11,076	10,811	11,961	13,164	13,407	13,154	13,342	13,745	13,670	12,876	11,768	*10,174*
1909	13,897	*10,665*	11,072	13,074	14,447	14,795	14,541	14,552	15,264	15,547	15,157	14,522	13,086
States, 1931													
Alabama	319	306	308	314	329	323	305	324	355	325	308	324	*303*
California	145	135	132	141	170	169	151	158	*126*	128	148	135	143
Illinois	204	192	182	*180*	221	209	202	229	233	200	220	197	182
Indiana	288	262	283	284	299	299	287	318	303	288	295	285	*253*
Maryland	222	176	191	244	263	242	236	253	268	257	212	169	*149*
Massachusetts	280	*226*	237	327	344	288	275	263	270	269	295	317	247
Missouri	507	475	504	509	540	555	534	549	528	511	494	458	*425*
New York	72	65	64	81	81	84	82	71	77	70	75	64	*53*
Ohio	1,110	*940*	1,035	1,093	1,174	1,227	1,197	1,195	1,199	1,142	1,111	1,053	949
Pennsylvania	1,214	1,139	1,163	1,176	1,257	1,331	1,285	1,328	1,277	1,233	1,227	1,123	*1,027*
Tennessee	398	*369*	373	386	397	390	380	384	377	418	423	438	*438*
Texas	233	291	311	309	307	225	224	213	209	190	180	173	*170*
Utah	33	32	36	48	50	47	38	21	*20*	26	32	*20*	22
Vermont	92	*69*	75	97	111	115	105	101	85	80	92	90	84
Virginia	580	*521*	544	551	659	665	631	599	560	578	571	544	534
Washington	109	114	127	126	121	112	115	115	100	103	102	91	*80*
West Virginia	221	226	213	238	246	243	208	235	226	205	213	206	*188*
Wisconsin	150	117	114	137	181	193	167	172	162	156	148	143	*113*

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1925 TO 1931

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9.]

	1931	1929	1927	1925
1. Lime industry, all products, total value	$22,199,792	$35,815,658	$41,587,458	$50,736,499
2. Lime	17,857,250	29,095,064	36,222,321	41,849,900
3. Other products (not normally belonging to the industry)	4,342,542	6,720,594	5,365,137	8,886,599
4. Lime made as a secondary product in other industries, value	172,495	532,617	872,174	593,335
Lime, all industries:				
Total value (sum of 2 and 4)	$18,029,745	$29,627,681	$37,094,495	$42,443,235
Quicklime:				
Tons	1,480,930	1,948,812	2,334,377	2,608,582
Value	$9,461,093	$15,709,849	$21,403,714	$26,310,529
Hydrated lime:				
Tons	1,144,363	1,307,192	1,471,654	1,453,600
Value	$7,137,739	$11,383,781	$14,152,292	$15,539,371
Agricultural lime:				
Tons	307,265	755,682	317,382	(1)
Value	$1,430,913	$2,482,238	$1,538,489	(1)
Not distributed by kind, value	----------	$51,813	----------	$593,335

[1] Not reported separately.

TABLE 4.—QUICKLIME AND HYDRATED LIME—PRODUCTION, BY QUANTITY AND VALUE, BY STATES: 1931

[This table gives statistics for each State for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments. In many cases, however, certain of the "Other States" outranked some of the States for which separate figures are given]

KIND AND STATE	Tons	Value	KIND AND STATE	Tons	Value
QUICKLIME			HYDRATED LIME		
Total	1,480,930	$9,461,093	Total	1,144,363	$7,137,739
Alabama	119,347	668,611	Alabama	25,274	161,642
California	22,864	253,979	California	21,520	222,400
Indiana	43,809	251,565	Indiana	41,256	296,224
Massachusetts	95,231	1,175,103	Maryland	15,606	125,670
Missouri	254,204	847,895	Massachusetts	53,827	181,034
Ohio	128,387	761,720	Missouri	249,322	687,007
Pennsylvania	344,648	1,965,461	New York	16,381	134,424
Tennessee	82,662	397,863	Ohio	332,568	2,203,086
Texas	22,085	178,979	Pennsylvania	130,686	879,506
Utah	2,475	25,449	Tennessee	31,542	235,436
Vermont	25,256	235,781	Texas	33,958	383,406
Virginia	49,274	314,697	Vermont	8,009	72,343
Washington	16,721	217,928	Virginia	48,511	371,893
West Virginia	63,324	353,083	Washington	5,546	51,361
Wisconsin	34,683	304,865	West Virginia	43,181	311,164
Other States	175,900	1,508,114	Other States	87,176	821,083

MARBLE, GRANITE, SLATE, AND OTHER STONE PRODUCTS

[A preliminary report for this industry was issued under date of Nov. 25, 1932]

Description of the industry.—This industry classification covers establishments engaged primarily in cutting, shaping, and finishing marble, granite, slate, and other stone for building, monumental, and miscellaneous uses. The census does not cover the numerous small yards which are engaged in the purchase and sale of finished or partly finished monuments and tomb-stones 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.

Inclusion of data for quarrying.—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 in all cases to do so. The extent to which these enter into the statistics is shown by the following figures for the establishments which included such data in their reports for 1929, the only year for which figures of this character are available.

	Total for the industry, 1929	Total for establishments which included quarrying data in reports for 1929
Number of establishments	1,881	201
Number of wage earners employed (average for the year)	37,817	9,102
Wages	$63,040,864	$11,830,326
Materials, fuel, and purchased electric energy	$57,637,838	$3,341,666
Value of products	$192,163,916	$24,387,680

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. No comparable data are available for years prior to 1904. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. One of the "Other States," namely, South Dakota, is, however, more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	1,588	27,700	$41,650,574	$34,405,109	$119,395,105	$84,989,996
1929	1,881	37,817	63,040,864	57,637,838	192,163,916	134,526,078
1927	1,978	40,474	68,490,655	66,328,248	201,181,281	134,853,033
1925	2,356	36,575	59,592,678	66,976,305	193,046,836	126,070,531
1923	2,691	40,056	61,599,519	66,882,788	191,537,444	124,654,656
1921	2,925	30,260	44,135,464	53,067,050	137,241,121	84,174,071
1919	4,240	32,768	38,354,822	49,524,341	129,164,653	79,640,312
1914	4,901	54,891	37,960,517	37,802,335	107,054,593	69,252,258
1909	4,964	65,603	42,546,384	37,397,134	113,092,967	75,695,833
1904	2,608	51,110	31,899,300	26,568,526	84,843,934	58,275,408

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
Percent of increase or decrease (—):						
1929-31	−15.6	−26.8	−33.9	−40.3	−37.9	−36.8
1927-29	−4.9	−6.6	−8.0	−13.1	−4.5	−0.2
1925-27	−16.0	10.7	14.9	−1.0	4.2	7.0
1923-25	−12.4	−8.7	−3.3	.1	.8	1.1
1921-23	−8.0	32.4	39.6	26.0	39.6	48.1
1919-21	−31.0	−7.7	15.1	7.2	6.3	5.7
1921-31	−45.7	−8.5	−5.6	−35.2	−13.0	1.0
1919-29	−55.6	15.4	64.4	16.4	48.8	68.9
1909-19	−14.6	−50.1	−9.9	32.4	14.2	5.2
States, 1931						
Alabama	13	459	$544,380	$299,980	$1,755,737	$1,455,757
Arkansas	7	44	55,528	67,062	193,611	126,549
California	55	555	912,440	785,830	2,728,279	1,942,449
Colorado	14	98	177,489	131,379	435,992	304,613
Connecticut	30	245	451,833	517,092	1,528,579	1,011,487
Delaware	4	17	21,865	32,014	88,290	56,276
District of Columbia	5	59	97,394	119,280	278,444	159,164
Florida	6	81	105,565	78,749	249,285	170,536
Georgia	50	1,913	1,876,594	1,575,964	6,382,120	4,806,156
Illinois	79	600	1,117,818	1,266,388	3,698,985	2,432,597
Indiana	48	2,240	3,534,678	2,654,026	9,927,904	7,273,878
Iowa	14	95	137,869	199,470	540,369	340,899
Kansas	11	61	98,683	124,835	353,013	228,178
Kentucky	18	129	158,860	196,416	660,820	464,404
Louisiana	10	110	136,096	95,060	433,460	338,400
Maine	20	709	1,153,170	205,750	1,966,657	1,760,907
Maryland	25	376	729,741	667,835	2,011,800	1,343,965
Massachusetts	130	1,524	2,587,008	1,583,316	6,721,156	5,137,840
Michigan	34	287	447,568	684,709	1,737,754	1,053,045
Minnesota	61	1,442	1,869,114	1,435,018	5,834,633	4,399,615
Mississippi	4	52	44,697	92,973	273,573	180,600
Missouri	38	716	999,449	873,238	2,722,284	1,849,046
Montana	5	31	45,695	17,464	109,560	92,096
Nebraska	8	85	141,437	197,379	605,950	408,571
New Hampshire	20	485	944,970	332,411	1,754,082	1,421,671
New Jersey	39	398	1,024,376	918,620	3,028,765	2,110,145
New York	212	3,084	7,398,874	6,463,132	21,042,467	14,579,335
North Carolina	28	707	824,259	602,532	2,237,996	1,635,464
Ohio	58	1,125	1,492,802	1,176,495	4,528,081	3,351,586
Oklahoma	12	92	139,279	210,825	490,064	279,239
Oregon	11	64	100,250	71,484	285,574	214,090
Pennsylvania	160	2,670	3,033,689	2,420,113	7,898,548	5,478,435
Rhode Island	13	213	393,855	255,384	906,137	650,753
South Carolina	10	99	104,909	94,018	325,642	231,624
Tennessee	25	1,039	1,057,110	1,307,208	3,857,885	2,550,677
Texas	52	322	377,328	419,588	1,434,192	1,014,604
Utah	5	51	67,339	66,376	156,792	90,416
Vermont	162	3,582	5,375,224	4,557,773	14,763,431	10,205,658
Virginia	21	690	507,042	429,571	1,346,911	917,340
Washington	15	123	174,538	167,936	513,468	345,532
Wisconsin	48	902	1,106,778	943,197	3,320,788	2,377,591
Other States [3]	8	66	82,981	67,219	266,027	198,808

