31.—MINING AND MINERAL PRODUCTS

[Data in this section cover the following areas unless otherwise indicated: Bureau of Census and American Iron and Steel Institute statistics, continental United States; Bureau of Mines production statistics, continental United States, and, for leading products, outlying areas; foreign trade statistics, United States customs area, which includes Alaska, Hawaii, and Puerto Rico. Index numbers of mineral production are shown in Table 733, p. 725]

No. 656.—TOTAL VALUE OF MINERAL PRODUCTS OF THE UNITED STATES

NOTE.—All figures in millions of dollars. See general note above

Yearly average or year	Total	Metallic	Nonmetallic	Unspecified	Year	Total	Metallic	Nonmetallic	Unspecified
1881–1885	426	191	229	6	1914	2,111	687	1,424	(1)
1886–1890	541	248	292	1	1915	2,395	992	1,400	2
1891–1895	592	244	347	1	1916	3,508	1,621	1,884	3
1896–1900	828	366	461	1	1917	4,992	2,086	2,900	6
1901–1905	1,392	578	813	1	1918	5,541	2,153	3,381	7
1906–1910	1,887	769	1,118	(1)	1919	4,596	1,360	3,233	3
1911–1915	2,220	820	1,399	1	1920	6,981	1,762	5,214	5
1916–1920	5,124	1,796	3,322	5	1921	4,139	654	3,482	3
1921–1925	5,155	1,153	3,998	5	1922	4,647	987	3,656	4
1926–1930	5,556	1,273	4,275	9	1923	5,987	1,511	4,472	4
1905	1,624	703	921	(1)	1924	5,306	1,232	4,068	6
1906	1,901	886	1,015	(1)	1925	5,678	1,380	4,291	6
1907	2,070	904	1,165	(1)	1926	6,214	1,403	4,803	8
1908	1,592	551	1,041	(1)	1927	5,530	1,218	4,304	8
1909	1,887	755	1,132	(1)	1928	5,385	1,284	4,092	9
1910	1,988	750	1,238	(1)	1929	5,887	1,476	4,401	10
1911	1,924	681	1,243	(1)	1930	4,765	983	3,773	9
1912	2,238	862	1,375	(1)	1931	3,167	567	2,592	7
1913	2,434	879	1,554	(1)	1932	2,443	284	2,153	6

[1] Less than $500,000.

Source: Bureau of Mines, Department of Commerce.

No. 657.—YEARLY AVERAGE PRICES OF NONFERROUS METALS

[Prices are cents per pound, except quicksilver (dollars per flask[1]) and platinum (dollars per ounce)]

Year	Copper, electrolytic (New York)	Lead (New York)	Tin [2] (New York)	Zinc (St. Louis)	Aluminum (New York)	Antimony (New York)	Quicksilver (New York)	Platinum (New York)
1896–1900	[3] 13.41	3.84	19.54	[4] 4.55	37.15	8.204	42.17	[5] 16.66
1901–1905	13.877	4.330	28.194	[6] 5.284	33.80	7.398	43.17	19.55
1906–1910	15.642	4.780	34.260	5.432	31.12	11.885	44.12	26.58
1909	12.982	4.273	29.725	5.352	23.18	7.466	46.30	24.87
1910	12.738	4.446	34.123	5.370	22.97	7.386	47.06	32.70
1911	12.376	4.420	42.281	5.608	20.34	7.540	46.54	43.12
1912	16.341	4.471	46.096	6.799	22.52	7.760	42.46	45.55
1913	15.269	4.370	44.252	5.504	23.63	7.520	39.54	44.88
1914	13.602	3.862	34.301	5.061	18.60	8.763	48.31	45.14
1915	17.275	4.673	38.590	13.054	34.13	30.280	87.01	47.13
1916	27.202	6.858	43.480	12.634	60.73	25.370	125.49	83.40
1917	27.180	8.787	61.802	8.730	51.25	20.690	106.30	102.82
1918	[7] 24.628	7.413	[8]	7.890	33.60	12.581	123.47	105.95
1919	18.691	5.759	63.328	6.988	32.14	8.190	92.15	114.61
1920	17.456	7.957	49.101	7.671	30.61	8.485	81.12	110.90
1921	12.502	4.545	29.916	4.655	21.21	4.957	45.46	75.03
1922	13.382	5.734	32.554	5.716	18.68	5.471	58.95	97.62
1923	14.421	7.267	42.664	6.607	25.41	7.897	66.50	116.54
1924	13.024	8.097	50.176	6.344	27.03	10.836	69.76	118.82
1925	14.042	9.020	57.893	7.622	27.19	17.494	83.13	119.09
1926	13.795	8.417	65.285	7.337	26.99	15.988	91.90	113.27
1927	12.920	6.759	64.353	6.242	25.41	12.393	118.16	84.64
1928	14.570	6.305	50.427	6.027	23.90	10.305	123.51	78.58
1929	18.107	6.833	45.155	6.512	23.90	8.956	122.14	67.66
1930	12.982	5.517	31.694	4.556	23.39	7.667	115.01	45.36
1931	8.116	4.243	24.467	3.640	22.90	6.720	87.35	35.67
1932	5.555	3.180	22.017	2.876	22.90	5.592	57.93	36.46

[1] Flasks of 75 pounds prior to 1928; 76 thereafter.
[2] 99 per cent tin, 1896 to 1919; Straits tin, thereafter.
[3] Prices 1895 to 1898 are for Lake copper.
[4] Data are for New York zinc.
[5] Average for 1899 and 1900 only.
[6] Average, 1903–1905; average for New York zinc, 1901–1905, 5.058 cents.
[7] Average of 11 months.
[8] No average computed.

Sources: Engineering and Mining Journal; American Metal Market for aluminum, 1909–1932.

No. 658.—MINES AND QUARRIES, PRODUCING AND NONPRODUCING: PRINCIPAL STATISTICS FOR CONTINENTAL UNITED STATES, 1929

NOTE.—Statistics are not comparable with those for earlier years shown in the 1931 and previous issues of the Statistical Abstract owing to the exclusion of data for the petroleum and natural-gas industries (no data having been collected in 1929) and the inclusion of data for the sand and gravel, glass-sand, and moulding-sand industries (data having been collected for the first time in 1929)

	All enterprises	Producing enterprises	Nonproducing enterprises	
			Number or amount	Per cent of total
Number of enterprises	10,996	10,135	861	7.8
Number of mines and quarries	12,506	11,602	904	7.2
Persons engaged, total	870,480	863,948	6,532	.8
Proprietors and firm members	4,929	4,897	32	.6
Salaried employees	53,331	52,633	698	1.3
Wage earners (average for the year)	812,220	806,418	5,802	.7
Power equipment (total horsepower)	7,584,463	7,514,843	69,620	.9
Prime movers	2,780,116	2,743,025	37,091	1.3
Electric motors driven by purchased energy	4,804,347	4,771,818	32,529	.7
Principal expenses, total—1,000 dollars	1,675,944	1,661,168	14,776	.9
Salaries—do	139,023	137,639	1,384	1.0
Wages—do	1,099,895	1,091,990	7,905	.7
Contract work—do	17,914	17,056	857	4.8
Supplies—do	297,554	293,568	3,986	1.3
Fuel—do	49,364	49,146	218	.4
Purchased electric energy—do	72,195	71,769	426	.6
Value of products—do	2,392,831	2,392,831		
Expenditures for development (included above in "Principal expenses")—1,000 dollars	89,646	76,488	13,158	14.7
Machinery and other equipment purchased during the year (total cost)—1,000 dollars	86,732	84,508	2,224	2.6

No. 659. PRODUCING MINES AND QUARRIES: PRINCIPAL STATISTICS, CONTINENTAL UNITED STATES

	1909 [1]	1919 [1]	1929		Per cent increase or decrease (—)	
			All industries	Revised (for comparative purposes) [1]	1909–1919	1919–1929
Number of enterprises	12,089	11,466	10,135	9,063	—5.2	—21.0
Number of mines and quarries	18,127	13,731	11,602	10,277	—24.3	—25.2
Persons engaged, total	982,329	952,565	863,948	841,652	—3.0	—11.8
Proprietors and firm members	13,703	7,695	4,897	4,629	—43.8	—39.8
Salaried employees	37,946	56,515	52,633	48,666	48.9	—13.9
Wage earners (average for the year)	930,680	888,355	806,418	788,357	—4.5	—11.3
Power equipment (total horsepower)	3,384,759	4,900,102	7,514,843	6,970,091	44.8	42.2
Prime movers	3,179,270	3,341,350	2,743,025	2,502,132	5.1	—25.1
Electric motors driven by purchased energy	205,489	1,558,752	4,771,818	4,467,959	658.6	186.6
Principal expenses (1,000 dollars):						
Salaries	46,093	115,861	137,639	126,008	151.4	8.8
Wages	559,546	1,161,415	1,091,990	1,066,606	107.6	—8.2
Contract work	12,151	10,717	17,056	16,595	—11.8	54.9
Supplies and materials	196,530	331,627	293,568	280,623	120.3	—15.4
Fuel		74,082	49,146	44,693		—39.7
Purchased electric energy		27,230	71,769	66,416		143.9
Value of products (1,000 dollars)	1,052,569	2,226,671	2,392,831	2,280,384	111.5	2.4

[1] The figures for 1909, 1919, and 1929 have been adjusted to make them comparable.

Source of Tables 658 and 659: Bureau of the Census, Department of Commerce.

No. 660.—PRODUCING MINES AND QUARRIES: SUMMARY, BY STATES

NOTE.—Figures for 1919 and 1929 have been revised to make them comparable except for 1919 where data for revision were not available, and for certain States for 1929 where revision would result in disclosure of individual operations. Therefore, the totals for the United States are less than the sum of the figures for the States for both years and for geographic divisions for 1919; also the totals for most of the geographic divisions for 1929 are less than the sum of the figures for the States

[Wages and value of products in thousands of dollars]

Division and State	Number of mines and quarries		Wage earners (average for the year)		Horsepower		Wages		Value of products	
	1919	1929	1919	1929	1919	1929	1919	1929	1919	1929
Continental U. S.	13,731	10,277	888,355	788,357	4,900,102	6,970,091	1,161,415	1,066,606	2,226,671	2,280,384
New England	334	347	7,213	7,979	62,725	96,422	8,036	11,560	18,723	27,929
Maine	51	56	979	1,170	6,277	12,076	1,052	1,577	1,823	3,468
New Hampshire	33	39	682	569	4,336	5,455	826	773	1,568	1,562
Vermont	109	129	2,936	3,154	28,099	39,906	3,042	4,153	8,555	10,276
Massachusetts	79	77	1,704	2,207	12,493	26,741	2,069	3,657	4,176	8,571
Rhode Island	15	14	369	256	3,000	4,237	400	385	952	809
Connecticut	47	42	543	761	8,520	10,756	647	1,220	1,649	3,810
Middle Atlantic	3,757	2,402	324,242	282,913	1,723,094	2,294,998	446,802	413,541	777,718	717,793
New York	147	206	5,334	5,021	61,143	102,389	6,410	7,480	15,230	24,272
New Jersey	102	71	4,576	2,906	33,901	50,171	5,393	4,309	9,309	11,100
Pennsylvania	3,508	2,129	314,332	275,138	1,628,050	2,143,828	434,999	401,988	753,179	683,531
East North Central	2,324	1,823	181,733	115,863	953,714	1,141,215	227,541	154,018	401,132	318,842
Ohio	1,064	744	44,175	25,500	184,271	182,003	51,767	29,117	89,035	51,757
Indiana	398	375	26,348	15,968	121,994	156,645	29,717	22,349	50,236	44,297
Illinois	590	486	76,371	52,164	282,801	398,602	90,901	71,828	147,410	124,772
Michigan	165	117	31,292	19,745	337,882	355,897	50,406	27,229	103,870	87,819
Wisconsin	107	104	3,547	2,517	26,766	49,158	4,750	3,545	10,581	10,401
West North Central	1,270	1,166	55,948	40,634	330,264	489,585	74,651	54,231	211,597	220,161
Minnesota	196	143	17,265	11,370	144,199	198,182	29,383	17,767	130,399	130,359
Iowa	226	207	11,274	6,766	32,166	38,945	12,466	8,806	18,474	14,648
Missouri	494	401	14,857	12,793	100,070	147,986	16,777	15,538	33,366	43,479
North and South Dakota	107	150	2,559	2,507	13,881	35,202	3,526	3,834	7,242	10,527
Nebraska	9	8	162	137	1,847	1,605	166	182	293	460
Kansas	238	257	9,831	7,061	38,101	67,665	12,333	8,104	21,823	20,688
South Atlantic	1,976	1,481	117,405	130,236	510,985	971,549	136,860	155,870	252,555	288,757
Delaware and Dist. of Col.	11	6	128	104	757	901	144	120	259	268
Maryland	161	119	5,628	3,987	18,660	23,967	6,152	4,125	9,699	7,341
Virginia	216	196	14,547	15,015	57,880	107,316	16,108	14,554	29,363	28,706
West Virginia	1,325	870	88,510	101,085	366,028	664,530	107,162	128,418	196,088	222,317
North Carolina	106	123	1,890	2,436	5,039	20,348	1,489	2,193	2,737	5,631
South Carolina	20	35	933	1,298	4,656	18,470	680	930	1,351	3,093
Georgia	32	31	2,397	3,665	12,996	34,386	2,017	2,898	4,082	9,439
Florida	55	65	3,372	3,061	44,969	106,384	3,108	3,046	8,976	13,525
E. South Central and W. South Central	1,970	1,491	109,793	120,698	481,635	839,583	122,187	127,551	225,570	263,629
Kentucky	864	617	41,444	57,569	135,008	310,664	46,905	62,442	75,157	102,502
Tennessee	263	167	14,470	11,441	56,675	73,772	12,987	10,333	23,292	22,050
Alabama	348	242	32,579	31,674	145,775	265,666	36,230	30,693	59,866	53,363
Arkansas	126	121	3,614	4,744	20,748	30,620	4,547	4,565	7,783	9,796
Louisiana and Mississippi	4	2	387	94	6,886	590	469	100	8,001	220
Oklahoma	284	245	12,734	10,047	94,939	98,481	16,060	13,318	34,430	31,560
Texas	81	104	4,565	5,190	21,514	60,394	4,989	6,151	17,041	44,334
Mountain	1,598	1,094	79,234	78,896	700,398	980,410	127,506	132,711	299,454	397,995
Montana	269	169	16,091	14,575	143,473	201,749	25,666	25,718	49,666	64,774
Idaho	83	65	2,455	4,226	31,059	67,295	4,202	7,420	11,840	20,746
Wyoming	87	73	7,532	5,282	49,864	50,855	11,090	9,664	19,969	18,817
Colorado	523	333	16,710	14,493	114,448	116,592	25,263	22,267	51,063	41,205
New Mexico	103	89	7,100	6,986	59,876	90,961	10,494	10,118	18,873	27,142
Arizona	172	134	15,268	16,533	165,076	201,456	26,193	28,238	88,478	116,135
Utah	154	131	9,847	12,149	85,816	179,475	17,197	21,225	41,511	82,843
Nevada	207	104	4,231	4,685	50,786	72,915	7,401	8,104	18,054	26,495
Pacific	502	473	12,790	11,138	137,386	156,329	17,840	17,122	39,966	45,278
Washington	93	90	5,050	3,652	37,998	39,321	7,466	5,796	13,329	12,271
Oregon	52	44	740	635	6,264	7,249	993	958	1,885	2,410
California	357	340	7,000	6,859	93,124	110,019	9,381	10,382	24,752	30,639

Source: Bureau of the Census, Department of Commerce.

No. 661.—PRODUCING MINES AND QUARRIES: SUMMARY BY INDUSTRIES, CONTINENTAL UNITED STATES

NOTE.—Figures for 1919 and 1929 for the limestone, sandstone, abrasive materials, and silica industries are not strictly comparable, owing to the inclusion or exclusion of data for 1929 not similarly treated for 1919. For the limestone industry, data for quarrying operations of lime and cement manufacturers are included in the figures for 1929 but not in those for 1919. For the sandstone industry, data for enterprises whose product was ground into glass or molding sand, or used as refractory materials (siliceous mica schist and ganister), etc., are included in the figures for 1919 but excluded from those for 1929 and included in the figures for the glass-sand, molding-sand, abrasive-materials, or silica industries, according to the nature and purpose of the final product. Data for diatomaceous earth are included in the figures for abrasive materials in 1919 and in those for silica in 1929

[Wages and value of products in thousands of dollars]

Industry	Number of mines and quarries		Wage earners (average for the year)		Horsepower		Wages		Value of products	
	1919	1929	1919	1929	1919	1929	1919	1929	1919	1929
All industries [1]	13,731	10,277	888,355	788,357	4,900,102	6,970,091	1,161,415	1,066,606	2,226,671	2,280,384
Coal:										
Anthracite	421	303	147,372	142,801	899,783	1,041,465	210,289	229,967	364,084	384,354
Bituminous	8,282	5,620	545,798	458,732	2,155,065	3,124,187	682,601	574,800	1,145,978	966,694
Metals:										
Copper	226	180	43,717	44,502	522,426	701,791	66,390	73,200	181,258	283,517
Iron ore	406	208	45,741	28,516	370,859	498,821	75,713	40,905	218,218	197,335
Lead and zinc	473	375	21,884	26,907	229,401	357,737	30,708	39,192	75,579	112,428
Gold and silver, lode mines	799	258	15,436	7,946	149,100	98,772	23,818	12,982	58,832	26,107
Gold, placer mines	132	37	1,380	578	35,632	20,280	1,914	970	9,369	3,779
Mercury	26	40	748	1,029	2,607	5,625	828	1,384	1,803	2,820
Manganese	37	21	909	354	5,800	2,342	1,086	392	2,188	1,185
Stone:										
Limestone	925	1,256	22,069	32,300	213,717	535,466	23,926	39,188	52,944	117,258
Granite	381	434	8,049	10,037	55,614	108,217	8,588	12,640	18,279	30,381
Basalt	174	144	3,336	3,053	37,307	63,881	3,991	4,498	9,658	15,544
Slate	104	130	3,513	4,098	20,613	33,817	3,128	4,884	5,721	10,486
Marble	62	88	1,732	3,350	15,628	30,198	1,452	3,292	4,398	7,539
Sandstone	276	172	4,287	2,156	33,869	28,935	4,449	2,626	10,685	6,312
Miscellaneous	(2)	234	(2)	1,841	(2)	28,527	(2)	2,406	(2)	8,475
Miscellaneous:										
Abrasive materials [3]	34	36	317	462	1,748	3,828	322	491	722	1,411
Asbestos	11	11	146	195	420	2,114	92	237	250	397
Asphalt and bituminous rock	12	25	324	1,123	648	13,109	295	1,255	750	5,124
Barite	98	44	919	844	3,029	6,066	769	648	1,592	1,801
Clay	350	236	5,453	4,139	21,203	31,877	5,367	3,758	10,086	10,753
Feldspar	32	58	349	598	1,782	6,543	264	527	584	1,935
Fluorspar	72	36	1,124	1,053	7,138	6,513	1,196	1,112	3,335	2,858
Fullers and filtering earths	9	24	824	991	2,538	8,221	541	853	2,019	4,812
Gypsum	48	63	2,191	2,078	15,032	26,498	2,478	2,628	6,806	5,740
Magnesite	11	5	448	351	2,540	3,197	652	466	2,170	2,044
Mica	69	32	448	226	803	1,721	288	195	607	516
Millstones and pulpstones	11	14	37	164	220	2,517	48	221	65	621
Minor metals [4]	37	30	1,371	1,244	6,051	13,469	1,690	1,507	3,916	6,650
Phosphate rock	69	33	4,373	3,201	49,639	104,146	3,901	3,304	10,300	13,044
Silica [5]	29	73	166	1,433	2,032	11,771	166	1,677	372	4,645
Sulphur and pyrites	22	10	2,301	2,199	22,629	33,932	3,067	3,483	20,345	37,126
Talc and soapstone	30	28	958	550	7,053	10,530	835	615	2,302	2,688
Miscellaneous minerals [6]	47	19	604	305	8,040	3,978	516	301	1,350	3,503
Sand, glass	------	32	------	1,030	------	13,215	------	1,314	------	5,359
Sand, molding	------	128	------	1,037	------	14,792	------	1,291	------	4,776
Sand and gravel	------	1,165	------	15,994	------	516,745	------	22,780	------	102,312

[1] For 1919 includes, besides those specified, statistics for 15 enterprises in the chromite industry; the value of products of this industry was less than one-tenth of 1 per cent of the total for all industries. For 1929 does not include data for the glass-sand, molding-sand, and sand and gravel industries, no data having been collected for these industries in 1919.