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Idaho, 2 establishments; North Dakota, 1; South Dakota, 3; West Virginia, 2.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	27,700	27,401	27,059	28,594	29,510	29,598	28,905	28,742	28,417	28,194	26,687	24,917	*23,780*
1929	37,817	*34,626*	34,881	36,937	38,394	39,068	39,475	39,143	39,751	39,528	38,908	37,462	35,631
1925	36,575	*33,649*	34,013	35,210	36,917	37,774	37,746	37,904	37,939	37,906	37,693	36,601	35,553
1919	32,768	*25,308*	25,604	28,177	31,447	33,333	34,518	35,528	35,942	36,275	36,275	35,900	34,909
1914	54,891	48,563	*47,642*	51,474	56,387	58,324	59,288	59,478	59,949	59,141	56,941	52,443	49,062
1909	65,603	*53,677*	54,453	60,032	66,623	69,040	70,348	71,644	72,187	72,004	70,432	67,060	59,682
States, 1931													
Alabama	459	*355*	406	430	473	478	459	454	490	531	480	480	475
Arkansas	44	41	45	38	41	44	57	54	42	46	40	40	*36*
California	555	658	637	634	546	511	510	553	537	528	549	507	*494*
Colorado	98	115	106	112	97	119	100	109	91	90	88	83	*68*
Connecticut	245	216	208	183	246	252	283	305	308	282	253	226	*180*
Delaware	17	19	19	15	12	*11*	15	13	12	19	18	22	25
District of Columbia	59	51	50	58	66	68	75	63	61	57	63	63	*33*
Florida	81	75	79	72	*66*	70	75	79	90	87	100	96	84
Georgia	1,913	1,854	1,937	2,027	2,044	2,005	2,022	1,983	1,944	1,908	1,873	1,706	*1,653*
Illinois	600	665	643	604	577	665	655	634	624	594	568	506	*470*
Indiana	2,240	2,615	2,577	2,578	2,453	2,339	2,192	2,094	2,033	1,949	1,764	*1,746*	2,535
Iowa	95	90	91	91	90	121	113	109	110	90	86	77	*70*
Kansas	61	*41*	45	74	73	82	67	62	60	65	73	44	43
Kentucky	129	119	127	132	138	139	136	127	131	136	132	114	*111*
Louisiana	110	121	122	131	112	114	96	111	105	111	125	93	*82*
Maine	709	454	371	373	611	713	986	1,020	1,041	917	921	739	*358*
Maryland	376	365	348	*335*	363	362	341	354	372	427	433	421	385
Massachusetts	1,524	1,376	1,349	1,468	1,584	1,721	1,700	1,770	1,655	1,594	1,455	1,397	*1,219*
Michigan	287	312	290	296	287	318	272	306	287	285	287	252	*246*
Minnesota	1,442	1,407	1,452	1,472	1,534	1,570	1,511	1,471	1,482	1,472	1,369	1,304	*1,265*
Mississippi	52	36	36	*35*	37	40	40	59	66	67	70	68	67
Missouri	716	*632*	682	738	737	743	687	710	754	766	743	705	694
Montana	31	25	*19*	25	28	36	30	35	39	39	37	32	23
Nebraska	85	72	*68*	74	89	110	76	91	89	95	99	84	72
New Hampshire	485	*319*	444	463	503	540	534	541	527	533	525	460	435
New Jersey	398	520	482	499	455	367	354	*324*	330	362	326	377	382
New York	3,084	3,497	3,281	3,384	3,503	3,283	3,085	3,021	3,002	2,985	2,881	2,681	*2,410*
North Carolina	707	519	663	715	731	757	799	871	832	869	680	551	*495*
Ohio	1,125	1,112	1,141	1,217	1,284	1,241	1,188	1,148	1,051	1,090	1,118	1,038	*875*
Oklahoma	92	117	113	78	96	95	84	92	87	96	89	87	*71*
Oregon	64	57	52	73	74	74	69	65	64	70	65	57	*46*
Pennsylvania	2,670	2,427	2,374	2,590	2,816	2,892	2,886	2,868	2,852	2,894	2,721	2,461	*2,264*
Rhode Island	213	171	*160*	178	194	215	270	255	213	221	230	235	218
South Carolina	99	101	101	101	101	101	101	94	*91*	97	100	96	98
Tennessee	1,099	1,128	1,126	1,067	1,087	1,077	1,093	1,090	1,144	1,128	1,126	1,089	*1,035*
Texas	322	330	339	342	340	338	326	325	323	317	312	290	*287*
Utah	51	*14*	19	31	57	76	77	72	65	62	58	48	38
Vermont	3,582	3,596	3,823	3,965	4,038	3,992	3,610	3,528	3,519	3,471	3,336	3,175	*2,935*
Virginia	690	719	735	738	743	648	725	678	719	750	*532*	539	749
Washington	123	*101*	117	137	141	140	117	138	124	115	104	110	127
Wisconsin	902	889	913	951	974	1,061	1,045	995	985	911	793	747	*562*

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1931, 1929, AND 1927

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9]

	1931	1929	1927
1. "Marble, granite, slate, and other stone products" industry, all products, total value	$119,395,105	$192,163,916	$201,181,281
2. Marble, granite, slate, and other stone products	118,441,256	190,444,408	198,348,394
3. Other products (not normally belonging to the industry)	416,302	840,881	2,832,887
4. Receipts for contract and custom work	537,547	878,627	
5. Marble, granite, slate, and other stone products reported as secondary products in other industries	174,231	178,146	724,007
Marble, granite, slate, and other stone products, all industries: Aggregate value (sum of 2 and 5)	118,615,487	[1] 190,622,554	[1] 199,072,401
Building stones, total	69,127,093	[1] 115,417,806	[1] 122,561,959
Marble, total	27,533,088	41,524,559	45,759,500
For exterior use	4,883,525	6,217,315	4,531,053
For interior use	22,649,563	35,307,244	41,228,447
Granite for exterior use	10,807,482	11,422,148	11,326,196
Limestone, total	24,316,855	51,301,968	52,240,008
For exterior use	24,105,703	50,447,014	51,273,617
For interior use	211,152	854,954	966,391
Slate, total	2,849,207	6,691,540	7,281,512
For roofing	2,041,258	5,207,711	6,001,063
Structural and sanitary	807,949	1,483,829	1,280,449
Other building stones (sandstone, bluestone, soapstone, etc.), total	3,620,461	[1] 4,477,591	5,954,743
For exterior use	2,676,817	3,148,522	4,739,301
For interior use	943,644	[1] 1,329,069	1,215,442
Monumental stones (monuments, tombstones, and other stone articles for cemetery use), total	40,747,754	60,173,889	59,693,668
Marble	5,644,899	9,825,606	10,781,524
Granite	34,806,004	49,634,342	48,462,006
Other monumental stones (limestone, slate, etc.)	296,851	713,941	450,138
Stones for ornamental and miscellaneous uses, total	8,669,880	[1] 13,199,387	[1] 14,650,681
Marble, total	795,304	1,684,359	1,682,171
Table tops	311,495	493,247	384,270
Other marble	483,809	1,191,112	1,297,901
Granite, total	3,997,331	[1] 5,835,617	[1] 6,410,523
Paving blocks	1,858,719	2,641,241	2,890,725
Curbing	1,553,457	1,547,165	2,086,433
Other granite	585,155	[1] 1,647,211	[1] 1,433,305
Slate, total	2,155,102	3,345,761	3,409,934
Switchboard panels and other electrical insulation	292,889	1,099,631	1,527,469
Blackboards and bulletin boards	890,722		
School slates	95,172		
Flagstones, walkways, etc	114,786	2,246,130	1,882,465
Granules and "flour"	705,982		
Other slate	55,551		
Limestone, total	279,188	283,040	150,357
Curbing, flagging, and paving	217,706	(2)	(2)
Other limestone	61,482		
Other stones (sandstone, bluestone, onyx, etc.), total	1,442,955	[1] 2,050,610	2,997,696
Curbing	369,069	(2)	(2)
Flagging	298,274		
Paving blocks	33,091		
All other	742,521		
Stone not reported in detail	70,760	[1] 1,831,472	[1] 2,166,093

[1] Revised.

[2] Not called for separately.

TABLE 4.—PRINCIPAL PRODUCTS, BY KIND AND VALUE, FOR SELECTED STATES: 1931

[This table covers each class of products for which the United States total value was $1,000,000 or more. Statistics are given for each State for which it is possible to publish separate figures without disclosing, exactly or approximately, the output of individual establishments, and which contributed at least 2 percent of the total value of the specified class of products. In many cases, however, certain of the "Other States" outranked some of the States for which separate figures are given]

Kind and State	Number of establishments	Value
BUILDING STONES FOR EXTERIOR USE		
Marble, total	78	$4,883,525
Missouri	6	178,746
New York	18	603,469
Other States	54	4,101,310
Granite, total	143	10,807,482
Massachusetts	18	1,523,701
Minnesota	4	1,379,784
New Hampshire	8	1,392,977
New York	22	1,710,147
North Carolina	9	1,042,708
Pennsylvania	8	264,663
Rhode Island	3	368,172
Other States	71	3,125,330
Limestone, total	293	24,105,703
Illinois	34	1,152,323
Indiana	35	9,591,579
Michigan	23	1,239,825
Minnesota	12	633,516
Missouri	10	523,104
New Jersey	17	1,600,640
New York	40	3,831,624
Ohio	14	662,578
Pennsylvania	17	725,832
Wisconsin	17	609,686
Other States	74	3,534,996
Roofing slate, total	44	2,041,258
Pennsylvania	29	1,161,006
Vermont	5	580,956
Virginia	3	205,865
Other States	7	93,431
Other stones (sandstone, bluestone, etc.) total	78	2,676,817
Minnesota	6	61,007
New York	15	305,068
Ohio	14	1,558,976
Pennsylvania	9	147,382
Other States	34	604,384
BUILDING STONES FOR INTERIOR USE		
Marble, total	198	22,649,563
California	20	1,100,775
Illinois	21	874,388
Massachusetts	9	487,971
Minnesota	4	705,887
Missouri	11	1,554,307
BUILDING STONES FOR INTERIOR USE—continued		
Marble—Continued		
New Jersey	8	$632,436
New York	54	7,845,602
Pennsylvania	9	590,853
Tennessee	8	2,724,491
Other States	54	6,132,853
MONUMENTS, TOMBSTONES, AND OTHER STONE ARTICLES FOR CEMETERY USE		
Marble, total	438	5,644,899
Georgia	31	1,726,912
Maryland	13	130,399
Mississippi	4	181,674
New York	35	462,587
North Carolina	13	158,331
Pennsylvania	62	273,829
Tennessee	13	268,444
Texas	33	128,907
Vermont	10	1,208,760
Other States	224	1,105,056
Granite, total	910	34,806,004
California	37	766,642
Georgia	30	906,372
Illinois	24	1,189,280
Massachusetts	98	2,922,829
Minnesota	43	2,841,832
New York	81	4,669,342
Ohio	29	990,421
Pennsylvania	88	2,066,368
Texas	47	751,368
Vermont	118	9,557,073
Wisconsin	27	1,313,657
Other States	288	6,830,820
STONES FOR ORNAMENTAL AND MISCELLANEOUS USES		
Granite paving blocks, total	33	1,358,719
Maine	5	968,929
New Hampshire	5	94,077
North Carolina	3	65,106
Wisconsin	4	430,480
Other States	16	300,127
Granite curbing, total	47	1,553,457
Georgia	5	111,483
Massachusetts	10	559,302
New York	8	556,155
Other States	24	326,517

MINERALS AND EARTHS, GROUND OR OTHERWISE TREATED

Description of the industry.—This industry classification covers establishments engaged primarily in the grinding or pulverizing of certain earths, rocks, or minerals, such as barium, barytes, borax, chalk, clays, Cornwall stone, corundum, diatomaceous earth, emery, feldspar, flint, fluorspar, haydite, iron oxide ores, kaolin, limerock, magnesite, manganese ore, mica, pumice, quartz, silica, spar, sulphur, and talc.

Change in classification.—At the census for 1929 establishments engaged in grinding and treating minerals and earths mined or quarried by themselves were not classified as manufacturing establishments, as at former censuses, but were assigned to the appropriate industries in the Mines and Quarries group. The reports made by some of these establishments at former censuses had not shown clearly whether they were engaged in both quarrying and manufacturing or in manufacturing alone, but the canvass for the decennial census of Mines and Quarries enabled the Bureau to ascertain in each case the exact nature of the operations performed, with the result that it became possible to classify all these establishments properly, retaining in the Minerals and Earths, Ground or Otherwise Treated industry only those engaged wholly in manufacturing. Because of this change, the figures given in this report are not comparable with those for census years prior to 1929.

SUMMARY FOR THE UNITED STATES, 1931 AND 1929, AND FOR STATES, 1931

[No comparable data can be given for years prior to 1929. See "Change in classification," above. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1, 2]	Value added by manufacture [3]
United States						
1931	88	1,090	$1,126,538	$3,817,099	$7,294,967	$3,477,868
1929	88	1,679	$2,187,923	$8,937,883	$17,409,056	$8,471,173
Percent of decrease, 1929–31		−35.1	−48.5	−57.3	−58.1	−58.9
States, 1931						
California	9	70	$114,982	$364,919	$693,315	$328,396
Illinois	7	82	103,234	322,794	627,178	304,384
Massachusetts	7	264	307,257	394,358	1,102,636	708,278
New Jersey	8	49	55,075	240,734	461,442	220,708
New York	15	189	196,783	829,729	1,314,118	484,389
North Carolina	9	175	86,244	315,219	562,113	246,894
Ohio	6	40	45,038	107,465	279,979	172,514
Other States [4]	27	221	217,925	1,241,881	2,254,186	1,012,305

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.