[2] Distributed among other stones.

[3] Emery; garnet and industrial sapphires and diamonds; grinding pebbles and tube-mill lining; grindstones, oilstones, whetstones, scythestones, and rubbing stones; pumice and volcanic ash (pumicite).

[4] Bauxite, molybdenum, titanium, tungsten, vanadium.

[5] Diatomaceous earth, ganister, quartz, quartzite, silica rock, silica sand, siliceous mica schist, tripoli.

[6] Borates, cyanite, graphite, lithium minerals (amblygonite, lepidolite, and spodumene), mineral pigments, tantalum, vermiculite.

Source: Bureau of the Census, Department of Commerce.

No. 662.—PRODUCING MINES AND QUARRIES: SIZE OF ENTERPRISES ACCORDING TO NUMBER OF WAGE EARNERS, CONTINENTAL UNITED STATES, 1929

Industry and wage earners per enterprise	Number of enterprises	Number of mines and quarries	Wage earners: Average for year	Wage earners: Per cent
All industries [1]	10,099	11,566	806,418	100.0
Not reported	31	34		
1 to 5	2,742	2,799	8,194	1.0
6 to 20	3,004	3,217	34,079	4.2
21 to 50	1,611	1,795	53,183	6.6
51 to 100	1,055	1,201	76,362	9.5
101 to 250	988	1,267	158,623	19.7
251 to 500	416	607	145,883	18.1
501 to 1,000	169	274	110,931	13.8
1,001 to 2,500	60	188	87,279	10.8
2,501 and over	23	184	131,884	16.3
Anthracite	198	303	142,801	100.0
1 to 5	31	31	85	.1
6 to 20	20	21	221	.2
21 to 50	21	21	710	.5
51 to 100	17	18	1,113	.8
101 to 250	32	34	5,052	3.5
251 to 500	19	19	6,983	4.9
501 to 1,000	34	36	23,291	16.3
1,001 to 2,500	11	24	17,255	12.1
2,501 and over	13	99	88,091	61.6
Bituminous coal	4,976	5,620	458,732	100.0
1 to 5	1,384	1,384	3,979	.9
6 to 20	1,109	1,123	12,316	2.7
21 to 50	676	720	23,169	5.1
51 to 100	619	692	45,624	9.9
101 to 250	708	830	114,505	25.0
251 to 500	334	472	116,890	25.4
501 to 1,000	105	196	67,093	14.6
1,001 to 2,500	34	142	47,404	10.3
2,501 and over	7	61	27,752	6.1
Copper	143	180	44,502	100.0
Not reported	2	2	104	.2
1 to 5	33	33		
Copper—Continued.				
6 to 20	40	41	496	1.1
21 to 50	14	17	398	.9
51 to 100	12	13	877	2.0
101 to 250	11	13	1,859	4.2
251 to 500	10	15	3,393	7.6
501 to 1,000	7	9	5,096	11.5
1,001 to 2,500	11	13	32,279	72.5
2,501 and over	3	24		
Limestone	1,165	1,254	32,300	100.0
1 to 5	283	286	897	2.8
6 to 20	438	465	5,400	16.7
21 to 50	288	312	9,313	28.8
51 to 100	107	119	7,436	23.0
101 to 250	41	58	6,398	19.8
251 to 500	6	6	2,856	8.9
501 to 1,000	2	8		
Iron ore	180	208	28,516	100.0
1 to 5	7	7	20	.1
6 to 20	13	13	153	.5
21 to 50	29	32	949	3.3
51 to 100	45	46	3,452	12.1
101 to 250	59	76	9,663	33.9
251 to 500	16	20	5,262	18.5
501 to 1,000	10	11	9,017	31.6
1,001 to 2,500	1	3		
Sand and gravel	957	1,165	15,994	100.0
1 to 5	263	292	976	6.1
6 to 20	485	561	5,216	32.6
21 to 50	160	214	4,964	31.0
51 to 100	31	49	2,175	13.6
101 to 250	17	48	2,663	16.7
251 to 500	1	1		

[1] Exclusive of 36 enterprises operating 36 mines which employed no wage earners.

No. 663.—PRODUCING MINES AND QUARRIES, HOURS OF LABOR, 1929

NOTE.—This table does not include data for enterprises having products valued at less than $20,000. To avoid disclosing data for individual establishments, the figures for certain groups are combined and printed in *italics*. An (x) shows where an omission results

Industry	Wage earners (average for the year)—total	Wage earners in mines where the prevailing hours of labor per week were—: Under 36	36 and over but under 40	40	Over 40 but under 48	48	Over 48 but under 63	63 and over
All industries	792,395	51,023	5,764	29,293	26,506	528,394	144,091	7,324
Coal, anthracite	142,801	912		30	3,186	138,226	*447*	(x)
Coal, bituminous	447,125	49,602	5,587	26,842	14,589	320,718	29,427	360
Copper	44,234	(x)			(x)	24,416	*19,818*	
Limestone	31,578	*118*	(x)	450	307	4,652	25,052	999
Iron ore	28,516			*424*	974	15,103	*12,015*	(x)
Sand and gravel	15,994	*70*	(x)	273	339	1,273	11,850	2,189
Lead	13,831	(x)				*6,634*	6,734	463
Zinc	11,861		(x)		(x)	5,897	*5,862*	102
Granite	9,806	44	97	595	4,239	2,326	2,505	
Gold, lode	5,079	(x)				*1,971*	*3,108*	(x)
Gold, placer	534	(x)				*39*	495	
Clay	4,139	*73*	(x)	*98*	281	744	2,021	917
Slate	4,027	[1]91		(x)	*925*	52	*2,959*	(x)
Marble	3,308	(x)	(x)		*217*	94	*2,997*	(x)
Basalt	3,016			*127*	(x)	406	2,392	91
Silver	2,451	(x)				*90*	*2,361*	(x)
Sandstone	2,058	(x)		*137*	344	399	*1,178*	(x)
Stone, miscellaneous	1,569		(x)	74		381	892	222
Other industries	20,468	123	1	169	933	5,001	13,660	581

(x) Number of hours not reported.

Source of Tables 662 and 663: Bureau of the Census, Department of Commerce.

No. 664.—MINERAL PRODUCTS OF THE UNITED STATES: QUANTITIES AND VALUES

NOTE.—Data cover continental United States and, for leading products, outlying areas. Certain of the figures represent shipments rather than quantity mined, and some of the figures for 1932 are estimates. Blank spaces indicate absence of data in most cases; method of computing total value is indicated by footnotes. Short tons are 2,000 pounds; long tons, 2,240 pounds

Product	Quantity						Value in thousands of dollars					
	1915	1920	1925	1930	1931	1932	1915	1920	1925	1930	1931	1932
METALLIC												
Aluminum, 1,000 pounds		138,000	140,000	229,035	177,544	104,885	16,280	41,375	36,430	50,961	37,284	20,453
Antimonial lead[1], short tons	23,224	12,535	19,667	13,711	(1)	(1)	3,666	1,963	3,786	1,393	(1)	(1)
Antimony, do	[2] 5,364	[2] 2,785	[2] 2,624	[2] 1,685	(3)	[2] 1,776	[2] 2,374	[2] 473	[2] 918	[2] 258	(3)	(3)
Bauxite, long tons	297,041	521,308	316,540	330,612	195,895	96,349	1,515	3,247	1,988	1,928	1,141	548
Cadmium, pounds	91,415	129,283	502,824	2,777,762	1,050,529	799,501	108	151	277	1,778	410	(4)
Chromite, long tons	3,281	2,502	108	80	268	155	37	45	2	2	4	2
Copper, [5] sales value, 1,000 pounds	1,388,010	1,209,061	1,674,870	1,394,389	1,042,711	544,010	242,902	222,467	237,832	181,271	94,887	34,273
Ferro-alloys, long tons	388,644	612,808	616,222	650,240	398,295	218,646	17,450	77,519	53,048	51,900	30,765	14,004
Gold, 1,000 troy ounces	4,888	2,476	2,412	2,286	2,396	2,449	101,036	51,187	49,860	47,248	49,527	50,626
Iron:												
Ore [6], 1,000 long tons	55,493	69,281	63,925	55,201	28,516	5,331	[6] 101,289	[6] 285,006	[6] 160,797	[6] 145,619	[6] 74,124	[6] 12,898
Pig, do	30,384	35,710	36,815	29,905	17,813	8,518	401,410	1,140,904	739,316	512,165	285,147	126,033
Lead (refined) [5] sales value, short tons	507,026	476,849	654,921	573,740	390,260	255,337	47,660	76,296	113,956	57,374	28,879	15,320
Manganese ore (35 per cent or more Mn.), long tons	9,613	94,420	98,324	67,035	39,242	17,777	113	2,396	1,858	1,437	699	377
Manganiferous ore (5 to 35 per cent Mn.), long tons	195,735	767,664	1,448,054	785,390	281,414	25,434	817	2,438	3,752	2,402	977	92
Mercury, metal, flasks (76 pounds net)	20,756	13,216	9,053	21,553	24,947	12,622	1,805	1,067	763	2,479	2,179	731
Mercury ore, short tons	159,000	109,000	65,000	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Nickel (value at New York City), do	822	365	272	308	373	195	538	293	170	214	202	89
Ores (crude), tailings, etc.:												
Copper, 1,000 short tons	43,404	36,765	53,262	47,382	34,049	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Copper-lead and copper-lead zinc, do	11	27	229	246	213	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Dry and siliceous (gold and silver), do	12,687	8,590	8,995	7,767	8,329	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Lead, do	7,497	7,200	8,560	8,080	6,043	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Lead-zinc, do	18,176	12,383	17,741	10,645	5,427	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Zinc, do		2,651	3,411	5,980	4,500	(7)	(7)	(7)	(7)	(7)	(7)	(7)
Platinum and allied metals (value at New York City), troy ounces	8,665	41,544	49,643	43,502	36,205	17,616	479	4,698	5,662	2,049	1,274	592
Silver, 1,000 troy ounces	74,961	55,362	66,155	50,748	30,932	23,981	37,397	60,802	45,912	19,538	8,970	6,763
Tin (metallic equivalent), short tons	102	22	14	17	4	(8)	79	22	16	10	2	(8)
Titanium ore (ilmenite), do			5,566	(4)	(4)	(4)			89	(4)	(4)	(4)
Titanium ore (rutile), do	250	277	46	(4)	(4)	(4)	28	(4)	11	(4)	(4)	(4)
Tungsten ore (60 per cent concentrate), do	2,332	216	1,190	702	1,404	396	4,100	102	756	509	928	218
Uranium and vanadium ores, do		35,076	13,070	(4)	(4)	(4)	694	2,401	331	(4)	(4)	(4)
Zinc, [5] sales value, do	458,135	450,045	555,631	489,361	291,996	207,148	113,617	72,907	84,456	46,979	22,192	12,429
Total metallic products (approximate)							991,730	1,782,350	1,380,280	982,550	567,200	283,700

No. 664.—Mineral Products of the United States: Quantities and Values—Continued

Products	Quantity						Value in thousands of dollars					
	1915	1920	1925	1930	1931	1932	1915	1920	1925	1930	1931	1932
NONMETALLIC												
Arsenious oxide—short tons	5,498	11,502	12,317	17,425	13,777	12,483	302	2,021	1,199	1,008	797	651
Asbestos—do	1,731	1,648	1,258	4,242	3,228	3,559	77	678	52	289	119	105
Asphalt:												
Native—do	740,254	898,993	584,850	702,777	503,383	340,019	5,242	13,199	4,148	4,463	2,930	1,943
Oil (including road oil)—do			1,206,700	2,273,546	2,206,568	2,308,785			[6] 15,306	[6] 21,570	[6] 16,615	[6] 14,898
Barite (crude)—do	108,547	228,113	228,063	234,932	174,520	129,854	381	2,142	1,703	1,538	995	746
Borates—do	67,003	120,320	113,700	177,360	178,550	181,915	1,677	2,173	3,086	5,352	4,931	3,024
Bromine—1,000 pounds	856	1,161	1,566	8,463	8,935	5,728	856	745	488	2,110	1,855	1,183
Calcium-magnesium chloride—short tons	20,535	27,849	67,870	116,160	86,156	66,286	131	539	1,387	2,208	1,687	1,163
Cement—1,000 bbls. (376 lbs. net)	87,685	97,079	159,047	160,846	128,377	81,130	75,155	195,590	281,076	231,249	142,580	81,500
Clay:												
Products							160,080	373,670	[9] 423,447	[9] 275,134	[9] 177,562	[10]
Raw—1,000 short tons	2,363	3,116	4,030	3,963	2,519	1,618	[6] 3,972	[6] 11,614	[6] 12,737	[6] 12,521	[6] 8,352	[6] 5,636
Coal:												
Bituminous [11]—do	442,624	568,667	520,053	467,526	382,089	305,667	502,038	2,129,933	1,060,402	795,483	588,895	416,000
Pennsylvania anthracite—do	88,995	89,598	61,817	69,385	59,646	49,900	184,653	434,252	327,665	354,574	296,355	222,000
Coke [6]—do	41,581	51,345	51,267	47,972	33,484	21,913	[6] 105,504	[6] 494,246	[6] 262,559	[6] 209,137	[6] 161,609	[6] 105,787
Diatomite and tripoli—short tons	35,304	102,155	102,418	[12] 32,439	[12] 26,682	[12] 14,775	167	1,649	1,357	[12] 508	[12] 310	[12] 233
Emery—do	3,063	2,327	769	555	512	250	31	22	6	6	6	3
Feldspar (crude)—long tons	93,855	135,551	185,706	171,788	147,119	104,715	489	851	1,316	1,067	861	540
Fluorspar—short tons	136,941	186,778	113,669	95,849	53,484	25,251	764	4,719	2,052	1,747	931	392
Fuller's earth—do	47,901	128,487	206,574	335,644	288,400	252,902	489	2,506	2,924	4,327	3,056	2,441
Garnet for abrasive purposes—do	4,301	5,476	8,429	5,003	2,946	1,950	140	434	713	314	193	147
Gems and precious stones							170	265	[13]	[13]	[13]	[13]
Graphite:												
Amorphous—short tons	1,181	4,694	3,536	1,941	[4]	[4]	12	50	40	21	[4]	[4]
Crystalline—1,000 pounds	7,074	9,632	2,257	[4]	[4]	[4]	417	576	57	[4]	[4]	[4]
Grindstones and pulpstones—short tons		53,484	37,340	18,700	8,724	7,668	648	1,707	1,706	771	342	247
Gypsum—1,000 short tons	2,448	3,129	5,678	3,471	2,559	1,355	6,597	24,533	47,577	27,051	20,801	12,408
Lime—do	3,623	3,570	4,581	3,388	2,708	1,956	14,424	37,544	42,609	25,616	18,675	12,108
Magnesite (crude)—short tons	30,499	303,767	120,660	129,320	73,602	38,462	274	2,748	1,433	1,033	499	283
Mica:												
Scrap—do	3,959	5,723	9,695	6,732	6,621	7,183	51	167	174	109	99	79
Sheet—1,000 pounds	554	1,683	1,794	1,465	963	304	378	547	322	177	112	40
Millstones							53	63	22	18	5	4
Mineral paints:												
Natural pigments [14]—short tons	57,442	[14]	[14]	[14]	[14]	[14]	552	[14]	[14]	[14]	[14]	[14]
Zinc and lead pigments [15]—do	141,383	143,244	199,190	147,948	123,963	92,812	14,962	24,565	28,311	18,420	15,225	9,821
Mineral waters—1,000 gallons	52,114	36,218	[13]	[13]	[13]	[13]	5,139	4,861	[13]	[13]	[13]	[13]
Natural gas—1,000,000 cu. ft	628,579	798,210	1,188,571	1,943,421	1,686,436	1,518,000	101,312	196,194	265,271	416,090	392,816	357,000
Natural gasoline—1,000 gallons	65,365	384,744	1,127,470	2,210,494	1,831,918	1,502,400	5,151	71,788	120,383	128,160	63,732	47,620

For footnotes see p. 657.