[2] Includes following values of miscellaneous commodities, normally belonging to other industries, made as secondary products by establishments engaged primarily in grinding or otherwise treating minerals and earths: 1931, $35,253; 1929, $52,127. Does not include following values of minerals and earths ground or otherwise treated by establishments engaged primarily in other industries: 1931, $264,344; 1929, $1,625,703.

[3] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

[4] Connecticut, 1 establishment; Indiana, 1; Kentucky, 1; Maine, 1; Maryland, 1; Missouri, 1; Nebraska, 1; New Hampshire, 3; Pennsylvania, 8; Tennessee, 1; Texas, 1; Utah, 1; Virginia, 2; Washington, 1; West Virginia, 1; Wisconsin, 1; Wyoming, 1.

MIRRORS AND OTHER GLASS PRODUCTS MADE OF PURCHASED GLASS

Description of the industry.—This industry classification covers establishments engaged primarily in the manufacture, *from purchased glass as a material*, of mirrors, stained and leaded glass, laminated glass, glass laboratory apparatus, watch crystals, etc.; or in such work as cutting and otherwise decorating glassware and cutting, beveling, and polishing plate and other sheet glass.

Change in classification.—At censuses prior to that for 1931, establishments whose principal products were mirrors and those engaged primarily in the manufacture of other glass products from purchased glass were classified separately under the industry designations "Mirrors, framed and unframed," and "Glass products (except mirrors) made from purchased glass," respectively. The figures for these industries for 1929 and earlier years have been combined in tables 1 and 2 for the purpose of comparison with those for 1931. It is impossible, however, to give comparative figures for most of the items in table 3 for years prior to 1931 because the establishments engaged primarily in manufacturing glass products, other than mirrors, from purchased glass were canvassed for those years by means of a schedule which did not call specifically for data on the several classes of products made.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	610	7,183	$8,649,900	$17,249,863	$36,326,859	$19,076,996
1929	735	10,811	14,756,527	31,977,682	65,115,743	33,138,061
1927	650	8,773	12,575,365	24,967,182	53,752,524	28,785,342
1925	628	9,013	12,620,726	33,044,226	62,891,552	29,847,326
1923	629	8,621	10,921,247	31,900,035	58,494,530	26,594,495
1921	642	7,050	8,807,385	20,890,039	38,949,021	18,058,982
1919	802	9,079	8,973,971	26,856,611	49,274,096	22,417,485
1914	817	11,251	6,638,181	13,156,579	26,635,270	13,478,691
1909	731	12,356	7,012,674	12,151,150	25,671,926	13,520,776
1904	572	11,028	5,734,006	9,208,513	20,743,088	11,534,575
1899	614	7,469	3,625,400	8,530,661	16,754,343	8,223,682

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
Percent of increase or decrease (−):						
1929-31	−17.0	−33.6	−41.4	−46.1	−44.2	−42.4
1927-29	13.1	23.2	17.3	28.1	21.1	15.1
1925-27	3.5	−2.7	−0.4	−24.4	−14.5	−3.6
1923-25	−0.2	4.5	15.6	3.6	7.5	12.2
1921-23	−2.0	22.3	24.0	52.7	50.2	47.3
1919-21	−20.0	−22.3	−1.9	−22.2	−21.0	−19.4
1921-31	−5.0	1.9	−1.8	−17.4	−6.7	5.6
1919-29	−8.4	10.5	64.4	19.1	32.2	47.8
1909-19	9.7	−2.2	28.0	121.0	91.9	65.8
1899-1909	19.1	65.4	93.4	42.4	53.2	64.4
States, 1931						
California	52	263	$402,109	$661,737	$1,461,384	$799,647
Colorado	3	10	13,418	16,553	49,899	33,346
Connecticut	8	78	88,055	90,614	288,248	197,634
Illinois	48	370	446,975	638,630	1,587,946	949,316
Indiana	12	278	269,511	618,432	1,312,319	693,887
Maryland	11	113	104,771	174,274	419,337	245,063
Massachusetts	18	189	329,149	266,463	976,900	710,437
Michigan	14	129	149,967	326,414	674,423	348,009
Minnesota	11	56	75,127	76,880	198,217	121,337
Missouri	21	107	141,597	152,493	457,137	304,644
New Jersey	38	593	964,573	2,641,671	4,627,944	1,986,273
New York	168	2,056	2,536,079	3,955,057	9,437,066	5,482,009
North Carolina	7	160	169,469	945,974	1,442,251	496,277
Ohio	47	868	909,281	2,498,186	4,942,360	2,444,174
Oregon	8	38	45,173	177,776	280,215	102,439
Pennsylvania	70	1,100	1,201,618	1,863,625	3,951,303	2,087,678
Rhode Island	3	7	10,406	12,114	39,172	27,058
Tennessee	4	107	62,505	173,698	285,968	112,270
Texas	8	47	59,899	97,567	205,994	108,427
Virginia	9	172	168,115	833,736	1,504,364	670,628
Washington	10	47	76,506	100,461	251,729	151,268
West Virginia	6	88	93,601	215,854	384,160	168,306
Wisconsin	15	106	135,849	139,783	391,335	251,552
Other States [3]	19	201	196,147	571,871	1,157,188	585,317

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec., 16 p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20. p. 11.
[3] Alabama, 1 establishment; Arkansas, 1; Georgia, 2; Iowa, 3; Kansas, 1; Kentucky, 4; Maine, 1; Montana, 1; Nebraska, 1; New Hampshire, 1; Oklahoma, 1; Utah, 1; Vermont, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data reported for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	7,183	7,182	7,248	7,296	7,236	7,482	7,119	*6,939*	7,081	7,118	7,261	7,221	7,018
1929	10,811	10,954	11,329	11,409	11,012	10,576	10,390	10,582	10,955	11,028	10,737	10,557	*10,197*
1925	9,013	*8,782*	8,875	9,002	8,961	8,924	8,822	8,787	8,867	9,041	9,326	9,441	9,328
1919	9,079	*7,694*	8,077	8,381	8,468	8,655	8,918	9,064	9,558	9,632	9,973	10,223	10,305
1914	11,251	11,743	11,814	11,758	11,535	11,162	11,001	*10,510*	11,097	11,312	11,138	11,056	10,886
1909	12,356	11,874	12,156	12,364	12,258	11,978	11,941	*11,476*	12,205	12,700	13,095	13,104	13,140
States, 1931													
California	263	263	271	280	268	274	254	*249*	259	263	264	259	254
Colorado	10	*6*	7	8	10	9	10	10	12	14	12	11	10
Connecticut	78	76	71	77	77	74	74	*65*	66	70	79	100	105
Illinois	370	421	410	403	385	378	349	343	361	362	368	349	*317*
Indiana	278	273	277	285	297	289	291	285	286	272	275	255	*250*
Maryland	113	115	111	112	117	121	111	*101*	103	114	121	116	108
Massachusetts	189	209	201	194	184	178	*174*	179	183	185	200	196	190
Michigan	129	137	147	131	127	138	133	123	121	131	123	120	*115*
Minnesota	56	58	58	57	57	60	52	51	*50*	59	57	58	57
Missouri	107	112	106	108	117	123	106	102	107	105	*93*	104	101
New Jersey	593	597	599	592	*576*	599	608	603	577	590	587	600	590
New York	2,056	2,107	2,099	2,126	2,067	2,103	1,998	1,963	2,020	2,089	2,120	2,042	*1,943*
North Carolina	160	161	165	163	170	171	173	176	180	151	143	132	*131*
Ohio	868	825	867	877	895	996	899	880	926	787	788	837	836
Oregon	38	*35*	37	37	37	43	40	*35*	*35*	*35*	38	40	42
Pennsylvania	1,100	1,014	1,046	1,056	1,072	1,129	1,068	1,018	*994*	1,102	1,195	1,257	1,250
Rhode Island	7	7	9	10	9	5	*4*	6	6	7	6	8	8
Tennessee	107	114	115	114	106	109	111	112	110	*98*	100	*98*	*98*
Texas	47	47	*44*	46	45	49	48	47	50	50	45	45	48
Virginia	172	176	175	181	183	176	176	167	173	180	187	*147*	*147*
Washington	47	46	46	48	47	48	50	49	52	45	47	46	*41*
West Virginia	88	81	83	84	83	84	*75*	88	91	92	97	96	96
Wisconsin	106	106	107	106	106	111	105	106	114	112	108	97	*92*

TABLE 3.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1931

[No comparable figures can be given for earlier years. See "Change in classification," p. 769]

KIND	Value
1. "Mirrors and other glass products made of purchased glass" industry, all products, total value	$36,326,859
2. Mirrors and other glass products made of purchased glass	35,248,068
3. Other products (not normally belonging to the industry)	651,406
4. Receipts for contract and custom work	427,385
5. Mirrors and other glass products made of purchased glass—secondary products of other industries	5,902,544
Mirrors and other glass products made of purchased glass, all industries: Aggregate value (sum of 2 and 5)	41,150,612
Mirrors, total value	[1] 13,870,523
Plate-glass, total	[2] 11,775,109
Framed	[3] 3,835,043
Unframed	[4] 7,940,066
Mirrors and other glass products made of purchased glass—Continued. Mirrors—Continued. Other than plate-glass, total	[5] $2,095,414
Framed	[6] 454,731
Unframed	[7] 1,640,683
Cut glassware	3,487,047
Decorated glassware (engraved, etched, chipped, etc.)	3,705,847
Scientific glass apparatus	1,318,685
Watch and clock crystals, etc	808,876
Laminated glass	8,887,920
Plate-glass, cut, beveled, and polished	2,724,331
Sheet glass, bent	114,529
Leaded, stained, and other ornamental glass, for windows, etc	3,232,885
Glass mosaics	88,314
Other glass products and glass products not reported in detail	2,911,055

[1] Manufacturers' sales, 1929, $24,001,242; production, 1927, $23,848,946; production, 1925, $28,036,154.
[2] Manufacturers' sales, 1929, $19,585,131; production, 1927, $19,662,125; production, 1925, $22,988,169.
[3] Manufacturers' sales, 1929, $5,349,136; production, 1927, $4,821,531.
[4] Manufacturers' sales, 1929, $14,235,995; production, 1927, $14,840,594.
[5] Manufacturers' sales, 1929, $3,531,358; production, 1927, $3,248,689; production, 1925, $3,089,927.
[6] Manufacturers' sales, 1929, $835,267; production, 1927, $427,721.
[7] Manufacturers' sales, 1929, $2,696,091; production, 1927, $2,820,968.

SAND-LIME BRICK

[A preliminary report was issued for this industry under date of May 19, 1932]

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, 1914 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. One of the "Other States," namely, New York, is, however, more important in the industry than either of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
United States						
1931	31	322	$356,853	$461,418	$1,267,538	$806,120
1929	40	566	776,202	944,534	2,970,923	2,026,389
1927	45	790	1,051,495	1,157,965	3,616,456	2,458,491
1925	41	801	1,118,634	1,237,970	3,759,729	2,521,759
1923	31	582	697,850	945,931	2,408,106	1,462,175
1921	26	374	361,182	500,689	1,220,425	719,736
1919	32	504	501,854	575,402	1,663,052	1,087,650
1914 [2]	45	557	321,956	350,484	994,199	643,715
Percent of increase or decrease (−):						
1929–31	(3)	−43.1	−54.0	−51.1	−57.3	−60.2
1927–29	(3)	−28.4	−26.2	−18.4	−17.8	−17.6
1925–27	(3)	−1.4	−6.0	−6.5	−3.8	−2.5
1923–25	(3)	37.6	60.3	30.9	56.1	72.5
1921–23	(3)	55.6	93.2	88.9	97.3	103.2
1919–21	(3)	−25.8	−28.0	−13.0	−26.6	−33.8
1921–31	(3)	−13.9	−1.2	−7.8	3.9	12.0
1919–29	(3)	12.3	54.7	64.2	78.6	86.3
States, 1931						
Michigan	11	82	$60,139	$85,214	$224,456	$139,242
Minnesota	3	26	38,875	20,004	94,052	74,048
Other States [4]	17	214	257,839	356,200	949,030	592,830

[1] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[2] The manufacture of sand-lime brick was not treated as a separate industry prior to 1914.
[3] Percent not computed where base is less than 100.
[4] Florida, 1 establishment; Indiana, 1; Louisiana, 1; Massachusetts, 2; Missouri, 1; New Jersey, 2; New York, 2; Ohio, 1; Pennsylvania, 1; South Dakota, 1; Texas, 1; Washington, 1; Wisconsin, 2.