NONMETALLIC—continued												
Oilstones, etc.—short tons		1,144	970	651	370	331	115	232	272	137	82	64
Peat—do	42,284	73,204	72,436	(13)	(13)	(13)	289	922	453	(13)	(13)	(13)
Petroleum—1,000 barrels (42 gals.)	281,104	442,929	763,743	898,011	851,081	781,845	179,463	1,360,745	1,284,960	1,070,200	550,630	680,000
Phosphate rock—1,000 long tons	1,836	4,104	3,482	3,926	2,535	1,701	5,413	25,080	11,546	13,997	9,288	5,505
Potash (K_2O)—short tons	1,090	41,444	25,802	56,610	63,770	55,620	342	7,463	1,204	2,986	3,087	2,103
Pumice—do	27,708	41,838	40,380	56,843	68,819	53,214	63	114	179	336	339	235
Pyrites—long tons	394,124	310,777	170,081	[16] 347,512	[16] 330,848	[16] 186,485	1,675	1,597	650	[16] 1,029	[16] 975	[16] 492
Salt—1,000 short tons	5,352	6,840	7,398	8,054	7,358	6,447	11,748	29,894	26,162	25,009	21,541	19,468
Sand:												
Glass—1,000 short tons	1,884	2,166	2,335	1,849	1,678	89,000	1,607	4,749	3,836	3,211	2,779	46,280
Molding, building, etc., and gravel—do	74,719	79,875	169,667	195,203	151,801		21,515	60,913	103,706	111,966	83,501	
Sand-lime brick—thousands	179,643	169,761	[9]315,595	[9] 191,193	[9] 143,673	[9] 52,853	1,135	2,490	[9] 3,781	[9] 1,951	[9] 1,237	[9] 433
Silica (quartz)—short tons	112,575	68,190	25,444	13,156	7,851	7,487	274	320	205	121	69	59
Slate—do		468,700	724,600	463,610	368,420	272,400	4,959	8,726	12,575	7,912	5,498	2,990
Stone—1,000 short tons		78,527	115,851	126,996	97,933	66,234	74,596	133,542	174,217	178,949	135,086	84,050
Sulphur—1,000 long tons	294	1,518	1,858	1,990	1,377	1,109	4,959	30,000	29,000	35,800	24,800	20,000
Sulphuric acid (60° Baumé) from copper and zinc smelters—1,000 short tons	[17] 905	[17] 1,230	1,007	1,188	863	600	7,621	13,617	7,513	9,544	6,492	4,029
Talc and soapstone—short tons	186,891	210,635	[18]182,256	[18] 179,385	[18] 163,752	[18] 123,221	[18] 1,892	[18] 3,035	[18] 2,012	[18] 2,108	[18] 1,852	[18] 1,362
Total nonmetallic products (approximate)							1,400,484	5,214,170	4,291,100	3,773,400	2,592,100	2,153,300
SUMMARY OF VALUES												
Metallic products							991,730	1,762,350	1,380,280	982,550	567,200	283,700
Nonmetallic products (exclusive of fuels)							427,867	1,021,260	1,232,420	1,008,900	699,700	430,700
Mineral fuels							972,617	4,192,910	3,058,680	2,764,500	1,892,400	1,722,600
"Unspecified" (metallic and nonmetallic) products partly estimated							2,430	4,820	6,250	8,850	7,300	6,000
Grand total (approximate)							2,394,644	6,981,340	5,677,630	4,764,800	3,166,600	2,443,000

[1] From both domestic and foreign ores. No comparable data for 1931 and 1932; estimate of value of primary antimony and lead contents of antimonial lead from domestic sources included in total value of metallic products.
[2] Content of antimonial lead. Value excluded from metallic total as the value of the antimony is included in the antimonial lead value.
[3] All from foreign ore. Value not included in total value. Bureau of Mines not at liberty to publish figures for 1931 and value for 1932.
[4] Value included in total value of metallic or nonmetallic products. Bureau of Mines not at liberty to publish figures.
[5] Product from domestic ores only.
[6] Value not included in total value, since value of product derived therefrom, or of raw material used, is accounted for under other items.
[7] Figures not available. Value of products derived therefrom, or of raw materials used, is included elsewhere.
[8] Quantity, 1,000 pounds; value, $220.
[9] Figures obtained through cooperation with Bureau of the Census.
[10] Figures not yet available. Estimate of value included in total value of nonmetallic products.
[11] Includes brown coal and lignite and anthracite mined elsewhere than in Pennsylvania.
[12] Tripoli only. Value of diatomite is included in total value of nonmetallic products. Bureau of Mines not at liberty to publish figures.
[13] No canvass. Estimate of value included in total value of nonmetallic products.
[14] Canvass discontinued after 1915. Value of iron ore sold for paint included under "Unspecified."
[15] Sublimed blue lead, sublimed white lead, leaded zinc oxide, and zinc oxide.
[16] Figures include pyrites concentrates from Tennessee and partly desulphurized tailings from zinc operations in Wisconsin; similar output in 1915 to 1925 was not included.
[17] In 1915 includes 59,189 tons and in 1920, 23,728 tons of stronger acid, not converted to 60° Baumé.
[18] Talc only. Value of soapstone is included in value of nonmetallic products. Bureau of Mines not at liberty to publish figures.

Source: Bureau of Mines, Department of Commerce.

117053°—33——43

No. 665.—MINERAL PRODUCTION, BY STATES

NOTE.—Iron ore, not pig iron, is taken as the basis of valuation of iron and in the case of other metals, mine production (recoverable content of metals) is the basis

[Values in thousands of dollars]

Division and State	1925	1926	1927	1928	1929	1930	1931
Continental United States	4,965,430	5,485,743	4,888,555	4,722,136	5,164,963	4,249,935	2,854,190
New England	48,452	50,707	48,531	49,053	49,101	40,619	32,870
Maine	5,839	5,786	5,476	5,923	6,749	6,228	4,889
New Hampshire	3,465	4,145	3,447	3,816	3,726	3,337	2,796
Vermont	14,409	14,955	14,703	14,649	14,603	11,637	8,422
Massachusetts	16,832	16,787	16,295	16,234	16,031	12,723	11,170
Rhode Island	1,152	1,339	1,311	831	940	1,209	793
Connecticut	6,755	7,695	7,299	7,600	7,053	5,485	4,800
Middle Atlantic	1,045,993	1,244,848	1,122,074	1,060,381	1,074,167	935,351	714,283
New York	102,036	112,016	112,210	108,026	109,361	99,622	78,007
New Jersey	76,761	77,066	73,091	70,865	71,892	57,206	41,633
Pennsylvania	867,196	1,055,766	936,773	881,490	892,914	778,523	594,643
East North Central	732,417	761,391	660,742	642,488	676,012	543,627	364,475
Ohio	247,507	253,884	226,963	211,041	220,061	186,972	130,928
Indiana	111,834	118,692	107,578	98,584	96,962	79,227	50,852
Illinois	231,659	237,242	180,394	188,099	182,701	148,311	108,066
Michigan	122,212	130,861	124,030	123,826	151,976	111,406	62,786
Wisconsin	19,205	20,712	21,777	20,938	24,222	17,711	11,843
West North Central	398,158	423,120	347,534	348,016	392,950	325,710	192,733
Minnesota	110,253	118,361	102,973	108,275	136,350	103,931	55,275
Iowa	38,420	35,972	33,426	35,499	35,955	33,358	21,615
Missouri	92,548	90,004	75,890	74,981	78,948	69,074	41,806
North Dakota	2,662	2,805	2,870	3,083	3,466	3,056	2,271
South Dakota	7,972	7,595	8,464	9,443	8,914	11,076	11,339
Nebraska	3,359	3,322	3,542	3,455	4,845	4,962	3,623
Kansas	142,944	165,061	120,369	113,280	124,472	100,253	56,804
South Atlantic	443,785	519,412	481,112	440,831	450,973	380,543	289,619
Delaware	539	378	493	482	467	425	395
Maryland	21,558	24,067	20,469	18,418	18,470	14,990	11,330
District of Columbia	955	987	1,375	1,031	1,065	1,288	282
Virginia	41,038	46,136	41,323	38,770	39,753	34,603	26,150
West Virginia	333,528	395,942	366,643	336,637	346,565	290,119	221,735
North Carolina	9,504	10,993	11,704	11,480	10,964	7,462	5,554
South Carolina	3,508	3,677	4,251	4,046	3,592	3,341	3,031
Georgia	16,504	17,480	16,758	14,740	15,294	12,831	10,291
Florida	16,651	19,752	18,096	15,227	14,804	15,484	10,851
East South Central	249,551	271,658	271,684	243,628	241,344	201,427	140,088
Kentucky	131,371	146,768	152,614	131,970	132,650	111,691	75,150
Tennessee	38,869	39,297	37,875	39,217	40,720	32,499	24,043
Alabama	77,139	83,710	78,641	69,807	65,402	55,462	38,507
Mississippi	2,172	1,883	2,554	2,634	2,573	1,775	2,388
West South Central	1,000,669	1,136,796	1,009,814	967,071	1,116,555	947,374	564,627
Arkansas	87,186	84,486	59,449	45,010	41,325	34,901	18,692
Louisiana	60,504	62,204	51,267	56,810	62,726	71,929	61,693
Oklahoma	501,767	569,519	524,595	486,634	516,685	390,171	182,041
Texas	351,212	420,587	374,503	378,617	495,820	450,373	302,201
Mountain	519,273	526,261	458,780	493,577	579,548	369,988	231,619
Montana	79,261	79,763	68,265	74,752	93,842	50,995	32,360
Idaho	31,611	31,753	29,184	28,589	32,143	22,904	13,177
Wyoming	78,755	78,988	56,167	52,951	51,237	46,735	30,893
Colorado	63,149	65,597	58,855	58,595	55,332	46,271	32,970
New Mexico	25,549	28,514	28,609	30,427	37,128	31,850	25,350
Arizona	114,203	115,048	100,559	116,000	157,960	82,934	41,603
Utah	100,275	98,985	90,388	97,381	115,131	64,224	40,302
Nevada	26,470	27,613	26,753	34,882	36,776	24,075	14,964
Pacific	527,132	551,550	488,284	463,068	584,313	505,296	324,385
Washington	22,382	21,257	21,966	22,120	22,435	20,076	14,801
Oregon	7,827	6,941	6,821	6,687	6,877	6,170	5,045
California	496,923	523,352	459,497	434,261	555,001	479,050	304,539
Alaska	18,286	17,607	14,402	14,024	15,947	13,707	12,371

Source: Bureau of Mines, Department of Commerce.

No. 666.—IRON ORE: PRODUCTION, SHIPMENTS, EXPORTS, AND IMPORTS

NOTE.—In thousands of long tons (2,240 pounds). Nearly all exports are to Canada. Blank spaces indicate lack of data. Since 1905, ore containing 5 per cent or more of manganese has been excluded

Yearly average or year	Production	Shipments	Exports	Imports
1881–1890	10,385			766
1891–1900	17,551			587
1901–1910	41,339		271	1,180
1911–1915	51,595	50,592	953	1,841
1916–1920	69,737	70,224	1,143	967
1921–1925	52,429	52,617	677	1,691
1926–1930	64,600	64,952	1,021	2,709
1918	69,658	72,021	1,256	787
1919	60,965	56,373	997	476
1920	67,604	69,281	1,145	1,273
1921	29,491	26,653	440	316
1922	47,129	50,613	602	1,135
1923	69,351	69,811	1,117	2,768
1924	54,267	52,083	595	2,047
1925	61,908	63,925	631	2,191
1926	67,623	69,293	869	2,555
1927	61,741	61,232	899	2,621
1928	62,197	63,433	1,282	2,453
1929	73,028	75,603	1,304	3,139
1930	58,409	55,201	752	2,775
1931	31,132	28,516	436	1,466
1932	9,847	5,331	83	582

Production	1929	1930	1931	1932
REGION				
Lake Superior [1]	62,825	49,383	25,877	8,139
Birmingham	6,282	5,552	3,495	1,336
All other	3,921	3,474	1,760	371
STATE				
Alabama	6,453	5,738	3,615	1,375
Michigan	15,456	13,544	7,553	2,555
Minnesota	45,761	34,518	17,445	5,154
Missouri	169	133	112	30
New Mexico	172	173	168	----
New Jersey	281	395	294	31
New York	822	889	275	31
Pennsylvania	1,092	965	368	103
Utah	325	279	184	137
Wisconsin	1,609	1,321	880	430
Wyoming	639	320	181	----
All other	248	133	57	1
KIND				
Hematite	[2,3]69,849	[2,3]55,266	[3]29,665	[3]9,622
Brown ore	[2]776	[2]720	360	62
Magnetite	[3]2,401	[3]2,421	[3]1,105	[3]163
Carbonate	2	1	1	(4)

[1] Includes only those mines in Wisconsin which are in true Lake Superior district.
[2] Some hematite included with brown ore. [3] Some hematite included with magnetite. [4] 477 tons.

No. 667.—ANALYSIS OF PIG IRON AND FERRO-ALLOY PRODUCTION

[In thousands of long tons (2,240 pounds) unless otherwise specified]

	1900	1905	1910	1915	1920	1925	1929	1930	1931	1932
Total pig iron and ferro-alloys	13,789	22,992	27,304	29,916	36,926	36,701	42,614	31,752	18,426	8,781
By States:										
New England	14	16	17	8	10	----	3,025	2,211	1,275	710
New York, New Jersey	463	1,509	2,203	2,105	2,601	2,188				
Pennsylvania	6,366	10,579	11,272	12,791	13,983	12,523	14,453	10,305	5,233	2,188
Maryland and Virginia	781	842	771	503	953	830	1,166	1,088	692	380
Alabama	1,184	1,604	1,939	2,049	2,393	2,836	2,710	2,395	1,671	667
Ohio	2,471	4,586	5,752	6,913	8,533	8,863	9,796	6,805	4,189	2,412
Illinois	1,363	2,034	2,676	2,447	3,281	3,604	4,358	3,345	1,965	919
Indiana, Michigan	164	289	1,250	1,987	2,940	4,120	5,086	3,934	2,328	1,035
Wisconsin, Minnesota	185	351	307	373	711	468	379	805	317	164
Iowa, Colorado, Utah	798	1,182	1,117	741	1,520	505	638			
All other						762	1,003	865	756	306
By disposition:										
For sale	(1)	(1)	(1)	8,583	10,724	8,991	9,635	7,083	4,339	1,877
For maker's use	(1)	(1)	(1)	21,333	26,202	27,710	32,979	24,670	14,087	6,904
By kinds:										
Basic	1,072	4,105	9,085	13,093	16,738	19,667	24,912	18,393	10,174	5,074
Bessemer	7,979	12,407	11,246	10,523	12,062	9,419	9,877	7,315	4,636	2,220
Foundry (incl. ferrosilicon)	3,376	4,758	5,260	4,844	5,958	5,410	4,787	3,960	2,345	936
Malleable	173	635	843	830	1,311	1,554	2,313	1,572	949	420
Forge	793	728	564	316	318	241	168	51	36	2
Ferromanganese, spiegeleisen, and all other	395	359	306	310	539	409	557	461	289	129
By fuels:										
Coke [2]	11,728	20,965	26,258	29,535	36,300	36,504	42,476	31,656	18,380	8,766
Anthracite	1,677	1,675	649	85	303	----	----	----	----	----
Charcoal	384	353	397	296	323	196	138	97	46	15
Materials used:										
Iron ore, briquettes, etc	24,131	41,525	51,739	55,137	66,450	65,450	[3]73,059	[3]53,662	[3]29,668	[3]12,788
Cinder, scale, etc	1,600	(1)	2,800	4,483	4,986	5,017	[3]7,434	[3]6,296	[3]3,762	[3]2,188
Coke (1,000 tons of 2,000 pounds) [4]	(1)	(1)	(1)	33,329	42,046	39,296	[3]42,403	[3]31,168	[3]17,738	[3]8,337
Limestone	7,422	11,627	14,528	14,790	17,825	15,154	[3]15,603	[3]11,099	[3]6,209	[3]2,951
Total number of furnaces	406	424	473	445	452	395	316	300	288	279
Furnaces in blast Dec. 31	232	313	206	310	216	328	165	97	61	44

[1] Not available. [2] Includes pig iron and ferro-alloys made in electric furnaces.
[3] Materials consumed in manufacture of pig iron only. [4] Coke and bituminous coal 1900 to 1925.

Sources: Table 666, Bureau of Mines, Department of Commerce; Table 667, American Iron and Steel Institute.

No. 668.—PRODUCTION, EXPORTS, AND IMPORTS OF PIG IRON (INCLUDING FERRO-ALLOYS) AND PRODUCTION OF STEEL INGOTS AND CASTINGS

NOTE.—In long tons (2,240 pounds). Prior to 1901 exports and imports are for years ended June 30 following year specified; calendar years thereafter. All production figures are for calendar years. For individual years 1871 and 1906 and data for earlier years, see Statistical Abstract 1931, Table 750

Yearly average or year	Pig iron and ferro-alloys			Steel ingots and castings, production	Year	Pig iron and ferro-alloys			Steel ingots and castings, production
	Production	Exports of domestic	Imports			Production	Exports of domestic	Imports	
1871–1875	2,248,293	7,412	137,591	[1] 389,799	1916	39,434,797	607,236	135,349	42,773,680
1876–1880	2,562,763	3,407	276,600	803,479	1917	38,621,216	656,220	76,786	45,060,607
1881–1885	4,301,096	5,311	325,290	1,652,268	1918	39,054,644	269,575	34,711	44,462,432
1886–1890	7,079,312	12,407	229,970	3,292,763	1919	31,015,364	321,261	101,665	34,671,232
1891–1895	8,133,013	22,983	54,778	4,675,736	1920	36,925,987	216,828	185,944	42,132,934
1896–1900	11,491,937	224,268	34,308	8,439,938	1921	16,688,126	28,405	44,842	19,783,797
1901–1905	18,239,665	45,465	314,765	15,367,931	1922	27,219,904	33,332	498,059	35,602,926
1906	25,307,191	83,317	379,828	23,398,136	1923	40,361,146	37,559	474,723	44,943,696
1907	25,781,361	73,703	489,475	23,362,594	1924	31,405,790	45,818	276,966	37,931,939
1908	15,936,018	46,696	92,202	14,023,247	1925	36,700,566	39,907	516,948	45,393,524
1909	25,795,471	61,989	176,442	23,955,021	1926	39,372,729	28,606	514,288	48,293,763
1910	27,303,567	127,385	237,233	26,094,919	1927	36,565,645	55,899	175,529	44,935,185
1911	23,649,547	120,799	148,459	23,676,106	1928	38,155,714	96,743	194,636	51,544,180
1912	29,726,937	272,676	129,325	31,251,303	1929	42,613,983	53,749	223,689	56,433,473
1913	30,966,152	277,648	156,450	31,300,874	1930	31,752,169	25,344	182,446	40,699,483
1914	23,332,244	114,423	139,683	23,513,030	1931	18,426,354	15,429	103,540	25,945,501
1915	29,916,213	224,509	89,836	32,151,036	1932	8,781,453	6,938	145,664	13,681,162

[1] 1875 only.

No. 669.—PRODUCTION OF ROLLED AND MISCELLANEOUS STEEL PRODUCTS

NOTE.—In thousands of long tons (2,240 pounds) unless otherwise specified. Blank spaces indicate figures not available. The miscellaneous products, except cast-iron pipe, are for the most part further elaborations of the rolled products listed above

	1905	1910	1915	1920	1925	1930	1931	1932
Rolled products, total	16,840	21,621	24,393	32,348	33,387	29,513	19,176	10,451
Rails	3,376	3,636	2,204	2,604	2,785	1,873	1,158	403
Bessemer	3,192	1,884	327	143	10	2	1	(1)
Open hearth	183	1,751	1,775	2,334	2,692	1,835	1,136	393
Rerolled			102	127	84	36	21	9
Sheets and plates	3,532	4,955	6,078	9,338	9,808	9,067	6,040	3,443
Universal			955	1,250	1,196	1,041	615	310
Sheared			1,923	3,505	2,557	2,622	1,351	520
Black sheets [2]			1,837	2,886	4,097	3,512	2,461	1,472
Black plates for tinning			1,093	1,449	1,632	1,692	1,431	1,000
Other black-plate specialties			270	247	325	201	181	142
Wire rods	1,809	2,242	3,096	3,137	2,845	2,349	1,845	1,186
Structural shapes	1,661	[3] 2,267	2,437	3,307	3,604	3,512	2,063	937
Merchant bars	3,504	3,786	4,131	6,130	5,659	4,138	2,444	1,314
Skelp	1,436	1,828	2,299	3,220	3,230	2,682	1,499	608
Hoops	446	262	282	333	205	80	56	43
Bands and cotton ties		425	438	389	356	46	57	38
Splice and fish-plate bars			536	576	823	606	390	148
Rolled forging blooms, billets, etc	42	460	651	447	345	304	115	76
Bars for reinforced concrete work	946	241	353	572	820	850	644	386
Hot-rolled strips and flats for cold rolling						1,941	1,621	1,185
Blanks or pierced billets for seamless tubes		1,519	1,888	2,294	2,908	1,248	733	370
All other rolled products						814	511	315
Miscellaneous products:								
Tin plate (million pounds)		1,450	2,202	3,080	3,459	3,719	3,119	2,209
Terneplates (million pounds)		168	163	158	255	231	149	104
Galvanized sheets (million pounds)			1,582	1,871	2,539	2,341	1,707	1,151
Galvanized formed products (million pounds)			112	144	178	146	112	87
Wire nails (thousands of kegs [4])	10,855	12,705	14,583	16,450	15,454	9,561	7,583	5,394
Cut nails (thousands of kegs [4])	1,358	1,005	775	845	736	460	317	286
Wrought pipe, incl. boiler tubes			1,920	3,003	3,031	2,247	1,121	485
Boiler tubes			97	119	63	31	17	9
Seamless steel tubes			140	292	568	1,194	717	338
Cast-iron pipe (1,000 short tons [5])			1,215	887	1,925	1,436	1,120	523
Forgings made by rolling mills		320	524	540	388	476	173	93

[1] Less than 500 tons. [2] Rolled on sheet or jobbing mills. [3] Small structural forms not included.
[4] Of 100 pounds. [5] Of 2,000 pounds.

Source of Tables 668 and 669: American Iron and Steel Institute.

No. 670.—PRODUCTION, EXPORTS, AND IMPORTS OF FINISHED ROLLED IRON AND STEEL

NOTE.—In long tons (2,240 pounds). Blank spaces indicate that figures are not available

Yearly average or year (calendar year)	Total production, finished rolled products	Rails			Plates and sheets			Merchant[1] bar production
		Production	Exports	Imports	Production	Exports	Imports	
1876–1880		911,095	4,441	59,851				
1881–1885		1,273,688	3,986	116,972				
1886–1890	[2] 5,278,214	1,710,278	7,275	49,775	[3] 684,914		8,013	
1891–1895	5,472,849	1,264,677	13,650	1,047	755,818	1,510	23,894	
1896–1900	8,162,560	1,881,905	232,518	2,399	1,463,879	30,995	4,771	
1901–1905	13,670,907	2,895,138	225,746	43,207	2,694,625	39,505	6,167	[3] 3,593,601
1906–1910	18,509,490	3,238,486	303,234	3,963	4,054,102	158,591	4,096	3,479,910
1911	19,039,171	2,822,790	420,874	3,414	4,488,049	372,373	2,453	3,306,103
1912	24,656,841	3,327,915	446,473	3,780	5,875,080	546,521	3,299	3,971,446
1913	24,791,243	3,502,780	460,553	10,408	5,751,037	463,426	2,893	4,277,279
1914	18,370,196	1,945,095	174,680	22,571	4,719,246	280,095	4,310	2,812,102
1915	24,392,924	2,204,203	391,379	78,525	6,077,694	419,604	1,420	4,484,650
1916	32,380,389	2,854,518	540,828	26,299	7,453,980	515,558	1,730	6,691,702
1917	33,067,700	2,944,161	512,669	9,263	8,267,616	851,529	1,748	6,681,141
1918	31,155,754	2,540,892	453,537	8,705	8,799,135	854,136	1,517	6,587,369
1919	25,101,544	2,203,843	652,443	17,008	7,372,814	1,042,697	1,095	4,810,645
1920	32,347,863	2,604,116	594,628	45,684	9,337,680	1,273,558	1,792	6,702,685
1921	14,774,006	2,178,818	321,822	22,048	4,260,574	607,370	1,976	1,792,982
1922	26,452,004	2,171,776	277,090	26,629	7,968,397	439,417	[4] 1,947	4,554,474
1923	33,277,076	2,904,516	267,409	29,706	9,497,717	386,405	[4] 4,572	6,233,663
1924	28,086,435	2,433,332	208,496	43,358	8,087,883	360,540	[4] 6,066	4,937,043
1925	33,386,960	2,785,257	151,690	36,872	9,807,659	386,912	[4] 4,480	6,478,902
1926	35,495,892	3,217,649	187,557	55,212	10,529,056	517,611	[4] 15,616	6,289,665
1927	32,879,031	2,806,486	177,593	15,455	9,627,734	468,511	[4] 19,760	5,686,260
1928	37,662,916	2,647,493	190,925	14,019	11,006,050	522,657	[4] 30,800	7,229,723
1929	41,069,416	2,722,138	146,060	6,236	12,436,312	540,896	[4] 28,461	7,423,496
1930	29,513,007	1,873,233	95,179	8,307	9,067,366	346,853	[4] 28,486	4,982,124
1931	19,175,894	1,157,751	33,108	5,007	6,039,581	192,830	[4] 16,907	3,083,996
1932	10,451,088	402,566	11,320	5,662	3,443,308	79,477	[4] 22,252	1,699,501

Yearly average or year (calendar year)	Skelp, flue, and pipe production	Wire rods			Structural shapes			All other finished rolled production
		Production	Exports	Imports	Production	Exports	Imports	
1891–1895		633,248		34,804	[5] 429,872			2,475,209
1896–1900		909,819	[6] 16,182	18,087	689,419	[6] 48,877		3,217,538
1901–1905	[3] 1,435,995	1,590,280	16,345	18,390	1,203,791	55,651	[7] 12,886	1,263,396
1906–1910	1,668,674	2,056,732	13,403	15,400	1,936,951	121,086	11,107	2,074,634
1911	1,980,673	2,450,453	22,641	15,483	[8] 1,912,367	223,493	5,343	2,078,736
1912	2,446,816	2,653,553	64,978	15,069	2,846,487	288,164	3,120	3,535,544
1913	2,501,964	2,464,807	61,637	16,098	3,004,972	403,264	11,659	3,288,404
1914	1,982,431	2,431,714	61,856	6,954	2,031,124	182,395	10,145	2,448,484
1915	2,299,464	3,095,907	165,014	5,317	2,437,003	232,139	1,494	3,794,003
1916	2,927,674	3,518,746	158,284	4,130	3,029,964	300,594	1,473	5,903,805
1917	2,674,231	3,137,138	181,941	1,060	3,110,000	294,150	6,216	6,253,413
1918	2,564,011	2,562,390	148,523	7,677	2,849,969	232,729	3,504	5,251,988
1919	2,555,778	2,538,476	118,010	342	2,614,036	360,787	1,154	3,005,952
1920	3,220,289	3,136,907	116,775	5,488	3,306,748	493,633	1,685	4,039,438
1921	1,930,575	1,564,330	18,953	917	1,272,624	297,022	777	1,774,103
1922	2,872,215	2,654,741	40,424	1,735	2,718,768	167,585	7,823	3,511,633
1923	3,734,336	3,075,892	40,868	3,948	3,405,197	199,021	10,674	4,425,755
1924	3,170,543	2,522,545	18,762	6,851	3,283,708	167,910	43,245	3,651,381
1925	3,229,768	2,844,656	21,207	7,988	3,604,130	169,252	77,291	4,636,588
1926	3,764,550	2,722,032	19,646	10,075	3,911,663	233,059	121,100	5,061,277
1927	3,418,852	2,770,271	16,127	17,988	3,742,445	215,226	161,849	4,826,983
1928	3,368,973	3,080,816	38,619	19,298	4,096,143	296,885	163,762	6,233,718
1929	3,517,238	3,134,409	42,250	15,653	4,778,020	399,837	148,223	7,057,803
1930	2,682,046	2,348,600	39,779	8,843	3,512,473	243,840	120,333	5,047,165
1931	1,499,280	1,844,620	32,125	7,114	2,062,858	121,725	72,329	3,487,808
1932	607,599	1,186,181	14,818	7,934	937,228	32,561	36,547	2,174,705

[1] Includes concrete reinforcing bars.
[2] Average for years 1887–1890.
[3] 1905 only; data not available for earlier years.
[4] Includes skelp.
[5] Average for years 1892–1895.
[6] Average for period July 1, 1897, to Dec. 31, 1900.
[7] Average for period July 1, 1903, to Dec. 31, 1905.
[8] Small structural forms not included.

Source: American Iron and Steel Institute (exports and imports compiled from Government statistics).

No. 671.—PRODUCTS OF STEEL WORKS AND ROLLING MILLS, AND OF THE WIRE, TIN-PLATE, AND CAST-IRON PIPE INDUSTRIES

NOTE.—The overlapping of the industries shown in this table results in considerable duplication in tonnages shown. The products chiefly used further in manufacture are wire rods, plates, and sheets, black plates for tinning, and skelp. The figures under "Wire," "Tin and terneplate," and "Cast-iron pipe and fittings" include data for products of these departments of steel works and rolling mills and of all other industries producing these commodities. For more detailed statistics, see Census reports for these industries

Industry and product	Unit	Quantity in thousands of unit specified			Value in thousands of dollars		
		1927	1929	1931	1927	1929	1931
STEEL WORKS AND ROLLING MILLS							
All products, total value					2,779,840	3,365,789	1,402,843
Unrolled steel, total	Ton [1]	44,757	56,161	25,896			
Ingots—							
For sale and interplant transfer	do	437	661	243	12,679	17,150	5,548
Produced and consumed in works	do	43,337	54,133	25,193			
Direct steel castings—							
For sale and interplant transfer [2]	do	888	1,212	371	145,085	191,398	59,557
Produced and consumed in works [2]	do	95	155	89			
Semifinished rolled products, for sale and interplant transfer, total.	do	10,307	12,779	5,633	346,051	421,328	161,673
Blooms, billets, and slabs, except for forging.	do	6,162	7,362	3,107	205,908	244,792	91,110
Rolled blooms and billets for forging	do	113	269	69	4,690	10,327	2,494
Sheet and tin-plate bars	do	3,985	5,062	2,439	133,094	162,316	67,290
Muck and scrap bar	do	47	86	17	2,359	3,893	778
Finished rolled products and forgings, total. [3]	do	32,154	39,883	18,396			
Produced and consumed in works	do	8,416	9,532	5,199			
For sale and interplant transfer	do	23,738	30,351	13,198	1,251,788	1,604,833	614,899
Rails	do	2,703	2,666	1,130	114,565	113,925	48,197
Rail joints, fastenings, tie plates, etc.	do	893	872	379	50,394	47,761	19,096
Structural shapes (not fabricated)	do	3,502	4,469	1,985	148,339	188,898	71,668
Concrete reinforcing bars	do	783	972	617	35,410	42,417	23,081
Merchant bars, mill shafting, etc.—							
Steel	do	4,249	6,228	2,231	240,469	358,601	111,637
Iron	do	202	187	53	13,582	13,284	3,696
Bolt and nut rods, spike and chain rods, etc.	do	95	121	20	4,381	5,683	843
Wire rods	do	1,024	1,155	650	46,059	49,042	23,420
Plates No. 12 and thicker	do	3,781	5,218	1,986	164,513	228,236	75,853
Sheets No. 13 and thinner	do	2,982	4,041	2,021	227,683	306,936	125,920
Skelp	do	1,241	1,271	619	50,605	50,121	21,320
Hot-rolled strips for cold rolling	do	1,265	479	402	66,351	21,347	18,052
Other strips and cotton ties	do		1,566	705		75,626	31,785
Axles	do	119	150	27	10,737	12,039	2,239
Armor plate and ordnance	do	8	10	17	2,614	3,287	6,184
Car and locomotive wheels	do	155	209	84	15,197	19,352	7,689
All other rolled and forged products [4]	do	736	732	270	60,891	68,278	24,219
Scrap iron and steel, for sale and interplant transfer.	do	2,448	2,830	1,409	35,750	42,101	16,645
Cinder and scale	do	657	1,194	620	988,487	2,731	1,303
All other (including value added to rolled products by further manufacture).	do					1,086,248	543,213
WIRE AND WIRE PRODUCTS (ALL METALS)							
All industries, total value					697,684	919,988	404,786
Iron and steel wire:							
Plain wire, *total* [5]	Ton [6]	2,865	3,097	1,866			
For sale and interplant transfer	do	907	1,204	603	67,619	88,456	40,492
Produced and consumed in works	do	1,958	1,891	1,262			
Galvanized wire: For sale and interplant transfer.	do	250	269	172	17,035	19,656	10,963
Other coated wire: For sale and interplant transfer.	do	45	52	43	6,368	8,143	5,164
Cold-rolled from drawn wire: For sale and interplant transfer. [7]	do	150	29	14	18,544	4,256	2,361
Copper wire:							
For sale and interplant transfer	Lb	491,819	544,740	187,921	77,090	118,628	22,884
Produced and consumed in works	do	294,745	407,996	242,390			
Drawn on contract or custom basis from rods or bars furnished by others.	do	(8)	151,761	25,572			

For footnotes see p. 663.

No. 671.—Products of Steel Works and Rolling Mills, and of the Wire, Tin-Plate, and Cast-Iron Pipe Industries—Continued

Industry and product	Unit	Quantity in thousands of unit specified			Value in thousands of dollars		
		1927	1929	1931	1927	1929	1931
WIRE AND WIRE PRODUCTS (ALL METALS)—continued							
Brass and bronze wire:							
For sale and interplant transfer	Lb	[9] 60,844	86,805	48,031	[9] 11,693	20,332	7,904
Produced and consumed in works	do	[9] 3,086	5,581	5,066			
Other metal wire:							
For sale and interplant transfer	do	[9] 34,117	48,487	26,750	[9] 12,009	23,590	10,214
Produced and consumed in works	do	[9] 7,209	21	31			
Fabricated wire products for sale:							
Iron and steel—							
Nails, brads, and spikes [10]	Keg [11]	14,819	13,601	8,177	48,002	44,935	22,532
Tacks [10]	Lb	7,135	6,540	2,620	690	640	218
Staples	do	49,379	58,879	44,863	1,596	2,342	1,385
Barbed wire	Ton [6]	202	222	162	12,973	13,824	8,280
Rope or cable, except insulated	do	([8])	153	57	46,916	46,877	18,412
Strand, galvanized	do	([8])	49	36		5,618	3,284
Poultry netting	do	([8])	47	32	40,011	7,536	4,165
Woven wire fence, except poultry netting.	do	([8])	366	242		31,041	17,897
Fly screening	Lb	([8])	64,728	31,719	23,396	9,942	4,623
Other wire cloth	do			24,949		6,555	4,177
Concrete reenforcement wire	Ton [6]			140		11,786	8,177
Other woven wire	do	([8])	139	28			5,522
Automobile skid chains					([12])	11,491	5,987
Bale ties	Lb	([8])	148,474	109,349	4,580	5,088	3,593
Wire springs					32,187	47,903	26,686
Welding wire, including electrodes					[12] 41,868	42,872	2,790
Other fabricated iron and steel wire products.							25,361
Nonferrous-wire products—							
Fly screening—							
Copper	Lb	([8])	4,993	2,697	8,796	1,768	780
Other metals	do	([8])	10,211	7,132		3,336	2,381
Fourdrinier and cylinder wire cloth.	do	([8])	3,108	1,899		4,765	3,082
Other wire cloth—							
Copper	do	([8])	1,168	386	14,823	588	151
Other metals	do	([8])	1,450	1,239		683	1,084
Copper strand, except insulated	do	([8])	92,395	59,051		18,617	7,383
Other fabricated nonferrous wire products, except insulated wire.						6,125	5,670
Fabricated wire products not distributed above					1,435		397
Insulated wire and cable					210,048	312,592	120,789
TIN PLATE AND TERNEPLATE							
All products, total value					193,894	213,084	142,698
Tin plate	Lb	3,560,417	4,031,856	3,108,668	180,410	194,107	135,375
Terneplate	do	193,057	345,592	159,357	10,017	15,568	5,609
All other products					3,468	3,409	1,713
CAST-IRON PIPE AND FITTINGS							
All industries, total value					([8])	85,890	51,111
Reported with quantity	Ton [6]	([8])	1,736	1,191	([8])	78,296	45,238
Reported without quantity					([8])	7,594	5,873

[1] Of 2,240 pounds.
[2] In addition steel castings were produced for sale by establishments classified in other industries as follows: For 1927, 59,809 tons valued at $10,464,311; 1929, 33,550 tons valued at $6,635,760; 1931, 13,916 tons valued at $2,578,080. Steel castings were also reported by the "Foundry and machine-shop products, not elsewhere classified" industry as made and consumed in the same works as follows: For 1927, 16,968 tons; 1929, 53,980 tons; 1931, 13,210 tons. Steel castings are produced and consumed in further manufacture to some extent in other industries, but no data for such production are collected.
[3] Does not include tonnage of rolled billets and blanks for seamless tubes, nor tonnage, for sale, of rolled blooms and billets for forging.
[4] Includes "nail and tack plate" not shown separately to avoid disclosing data for individual operations.
[5] All iron and steel wire, including that subsequently galvanized, otherwise coated, and cold rolled.
[6] Of 2,000 pounds.
[7] Figures for 1927 include all cold-rolled wire; for 1929 and 1931, only wire cold rolled from drawn wire.
[8] No comparable data.
[9] For 1927 bronze wire was included with "Other metal wire"
[10] Not including value of nails and tacks made from nail and tack plate.
[11] Of 100 pounds.
[12] Automobile skid chains included in "Other fabricated iron and steel wire products".