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TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, AND 1914, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	322	285	342	341	380	372	360	334	344	308	312	266	*224*
1929	566	613	572	624	598	628	645	618	579	500	491	*460*	461
1925	801	*669*	686	698	805	829	870	916	907	860	822	790	756
1919	504	*314*	321	343	408	529	550	606	569	582	572	633	621
1914	557	404	*396*	493	544	714	720	686	702	604	515	476	430
States, 1931													
Michigan	82	88	78	88	96	87	78	78	90	100	84	69	*43*
Minnesota	26	7	15	16	22	19	27	39	39	39	39	26	24

TABLE 3.—PRODUCTION, AND STOCKS ON HAND DEC. 31, FOR THE UNITED STATES: 1931, 1930, AND 1929

PRODUCT	1931	1930	1929
Sand-lime brick industry, all products, total value	$1,267,538	$1,977,252	$2,970,923
Sand-lime brick	$1,236,825	$1,950,709	$2,909,635
Other products (not normally belonging to the industry)	$30,713	$26,543	$61,288
Sand-lime brick:			
Production (thousands)	143,673	191,193	269,584
Stocks on hand Dec. 31 (thousands)	13,555	18,842	22,708

STATUARY AND ART GOODS (EXCEPT CONCRETE), FACTORY PRODUCTION

Description of the industry.—This industry classification covers establishments engaged primarily in the manufacture of ornamental plaster work, plaster casts, ecclesiastical statuary, architectural sculpture, cast-bronze statues, and other art goods, of materials other than concrete. (Concrete art goods are classified in the Concrete Products industry.) 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 Nonferrous-metal Alloys; Nonferrous-metal Products, Except Aluminum, Not Elsewhere Classified, 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.

SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3*d*, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products[1, 2]	Value added by manufacture[3]
United States						
1931	150	1,325	$2,327,956	$1,271,371	$5,699,885	$4,428,514
1929	171	2,112	4,235,907	2,044,955	10,045,159	8,000,204
1927	136	2,028	4,403,742	2,414,919	10,187,247	7,772,328
1925	137	2,033	4,188,087	2,078,478	9,329,892	7,251,414
1923	150	1,807	3,243,690	1,897,528	7,550,015	5,652,487
1921	138	1,634	2,741,429	1,715,217	6,666,964	4,951,747
1919	195	1,466	1,716,067	1,378,540	5,019,521	3,640,981
1914	190	1,988	1,582,745	842,289	3,909,569	3,067,280
1909	194	1,699	1,339,063	680,330	3,441,546	2,761,216
1904	135	1,507	1,030,481	392,374	2,416,730	2,024,356

For footnotes, see end of table.

SUMMARY FOR THE UNITED STATES, 1904 TO 1931, AND FOR STATES, 1931—Con.

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1, 2]	Value added by manufacture [3]
Percent of increase or decrease (−):						
1929-31	−12.3	−37.3	−45.0	−37.8	−43.3	−44.6
1927-29	25.7	4.1	−3.8	−15.3	−1.4	2.9
1925-27	−0.7	−0.2	5.1	16.2	9.2	7.2
1923-25	−8.7	12.5	29.1	9.5	23.6	28.3
1921-23	8.7	10.6	18.3	10.6	13.2	14.2
1919-21	−29.2	11.5	59.8	24.4	32.8	36.0
1921-31	8.7	−18.9	−15.1	−25.9	−14.5	−10.6
1919-29	−12.3	44.1	146.8	48.3	100.1	119.7
1909-19	0.5	−13.7	28.2	102.6	45.9	31.9
States, 1931						
California	13	45	$80,650	$38,845	$194,965	$156,120
Illinois	19	336	631,654	539,379	1,837,761	1,298,382
Kentucky	3	16	20,183	7,747	40,473	32,726
Massachusetts	9	70	128,155	49,065	320,665	271,600
Michigan	7	34	63,813	20,422	114,472	94,050
Minnesota	4	29	53,601	33,361	141,272	107,911
Missouri	9	49	85,142	32,944	161,216	128,272
New Jersey	8	46	70,968	51,774	171,444	119,670
New York	35	301	587,865	213,893	1,332,119	1,118,226
Ohio	6	62	98,353	36,966	203,341	166,375
Pennsylvania	14	133	207,116	98,470	512,320	413,850
Wisconsin	7	86	121,005	80,944	296,396	215,452
Other States [4]	16	118	179,451	67,561	373,441	305,880

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.

[2] The items in this column include the following 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: For 1931, $74,408; 1929, $699,180; 1927, $550,074; 1925, $93,146. No corresponding data are available for earlier years. They do not include the following values of statuary and art goods made as secondary products by establishments classified in other industries: For 1931, $208,489; 1929, $463,470; 1927, $651,103; 1925, $447,791; 1923, $217,024; 1921, $39,907; 1919, $226,471. No corresponding data are available for earlier years.

[3] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.

[4] Colorado, 2 establishments; District of Columbia, 1; Florida, 2; Indiana, 1; Louisiana, 1; Maryland, 1; Nebraska, 1; New Hampshire, 1; Oregon, 1; Tennessee, 1; Texas, 1; Utah, 1; Washington, 2.

WALL PLASTER, WALL BOARD, INSULATING BOARD, AND FLOOR COMPOSITION

[A preliminary report for this industry was issued on Nov. 11, 1932]

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of gypsum and other plasters, gypsum board, fiber wall and insulating board (except as explained below), and floor composition. Establishments engaged in mixing lime and other materials for sale as premixed plaster are classified in this industry, but those engaged in burning lime to be used in lime plaster are assigned to the lime industry. Establishments which manufacture wall board or insulating board on paper machines without further processing it are classified in the paper industry, and therefore no data for such establishments are included except in table 3. Some of the material designated as "wall board" is used for purposes other than as a substitute for lath and plaster.

Detailed statistics of products (table 3).—Prior to 1927 the industry was canvassed by means of the "general schedule," which did not call for data on the quantities and the values of the several classes of products in detail, and consequently no figures for censuses prior to 1927 are given in table 3.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1923 TO 1931, AND FOR STATES, 1931

[No comparable data for years prior to 1923. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States"—namely, Louisiana and Mississippi—are, however, more important in the industry than any of the States shown separately except New York]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
United States						
1931	204	5,866	$6,481,750	$17,868,757	$51,720,497	$33,851,740
1929	236	7,462	10,180,391	28,312,628	70,662,746	42,350,118
1927	221	10,014	14,411,777	31,998,385	83,856,008	51,857,623
1925	222	10,978	16,078,362	39,553,463	90,957,045	51,403,582
1923	195	9,289	14,893,572	33,124,267	73,800,539	40,676,272
Percent of increase or decrease (—):						
1929-31	—13.6	—21.4	—36.3	—36.9	—26.8	—20.1
1927-29	6.8	—25.5	—29.4	—11.5	—15.7	—18.3
1925-27	—0.5	—8.8	—10.4	—19.1	—7.8	0.9
1923-25	13.8	18.2	8.0	19.4	23.2	26.4
States, 1931						
California	30	187	$306,410	$1,044,048	$2,230,738	$1,186,690
Colorado	4	26	38,433	87,058	188,195	101,137
Illinois	16	378	474,851	1,046,329	2,427,210	1,380,881
Iowa	8	496	477,148	1,089,667	3,007,026	1,917,359
Kentucky	4	20	16,766	41,980	78,280	36,300
Michigan	9	295	354,522	1,040,960	2,538,986	1,498,026
Minnesota	6	219	212,200	525,247	1,899,434	1,374,187
Missouri	8	23	28,844	107,606	270,609	163,003

See footnotes at end of table

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1923 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products [1]	Value added by manufacture [2]
New Jersey	10	288	$395,697	$753,041	$1,955,820	$1,202,779
New York	32	1,053	1,323,240	4,518,567	11,872,234	7,353,667
Pennsylvania	15	133	215,685	854,667	1,880,832	1,026,165
Texas	5	255	207,912	586,716	2,279,170	1,692,454
Utah	5	41	42,015	51,785	158,013	106,228
Washington	8	51	58,336	217,753	488,684	270,931
Wisconsin	4	24	25,119	152,027	332,310	180,283
Other States [3]	40	2,377	2,304,572	5,751,306	20,112,956	14,361,650

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[3] Arizona, 2 establishments; Connecticut, 1; District of Columbia, 1; Florida, 1; Indiana, 1; Kansas, 2; Louisiana, 2; Maine, 1; Maryland, 2; Massachusetts, 3; Mississippi, 1; Montana, 2; Nebraska, 1; Nevada, 2; New Hampshire, 1; Ohio, 7; Oklahoma, 2; Oregon, 1; South Dakota, 1; Tennessee, 1; Vermont, 1; Virginia, 2; West Virginia, 1; Wyoming, 1.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, AND 1925, AND FOR STATES, 1931

[This table presents statistics for only those States for which figures can be given without disclosing, exactly or approximately, the data for individual establishments. The sum of the State items in any column is not, therefore, equal to the United States total at the head of the column. The month of maximum employment is indicated by bold-faced figures and that of minimum employment by *italic* figures. See sec. 13, p. 8]

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931	5,866	5,492	5,860	5,978	6,157	6,339	6,326	6,217	6,041	5,699	5,647	5,432	*5,209*
1929	7,462	7,011	7,026	7,290	7,393	7,614	7,789	7,938	8,096	8,065	7,847	7,081	*6,397*
1925	10,978	*9,875*	10,020	10,657	10,935	11,205	11,276	11,261	11,427	11,646	11,469	11,294	10,665
States, 1931													
California	187	197	217	203	192	219	193	197	212	149	145	181	*142*
Colorado	26	*25*	*25*	*25*	26	26	26	26	26	26	26	26	26
Illinois	378	350	374	391	424	433	474	354	412	368	*310*	313	331
Iowa	496	537	559	557	503	545	493	508	473	445	456	*429*	450
Kentucky	20	20	21	21	*19*	20	20	*19*	21	22	*19*	21	*19*
Michigan	295	260	272	276	292	312	334	334	308	323	313	281	*233*
Minnesota	219	193	223	264	268	216	236	248	221	211	206	*159*	182
Missouri	23	24	24	23	24	25	25	23	22	23	21	21	*18*
New Jersey	288	286	289	293	301	302	302	282	293	274	*271*	278	282
New York	1,053	1,009	1,036	1,055	1,075	1,120	1,144	1,133	1,078	1,046	1,014	992	*936*
Pennsylvania	133	132	137	147	153	146	150	159	127	119	116	105	*104*
Texas	255	261	278	268	263	270	270	265	262	244	235	221	*220*
Utah	41	37	39	47	43	43	43	50	45	45	45	29	*25*
Washington	51	62	49	54	50	49	49	50	52	47	55	*45*	53
Wisconsin	24	27	25	25	24	24	26	29	27	24	19	*18*	*18*

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, AND 1927

[The figures for 1929 refer to sales (shipments or deliveries) by manufacturers; those for other years represent production. See sec. 16, p. 9. No detailed production data are available for years prior to 1927. See "Detailed statistics of products," p. 777]