Source: Bureau of the Census, Department of Commerce.

No. 672.—PRODUCTION OF STEEL INGOTS AND CASTINGS, BY GRADES

NOTE.—In long tons (2,240 pounds). Blank spaces indicate that figures are not available

Year	Total	Bessemer	Open hearth			Crucible	Electric	Miscellaneous
			Total	Basic	Acid			
1890	4,277,071	3,688,871	513,232			71,175		3,793
1900	10,188,329	6,684,770	3,398,135	2,545,091	853,044	100,562		4,862
1905	20,023,947	10,941,375	8,971,376	7,815,728	1,155,648	102,233		8,963
1910	26,094,919	9,412,772	16,504,509	15,292,329	1,212,180	122,303	52,141	3,194
1915	32,151,036	8,287,213	23,679,102	22,308,725	1,370,377	113,782	69,412	1,527
1920	42,132,934	8,883,087	32,671,895	31,375,723	1,296,172	72,265	502,152	3,535
1925	45,393,524	6,723,962	38,034,488	37,087,342	947,146	19,562	615,512	
1929	56,433,473	7,122,509	48,352,888	47,232,419	1,120,469	6,645	951,431	
1930	40,699,483	5,035,459	35,049,172	34,268,316	780,856	2,253	612,599	
1931	25,945,501	3,023,446	22,509,566	22,130,398	379,168	1,547	410,942	
1932	13,681,162	1,532,076	11,907,330	11,742,682	164,648	645	241,111	

No. 673.—BLAST FURNACES AND STEEL MILLS: CENSUS STATISTICS

NOTE.—The scope of the industry "Steel works and rolling mills" is indicated by Table 671

Year	Number of establishments	Wage earners (average number)	Wages	Value of products [1]	Value added by manufacture [2]	Primary horsepower
			Thousands of dollars			
1879	792	[3] 140,708	[3] 55,451	296,558	105,287	[4]
1889	719	171,181	89,273	478,688	151,415	784,358
1899	668	222,490	120,820	803,968	281,569	1,597,816
1909	654	278,505	187,807	1,377,152	399,013	3,274,285
1919	695	416,748	711,407	3,623,369	1,321,507	5,399,574
1921	628	254,213	354,357	1,901,431	535,256	[4]
1923	658	424,913	696,761	4,161,938	1,289,910	5,999,941
1925	595	399,914	660,297	3,711,354	1,281,976	6,143,927
1927	602	389,270	645,534	3,488,744	1,219,534	6,781,058
1929	591	419,534	730,974	4,137,214	1,622,837	7,532,530
1931	526	278,206	357,645	1,714,214	623,199	[4]
Blast furnaces:						
1929	105	24,960	41,959	771,425	161,132	[5]
1931 [6]	80	13,572	19,259	311,371	52,240	[4]
Steel works and rolling mills:						
1929	486	394,574	689,016	3,365,789	1,461,706	[5] 7,532,530
1931	446	264,634	338,386	1,402,843	570,959	[4]

[1] Includes much duplication.
[2] Value of products less cost of materials.
[3] Returns were not secured for number of salaried employees and it is probable that "wages" included amounts paid for salaries, and "wage earners" may have included some salaried employees.
[4] No data.
[5] Blast furnace data are included with steel works and rolling mills.
[6] Includes data for 4 establishments engaged in production of sintered ore and flue dust and operated independently of blast furnaces.

No. 674.—AGGREGATE DOMESTIC EXPORTS OF HEAVY IRON AND STEEL

NOTE.—Prior to 1922, the small items for which quantity is not available are excluded, while in later years all items are included. Ferromanganese is included for all years. The small item "steam and hot water heating boilers and radiators," formerly classified as heavy iron and steel, is excluded beginning 1922

[Quantities in thousands of long tons (2,240 pounds); values in thousands of dollars]

Year	Quantity	Value	Year	Quantity	Value	Year	Quantity	Value
1890	52		1910	1,538	63,436	1922	1,995	136,334
1895	89		1911	2,188	86,599	1923	2,010	167,247
1900	1,154	42,518	1912	2,948	112,535	1924	1,806	150,494
1901	701	29,050	1913	2,746	108,875	1925	1,763	144,262
1902	372	15,889	1914	1,550	63,409	1926	2,167	174,145
1903	327	14,533	1915	3,533	140,993	1927	2,183	160,609
1904	1,168	35,248	1916	6,101	353,971	1928	2,865	179,881
1905	1,010	33,813	1917	6,439	567,041	1929	3,038	200,203
1906	1,326	52,215	1918	5,375	558,279	1930	1,983	139,039
1907	1,302	60,046	1919	4,400	410,164	1931	969	63,226
1908	964	43,397	1920	4,935	458,376	1932	595	28,857
1909	1,244	50,777	1921	2,213	214,830			

Sources: Table 672, American Iron and Steel Institute; Table 673, Bureau of the Census, Department of Commerce; Table 674, Bureau of Foreign and Domestic Commerce, Department of Commerce.

No. 675.—EXPORTS OF HEAVY IRON AND STEEL PRODUCTS

NOTE.—This and Tables 674 and 676 exclude the highly elaborated manufactures of iron and steel

Articles	Quantity in long tons (2,240 pounds)				Value in thousands of dollars			
	1929	1930	1931	1932	1929	1930	1931	1932
Total	3,037,857	1,982,546	968,645	594,581	200,203	139,039	63,226	28,857
Pig iron, not including ferro-alloys	46,357	13,671	6,719	2,324	830	292	151	54
Ferromanganese and spiegeleisen	1,574	6,189	1,306	33	59	146	39	2
Scrap	557,044	358,649	136,125	227,522	7,748	5,562	1,957	1,859
Ingots, blooms, billets, sheet bars, and skelp	173,665	136,916	64,461	27,114	7,007	5,926	2,701	974
Iron and steel bars	188,968	82,913	43,528	15,987	10,503	4,839	2,425	870
Alloy steel bars	15,743	6,668	2,968	1,621	1,660	911	499	251
Wire rods	42,251	39,777	32,125	14,813	2,012	1,876	1,297	583
Galvanized sheets	151,510	93,490	51,523	26,923	14,759	8,798	4,294	1,982
Plates, iron and steel	193,695	98,339	42,472	10,293	10,018	4,858	1,911	524
Black steel sheets	173,602	137,918	91,788	38,277	14,307	10,343	6,918	2,844
Black iron sheets	15,855	11,482	5,526	2,462	1,597	1,097	447	176
Hoop, band, and strip steel	70,864	39,316	28,229	17,778	5,136	2,673	1,834	1,127
Tin plate, terneplate, etc	258,965	216,513	84,433	39,603	28,566	24,202	7,841	3,273
Structural shapes, plain material	288,513	140,415	88,710	14,885	12,684	6,234	3,437	590
Structural materials, fabricated	112,099	103,471	32,135	17,277	9,665	9,146	2,769	1,029
Tanks, complete and knocked down		20,490	12,432	3,053		2,387	1,132	267
Metal lath	5,452	5,578	2,410	1,471	816	848	350	183
Steel rails	146,060	95,179	33,108	11,320	5,332	3,580	1,289	428
Rail fastenings, switches, frogs, etc	32,597	19,517	8,093	3,742	3,223	2,133	877	299
Boiler tubes	19,506	14,685	7,071	3,681	2,494	2,005	886	567
Casing and oil-line pipe	113,584	62,104	21,975	17,275	11,861	6,708	2,469	1,792
Seamless black pipe, except casing and oil line				597				95
Black and galvanized welded pipe	145,186	93,400	60,437	30,888	13,267	9,069	5,178	2,463
Riveted pipe and fittings				161				33
Cast-iron pipe and fittings	46,919	31,474	21,184	8,410	5,036	3,667	1,661	591
Malleable-iron screwed pipe fittings	12,534	10,743	4,509	1,677	3,927	3,413	1,401	485
Barbed-wire and woven-wire fencing	64,478	39,118	24,105	17,742	4,445	2,539	1,331	896
Plain and galvanized wire	45,505	26,463	14,163	8,391	3,654	2,069	1,044	597
Woven-wire screen cloth	1,667	1,583	866	635	669	558	298	199
Wire rope	6,958	4,836	2,499	1,575	1,907	1,254	666	410
Insulated wire and cable	1,076	530	298	84	397	216	108	28
Wire, other, and manufactures thereof	10,382	7,468	4,640	2,080	2,446	1,677	997	527
Wire nails	12,987	8,472	8,838	7,552	864	536	485	370
Nails other than wire, including tacks	10,256	5,867	3,816	3,378	1,784	1,056	608	456
Horseshoes	441	180	152	100	69	32	21	14
Bolts, nuts, rivets, and washers [1]	16,235	10,131	4,861	2,714	3,145	2,093	1,049	625
Car wheels and axles	21,459	14,841	6,317	2,884	1,560	1,140	430	210
Iron castings	10,976	6,613	4,326	3,397	1,573	1,458	689	374
Steel castings	10,824	9,380	3,104	1,173	2,975	2,280	743	290
Forgings	12,070	8,467	7,393	3,689	2,207	1,420	997	521

[1] Except track.

No. 676.—IRON AND STEEL: EXPORTS BY DESTINATIONS

NOTE.—All figures in long tons (2,240 pounds). Products covered are those listed in Table 675

Country	1930	1931	1932	Country	1930	1931	1932
Belgium	7,960	2,749	1,872	Brazil	37,720	22,650	10,090
France	7,153	8,931	3,703	Chile	81,983	24,178	1,655
Germany	8,325	1,094	703	Colombia	24,087	12,040	10,863
Italy	44,750	6,231	8,093	Ecuador	4,895	1,519	1,143
Netherlands	3,032	2,031	1,188	Peru	16,520	14,484	3,284
Norway	6,914	3,439	2,964	Uruguay	20,334	7,271	2,164
Spain	11,335	179	576	Venezuela	37,624	10,370	8,505
U. S. S. R. (Russia) in Europe	10,892	2,708	275	India and Ceylon	24,787	11,605	3,254
United Kingdom	44,878	40,476	4,700	British Malaya	6,073	2,318	390
Canada	820,116	420,599	163,900	China	38,879	38,224	20,885
Central America	35,189	24,409	20,641	Netherland East Indies	41,041	9,099	4,291
Mexico	83,433	44,095	18,237	Hong Kong	7,062	7,998	5,647
British West Indies	12,253	4,285	1,127	Japan	276,740	98,886	191,193
Cuba	41,628	15,999	10,531	Kwantung	9,686	1,360	1,203
Dominican Republic	3,791	1,955	1,497	Palestine and Syria	3,602	471	3,566
Netherland West Indies	11,109	2,397	3,102	Philippine Islands	69,696	52,452	46,768
Argentina	58,618	40,101	17,892	Australia	9,643	1,983	1,300
				British South Africa	5,308	4,523	2,349
				All other	55,490	25,436	15,030

Source of Tables 675 and 676: Bureau of Foreign and Domestic Commerce, Department of Commerce.

No. 677.—IRON AND STEEL: AVERAGE ANNUAL PRICES

[Prices of pig iron, rails, and billets in dollars per long ton (2,240 pounds); other prices in dollars per 100 pounds]

Year	Pig iron				Bessemer rails at mills in Pennsylvania [2]	Bessemer steel billets, Pittsburgh	Soft-steel bars, Pittsburgh	Iron bars (best refined), Pittsburgh [3]	Tank plates, Pittsburgh	Beams, Pittsburgh	Composite finished steel [4]
	Bessemer, Pittsburgh	Basic, The Valleys	Southern, No. 2, Cincinnati	Local, No. 2, Chicago [1]							
1891–1895	13.46	----	11.74	12.80	27.27	20.89	----	1.46	----	----	----
1896–1900	14.22	----	12.56	14.30	24.96	21.08	[5] 1.46	1.50	1.61	[5] 1.63	----
1901–1905	17.14	----	15.80	17.50	27.87	25.76	1.47	1.77	1.60	1.63	----
1903	18.98	----	17.08	19.25	28.00	27.91	1.56	1.77	1.61	1.62	----
1904	13.76	----	12.73	14.37	28.00	22.18	1.33	1.48	1.54	1.54	1.71
1905	16.36	15.25	15.57	17.65	28.00	24.03	1.48	1.87	1.58	1.62	1.76
1906	19.54	18.10	18.37	20.43	28.00	27.45	1.51	1.93	1.61	1.70	1.77
1907	22.84	20.87	23.10	24.50	28.00	29.25	1.60	1.94	1.70	1.70	1.92
1908	17.07	15.16	15.54	17.57	28.00	26.31	1.49	1.60	1.64	1.64	1.86
1909	17.41	15.48	16.12	17.49	28.00	24.62	1.33	1.62	1.42	1.42	1.63
1910	17.19	14.76	15.16	17.09	28.00	25.38	1.44	1.65	1.47	1.45	1.66
1911	15.71	13.07	13.67	14.83	28.00	21.46	1.26	1.41	1.31	1.32	1.54
1912	15.94	13.92	14.93	15.32	28.00	22.38	1.29	1.44	1.33	1.32	1.53
1913	17.13	14.71	14.90	15.85	28.00	25.79	1.55	1.69	1.50	1.50	1.66
1914	14.89	12.87	13.41	13.60	28.00	20.09	1.15	1.32	1.14	1.15	1.43
1915	15.78	13.74	13.57	14.01	28.00	22.44	1.31	1.48	1.31	1.30	1.53
1916	23.86	19.76	18.67	20.26	32.00	43.95	2.67	2.13	3.53	2.55	2.67
1917	43.64	38.90	38.95	41.31	38.00	70.96	3.64	3.83	5.88	3.67	4.19
1918	36.67	32.50	36.56	33.25	55.00	47.33	2.89	4.31	3.24	2.99	3.54
1919	31.12	27.67	32.17	29.11	47.29	40.54	2.49	4.10	2.72	2.53	3.12
1920	44.44	42.25	44.52	42.52	52.42	56.14	3.22	4.75	3.28	2.95	3.84
1921	25.34	21.73	26.68	22.93	44.06	34.46	1.87	4.47	1.93	1.93	2.54
1922	27.58	24.20	23.95	24.85	40.75	33.95	1.72	3.35	1.72	1.71	2.24
1923	28.97	25.80	27.85	28.16	43.00	41.70	2.36	3.50	2.43	2.43	2.78
1924	23.29	20.24	23.92	22.11	43.00	37.99	2.20	4.00	2.12	2.19	2.60
1925	22.33	19.58	23.85	22.09	43.00	35.45	2.02	4.52	1.92	1.99	2.44
1926	21.32	18.55	24.71	21.64	43.00	35.00	2.00	4.62	1.88	1.95	2.41
1927	20.43	17.69	21.16	19.68	43.00	33.27	1.83	4.68	1.82	1.83	2.29
1928	19.22	16.67	19.70	18.54	43.00	32.67	1.87	4.64	1.87	1.87	2.25
1929	20.54	18.19	18.49	20.00	43.00	34.66	1.92	4.13	1.93	[6] 1.92	2.30
1930	20.27	17.97	16.19	18.47	43.00	31.84	1.71	4.11	1.69	[6] 1.69	2.11
1931	18.70	15.85	14.52	17.35	43.00	29.36	1.62	3.69	1.62	[6] 1.62	2.02
1932	17.12	13.98	13.84	15.87	42.44	26.51	1.57	3.35	1.57	[6] 1.57	1.96

[1] At furnace after 1907.
[2] Bessemer or open-hearth rails from Oct. 22, 1921.
[3] Muck iron prior to 1892.
[4] Includes hot-rolled strip beginning 1920.
[5] Average for years 1898–1900.
[6] Structural shapes from March 19, 1929.

No. 678.—ALUMINUM AND BAUXITE: PRODUCTION, EXPORTS, AND IMPORTS

	1913	1920	1925	1929	1930	1931	1932
BAUXITE							
Quantities, long tons (2,240 pounds):							
Production	210,241	521,308	316,540	365,777	330,612	195,895	96,349
Georgia, Alabama, and Tennessee	40,370	40,029	20,220	14,723	15,339	9,198	6,570
Arkansas	169,871	481,279	296,320	351,054	315,273	186,697	89,779
Imports for consumption	21,456	42,895	353,696	380,812	409,678	306,490	205,620
Exports	(1)	22,257	78,633	133,551	104,504	88,370	28,474
Value of production [2] (1,000 dollars)	998	3,247	1,988	2,266	1,928	1,141	548
ALUMINUM							
Value, 1,000 dollars:							
Production—							
Primary metal	9,450	41,375	36,430	51,864	50,961	37,284	20,453
Secondary metal	2,199	9,489	24,816	23,135	17,177	12,726	(1)
Imports for consumption, total	4,784	13,077	10,107	10,860	5,286	3,211	1,822
Crude and semicrude	4,388	12,184	9,806	9,935	4,690	2,540	1,339
Manufactures	396	893	301	925	596	671	483
Exports, total	966	5,631	6,057	7,971	7,122	2,855	1,453
Crude and semicrude	----	3,068	3,366	4,150	3,916	986	469
Manufactures	----	2,563	2,691	3,822	3,206	1,869	984
Quantities, 1,000 pounds:							
Imports (crude and semicrude)	25,095	39,299	41,997	50,881	25,461	14,833	8,185
Exports (crude and semicrude)	(1)	9,408	12,642	17,032	17,330	4,701	4,437

[1] Unavailable.
[2] F. o. b mines.

Sources: Table 677, Iron Age and American Iron and Steel Institute; Table 678, Bureau of Mines, Department of Commerce.

No. 679.—COPPER: Production, Exports, Imports, and Consumption

NOTE.—**All quantities except ore produced in millions and tenths of millions of pounds.** Production figures include continental United States and Alaska. Owing to the varying stages of production, the stocks in different classes of hands, the redistribution of copper previously purchased, the recovery and use of old copper, etc., calculations of consumption are somewhat uncertain. The American Bureau of Metal Statistics presents consumption estimates rather widely different from those given below. Consumption as shown represents the quantity of copper withdrawn on domestic account, but not actual domestic consumption, as no account is taken of consumers' stocks

Item	1910	1915	1920	1925	1929	1930	1931	1932
UNREFINED COPPER								
Ore produced (million short tons) [1]	28.5	43.4	36.8	53.1	68.4	47.4	34.0	(2)
Average copper yield, per cent	1.88	1.66	1.63	1.54	1.41	1.43	1.50	(2)
Smelter output from domestic ore	1,080.2	1,388.0	1,209.1	1,674.9	2,002.9	1,394.4	1,042.7	544.0
Mine production	1,088.2	1,488.1	1,224.6	1,678.1	1,995.1	1,410.1	1,057.7	483.2
Imports, unrefined:								
Ore (copper content)	64.2	92.1	52.0	107.6	124.6	101.3	23.6	14.0
Concentrates (copper content)	21.0	22.3	46.8	54.0	53.7	56.9	99.4	44.2
Matte and regulus (copper content)			17.6	1.7	2.1	4.7	1.5	1.7
Black, in bars, pigs, etc	[3] 259.2	[3] 193.8	244.7	379.3	646.2	560.5	281.9	161.7
REFINED COPPER PRODUCTION								
Total new and old copper	1,611.0	2,027.0	2,151.0	3,045.0	3,993.0	3,091.0	2,195.0	1,177.0
New copper (primary)	1,422.0	1,634.2	1,526.2	2,204.6	2,740.1	2,157.1	1,501.4	680.9
Domestic	1,071.9	1,387.7	1,182.4	1,682.9	1,982.7	1,391.2	1,074.6	445.1
Foreign	350.1	246.5	343.7	521.7	757.4	765.8	426.8	235.8
Electrolytic	1,128.3	1,360.8	1,351.7	2,050.6	2,542.3	1,993.6	1,373.4	[4] 608.7
Lake	221.5	236.8	153.5	138.0	185.3	143.0	105.2	[4] 53.8
Casting and best select [5]	72.3	36.6	21.0	15.9	12.5	20.5	22.8	18.3
Old copper rerefined (secondary)	189.0	392.4	624.9	840.4	1,253.1	934.4	694.0	496.0
REFINED COPPER CONSUMPTION								
New copper produced (refinery)	1,422.0	1,634.2	1,526.2	2,204.6	2,740.1	2,157.1	1,501.4	680.9
Refined copper imported	(2)	(2)	108.7	99.8	134.0	86.2	174.4	167.8
Refined copper exported [6]	708.3	588.8	553.1	1,022.3	903.5	669.3	464.2	250.1
Stocks, Dec. 31 (refined)	122.8	82.4	659.0	124.0	306.0	615.0	924.6	1,004.0
Withdrawn on domestic account:								
New refined copper	732.4	1,136.6	1,053.8	1,401.0	1,778.6	1,265.0	902.1	519.2
New and old copper [7]	921.0	1,529.0	1,679.0	2,241.0	3,031.7	2,199.4	1,596.1	1,015.2

[1] 2,000 pounds.
[2] Not available.
[3] Imports of refined copper in ingots, bars, or other forms included in imports of unrefined.
[4] Some copper from Michigan was electrolytically refined and is included with electrolytic.
[5] Includes pig for years 1915 and 1920.
[6] Includes small exports of unrefined black blister and converter copper (bars, pigs, etc.) prior to 1925.
[7] Total from preceding line plus production of secondary copper as given above.

No. 680.—COPPER: Smelter Production by State of Origin of Ore Smelted

[Quantities in thousands of pounds]

State of origin	1910	1915	1920	1925	1929	1930	1931	1932
Total	1,080,160	1,388,010	1,209,061	1,674,870	2,002,863	1,394,389	1,042,711	544,010
Alaska	4,311	70,695	66,094	72,204	39,868	36,380	23,233	13,297
Arizona	297,251	432,468	552,989	722,653	829,207	570,897	400,311	201,136
California	45,760	37,658	11,822	46,944	33,084	26,262	8,345	5,514
Colorado	9,307	7,272	4,283	3,163	10,520	12,944	9,029	8,976
Idaho	6,878	6,218	1,922	3,144	6,268	2,714	1,627	663
Michigan	221,463	238,956	153,484	138,030	185,301	142,986	105,222	63,899
Missouri		306	533	12	2	2		
Montana	283,079	268,263	177,744	270,605	299,895	198,796	173,910	97,918
Nevada	64,495	67,757	55,580	77,138	138,990	87,475	71,233	32,616
New Mexico	3,785	62,817	52,160	76,467	100,165	74,188	66,776	32,915
Oregon	22	797	2,529	126	739	230	9	37
Pennsylvania	741		618	562	3,581	3,061	844	(1)
Tennessee	16,692	18,205	16,728	19,789	(1)	(1)	(1)	(1)
Utah	125,185	175,178	110,358	242,731	325,965	205,770	161,023	76,403
Washington	65	904	2,126	1,185	1,569	1,405	71	3
Undistributed	1,127	514	92	117	27,709	31,280	21,078	10,633

[1] Included under "Undistributed."

Source of Tables 679 and 680: Bureau of Mines, Department of Commerce.

No. 681.—COPPER: SMELTER AND REFINERY OUTPUT

NOTE.—Smelter output as here given represents the production of unrefined copper from domestic (including Alaskan) ores. Some copper ore is imported and smelted in this country, but this appears only in the figures of refined copper from imported material in Table 679

[Quantities in millions of pounds; values in thousands of dollars]

Period	Smelter output from domestic ore		Year	Smelter output from domestic ore		Refinery output (quantity)			
						New copper			Secondary copper
	Quantity	Value		Quantity	Value	Total[1]	Domestic	Foreign[1]	
1850	1½	320	1910	1,080	137,180	1,422	1,072	350	189
1860	16	3,709	1911	1,097	137,154	1,434	1,097	337	214
1870	28	5,997	1912	1,243	205,139	1,568	1,243	325	273
1871–1875	34	8,895	1913	1,224	189,795	1,615	1,237	378	276
1876–1880	50	9,679	1914	1,150	152,968	1,534	1,150	384	252
1881–1885	118	17,236	1915	1,388	242,902	1,634	1,388	247	395
1886–1890	226	30,345	1916	1,928	474,288	2,259	1,928	331	700
1891–1895	339	37,266	1917	1,886	514,911	2,428	1,886	542	767
			1918	1,909	471,408	2,432	1,883	549	705
1896–1900	531	74,424	1919	1,286	239,274	1,805	1,433	372	574
1901–1905	732	103,859	1920	1,209	222,467	1,526	1,182	344	625
1906–1910	980	150,924	1921	506	65,221	951	609	341	435
1911–1915	1,221	185,592	1922	950	128,289	1,256	905	351	672
1916–1920	1,644	395,270	1923	1,435	210,945	1,980	1,464	516	822
1921–1925	1,240	171,275	1924	1,634	214,087	2,260	1,674	586	777
1926–1930	1,729	252,172	1925	1,675	237,832	2,205	1,683	522	840
			1926	1,740	243,547	2,322	1,731	591	960
1904	813	104,005	1927	1,684	220,609	2,326	1,719	607	980
1905	889	138,650	1928	1,826	262,930	2,488	1,792	696	1,073
1906	918	177,136	1929	2,003	352,504	2,740	1,983	757	1,253
1907	869	173,799	1930	1,394	181,271	2,157	1,391	766	934
1908	943	124,419	1931	1,043	94,887	1,501	1,075	427	694
1909	1,093	142,084	1932	544	34,273	681	445	236	496

[1] Includes refined copper imported from 1908 to 1919, inclusive.

Source: Bureau of Mines, Department of Commerce.

No. 682.—EXPORTS AND IMPORTS OF COPPER

NOTE.—Exports are those classed as "domestic" in the foreign trade statistics but include copper smelted or refined in the United States from imported ore or unrefined metal. Values include all forms of copper. Quantities represent all copper except the small item, "other manufactures." Copper content of exports of ore for years 1891–1915 and of imports for years 1894–1903 was estimated

[Quantities in short tons (2,000 pounds); values in thousands of dollars]

Yearly average or year	Exports		Imports		Year	Exports		Imports	
	Quantity	Value	Quantity	Value		Quantity	Value	Quantity	Value
1891–1895 [1]	65,586	14,392	5,477	896	1923	412,375	129,220	338,236	95,988
1896–1900 [1]	137,684	36,745	24,634	5,866	1924	556,106	156,646	384,408	96,184
1901–1905 [1]	199,451	54,942	83,237	22,611	1925	540,376	161,166	326,486	84,270
1906–1910 [1]	289,445	92,334	130,111	38,026	1926	482,843	141,204	389,721	99,742
1911–1915 [1]	416,840	123,655	176,635	46,129	1927	538,365	150,214	359,161	84,963
1916–1920 [2]	376,877	208,909	244,948	103,805	1928	562,510	169,831	393,537	98,187
1921–1925	438,337	129,761	208,975	77,811	1929	499,237	183,405	487,156	153,710
1926–1930	491,290	149,999	407,630	108,244	1930	376,647	105,342	408,577	104,616
1921	314,402	97,898	175,236	45,785	1931	278,937	54,748	292,946	48,745
1922	368,428	103,874	270,507	66,829	1932	164,111	21,236	195,996	23,735

[1] Fiscal years ended June 30.
[2] Average for period July 1, 1915, to Dec. 31, 1920.

Source: Bureau of Foreign and Domestic Commerce.

No. 683.—REFINED PRIMARY LEAD AND SECONDARY LEAD

NOTE.—Production in short tons (2,000 pounds); values, except price per pound, in thousands of dollars. This table, except the column for secondary lead, relates to new (primary) lead only; the totals include lead derived from both domestic (including Alaska) and foreign ore. General production figures and production of desilverized lead do not include antimonial lead, shown in next to the last column. This table represents exclusively refined lead, while in Table 684 part of the lead from domestic ore is unrefined

Year	Production	Value	Year	Production	Value	Year	Production	Value
1830	8,000	608	1899	298,047	26,824	1916	571,134	78,817
1840	17,000	1,666	1900	367,773	32,364	1917	610,769	105,052
1850	22,000	2,112	1901	371,032	30,909	1918	640,195	90,908
1860	15,600	1,778	1902	367,892	30,167	1919	482,220	51,115
1870	17,330	2,247	1903	368,939	30,991	1920	529,657	84,745
1880	95,725	9,573	1904	393,452	33,837	1921	448,589	40,373
1885	126,192	10,095	1905	388,307	36,501	1922	532,662	58,593
1889	178,357	13,912	1906	404,746	46,141	1923	618,322	86,565
1890	157,844	14,206	1907	413,389	43,819	1924	690,493	110,479
1891	198,363	17,059	1908	396,564	33,311	1925	766,969	133,453
1892	208,223	17,074	1909	446,909	38,434	1926	798,941	127,831
1893	224,320	16,600	1910	470,272	14,384	1927	796,530	100,363
1894	213,650	14,101	1911	486,979	43,828	1928	781,071	90,604
1895	235,822	15,093	1912	480,894	43,280	1929	774,633	97,604
1896	257,487	15,449	1913	462,460	40,696	1930	643,033	64,303
1897	282,169	20,316	1914	542,122	42,286	1931	442,764	32,765
1898	302,148	22,963	1915	550,055	51,705	1932	288,361	17,302

Year	Class		Source			Average value per pound	Antimonial lead, total production	Secondary lead recovered, total
	Desilverized [1]	Soft	Domestic ores and bullion [2]	Foreign ores	Foreign base bullion			
1880	68,035	27,690	95,725			$0.050	2,100	
1885	104,217	21,975	126,192			.040	3,220	
1890	126,493	31,351	139,720	18,124		.045	3,910	
1895	195,932	39,890	159,649	76,173		.032	6,060	
1900	319,752	48,021	260,918	106,855		.044	9,906	
1905	302,852	85,455	307,514	80,793		.047	10,995	
1910	328,954	141,318	375,402	18,065	76,805	.044	14,069	55,422
1915	388,594	161,461	507,026	9,581	33,448	.047	23,224	78,900
1920	339,803	189,854	476,849	8,414	44,394	.080	12,535	124,650
1925	506,409	260,560	654,921	47,024	65,024	.087	19,667	226,880
1929	539,288	235,345	672,498	29,675	72,460	.063	25,669	311,000
1930	441,672	201,361	573,740	34,348	34,945	.050	13,711	255,800
1931	304,375	138,389	390,260	22,254	30,250	.037	(3)	234,700
1932	225,231	63,130	255,337	21,747	11,277	.030	(3)	198,300

[1] Desilverized soft lead is included. [2] Excludes antimonial lead. [3] No comparable data.

No. 684.—SOURCES OF PRIMARY LEAD SMELTED OR REFINED IN THE UNITED STATES

[Production in short tons (2,000 pounds). See headnote to Table 682]

Source of ore	1910	1915	1920	1925	1929	1930	1931	1932
Total	494,081	580,041	547,155	798,499	788,127	649,306	446,103	290,065
From domestic ore	389,211	537,012	494,347	686,451	685,992	580,013	393,599	257,041
Arizona	948	6,953	5,987	10,281	8,153	4,223	2,085	1,134
Colorado	38,542	32,352	17,752	31,855	23,675	25,091	6,311	2,288
Idaho	109,951	160,680	117,191	123,363	147,595	135,411	100,970	68,606
Kansas	1,308	1,320	8,421	15,001	[1] 26,104	[1] 13,103	[1] 6,601	(2)
Missouri	161,659	195,634	171,999	208,547	211,345	201,056	151,359	79,483
Montana	1,943	4,853	13,231	22,008	26,795	15,412	4,766	1,572
Nevada	2,246	7,664	8,650	10,978	13,256	14,091	8,348	390
New Mexico	1,890	2,157	1,123	3,782	12,249	11,250	11,045	10,606
Oklahoma	1,805	4,346	68,494	78,487	[1] 45,653	[1] 23,398	[1] 12,312	[2] 14,952
Utah	60,605	106,105	64,006	166,844	157,085	122,311	75,207	70,111
Undistributed	6,077	10,386	13,127	13,764	12,179	13,672	13,878	7,507
Zinc residues	2,237	4,562	4,366	1,541	1,903	995	717	392
From foreign ore [3]	18,065	9,581	8,414	47,024	29,675	34,348	22,254	21,747
Canada	25	1,174	1,186	10,676	9,499	14,369	3,816	3,797
Europe			19	470	28	41	43	4,491
Mexico	11,704	5,437	2,729	31,107	16,807	14,949	6,420	334
South America	2,996	2,829	2,747	4,496	3,285	3,476	2,299	2,631
From foreign base bullion [3]	76,805	33,448	44,394	65,024	72,460	34,945	30,250	11,277
Mexico	76,805	33,173	42,421	65,024	51,295	18,592	30,072	11,164
Peru					21,165	16,353	178	113

[1] Separation as between Kansas and Oklahoma is made on the basis of mine figures.
[2] Production for Kansas is included with Oklahoma. [3] Totals include small unspecified items.
Source of Tables 683 and 684: Bureau of Mines, Department of Commerce.

No. 685.—SUPPLY AND DISTRIBUTION OF REFINED PRIMARY LEAD

NOTE.—All data in short tons (2,000 pounds). Apparent deliveries are only approximate, as no account (except for bonded warehouses prior to 1931) is taken of changes in stocks

	1910	1915	1926	1925	1929	1930	1931	1932
Supply, total	473,836	550,467	565,610	779,035	780,430	644,570	442,774	288,405
Stock in bonded warehouses Jan. 1	79	2	234	5,045	4,139	1,328	(1)	(1)
Imports of pigs, bars, and old	3,485	410	35,719	7,021	1,658	209	10	44
Production from domestic and foreign ore	470,272	550,055	529,657	766,969	774,633	643,033	442,764	288,361
Deductions, total	78,661	130,907	27,590	123,380	87,665	61,796	32,168	30,607
Exports—								
Pig lead	69,786	126,924	20,093	103,519	73,251	48,307	21,665	23,387
In manufactures with benefit of drawback	8,800	3,983	6,175	11,699	13,086	12,161	10,503	7,220
Stock in bonded warehouses Dec. 31	75	----	1,322	8,162	1,328	(1)	(1)	(1)
Apparent deliveries to domestic consumers	395,175	419,560	538,020	655,655	692,765	582,774	410,606	257,798

[1] Stocks of pigs, bars, etc. in bonded warehouse not separately reported after April, 1930; included with base bullion. For purpose of calculating apparent deliveries in 1930, stocks in warehouse are estimated to have remained unchanged from beginning of the year.

Source: Bureau of Mines, Department of Commerce.

No. 686.—MANUFACTURES OF NONFERROUS METALS AND ALLOYS,[1] 1931

NOTE.—This table shows the production of the commodities specified, whether made as primary or as secondary products by the industries reporting them. The census designations of the industries in which these commodities are made as primary products are as follows: "Nonferrous-metal alloys; nonferrous-metal products, except aluminum, not elsewhere classified;" and "Smelting and refining, nonferrous metals other than gold, silver, or platinum, not from the ore."

[Quantities in thousands of pounds; values in thousands of dollars]

Kind	1931		Kind	1931	
	Quantity	Value		Quantity	Value
Ingots and pigs:			Other tubing, including brazed	2,482	573
Copper (secondary)	52,558	3,756	Castings, rough:		
Lead (secondary)	277,392	11,473	Brass and bronze	209,266	33,468
Zinc (secondary)	38,288	1,441	Copper	3,290	951
Brass and bronze	161,768	14,252	Nickel-alloy [2]	4,068	2,227
Antifriction bearing metal	29,112	3,783	Finished products:		
Solders, of all kinds	70,154	10,166	Castings, finished, brass and bronze	----	3,573
Type metal	58,508	3,538	Bearings and bushings, brass and bronze (including antifriction linings)	----	9,231
Plates and sheets:			Die castings	----	8,037
Brass and bronze	225,710	33,295	Extruded shapes	----	2,281
Copper	144,006	23,251	Forgings and hot-pressed parts, brass and bronze	----	2,807
Lead	33,176	2,227	Architectural and ornamental work, including grilles, railings, etc	----	948
Nickel and nickel-alloy	27,188	8,202	Bells	----	479
Rods and bars:					
Brass and bronze	201,086	22,576			
Copper	180,708	18,553			
Nickel and nickel alloys	5,628	2,285			
Tubing (seamless) and pipe:					
Brass and bronze	97,904	16,773			
Copper	64,504	12,054			
Lead	44,388	2,906			
Nickel and nickel alloys	2,452	1,289			

[1] This table does not include data for establishments engaged in smelting and refining concentrates containing copper, lead, zinc, and other nonferrous metals.
[2] Includes nonferrous heat-resistant alloy castings.