KIND	1931	1929	1927
1. "Wall plaster, wall board, insulating board, and floor composition" industry, all products, total value	$51,720,497	$70,662,746	$83,856,008
2. Wall plaster, wall board, insulating board, and floor composition	46,577,296	63,202,639	74,658,116
3. Other products (not normally belonging to the industry)	[1] 5,120,278	7,456,973	[1] 9,197,892
4. Receipts for contract and custom work	22,923	3,134	
5. Wall plaster, wall board, insulating board, and floor composition made as secondary products in other industries	6,322,929	12,419,234	7,276,124
Wall plaster, wall board, insulating board, and floor composition, all industries: Aggregate value (sum of 2 and 5)	$52,900,225	$75,621,873	$81,934,240
Gypsum plasters: Total tons	1,695,301	3,137,108	4,233,004
Total value	$16,350,139	$20,683,228	$32,506,243
Neat plaster (unfibered): Tons	209,138	442,907	(2)
Value	$2,026,920	$3,566,257	(2)
Sanded plaster: Tons	180,322	336,122	554,673
Value	$1,443,823	$2,240,291	$4,143,818
Fibered plaster: Tons	960,915	1,939,313	(2)
Value	$8,496,216	$10,408,142	(2)
Gauging and finish plaster: Tons	90,618	72,535	
Value	$1,348,653	$958,911	
Plaster of Paris, including molding and casting, pottery, foundry, terra-cotta, dental, and plate-glass plaster: Tons	115,296	226,153	349,460
Value	$1,281,820	$2,071,429	$4,343,524
Other gypsum plaster: Tons	139,012	120,078	[3] 3,328,871
Value	$1,752,707	$1,438,198	[3] $24,018,901
Plasters other than gypsum: Total tons	40,789	173,507	121,223
Total value	$1,329,459	$5,252,970	$3,349,646
Magnesite stucco: Tons	853	10,338	29,591
Value	$33,191	$450,679	$1,014,413
Portland-cement stucco: Tons	25,078	55,827	34,839
Value	$743,094	$1,728,321	$1,086,172
Other: Tons	14,858	107,342	56,793
Value	$553,174	$3,073,970	$1,249,061
Gypsum board: Total tons	489,727	1,118,783	(2)
Equivalent in square feet	592,141,947	976,398,473	929,954,714
Total value	$13,321,696	$17,698,082	$20,222,353
Wall board: Tons	313,138	764,367	(2)
Equivalent in square feet	375,887,037	625,662,042	658,780,359
Value	$9,997,927	$12,230,859	$15,929,492
Plaster board and lath: Tons	176,589	354,416	(2)
Equivalent in square feet	216,254,910	350,736,431	271,174,355
Value	$3,323,769	$5,467,223	$4,292,861
Fiber wall board and insulating board and flexible fiber insulation, total value	$19,296,169	$29,337,909	$22,781,594
Reported in square feet: [4] Total square feet	476,521,208	606,062,431	403,653,834
Total value	$13,412,373	$19,359,229	$15,718,661
Reported in tons: [4] Total tons	89,862	112,602	72,594
Total value	$5,883,796	$9,978,680	$7,062,933

See footnotes at end of table.

TABLE 3.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931, 1929, AND 1927—Continued

[See note at head of table]

KIND	1931	1929	1927
Wall plaster, wall board, insulating board, and floor composition, all industries—Continued.			
Fiber wall board and insulating board and flexible fiber insulation—Continued.			
Fiber wall board and insulating board, total value	$17,291,784	$25,851,939	(5)
Reported in square feet: [4]			
Square feet	426,808,236	491,834,831	(5)
Value	$11,407,988	$15,873,259	(5)
Reported in tons: [4]			
Tons	89,862	112,602	72,594
Value	$5,883,796	$9,978,680	$7,062,933
Fiber wall board:			
Reported in square feet: [4]			
Square feet	127,215,001	(5)	(5)
Value	$3,403,734	(5)	(5)
Reported in tons: [4]			
Tons	37,688	53,150	(5)
Value	$2,762,155	$4,319,910	(5)
Fiber insulating board:			
Reported in square feet: [4]			
Square feet	299,593,235	(5)	(5)
Value	$8,004,254	(5)	(5)
Reported in tons: [4]			
Tons	52,174	59,452	(5)
Value	$3,121,641	$5,658,770	(5)
Flexible fiber insulations:			
Square feet	49,712,972	114,227,600	(5)
Value	$2,004,385	$3,485,970	(5)
Decorated wall board (imitation tile, etc.), value	$244,555	(6)	(5)
Floor composition and floor tile, total value	$2,358,207	$2,649,684	$3,074,404
Magnesite:			
Tons	11,370	17,687	(5)
Value	$753,828	$1,193,388	$2,165,182
Mastic (hot and cold), value	$295,765	$578,523	(2)
Other floor composition, value	$79,432	$877,773	$909,222
Asphalt floor tile:			
Square feet	15,903,732	(6)	(6)
Value	$1,229,182	(6)	(6)

[1] For 1931, 175,392 tons of gypsum block and tile, valued at $1,272,444; 765,380 tons of gypsum rock, $1,447,520; miscellaneous products, $2,400,314. For 1929, 309,331 tons of gypsum block and tile, $2,579,869; 958,015 tons of gypsum rock, $1,717,381; miscellaneous products, $3,159,723. For 1927, 63,733,561 square feet of gypsum blocks, $3,682,131; 655,634 tons of gypsum rock, $1,709,221; miscellaneous products and receipts for contract and custom work, $3,806,540.

[2] Not called for on schedule.

[3] Neat plaster, 2,423,785 tons, valued at $18,080,543 (not comparable with figures for neat plaster, unfibered, reported for 1931 and 1929); stucco, 648,953 tons, $3,819,770; other gypsum plaster, 256,133 tons, $2,118,588.

[4] Establishments classified in the "Wall plaster, wall board, insulating board, and floor composition" industry reported square feet; those classified in other industries, chiefly the paper industry, reported tons.

[5] Not shown separately to avoid disclosing approximations of the data for individual establishments.

[6] No data.

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

THE GROUP AS A WHOLE

Group 11 comprises two subgroups, namely: (1) Crude Iron and Steel Rolled Products, and (2) Other Iron and Steel Products except those classified in Groups 13, 14, and 15. The industries in the second subgroup use as their principal materials the products of those in the first subgroup, and as a result the total cost of materials and the total value of products for the group as a whole include large amounts of duplication.

Establishments which roll iron and steel and operate departments for further processing the rolled products, such as wrought pipe, bolts and nuts, wire, and tin plate and terneplate, are assigned in their entirety to the Steel Works and Rolling Mill Products industry, except that blast-furnace departments are classified separately. The several industries which constitute the subgroup Other Iron and Steel Products embrace establishments operated entirely independently of rolling mills, although some of them are under the same ownership. 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. In the detailed product tables, however, value figures, and in many cases quantity figures also, are given, so far as data are available, covering the total output of the individual classes of commodities, whether made in plants operated in connection with rolling mills or in plants classified in other industries. For example: Table 5, page 836, shows the total value of pipes and tubes made in rolling mills, and in addition the value of products reported by establishments engaged primarily in the manufacture of pipes and tubes, and the figures for wire and wire products are shown in a similar manner in Table 3, page 866.

This group differs slightly from the corresponding one as constituted at the census for 1929, as a result of the combination of the former "Iron and Steel, Processed" industry in Group 11 with the "Foundry and Machine-Shop Products" industry in Group 13. (See footnote 5, p. 784.)

The table beginning on page 782 lists all industries in Group 11 and gives summary statistics for each, with comparative figures for earlier census years; and detailed reports for the individual industries, all of which have previously been published in pamphlet form, are presented on pages 785 to 874.

SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY: 1921 TO 1931

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Aggregate for the group	1931	5,965	597,953	$705,125,215	$1,806,370,391	$3,277,405,752	$1,471,035,361
	1929	6,640	880,882	1,380,986,821	3,862,873,486	7,137,928,058	3,275,054,572
	1927	6,340	834,967	1,263,812,344	3,544,615,067	6,197,594,589	2,652,979,522
	1925	6,063	850,783	1,283,840,796	3,734,084,771	6,460,222,488	2,726,137,717
	1923	6,353	892,185	1,324,172,787	4,152,741,176	6,827,670,385	2,674,929,209
	1921	6,251	571,426	730,875,339	2,140,171,458	3,455,541,015	1,315,369,557
Crude iron and steel and rolled products, total.	1931	526	278,206	357,645,332	1,091,015,446	1,714,214,281	623,198,835
	1929	591	419,534	730,974,110	2,514,376,848	4,137,214,269	1,622,837,421
	1927	602	389,270	645,533,998	2,269,210,331	3,488,744,476	1,219,534,145
	1925	595	399,914	660,297,150	2,420,378,098	3,711,354,460	1,281,976,362
	1923	658	424,913	696,760,521	2,872,027,903	4,161,938,011	1,289,910,108
	1921	628	254,213	354,356,924	1,366,174,970	1,901,430,596	535,255,626
Blast-furnace products	1931	80	13,572	19,258,799	259,131,549	311,371,093	52,239,544
	1929	105	24,960	41,958,569	610,293,691	771,425,464	161,131,773
	1927	116	27,958	44,258,499	579,555,036	708,904,238	129,349,202
	1925	122	29,188	45,312,168	617,416,880	765,286,229	147,869,349
	1923	169	36,712	58,935,384	827,629,665	1,007,613,340	179,983,675
	1921	134	18,698	29,369,685	361,049,516	419,771,244	58,721,728
Steel-works and rolling-mill products (including all departments, such as bolt and nut, wire, tin-plate, etc.).	1931	446	264,634	338,386,533	831,883,897	1,402,843,188	570,959,291
	1929	486	394,574	689,015,541	1,904,083,157	3,365,788,805	1,461,705,648
	1927	486	361,312	601,275,499	1,689,655,295	2,779,840,238	1,090,184,943
	1925	473	370,726	614,984,982	1,811,961,218	2,946,068,231	1,134,107,013
	1923	489	388,201	637,825,137	2,044,398,238	3,154,324,671	1,109,926,433
	1921	494	235,515	324,987,239	1,005,125,454	1,481,659,352	476,533,898
Other iron and steel products, total.	1931	5,439	319,747	347,479,883	715,354,945	1,563,191,471	847,836,526
	1929	6,049	461,348	650,012,711	1,348,496,638	3,000,713,789	1,652,217,151
	1927	5,738	445,697	618,278,346	1,275,404,736	2,708,850,113	1,433,445,377
	1925	5,468	450,869	623,543,646	1,304,706,673	2,747,327,322	1,442,620,649
	1923	5,695	467,272	627,412,266	1,280,713,273	2,665,732,374	1,385,019,101
	1921	5,623	317,213	376,518,415	773,996,488	1,554,110,419	780,113,931
Iron and steel products exclusive of those made in steel works and rolling mills or in plants operated in connection with rolling mills:							
Bolts, nuts, washers, and rivets.[2]	1931	116	10,518	10,176,837	16,872,487	39,483,131	22,610,644
	1929	117	16,175	22,115,532	44,211,785	102,392,099	58,180,314
	1927	115	13,614	17,324,418	38,301,814	75,876,170	37,574,356
	1925	127	13,907	17,942,305	38,506,711	75,925,784	37,419,073
	1923	126	15,962	20,207,049	41,873,677	84,431,047	42,557,370
	1921	125	10,148	10,269,344	18,547,629	35,773,454	17,225,825
Forgings[2] [3]	1931	202	9,971	11,443,854	22,656,979	47,699,672	25,042,693
	1929	218	20,882	34,505,349	71,606,964	156,248,947	84,641,983
	1927	219	15,594	23,539,551	52,101,995	105,035,719	52,933,724
	1925	227	20,483	31,587,906	68,577,495	135,918,624	67,341,129
	1923	244	27,723	40,539,328	93,590,528	180,824,712	87,234,184
	1921	252	16,947	20,950,139	45,291,495	85,082,938	39,791,443
Galvanizing and other coating.[4]	1931	60	1,011	1,170,056	1,668,996	4,060,302	2,391,306
	1929	65	1,125	1,563,716	3,939,417	7,666,541	3,727,124
	1927	59	953	1,448,940	3,722,411	6,950,855	3,228,444
	1925	54	804	1,127,862	2,891,944	5,933,158	3,041,214
	1923	51	877	1,183,464	3,363,069	6,327,338	2,964,269
	1921	51	685	843,620	2,161,406	4,017,820	1,856,414
Iron and steel, processed.[5]	1929	46	511	878,459	1,088,672	3,865,480	2,776,808
	1927	33	231	392,273	509,690	1,443,289	933,599
	[6]1925	26	306	556,638	642,699	2,113,770	1,471,071
Nails, spikes, etc.[2] (exclusive of those made in the "Wire drawn from purchased rods" industry).	1931	46	1,570	1,670,306	2,981,668	6,827,854	3,846,186
	1929	55	2,027	2,553,417	5,955,661	12,854,745	6,899,084
	1927	56	2,100	2,670,016	5,156,906	11,753,468	6,596,562
	1925	58	2,227	2,609,773	5,645,626	12,318,494	6,672,868
	1923	61	2,849	3,235,142	7,005,168	13,299,740	6,294,572
	1921	56	2,412	2,575,961	5,670,025	10,976,307	5,306,282
Springs, steel, except wire.[2]	1931	98	2,938	3,633,836	7,541,098	15,157,727	7,616,629
	1929	86	5,842	9,313,927	25,372,478	46,672,319	21,299,841
	1927	94	5,753	8,912,961	24,598,568	43,820,633	19,222,065
	1925	98	5,897	8,988,669	23,609,007	44,469,221	20,860,214
	1923	114	8,634	12,782,130	31,748,019	59,392,180	27,644,161
	1921	126	5,358	6,779,358	16,007,255	31,750,373	15,743,118

For footnotes, see p. 784.

SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY: 1921 TO 1931—Continued

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Iron and steel products exclusive of those made in steel works, etc.—Con.							
Structural and ornamental metal work.[2]	1931	1,302	37,510	$47,874,684	$131,648,905	$238,033,284	$106,384,379
	1929	1,482	54,947	87,785,606	244,696,254	477,036,827	232,340,573
	1927	1,284	52,392	84,578,048	243,446,072	440,376,360	196,930,288
	1925	1,136	48,341	77,411,499	237,652,611	420,997,579	183,344,968
	1923	1,056	51,591	80,832,875	225,487,217	406,117,279	180,630,062
	1921	1,021	32,897	47,455,082	151,010,906	250,085,446	99,074,540
Wrought pipe, welded and heavy riveted.[4]	1931	51	8,045	9,889,930	42,291,098	75,040,579	32,749,481
	1929	50	11,417	18,762,303	70,120,941	124,658,966	54,538,025
	1927	44	11,083	16,066,001	55,778,864	98,186,341	42,407,477
	1925	42	10,871	17,156,545	59,142,447	94,695,553	35,553,106
	1923	53	10,633	17,704,699	57,965,845	90,823,189	32,857,344
	1921	57	8,728	11,234,413	37,093,041	56,662,278	19,569,237
Cast-iron pipe	1931	78	16,066	14,558,947	20,977,433	47,937,502	26,960,069
	1929	72	19,741	22,551,778	[7] 34,289,365	80,260,550	45,971,185
	1927	82	22,892	25,982,196	48,224,970	95,088,622	46,863,652
	1925	77	23,033	27,438,033	48,846,592	[8] 100,919,173	[8] 52,072,581
	1923	73	21,576	25,019,953	48,804,425	92,674,088	43,869,663
	1921	70	12,496	13,135,992	23,897,020	44,321,548	20,424,528
Doors, shutters, and window sash and frames, molding, and trim, metal.	1931	139	6,816	8,897,727	14,572,103	35,608,399	21,036,296
	1929	148	9,557	17,065,422	30,178,161	72,160,388	41,982,227
	1927	117	8,050	15,564,458	25,602,238	65,279,973	39,677,735
	1925	92	6,791	12,899,071	21,627,746	50,078,034	28,450,288
	1923	37	2,429	4,332,767	5,604,210	15,367,111	9,762,901
	1921	45	1,782	2,880,909	4,289,274	12,466,701	8,177,427
Firearms	1931	24	4,264	4,710,580	2,501,397	10,611,146	8,109,749
	1929	21	6,838	9,209,551	4,117,099	21,970,367	17,853,268
	1927	20	6,130	7,933,639	5,047,555	19,452,372	14,404,817
	1925	20	4,470	5,583,907	3,174,446	15,179,363	12,004,917
	1923	21	6,204	7,592,695	3,643,914	17,664,549	14,020,635
	1921	20	4,726	5,730,487	2,696,085	12,883,842	10,187,757
Hardware not elsewhere classified.	1931	451	36,118	37,269,297	38,318,046	115,900,290	77,582,244
	1929	485	52,306	67,702,255	76,480,210	229,477,507	152,997,297
	1927	485	47,834	60,827,474	71,877,055	208,253,586	136,376,531
	1925	476	52,349	65,561,817	77,502,839	225,052,644	147,549,805
	1923	473	52,205	63,470,745	80,597,525	215,960,129	135,362,604
	1921	456	35,228	36,240,193	41,520,050	120,599,728	79,079,678
Plumbers' supplies, not including pipe or vitreous-china sanitary ware.	1931	238	19,688	20,440,001	26,003,009	70,935,892	44,932,883
	1929	255	27,960	37,066,997	49,032,599	129,673,784	80,641,185
	1927	231	29,245	40,212,198	55,633,327	[9] 145,262,311	[9] 89,628,984
	1925	239	33,280	46,953,808	63,610,253	167,878,414	104,268,161
	[6] 1923	234	27,201	38,046,537	51,469,378	132,664,774	81,195,396
Safes and vaults	1931	25	2,044	2,176,226	4,073,014	11,606,575	7,533,561
	1929	27	3,033	4,438,698	6,392,461	19,362,192	12,969,731
	[6] 1927	25	3,386	4,494,497	7,226,295	18,439,550	11,213,255
Screw-machine products and wood screws.	1931	275	12,047	13,478,221	16,141,995	43,697,573	27,555,578
	1929	273	19,881	28,986,604	39,462,568	105,974,662	66,512,094
	1927	218	13,690	18,055,095	25,910,223	60,020,261	34,110,038
	1925	205	14,071	18,193,669	25,076,378	59,614,894	34,538,516
	1923	190	13,234	16,943,362	21,564,854	52,945,878	31,381,024
	1921	168	8,653	9,344,553	10,038,988	25,783,731	15,744,743
Steam and hot-water heating apparatus and steam fittings.	1931	238	28,996	29,557,784	29,704,072	102,500,918	72,796,846
	1929	240	39,621	58,974,874	72,708,268	228,310,254	155,601,986
	1927	232	42,893	64,851,149	76,835,267	225,158,390	148,323,123
	1925	225	43,260	63,979,276	77,356,905	228,929,985	151,573,080
	1923	236	44,141	64,806,855	83,297,279	221,954,313	138,657,034
	1921	274	30,808	39,596,053	50,213,402	127,366,887	77,153,485
Steel barrels, kegs, and drums.	1931	52	3,253	3,512,696	12,989,820	21,644,288	8,654,468
	1929	53	4,110	5,769,097	21,946,559	37,825,027	15,878,468
	1927	39	2,853	3,985,629	14,735,518	24,104,669	9,369,151
	1925	33	2,021	2,914,381	12,743,280	19,928,094	7,184,814
	1923	39	2,668	3,363,374	14,818,038	23,248,707	8,430,669
	1921	31	2,013	2,322,503	9,266,744	14,525,010	5,258,266

For footnotes, see p. 784.

SUMMARY FOR GROUP 11.—IRON AND STEEL AND THEIR PRODUCTS, NOT INCLUDING MACHINERY: 1921 TO 1931—Continued

INDUSTRY	Census year	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, containers, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
Stoves and ranges (other than electric) and warm-air furnaces.	1931	589	32,580	$35,274,920	$61,833,221	$169,106,093	$107,272,872
	1929	609	46,616	65,146,509	100,747,049	271,747,009	170,999,960
	1927	564	45,180	64,327,405	93,095,971	258,285,829	165,189,858
	1925	564	46,514	66,299,363	95,872,779	264,302,952	168,430,173
	1923	588	49,812	68,331,168	102,567,934	268,261,713	165,693,779
	1921	512	32,451	39,308,223	62,217,128	144,285,469	82,068,341
Tin cans and other tinware not elsewhere classified.	1931	199	25,271	27,977,932	149,121,078	223,634,271	74,513,193
	1929	232	31,497	38,173,246	194,986,803	296,901,426	101,914,623
	1927	236	29,721	35,000,822	169,421,340	253,478,691	84,057,351
	1925	221	29,901	34,391,598	175,778,593	260,359,961	84,581,368
	1923	241	30,511	32,816,010	135,980,053	215,971,256	79,991,203
	1921	244	22,711	24,595,432	108,747,954	168,304,813	59,556,859
Tools and cutlery:							
Cutlery (not including silver and plated cutlery) and edge tools.	1931	221	12,485	12,194,016	8,983,219	52,336,936	43,353,717
	1929	239	14,991	17,651,292	14,789,335	78,660,872	63,871,537
	1927	230	[9] 15,832	[9] 18,892,154	[9] 18,180,385	76,688,444	[9] 58,508,059
	1925	211	16,407	20,226,033	20,562,009	80,263,252	59,701,243
	1923	211	16,671	19,750,933	17,159,825	72,477,013	55,317,188
	1921	210	14,345	14,749,903	14,973,967	49,341,204	34,367,237
Files	1931	26	3,016	2,718,942	1,220,740	7,316,062	6,095,322
	1929	33	3,974	5,239,808	3,052,675	14,114,378	11,061,703
	1927	36	3,948	5,144,987	3,135,955	12,973,734	9,837,779
	1925	38	4,209	5,393,274	3,517,726	13,540,953	10,023,227
	1923	37	4,590	5,805,294	3,840,256	13,565,444	9,725,188
	1921	39	3,595	3,174,612	2,309,087	7,647,252	5,338,165
Saws	1931	78	3,005	3,083,728	4,034,969	11,572,385	7,537,416
	1929	81	4,137	5,727,416	6,884,331	22,614,958	15,730,627
	1927	77	4,182	5,753,856	7,674,394	22,627,990	14,953,596
	1925	71	4,710	5,873,393	8,224,443	[8] 24,709,211	[8] 16,484,768
	1923	80	5,420	6,730,442	9,739,996	30,786,858	21,046,862
	1921	79	3,788	4,086,840	6,479,913	18,185,297	11,705,384
Tools, not including edge tools, machine tools, files, or saws.	1931	355	10,833	11,208,740	13,724,818	42,416,660	28,691,842
	1929	534	19,305	25,808,289	32,110,507	99,462,032	67,351,525
	[10]*1927*	*405*	*18,447*	*20,941,443*	*28,057,884*	*76,607,237*	*48,549,353*
	1927	657	25,232	34,464,964	37,056,684	117,430,624	80,373,940
	1925	663	25,340	34,294,113	39,023,373	121,263,093	82,239,720
	1923	700	29,100	37,168,834	43,205,844	123,158,303	79,952,459
	1921	714	19,453	22,643,499	25,550,113	70,523,416	44,973,303
Vault, sidewalk, and floor lights, coal-hole covers, and ventilating equipment.[11]	1923	24	296	446,178	1,213,248	2,990,885	1,777,637
	1921	25	245	365,943	1,170,094	2,150,382	980,288
Wire drawn from purchased rods (covers fabricated wire products made in the same establishments).	1931	82	14,476	17,179,057	45,187,263	83,370,125	38,182,862
	1929	81	22,467	35,110,335	126,182,429	213,997,410	87,814,981
	1927	73	19,866	30,038,299	128,092,414	190,709,790	62,617,376
	1925	68	18,544	26,927,604	127,250,514	184,462,536	57,212,022
	1923	64	21,310	29,861,860	133,883,057	196,364,212	62,481,155
	1921	61	14,832	17,809,545	62,705,464	99,945,614	37,240,150
Wirework not elsewhere classified.	1931	494	17,226	17,381,566	40,307,517	86,693,807	46,386,290
	1929	547	22,388	27,912,231	68,144,047	146,805,049	78,661,002
	1927	512	21,697	26,439,144	63,093,221	128,535,783	65,442,562
	1925	462	19,268	23,834,812	59,604,126	115,428,872	55,824,746
	1923	443	16,783	19,340,549	52,279,608	100,248,108	47,968,500
	1921	413	11,485	13,314,017	37,039,301	66,384,507	29,345,206

[1] Value of products less cost of materials, containers, fuel, and purchased electric energy. See sec. 20, p. 11.
[2] 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.
[3] Includes figures for "Horseshoes, Not Made in Rolling Mills," a separate industry classification prior to 1929.
[4] Largely custom work.
[5] Abandoned as a separate industry classification; now included in "Foundry and Machine-shop Products Not Elsewhere Classified," Group 13.
[6] No comparable figures for earlier years.
[7] Cost of foundry supplies not included for 1929 but included for all other years.
[8] Revised; revision carried into total for subgroup but not into aggregate for group.
[9] Revised; revision not carried into total for subgroup nor aggregate for group.
[10] Adjusted for comparison with 1929 and 1931. Because of a change in classification at the census for 1929, the figures as formerly published for 1927 and earlier years were not comparable with those for 1929 and 1931.
[11] Abandoned as a separate classification at the census for 1925. These classes of products are now assigned to other industries.