Source: Bureau of the Census, Department of Commerce.

No. 687.—ZINC: PRODUCTION, EXPORTS, STOCKS, AND APPARENT CONSUMPTION

NOTE.—The excess of mine production over smelter production is due chiefly to export of ore

[All quantity figures in short tons (2,000 pounds); values in thousands of dollars]

	1910	1915	1920	1925	1929	1930	1931	1932[1]
Mine production (recoverable zinc content of ore)	327,618	587,595	587,524	710,847	724,478	595,425	[1]410,318	283,580
Colorado	38,545	52,297	24,395	30,811	29,431	36,259	[1]16,187	130
Idaho	2,802	35,077	13,966	15,619	45,675	37,649	19,569	10,200
Kansas	13,229	14,365	61,073	118,778	109,850	74,304	39,051	23,800
Missouri	128,589	136,300	24,509	14,794	11,017	10,311	3,205	1,040
Montana	15,819	93,573	92,169	57,658	68,176	26,421	6,747	2,240
Nevada	1,354	12,188	5,349	7,411	8,460	14,584	10,431	540
New Jersey	68,584	117,722	78,511	89,261	103,740	97,626	94,285	81,770
New Mexico	9,044	12,702	5,007	9,246	34,455	32,765	27,866	25,480
New York	----------	2,455	5,654	5,158	10,250	22,471	24,100	16,280
Oklahoma	6,394	14,314	219,727	283,371	192,042	136,153	78,132	64,000
Tennessee	966	16,461	19,217	16,256	[2]40,558	[2]48,147	[2]38,312	[2]19,070
Utah	8,184	12,146	4,079	26,306	51,510	44,495	37,291	29,080
Wisconsin	25,927	41,403	27,285	20,230	16,986	12,558	10,088	7,650
Other States	8,181	26,592	6,583	15,948	2,328	1,182	5,054	2,300
Smelter production	310,407	542,419	508,227	634,376	690,847	547,345	326,796	227,148
Primary zinc	269,184	489,519	463,377	572,946	625,447	498,045	291,996	207,148
From domestic ore	252,479	458,135	450,045	555,631	612,136	489,361	291,996	207,148
From foreign ore	16,705	31,384	13,332	17,315	13,311	8,684	----------	----------
Secondary zinc	41,223	52,900	42,850	61,430	65,400	49,300	34,800	20,000
Redistilled	12,784	29,764	21,371	39,181	47,348	[3]34,849	[3]21,625	14,718
Remelted	28,439	23,136	21,479	22,249	18,052	14,451	13,175	5,282
Value of primary product from domestic ore ($1,000)	27,268	113,617	72,907	84,456	80,802	46,979	22,192	12,429
Primary zinc consumed:								
Supply, total	282,350	510,518	508,347	593,724	674,105	584,295	459,586	351,051
Stock, Jan. 1	11,206	20,095	36,793	20,754	48,432	85,904	167,293	143,592
Produced	269,184	489,519	463,377	572,946	625,447	498,045	291,996	207,148
Imported	1,960	904	8,177	24	226	346	297	311
Deductions:								
Exports, total	13,234	131,410	114,267	80,547	19,676	8,533	3,402	9,618
Stock, Dec. 31	23,232	14,253	71,037	13,080	85,904	167,293	143,592	128,192
Apparent deliveries to domestic consumers	245,884	364,855	323,043	500,097	568,525	408,469	312,592	213,241

[1] Preliminary.
[2] Includes Virginia.
[3] Includes small quantity of secondary electrolytic zinc.

Source: Bureau of Mines, Department of Commerce.

No. 688.—SMELTER PRODUCTION OF PRIMARY ZINC FROM DOMESTIC ORE

[Quantities in short tons (2,000 pounds); values[1] in thousands of dollars]

Yearly average or year	Quantity	Value	Yearly average or year	Quantity	Value	Year	Quantity	Value
1875	15,833	[2]2,217	1921–1925	426,261	56,149	1923	508,335	69,134
1880[3]	23,239	2,277	1926–1930	576,395	73,119	1924	515,831	67,058
1885	40,688	3,540	1915	458,135	113,617	1925	555,631	84,456
1886–1890	54,285	5,219	1916	564,338	151,243	1926	611,991	91,799
1891–1895	82,396	6,787	1917	584,597	119,258	1927	576,960	73,851
1896–1900	109,963	10,180	1918	492,405	89,618	1928	591,525	72,166
1901–1905	169,504	17,067	1919	452,272	66,032	1929	612,136	80,802
1906–1910	219,378	24,165	1920	450,045	72,907	1930	489,361	46,979
1911–1915	346,867	52,416	1921	198,232	19,823	1931	291,996	22,192
1916–1920	508,731	99,812	1922	353,274	40,273	1932	207,148	12,429

[1] Values at New York prices, up to and including 1907; at St. Louis prices, 1908 to 1914; at average price all grades, 1915 and later years.
[2] Computed at yearly average of high and low monthly prices at New York.
[3] Census year ended May 31.

Source: Bureau of Mines, Department of Commerce.

No. 689.—GOLD AND SILVER: PRODUCTION FROM MINES IN CONTINENTAL UNITED STATES, ALASKA, PUERTO RICO, AND PHILIPPINE ISLANDS

NOTE.—The value of gold, in terms of money, being unchanging at $20.67+ per fine ounce, is not shown in the table. The value of silver given is commercial value (Pittman Act value for 1921 to June, 1923), which at times has differed materially from coinage value

[Figures are totals for period or for year]

Calendar year or period	Gold, 1,000 fine ounces	Silver, 1,000 fine ounces	Silver, value, 1,000 dollars	Calendar year	Gold, 1,000 fine ounces	Silver, 1,000 fine ounces	Silver, value, 1,000 dollars
1792–1847	1,187	310	405	1901	3,806	55,214	33,128
1848–1850	4,838	116	152	1902	3,870	55,500	29,415
1851–1855	14,271	194	259	1903	3,560	54,300	29,322
1856–1860	12,384	309	418	1904	3,892	57,683	33,456
1861–1865	10,716	28,811	38,674	1905	4,266	56,102	34,222
1866–1870	12,226	49,113	65,261	1906	4,565	56,518	38,256
1871–1875	8,826	121,083	156,270	1907	4,375	56,515	37,300
1876–1880	10,301	157,681	182,506	1908	4,574	52,441	28,051
1881–1885	7,730	182,841	202,807	1909	4,822	54,722	28,455
1886–1890	8,078	231,819	227,495	1910	4,657	57,138	30,855
1891–1895	9,107	287,057	227,960	1911	4,687	60,399	32,616
1896–1900	15,729	279,544	172,689	1912	4,521	63,767	39,198
1901–1905	19,394	278,798	159,543	1913	4,300	66,802	40,348
1906–1910	22,993	277,333	162,916	1914	4,573	72,455	40,068
1911–1915	22,968	338,384	189,626	1915	4,888	74,961	37,397
1916–1920	17,246	326,009	298,852				
1921–1925	12,194	313,757	258,862	1916	4,479	74,415	48,953
				1917	4,051	71,740	59,078
1926–1930	11,206	291,582	159,017	1918	3,321	67,810	66,485
1887	1,603	41,722	40,887	1919	2,919	56,682	63,534
1888	1,604	45,793	43,045	1920	2,476	55,362	60,802
1889	1,595	50,095	46,838				
1890	1,589	54,516	57,242	1921	2,422	53,052	[1] 53,052
				1922	2,363	56,240	[1] 56,240
1891	1,605	58,330	57,630	1923	2,503	73,335	[1] 60,135
1892	1,597	63,500	55,663	1924	2,529	65,407	43,823
1893	1,739	60,000	46,800	1925	2,412	66,155	45,912
1894	1,911	49,500	31,422				
1895	2,255	55,727	36,446	1926	2,335	62,719	39,136
				1927	2,197	60,434	34,266
1896	2,568	58,835	39,655	1928	2,233	58,463	34,201
1897	2,775	53,860	32,316	1929	2,208	61,328	32,688
1898	3,118	54,438	32,118	1930	2,286	50,748	19,538
1899	3,437	54,765	32,859				
1900	3,830	57,647	35,741	1931	2,396	30,932	8,970
				1932	2,449	23,981	6,763

State or Territory	Gold, 1,000 fine ounces					Silver, 1,000 fine ounces					Silver, value, 1932, 1,000 dollars
	1910	1920	1930	1931	1932	1910	1920	1930	1931	1932	
Total	4,657	2,476	2,286	2,396	2,449	57,138	55,362	50,748	30,932	23,981	6,763
Alaska	787	413	407	466	433	154	822	392	398	257	72
Arizona	165	240	149	137	67	2,656	5,432	4,910	4,071	2,137	603
California	989	716	450	521	570	1,792	1,655	1,434	777	509	143
Colorado	993	363	218	225	270	8,523	5,167	4,852	2,374	1,653	466
Idaho	50	23	21	18	41	7,027	7,365	9,710	7,416	6,591	1,859
Michigan						262	512	11	2	71	20
Montana	180	92	47	41	38	12,283	13,263	8,597	4,077	2,336	659
Nevada	913	175	140	139	128	12,366	7,482	4,179	2,369	1,305	368
New Mexico	23	22	32	32	20	779	700	1,160	1,070	1,108	313
Oregon	33	50	14	15	20	44	102	10	7	9	3
South Dakota	260	210	406	431	479	121	88	105	113	125	35
Texas	[2]	[2]	[2]		[2]	364	523	469	[2]	1	[2]
Utah	209	103	209	183	146	10,446	11,755	14,451	8,057	7,680	2,166
Washington	39	7	4	3	4	205	178	30	25	18	5
Philippine Islands	7	62	185	182	230	2	22	121	110	149	42
Other	8	[2]	3	1	3	115	296	317	66	31	9

[1] For 1921, 1922, and first half of 1923 price is taken at the figure of $1 per ounce fixed by the Pittman Act.
[2] Less than $500 or 500 ounces.

Source: Reports of the Director of the Mint, Treasury Department.

No. 690.—GOLD AND SILVER FOR USE IN MANUFACTURES AND THE ARTS

Yearly average or year	Gold in thousands of dollars					Silver in thousands of fine ounces				
	New material			Old material	Grand total	New material			Old material	Grand total
	United States coin [1]	Bullion and foreign coin	Total			United States coin [1]	Bullion and foreign coin	Total		
1880	3,300	5,511	8,811	1,294	10,105	464	2,126	2,590	204	2,794
1881–1885	3,715	6,991	10,706	1,863	12,568	155	3,685	3,840	315	4,155
1886–1890	3,500	8,512	12,012	4,029	16,041	155	4,831	4,986	676	5,662
1891–1895	3,500	7,948	11,448	5,060	16,508	108	6,938	7,046	951	7,997
1896–1900	3,500	9,398	12,898	4,067	16,965	77	8,937	9,014	1,200	10,214
1901–1905	3,500	18,218	21,718	6,778	28,496	77	16,447	16,524	3,002	19,526
1906–1910	3,500	26,941	30,441	7,708	38,149	77	20,807	20,884	3,669	24,553
1911–1915	2,500	28,121	30,621	9,967	40,588	77	23,438	23,516	6,928	30,444
1916–1920	1,000	38,831	39,831	22,033	61,864	77	22,011	22,089	9,126	31,214
1921–1925	1,000	29,321	30,321	29,275	59,596	77	28,538	28,616	8,189	36,805
1926–1930	1,000	23,747	24,747	30,450	55,197	77	28,059	28,137	10,325	38,461
1924	1,000	31,471	32,471	32,320	64,791	77	24,587	24,664	8,931	33,595
1925	1,000	30,134	31,134	30,092	61,226	77	29,852	29,929	9,897	39,827
1926	1,000	29,927	30,927	32,063	62,991	77	29,330	29,408	10,001	39,408
1927	1,000	25,450	26,450	30,369	56,820	77	28,416	28,493	10,155	38,649
1928	1,000	25,306	26,306	30,276	56,582	77	24,854	24,931	10,616	35,548
1929	1,000	23,873	24,873	32,031	56,904	77	30,900	30,978	11,382	42,359
1930	1,000	14,178	15,178	27,512	42,689	77	26,797	26,874	9,469	36,343
1931	1,000	4,931	5,931	23,227	29,158	77	24,258	24,336	9,346	33,682

[1] Estimated.

No. 691.—SILVER: PRICE, AND VALUE OF SILVER IN THE DOLLAR

NOTE.—The London price is converted to the basis of the ounce 1,000 fine and converted to American money throughout at par of exchange, notwithstanding the fact that from 1918 to 1924, and in 1931 and 1932 the pound sterling was depreciated as compared to the dollar. During these periods of depreciation the commercial ratio is computed on the basis of the New York average price; the value of fine silver (371¼ grains) in the dollar is computed on the basis of the New York average price beginning 1918. For other years computations are on the basis of the London quotations, which were at all times close to the New York quotations

Calendar year	London, per fine ounce	New York, per fine ounce			Commercial ratio to gold	Value of silver in dollar	Calendar year	London, per fine ounce	New York, per fine ounce			Commercial ratio to gold	Value of silver in dollar
		Average	High	Low					Average	High	Low		
1835	1.308				15.80		1906	.677	.674	.724	.631	30.54	.524
1840	1.323				15.62	1.023	1907	.662	.660	.710	.528	31.24	.512
1845	1.298				15.92	1.004	1908	.535	.535	.589	.483	38.64	.414
1850	1.316				15.70	1.018	1909	.520	.522	.545	.508	39.74	.402
1855	1.344				15.38	1.039	1910	.541	.542	.576	.508	38.22	.418
1860	1.352				15.29	1.045	1911	.539	.540	.575	.521	38.33	.417
1865	1.338				15.44	1.035	1912	.615	.620	.656	.553	33.62	.475
1870	1.328				15.57	1.027	1913	.605	.612	.651	.580	34.19	.468
1875	1.242	1.239	1.261	1.210	16.64	.961	1914	.553	.563	.609	.490	37.37	.428
1880	1.145	1.139	1.150	1.113	18.05	.886	1915	.519	.511	.580	.478	39.84	.401
1885	1.065	1.064	1.095	1.028	19.41	.824	1916	.686	.672	.791	.573	30.11	.531
1889	.935	.936	.972	.925	22.10	.723	1917	.895	.840	1.165	.731	23.09	.692
1890	1.046	1.053	1.205	.958	19.75	.809	1918	1.042	.984	1.025	.894	21.00	.761
1891	.988	.990	1.075	.948	20.92	.764	1919	1.250	1.121	1.388	1.018	18.44	.867
1892	.871	.876	.953	.830	23.72	.674	1920	1.346	1.019	1.368	.608	20.28	.788
1893	.780	.782	.850	.650	26.49	.604	1921	.805	.631	.738	.532	32.76	.488
1894	.635	.640	.700	.595	32.56	.491	1922	.754	.679	.742	.629	30.43	.525
1895	.654	.663	.690	.600	31.60	.506	1923	.700	.652	.690	.629	31.69	.505
1896	.676	.682	.703	.656	30.59	.523	1924	.745	.671	.724	.630	30.80	.519
1897	.604	.608	.661	.528	34.29	.467	1925	.703	.694	.732	.668	29.38	.537
1898	.590	.591	.623	.551	35.03	.456	1926	.629	.624	.689	.518	32.88	.483
1899	.602	.605	.648	.586	34.36	.465	1927	.571	.567	.603	.542	36.22	.438
1900	.620	.621	.658	.598	33.33	.480	1928	.586	.585	.639	.568	35.26	.452
1901	.596	.597	.645	.548	34.68	.461	1929	.536	.533	.578	.468	38.54	.412
1902	.528	.528	.569	.474	39.15	.408	1930	.387	.385	.472	.311	53.38	.298
1903	.543	.542	.624	.475	38.10	.420	1931	.320	.290	.376	.261	71.25	.224
1904	.579	.578	.625	.534	35.70	.448	1932	.391	.282	.313	.246	73.29	.218
1905	.610	.610	.665	.556	33.87	.472							

Source of Tables 690 and 691: Annual Reports of the Director of the Mint, Treasury Department.

No. 692.—COKE: Production, Exports, and Imports

Yearly average or year	Production in thousands of short tons (2,000 pounds)			By-product ovens, per cent of total	Production (value) in thousands of dollars	Exports	Imports[1]
	Total	Beehive ovens	By-product ovens			Thousand of short tons (2,000 pounds)	
1896–1900	16,265	15,741	524	3.2	30,293	265	54
1901–1905	25,673	23,566	2,107	8.2	58,581	519	150
1906–1910	36,848	31,296	5,552	15.1	91,068	904	159
1911–1915	40,394	29,000	11,394	28.2	103,739	897	98
1916–1920	52,429	27,733	24,696	47.1	320,799	1,182	34
1921–1925	42,985	11,026	31,959	74.4	251,967	734	99
1926–1930	53,724	6,687	47,037	87.6	262,212	1,027	171
1915	41,581	27,508	14,073	33.8	105,504	896	53
1916	54,534	35,464	19,069	35.0	170,841	1,175	55
1917	55,607	33,168	22,439	40.4	298,243	1,409	25
1918	56,478	30,481	25,998	46.0	382,324	1,688	30
1919	44,181	19,043	25,138	56.9	258,340	717	16
1920	51,345	20,511	30,834	60.0	475,981	920	41
1921	25,288	5,538	19,750	78.1	147,673	307	31
1922	37,124	8,573	28,551	76.9	238,313	512	94
1923	56,978	19,380	37,598	66.0	373,497	1,237	85
1924	44,270	10,286	33,984	76.8	244,042	660	83
1925	51,267	11,355	39,912	77.9	262,559	954	202
1926	56,866	12,489	44,377	78.0	307,773	987	285
1927	51,092	7,207	43,885	85.9	262,321	807	169
1928	52,806	4,493	48,313	91.5	252,834	1,098	148
1929	59,884	6,472	53,412	89.2	278,995	1,238	120
1930	47,972	2,776	45,196	94.2	209,137	1,004	133
1931	33,484	1,128	32,356	96.6	161,609	754	104
1932	21,913	654	21,259	97.2	105,787	630	117

[1] Imports entered for consumption, prior to 1925.