BLAST-FURNACE PRODUCTS

[A preliminary report for this industry was issued under date of Oct. 19, 1932]

Description of the industry.—This classification covers the manufacture, from ore and scrap, of pig iron, ferro-alloys—spiegeleisen, ferromanganese, ferrophosphorus, ferrosilicon, etc.—and castings made direct from the furnace. (The manufacture of electric ferro-alloys is included in the "Chemicals" industry.) In many cases blast furnaces are operated in conjunction with steel works, but for census purposes they are treated as separate establishments.

Active and idle furnaces (table 6).—As explained in the headnote to table 6, the statistics as to number and capacity of blast furnaces refer to all furnaces, including idle ones, in plants in which at least a part of the furnaces were in operation at some time within the census year. They do not, however, include data for plants in which no furnaces were in operation at any time within the census year. Thus the numbers of furnaces shown are somewhat larger than the numbers of active furnaces but are somewhat smaller than the total numbers of all furnaces, both active and idle, in existence.

Relation of Blast-Furnace Products and Steel-Works and Rolling-Mill Products industries.—More than 80 percent of the total pig-iron output of blast furnaces in 1931 was used as a material by steel mills. A large part of the pig iron is delivered, mostly in a molten state, to steel works operated in conjunction with the blast furnaces, but in such cases the two units are treated, for census purposes, as separate establishments. A transfer value is assigned to the pig iron thus delivered, and this transfer value is included in the value of products for the blast furnaces and in the cost of materials for the steel works.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

The figures for 1931 include data for 4 establishments—2 in New York, 1 in Ohio, and 1 in Pennsylvania—which were engaged in the production of sintered ore and flue dust and were operated independently of blast furnaces. The respective items for this group of 4 establishments are as follows: Wage earners, 217; wages, $326,610; cost of materials, fuel, and purchased electric energy, $723,735; value of products, $1,565,268; value added by manufacture, $841,533. No corresponding data are included in the figures for years prior to 1931]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
United States						
1931	80	13,572	$19,258,799	$259,131,549	$311,371,093	$52,239,544
1929	105	24,960	41,958,569	610,293,691	771,425,464	161,131,773
1927	116	27,958	44,258,499	579,555,036	708,904,238	129,349,202
1925	122	[2] 29,188	[2] 45,312,168	617,416,880	765,286,229	147,869,349
1923	169	36,712	58,935,384	827,629,665	1,007,613,340	179,983,675
1921	134	18,698	29,369,685	361,049,516	419,771,244	58,721,728
1919 [3]	209	43,296	76,445,616	644,021,264	824,383,203	180,361,939
1914	160	29,356	22,780,626	264,580,060	317,653,983	53,073,923
1909	208	38,429	24,606,530	320,637,889	391,429,283	70,791,394
1904	190	35,078	18,934,513	178,941,918	231,822,707	52,880,789
1899	223	39,241	18,484,400	131,503,655	206,756,557	75,252,902

See footnotes at end of table.

TABLE 1.—SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Continued

[See note at head of table]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products	Value added by manufacture [1]
United States—Continued						
Percent of increase or decrease (—):						
1929-31	—23.8	—45.6	—54.1	—57.5	—59.6	—67.6
1927-29	—9.5	—10.7	—5.2	5.3	8.8	24.6
1925-27	—4.9	—4.2	—2.3	—6.1	—7.4	—12.5
1923-25	—27.8	—20.5	—23.1	—25.4	—24.0	—17.8
1921-23	26.1	96.3	100.7	129.2	140.0	206.5
1919-21	—35.9	—56.8	—61.6	—43.9	—49.1	—67.4
1921-31	—40.3	—27.4	—34.4	—28.2	—25.8	—11.0
1919-29	—49.8	—42.4	—68.9	—5.2	—6.4	—10.7
1909-19	.5	12.7	210.7	100.9	110.6	154.8
1899-1909	—6.7	—2.1	33.1	143.8	89.3	—5.9
States, 1931						
Alabama	6	1,468	$1,480,871	$15,765,890	$20,608,546	$4,842,656
Illinois	6	1,531	2,386,833	28,062,417	34,204,867	6,142,450
Indiana	3	875	1,453,660	23,568,403	30,886,094	7,317,691
New York	7	667	1,141,815	13,548,376	16,579,142	3,030,766
Ohio	19	3,273	4,753,704	59,986,098	70,177,908	10,191,810
Pennsylvania	22	4,145	5,668,430	86,764,276	99,533,744	12,769,468
Other States [4]	17	1,613	2,373,486	31,436,089	39,380,792	7,944,703

[1] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.

[2] The 1925 items for wage earners and wages are not strictly comparable with those for other years, for the reason that some of the blast-furnace operators failed to include, in their reports for 1925, data in regard to wage earners employed in relining blast furnaces.

[3] Revised. Includes data for the blast-furnace branch of the ferro-alloys industry which was classified separately in 1919.

[4] Colorado, 1 establishment; Kentucky, 1; Maryland, 1; Massachusetts, 1; Michigan, 6; Minnesota, 1 Tennessee, 2; Utah, 1; Virginia, 1; West Virginia, 2. The figures for these States are combined to avoid disclosing, exactly or approximately, the data reported by individual establishments.

TABLE 2.—WAGE EARNERS, BY MONTHS, FOR THE UNITED STATES, 1931, 1929, 1925, 1919, 1914, AND 1909, AND FOR STATES, 1931

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

	Average number employed during year	NUMBER REPORTED FOR—											
		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
United States													
1931 [1]	13,572	15,812	15,978	15,741	15,500	15,386	13,950	13,069	12,235	11,801	11,689	11,312	*10,397*
1929	24,960	24,929	24,697	24,649	24,823	25,304	25,327	25,300	25,415	25,104	25,910	24,785	*23,871*
1925	29,188	31,932	32,421	32,094	30,906	29,051	27,303	27,235	*26,844*	27,117	27,926	28,443	28,081
1919 [2]	43,296	53,487	49,277	46,600	41,986	39,429	39,007	41,999	44,059	44,581	*34,949*	40,555	43,623
1914	29,356	31,898	31,869	32,813	32,851	31,733	30,782	29,921	29,000	27,757	26,407	*23,329*	23,912
1909	38,429	34,755	34,369	34,156	*33,458*	34,537	36,537	37,429	38,182	41,998	43,841	45,092	46,727
States, 1931													
Alabama	1,468	1,638	1,664	1,720	1,611	1,556	1,508	1,455	1,375	1,329	1,294	1,282	*1,185*
Illinois	1,531	1,724	1,793	1,802	1,795	1,713	1,571	1,427	*1,246*	1,410	1,321	1,287	1,281
Indiana	875	1,075	1,014	991	1,029	1,047	896	879	775	735	735	682	*642*
New York [1]	667	694	712	697	*619*	709	628	670	682	656	660	653	624
Ohio [1]	3,273	3,473	3,629	3,587	3,630	3,586	3,477	3,283	3,105	3,057	2,921	2,983	*2,548*
Pennsylvania [1]	4,145	5,172	5,194	4,963	5,032	4,964	4,258	3,833	3,607	3,201	3,367	3,149	*3,006*

[1] See headnote, table 1.

[2] Revised. Includes data for blast-furnace branch of the ferro-alloys industry which was classified separately in 1919.

TABLE 3.—DETAILED STATISTICS OF PRODUCTION, FOR THE UNITED STATES AND FOR SELECTED STATES, 1931

PRODUCT	United States	Alabama	Illinois and Indiana	New York	Ohio	Pennsylvania
Aggregate value	$311,371,093	$20,608,546	$65,090,961	$16,579,142	$70,177,908	$99,533,744
Pig iron (including ferro-alloys):						
Total tons (2,240 pounds)	18,288,715	1,669,715	3,755,224	1,094,452	4,180,284	5,230,741
Total value	$296,212,048	$20,141,792	$62,191,691	$15,132,121	$66,522,211	$95,328,119
For consumption in other plants of same companies:						
Tons	14,389,802	714,055	2,986,182	527,258	3,549,330	4,514,412
Assigned value	$231,531,137	$9,094,577	$49,678,077	$6,434,470	$56,207,250	$79,281,465
For sale:						
Tons	3,898,913	955,660	769,042	567,194	630,954	716,329
Value	$64,680,911	$11,047,215	$12,513,614	$8,697,651	$10,314,961	$16,046,654
Blast-furnace gas used as fuel, coal equivalent, total tons (2,000 pounds)	6,175,289	759,639	1,533,246	231,627	1,094,943	1,735,592
Consumed by blast furnaces, tons	3,614,703	698,308	873,142	99,235	570,689	1,131,639
Transferred to plants other than blast furnaces:						
Tons	2,560,586	61,331	660,104	132,392	524,254	603,953
Assigned value	$8,448,917	$149,849	$2,469,224	$509,881	$1,435,459	$2,118,490
Slag (granulated; slag for roofing, paving, etc.)	$1,288,168	$113,514	$83,834	$937,140	$751,162	$133,988
Sintered ore and flue dust produced by 4 plants operated independently of blast furnaces, value, and receipts for tonnage sintered on custom basis	$1,565,268				$1,469,076	$1,953,147
Other products, value, and receipts from sale of electric energy	$3,856,692	$203,391	$346,212			
Pig iron (including ferro-alloys made in Blast Furnace industry) classified by smelting fuel:						
Coke:						
Total tons (2,240 pounds)	18,242,472	1,669,715	3,755,224	1,094,452	4,180,284	5,230,741
For consumption	14,389,724	714,055	2,986,182	527,258	3,549,330	4,514,412
For sale	[1] 3,852,748	955,660	769,042	567,194	[1] 630,954	716,329
Value	$295,217,783	$20,141,792	$62,191,691	$15,132,121	$66,522,211	$95,328,119
Charcoal:						
Tons (2,240 pounds)	[2] 46,243					
Value	$994,265					
Pig iron (including ferro-alloys made in Blast Furnace industry), classified by grade, tons (2,240 pounds):						
Basic, total	10,149,697	624,749	2,210,755	501,446	2,082,716	3,074,618
For consumption	9,496,216	(3)	2,026,542	(3)	1,947,119	2,849,669
For sale	653,481	(3)	184,213	(3)	135,597	224,949

See footnotes at end of table.

TABLE 3.—DETAILED STATISTICS OF PRODUCTION, FOR THE UNITED STATES AND FOR SELECTED STATES, 1931—Continued

PRODUCT	United States	Alabama	Illinois and Indiana	New York	Ohio	Pennsylvania
Pig iron, classified by grade, tons—Continued.						
Bessemer, total	$4,499,218		$902,993	(3)	$1,533,901	$1,669,352
For consumption	4,373,330		887,392	(3)	(3)	1,566,238
For sale	125,888		15,601		(3)	103,114
Foundry, total	2,129,536	$948,909	258,824	$302,414	151,269	226,473
For consumption	187,246	(3)	(3)	(3)	(3)	(3)
For sale	1,942,290	(3)	(3)	(3)	(3)	(3)
Malleable, total	947,022		375,419	159,868	345,392	(3)
For consumption	114,172		(3)	(3)	68,194	
For sale	832,850		(3)	(3)	277,198	(3)
Low phosphorus for consumption and for sale (below 0.4 percent)	160,620	(3)		(3)	(3)	(3)
Forge or mill for sale	39,837	(3)			(3)	(3)
White, mottled, and miscellaneous for consumption and for sale	6,806	(3)	(3)			
Ferro-alloys made in Blast Furnace industry, total	340,871	(3)		(3)	(3)	194,315
For consumption	105,671	(3)				(3)
For sale	235,200	(3)		(3)	(3)	(3)
Direct castings for consumption and for sale	15,108	1,205	3,470	64	2,591	1,565
Pig iron (including ferro-alloys made in Blast Furnace industry) classified by method of delivery or casting, tons (2,240 pounds):[4]						
Delivered molten	12,016,954	(3)	2,534,334	462,072	3,020,910	3,868,118
Machine-cast	5,953,530	1,047,877	1,217,420	632,316	1,149,213	1,145,530
Sand-cast	143,106	(3)			7,570	(3)
Chill-cast	160,017	(3)				(3)
Direct castings	15,108	1,205	3,470	64	2,591	1,565

[1] Includes data for a small tonnage produced by a combination of coke and coal.
[2] Produced in Michigan and Tennessee.
[3] Included in total for United States but not shown separately to avoid disclosing, exactly or approximately, the production reported by individual establishments.
[4] For total production of ferro-alloys by kind, made by blast furnaces and by electric furnaces, see table 5, p. 789.

TABLE 4.—PIG IRON—PRODUCTION, BY STATES: 1931, 1929, 1927

[No data are included for ferro-alloys produced by the electric-furnace process]

STATE	Census year	Number of active furnaces	PRODUCTION			Value
			Tons (2,240 pounds)	Percent of total	Rank [1]	
United States	1931	141	18,288,715	100.0	--------	$296,212,048
	1929	244	42,486,758	100.0	--------	744,588,193
	1927	255	36,230,420	100.0	--------	688,641,808
Pennsylvania	1931	45	5,230,741	28.6	1	95,328,119
	1929	86	14,535,823	34.2	1	274,984,467
	1927	84	11,787,957	32.5	1	239,415,692
Ohio	1931	28	4,180,284	22.9	2	66,522,211
	1929	49	9,797,488	23.1	2	166,488,158
	1927	52	8,502,249	23.5	2	154,949,757
Illinois	1931	12	1,964,735	10.7	3	32,774,274
	1929	21	4,357,905	10.2	3	79,191,226
	1927	21	3,538,813	9.9	3	68,457,394
Indiana	1931	10	1,790,489	9.8	4	29,417,417
	1929	16	4,277,759	10.0	4	71,381,263
	1927	17	3,451,003	9.5	4	65,649,319
Alabama	1931	14	1,669,715	9.1	5	20,141,792
	1929	21	2,705,923	6.4	6	34,562,105
	1927	25	2,778,302	7.7	5	48,702,154
New York	1931	8	1,094,452	6.0	6	15,132,121
	1929	17	2,707,315	6.4	5	44,698,716
	1927	20	2,388,490	6.6	6	41,238,557
Michigan	1931	8	537,380	2.9	9	8,904,787
	1929	8	794,526	1.9	8	13,670,863
	1927	10	751,518	2.1	8	14,975,847
Other States	1931	[2] 16	1,820,919	10.0	--------	27,991,327
	1929	26	3,310,019	7.8	--------	59,611,395
	1927	26	2,982,088	8.2	--------	55,253,088

[1] Figures for Maryland, West Virginia, Colorado, Kentucky, Utah, Massachusetts, Tennessee, Virginia, and Minnesota, which ranked seventh, eighth, tenth, eleventh, twelfth, thirteenth, fourteenth, fifteenth, and sixteenth, respectively, for 1931, are withheld to avoid disclosing approximations of the production reported by individual establishments.

[2] Colorado, 3 furnaces; Kentucky, 1; Maryland, 3; Massachusetts, 1; Minnesota, 1; Tennessee, 2; Utah, 1; Virginia, 1; and West Virginia, 3.

TABLE 5.—FERRO-ALLOYS—PRODUCTION IN BLAST FURNACES AND ELECTRIC FURNACES, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1931 AND 1929

KIND	NUMBER OF ESTABLISHMENTS		1931		1929	
	1931	1929	Tons (2,240 pounds)	Value	Tons (2,240 pounds)	Value
Total	27	31	476,491	$31,898,957	868,543	$70,261,266
Produced for sale	26	30	365,454	23,171,046	745,653	60,245,126
Produced for consumption in other plants of same company (assigned value)	5	5	111,037	8,727,911	122,890	10,016,140
Made in blast furnaces	10	12	340,871	17,614,220	648,132	41,605,819
Made in electric furnaces	17	19	135,620	14,284,737	220,411	28,655,447
Ferromanganese and spiegeleisen	9	9	239,235	15,356,658	477,854	36,978,426
Ferrosilicon	12	12	108,122	8,091,943	328,095	15,712,522
Ferrochrome	8	16	26,502	5,904,763	62,594	17,570,318
Other ferro-alloys	12		12,632	2,545,593		

TABLE 6.—BLAST FURNACES REPORTED BY ACTIVE ESTABLISHMENTS—NUMBER AND CAPACITY, BY CAPACITY GROUPS, FOR THE UNITED STATES, 1925 TO 1931, AND FOR STATES, 1931

[This table covers all furnaces, both active and idle, in plants in which any furnaces were operated during any part of the year. See "Active and idle furnaces," p. 785]

	TOTAL		DAILY CAPACITY IN TONS (2,240 POUNDS) OF PIG IRON							
	Number	Daily capacity, tons (2,240 lbs.)	Active within the year	Idle throughout the year [1]	Less than 400	400 to 499	500 to 599	600 to 699	700 to 799	800 and over
			NUMBER							
United States										
1931	233		141	92	23	33	30	64	48	35
1929	273		244	29	50	39	52	70	41	21
1927	292		255	37	72	48	75	97		
1925	310		285	25	97	51	115	47		
			CAPACITY							
1931		142,027	83,969	58,058	4,636	14,524	15,780	40,157	34,756	32,174
1929		148,274	133,982	14,292	11,645	16,926	27,311	44,253	29,609	18,470
1927		142,016	124,913	17,103	18,082	20,830	39,037	64,067		
1925		136,086	127,711	8,375	24,346	22,408	59,964	29,368		
			NUMBER							
States, 1931										
Alabama	17	7,779	14	3	2	10	2	3		
Illinois	25	16,372	12	13	1	4	3	6	5	6
Indiana	18	14,673	10	8				2	10	6
Michigan	8	2,240	8		4	2	2			
New York	16	9,050	8	8	2	4	2	4	1	3
Ohio	45	28,799	28	17	2	4	6	15	12	6
Pennsylvania	82	51,567	45	37	6	1	14	32	20	9
Other States	22	11,547	16	6	6	8	1	2		5

[1] Not including data for furnaces in plants in which no furnaces were in operation at any time within the year. (See headnote.)

BOLTS, NUTS, WASHERS, AND RIVETS, NOT MADE IN PLANTS OPERATED IN CONNECTION WITH ROLLING MILLS

Description of the industry.—This industry embraces establishments engaged primarily in the manufacture of bolts, nuts, rivets, lock washers, plate washers, riveting burrs, turnbuckles, toggle bolts, etc. No detailed product statistics are given for this industry, but the total production of bolts, nuts, etc., in all industries is shown in table 5 (p. 836) of the Steel Works and Rolling Mill Products report.

The phrase "not made in plants operated in connection with rolling mills" refers to production in plants operated entirely independently of rolling mills, although in some cases under the same ownership.

SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931

[Data for establishments with products under $5,000 in value are included for 1919 and prior years but not for 1921 and subsequent years. See sec. 3d, p. 4. Statistics are given for all States for which separate figures can be published without disclosing, exactly or approximately, the data reported by individual establishments. Certain of the "Other States," however, are more important in the industry than some of the States shown separately]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1, 2]	Value added by manufacture [3]
United States						
1931	116	10,518	$10,176,837	$16,872,487	$39,483,131	$22,610,644
1929	117	16,175	22,115,532	44,211,785	102,392,099	58,180,314
1927	115	13,614	17,324,418	38,301,814	75,876,170	37,574,356
1925	127	13,907	17,942,305	38,506,711	75,925,784	37,419,073
1923	126	15,962	20,207,049	41,873,677	84,431,047	42,557,370
1921	125	10,148	10,269,344	18,547,629	35,773,454	17,225,825
1919	144	17,967	20,973,834	44,277,117	89,743,882	45,466,765
1914	102	10,658	5,960,824	12,912,649	23,403,405	10,490,756
1909	108	11,345	5,793,243	12,804,335	24,484,907	11,680,572
1904	88	8,090	3,642,268	7,807,239	14,687,108	6,879,869
1899	72	7,660	2,991,857	8,071,071	13,978,382	5,907,311
Percent of increase or decrease (—):						
1929-31	—0.9	—35.0	—54.0	—61.8	—61.4	—61.1
1927-29	1.7	18.8	27.7	15.4	34.9	54.8
1925-27	—9.4	—2.1	—3.4	—0.5	—0.1	0.4
1923-25	0.8	—12.9	—11.2	—8.0	—10.1	—12.1
1921-23	0.8	57.3	96.8	125.8	136.0	147.1
1919-21	—13.2	—43.5	—51.0	—58.1	—60.1	—62.1
1921-31	—7.2	3.6	—0.9	—9.0	10.4	31.3
1919-29	—18.7	—10.0	5.4	—0.1	14.1	28.0
1909-19	33.3	58.4	262.0	245.8	266.5	289.3
1899-1909	(4)	48.1	93.6	58.6	75.2	97.7

Footnotes at end of table.

SUMMARY FOR THE UNITED STATES, 1899 TO 1931, AND FOR STATES, 1931—Con.

[See note at head of table.]

	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, fuel, and purchased electric energy	Value of products [1, 2]	Value added by manufacture [3]
States, 1931						
California	5	115	$161,317	$245,843	$589,505	$343,662
Connecticut	7	210	222,229	324,369	832,647	508,278
Illinois	20	1,048	1,094,342	2,128,643	5,378,620	3,249,977
Indiana	5	449	324,725	936,554	1,844,793	908,239
Massachusetts	9	1,098	1,035,342	659,317	2,602,331	1,943,014
Michigan	6	74	90,767	271,842	474,476	202,634
New Jersey	5	209	342,310	509,059	1,415,306	906,247
Ohio	20	3,875	3,757,009	5,649,725	12,719,300	7,069,575
Pennsylvania	16	2,194	1,875,921	3,951,003	8,649,988	4,698,985
Rhode Island	5	486	400,960	423,890	1,171,286	747,396
Wisconsin	3	107	97,436	205,146	586,841	381,695
Other States [5]	15	653	774,479	1,567,096	3,218,038	1,650,942

[1] For 1929, manufacturers' sales (shipments or deliveries); for other years, production. See sec. 16, p. 9.
[2] For total production of bolts, nuts, washers, rivets, etc., in 1931, 1929, and 1927, by all plants (including those operated in connection with rolling mills), see table 5 of report for Steel Works and Rolling Mill Products industry (p. 836).
[3] Value of products less cost of materials, fuel, and purchased electric energy. See sec. 20, p. 11.
[4] Percent not computed where base is less than 100.
[5] Alabama, 2 establishments; Maryland, 1; Minnesota, 2; New York, 7; Oregon, 1; Washington, 2.