No. 693.—COKE: By-Product and Beehive Production, by States

[Figures in thousands of short tons (2,000 pounds)]

	1915	1920	1924	1925	1928	1929	1930	1931	1932
BY-PRODUCT									
Total	14,073	30,834	33,984	39,912	48,313	53,412	45,196	32,356	21,259
Alabama	2,070	3,124	4,386	4,582	4,327	4,754	3,987	2,943	1,401
Colorado		517	523	490	606	565	379	226	92
Illinois	1,687	2,137	2,355	3,012	3,241	4,204	3,576	2,479	1,428
Indiana	2,768	4,554	4,272	5,142	6,094	6,455	4,984	2,757	1,435
Maryland	313	682	810	1,019	1,186	1,393	1,169	818	500
Massachusetts	504	488	398	535	687	777	863	1,150	987
Michigan	(1)	1,393	1,771	1,751	2,400	2,680	2,604	2,437	2,165
Minnesota	128	675	515	518	623	746	641	440	385
New Jersey	269	726	869	904	903	898	919	931	929
New York	684	1,040	1,601	2,220	3,803	4,299	3,850	3,578	3,130
Ohio	666	5,615	5,723	7,105	7,786	8,521	6,163	3,933	2,347
Pennsylvania	3,092	7,730	8,426	9,853	13,475	14,489	12,529	7,525	4,038
West Virginia	141	447	999	1,056	1,368	1,431	1,479	1,265	903
All other States	1,749	1,706	1,335	1,725	1,814	2,199	2,051	1,873	1,519
BEEHIVE									
Total	27,508	20,511	10,286	11,355	4,493	6,472	2,776	1,128	654
Pennsylvania	22,531	15,908	8,501	9,574	3,442	5,368	2,011	856	506
Ohio	19	87	110	156	(1)				
West Virginia	1,250	1,381	330	490	431	497	422	114	48
Alabama	1,001	890	155	88					
Kentucky	285	273	79	(1)	(1)				
Tennessee	234	163	132	128	104	96	25	17	11
Virginia	630	1,028	485	422	248	315	220	99	56
Colorado	671	273	212	155	144	156	79	(1)	(1)
Utah	(1)	(1)	160	146	28	14	7	(1)	(1)
All other States	887	509	123	196	46	26	12	43	32

[1] Included under "all other States."

Source of Tables 692 and 693: Bureau of Mines, Department of Commerce.

No. 694.—COAL PRODUCTION: QUANTITY AND VALUE

NOTE.—Quantities in thousands of short tons (2,000 pounds); values in thousands of dollars. Includes coal consumed at mines. Figures for anthracite relate to Pennsylvania output only; those for bituminous relate to continental United States and Alaska. Bituminous coal includes brown coal and small amounts of anthracite outside of Pennsylvania. Comparatively little coal is held in stock at the mines

Year or yearly average	Quantity			Year	Quantity			Value	
	Total	Anthracite	Bituminous		Total	Anthracite	Bituminous	Anthracite	Bituminous
1821–1830	140	66	75	1911	496,371	90,464	405,907	175,189	451,376
1831–1840	1,032	722	310	1912	534,467	84,362	450,105	177,623	517,983
1841–1850	4,535	2,697	1,837	1913	569,960	91,525	478,435	195,181	565,235
1851–1860	12,513	7,645	4,868	1914	513,525	90,822	422,704	188,181	493,309
1861–1865	20,538	11,142	9,396	1915	531,619	88,995	442,624	184,653	502,038
1866–1870	31,706	16,281	15,425	1916	590,098	87,578	502,520	202,010	665,116
1871–1875	52,179	23,407	28,773	1917	651,402	99,612	551,791	283,651	1,249,273
1876–1880	62,261	25,800	36,461	1918	678,212	98,826	579,386	336,480	1,491,810
1881–1885	107,291	36,198	71,093	1919 [1]	553,952	88,092	465,860	364,927	1,160,616
1886–1890	138,398	43,952	94,446	1920	658,265	89,598	568,667	434,252	2,129,933
1891–1895	178,822	53,405	125,416	1921 [1]	506,395	90,473	415,922	452,305	1,199,984
1896–1900	227,123	55,625	171,498	1922	476,951	54,683	422,268	273,700	1,274,820
1901–1905	339,357	66,854	272,503	1923	657,904	93,339	564,565	506,787	1,514,621
1906–1910	454,555	81,142	373,413	1924 [1]	571,613	87,927	483,687	477,231	1,062,626
1911–1915	529,189	89,233	439,955	1925 [1]	581,870	61,817	520,053	327,665	1,060,402
1916–1920	626,386	92,741	533,645	1926 [1]	657,804	84,437	573,367	474,164	1,183,417
1921–1925	558,947	77,648	481,299	1927 [1]	597,859	80,096	517,763	420,942	1,029,652
1926–1930 [1]	595,497	76,619	518,878	1928 [1]	576,093	75,348	500,745	393,638	933,774
1906	414,157	71,282	342,875	1929 [1]	608,817	73,828	534,989	385,643	952,781
1907	480,363	85,604	394,759	1930 [1]	536,911	69,385	467,526	354,574	795,483
1908	415,843	83,269	332,574						
1909	460,815	81,070	379,744	1931 [1]	441,735	59,646	382,089	296,355	588,895
1910	501,596	84,485	417,111	1932 [2]	355,567	49,900	305,667	222,055	416,000

State	1900	1911–1915	1916–1920	1921–1925	1926–1930 [1]	1929 [1]	1930 [1]	1931 [1]	1932 [2]
Total quantity	269,684	529,189	626,386	558,947	595,497	608,817	536,911	441,735	355,567
Anthracite (Pa.)	57,368	89,233	92,741	77,648	76,619	73,828	69,385	59,646	49,900
Bituminous	212,316	439,956	533,645	481,299	518,878	534,989	467,526	382,089	305,667
Alabama	8,394	15,864	17,834	18,097	18,380	17,944	15,570	11,999	7,850
Arkansas	1,448	1,986	1,980	1,261	1,579	1,695	1,533	1,154	1,050
Colorado	5,244	9,433	11,595	10,049	9,665	9,921	8,197	6,604	5,564
Illinois	25,768	58,320	78,255	68,523	57,310	60,658	53,731	44,303	32,360
Indiana	6,484	16,060	25,515	21,677	18,467	18,344	16,490	14,295	12,400
Iowa	5,203	7,442	7,571	4,952	3,879	4,241	3,893	3,388	3,430
Kansas	4,468	6,811	6,556	3,827	3,215	2,976	2,430	1,987	1,865
Kentucky	5,329	18,380	30,103	43,743	61,116	60,463	51,209	39,964	35,610
Maryland	4,025	4,549	4,158	2,033	2,700	2,649	2,271	2,006	1,370
Michigan	849	1,271	1,301	976	705	804	661	359	446
Missouri	3,540	4,048	5,086	3,011	3,538	4,030	3,853	3,621	3,795
Montana	1,662	2,972	4,008	2,881	3,130	3,408	3,022	2,378	2,155
New Mexico	1,299	3,618	3,728	2,772	2,612	2,623	1,969	1,553	1,220
North Dakota	130	506	787	1,221	1,622	1,862	1,700	1,519	1,650
Ohio	18,988	28,553	40,609	31,590	21,111	23,689	22,552	20,411	13,350
Oklahoma	1,922	3,720	4,292	2,741	3,346	3,774	2,794	1,908	1,326
Pennsylvania	79,842	157,229	168,532	133,721	137,038	143,516	124,463	97,659	75,772
Tennessee	3,510	6,288	6,208	5,078	5,544	5,405	5,130	4,721	3,240
Texas	968	2,201	1,980	1,084	1,107	1,101	834	716	620
Utah	1,147	2,999	4,693	4,593	4,683	5,160	4,258	3,350	2,850
Virginia	2,394	7,924	10,158	10,648	12,521	12,748	10,907	9,699	8,025
Washington	2,474	3,261	3,576	2,626	2,513	2,521	2,302	1,846	1,625
West Virginia	22,647	69,353	86,369	97,044	136,315	138,519	121,473	101,473	83,765
Wyoming	4,015	6,907	8,555	6,812	6,526	6,705	6,088	4,994	4,140
Miscellaneous	565	259	190	239	246	231	196	182	189

[1] Exclusive of product of wagon mines. [2] Preliminary.

Source: Bureau of Mines, Department of Commerce.

No. 695.—COAL: EXPORTS, IMPORTS, AND BUNKER COAL LADEN ON VESSELS IN FOREIGN TRADE

[Quantities in thousands of long tons (2,240 pounds); values in thousands of dollars]

Yearly average or year	Total exports[1]		Anthracite exports		Bituminous exports[1]		Total imports		Bunker coal	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
1891–1895[2]	3,028	10,012	1,128	4,929	1,900	5,081	1,237	3,984	-------	-------
1896–1900[2]	4,710	13,300	1,469	6,268	3,241	7,032	1,403	3,831	-------	-------
1901–1905[2]	7,750	24,254	1,846	8,782	5,903	15,472	2,287	6,376	-------	-------
1906–1910[3]	12,018	36,805	2,646	13,034	9,372	23,770	1,727	4,530	[4] 5,638	[4] 18,291
1911–1915	19,132	58,362	3,753	19,624	15,379	38,738	1,437	4,069	7,289	23,890
1913	22,141	67,410	4,154	21,960	17,987	45,450	1,415	3,863	7,701	25,036
1914	17,632	54,316	3,830	20,211	13,802	34,105	1,395	3,928	7,266	24,146
1915	20,305	61,246	3,540	18,429	16,765	42,817	1,524	4,413	7,471	25,193
1916	23,143	68,298	4,166	22,470	18,977	45,828	1,536	4,734	7,826	27,492
1917	26,649	110,413	5,364	30,910	21,285	79,503	1,304	4,842	6,883	31,845
1918	24,392	107,881	4,436	29,216	19,956	78,665	1,334	6,898	5,532	29,868
1919	22,402	120,377	4,443	36,668	17,959	83,709	977	5,473	7,343	48,206
1920	39,215	349,811	4,825	45,538	34,390	304,273	1,140	6,992	9,362	82,462
1921	24,829	168,222	4,176	45,625	20,653	122,597	1,131	7,457	7,548	52,278
1922	13,449	91,242	2,366	25,351	11,083	65,892	4,726	28,250	4,120	27,913
1923	23,700	154,124	4,545	49,577	19,155	104,547	1,949	12,249	4,547	31,470
1924	18,855	111,039	3,587	40,068	15,268	70,971	478	3,019	3,983	22,883
1925	18,429	100,163	2,838	31,761	15,591	68,403	879	5,846	4,344	23,398
1926	35,091	196,905	3,598	41,086	31,493	155,819	1,201	9,301	6,907	38,025
1927	19,051	104,257	2,969	32,928	16,082	71,329	597	3,284	4,076	22,077
1928	17,411	92,121	2,979	32,657	14,433	59,464	831	4,989	3,834	20,258
1929	18,603	98,310	3,041	32,569	15,562	65,742	877	5,486	3,827	19,575
1930	16,455	83,694	2,278	24,509	14,176	59,186	818	5,525	3,122	15,697
1931	12,415	60,457	1,588	17,062	10,827	43,395	754	5,160	1,960	9,639
1932	9,033	41,752	1,164	12,064	7,870	29,688	709	4,420	1,204	5,534

[1] Does not include fuel or bunker coal laden on vessels engaged in the foreign trade.
[2] Fiscal years ended June 30. [3] Average for period July 1, 1905, to Dec. 31, 1910.
[4] Figures do not include coal laden on vessels on the Great Lakes in 1906, 1907, and 1908.

No. 696.—COAL: SHIPMENTS, AVERAGE VALUE PER TON, AND MEN EMPLOYED

Calendar year	Thousand tons (2,000 pounds)				Average value per ton	Average number of men employed	Average number of days worked	Average tonnage per man—		Per cent mined by machine	Calculated capacity, at 308 days (million tons[1])
	Loaded for shipment	Sold locally	Used by mines	Made into coke at mines				Per day	Per year		
ANTHRACITE											
1890	41,011	2,001	3,457	-------	$1.43	126,000	200	1.85	369	[2]	[2]
1895	52,093	1,315	4,591	-------	1.41	142,917	196	2.07	406	[2]	[2]
1900	50,710	1,208	5,550	-------	1.49	144,206	166	2.40	398	[2]	[2]
1905	69,053	1,571	7,036	-------	1.83	165,406	215	2.18	470	[2]	[2]
1910	73,623	2,021	8,841	-------	1.90	169,497	229	2.17	498	[2]	[2]
1915	76,906	2,092	9,997	-------	2.07	176,552	230	2.19	504	1.5	[2]
1920	76,844	2,897	9,858	-------	4.85	145,074	271	2.28	618	1.1	[2]
1925	53,763	2,885	5,164	-------	5.30	160,312	182	2.12	386	1.6	[2]
1927	70,495	3,047	6,554	-------	5.26	165,259	225	2.15	485	1.5	[2]
1928	66,488	3,185	5,676	-------	5.22	160,681	217	2.17	469	1.7	[2]
1929	65,295	3,233	5,301	-------	5.22	151,501	225	2.17	487	1.6	[2]
1930	61,202	3,144	5,038	-------	5.11	150,804	208	2.21	460	2.0	[2]
1931	52,636	2,901	3,986	-------	4.97	139,431	181	2.37	428	2.7	[2]
BITUMINOUS											
1890	87,373	7,008	1,607	15,332	.99	192,204	226	2.56	579	[3] 5.3	151
1895	106,287	8,340	2,086	18,404	.86	239,962	194	2.90	563	[4] 11.9	216
1900	173,072	7,868	3,740	27,635	1.04	304,375	234	2.98	697	24.9	281
1905	255,201	10,639	7,007	42,412	1.06	460,629	211	3.24	684	32.8	459
1910	342,969	12,287	9,668	52,187	1.12	555,533	217	3.46	751	41.7	592
1915	379,877	12,354	9,799	40,595	1.13	557,456	203	3.91	794	55.0	671
1920	504,873	21,289	11,896	30,608	3.75	639,547	220	4.00	881	59.8	798
1925	477,173	21,351	5,776	15,753	2.04	588,493	195	4.52	884	70.6	823
1928	467,348	21,990	4,602	6,805	1.86	522,150	203	4.73	959	73.8	760
1929	497,934	23,263	4,663	9,129	1.78	502,993	219	4.85	1,064	75.4	752
1930	437,399	22,121	3,993	4,014	1.70	493,202	187	5.06	948	77.5	770
1931	357,278	19,878	3,205	1,728	1.54	450,213	160	5.30	849	79.1	736

[1] Of 2,000 pounds. [2] Not available. [3] 1891. [4] 1896.

Sources: Table 695, Bureau of Foreign and Domestic Commerce; Table 696, Bureau of Mines, Department of Commerce.

No. 697.—CONSUMPTION OF BITUMINOUS COAL: BY CONSUMING CLASSES

	1889	1899	1909	1919	1923	1929	1930	1931	1932 [1]
Consumption (million net tons of 2,000 lbs.), total	95.8	190.3	370.3	481.7	519.0	519.8	455.0	371.9	302.5
Colliery fuel	1.4	3.1	9.5	11.1	8.8	4.7	4.0	3.2	2.9
Locomotive fuel, all steam roads	26.5	53.4	106.0	124.7	137.0	118.6	[2] 98.4	[2] 81.7	[2] 66.4
Bunkers, vessels in foreign trade	1.9	3.8	6.8	8.2	5.1	4.3	3.5	2.2	1.4
Coke ovens, beehive and by-product	16.0	30.2	59.4	65.6	84.4	86.8	69.8	48.6	31.8
Electric public utilities [3]	------	7.6	18.7	35.1	39.0	44.9	42.9	38.7	30.3
All other uses [4]	50.0	92.2	169.9	237.0	244.7	260.3	236.4	197.5	170.0
Per cent of total consumption	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Colliery fuel	1.5	1.6	2.6	2.3	1.7	.9	.9	.9	.9
Locomotive fuel, all steam roads	27.7	28.1	28.6	25.9	26.4	22.8	[2] 21.6	[2] 22.0	[2] 21.9
Bunkers, vessels in foreign trade	2.0	2.0	1.9	1.7	1.0	.8	.8	.6	.4
Coke ovens, beehive and by-product	16.7	15.9	16.0	13.6	16.3	16.7	15.3	13.1	10.5
Electric public utilities	------	4.0	5.0	7.3	7.5	8.6	9.4	10.4	10.0
All other uses	52.1	48.4	45.9	49.2	47.1	50.2	52.0	53.0	56.3

[1] Preliminary data.
[2] Class I roads.
[3] Includes electric central stations and street railways and certain minor plants. Figures include a small amount of anthracite consumed. Data not available for 1889.
[4] Obtained by subtracting known items from total consumption. Includes general manufacturing, domestic, and miscellaneous uses.

Source: Bureau of Mines, Department of Commerce (data were assembled from various original sources).

No. 698.—LABOR STRIKES IN COAL MINES

Year	Men on strike	Working days lost	Average days lost per man	Year	Men on strike	Working days lost	Average days lost per man
1908 [1]	145,145	5,449,938	38	1920	282,419	5,914,473	21
1909	24,763	723,634	29	1921	151,263	3,106,103	21
1910	218,493	19,250,524	88	1922	603,031	73,497,043	122
1911	41,413	983,737	24	1923	197,214	3,868,543	20
1912	311,056	12,527,305	40	1924	129,452	5,362,748	41
1913	135,395	3,049,412	23	1925	186,369	16,433,036	88
1914	161,720	11,013,667	68	1926	174,724	6,707,778	38
1915	67,190	2,467,431	37	1927 [2]	193,322	26,675,109	138
1916	170,633	3,344,586	20	1928	86,870	4,605,086	53
1917	160,240	2,348,399	15	1929	58,052	468,453	8
1918	79,395	508,526	6	1930	41,000	1,102,758	27
1919	453,418	15,761,410	35	1931	110,565	2,127,984	19

State	1928		1929		1930		1931	
	Men on strike	Days lost	Men on strike	Days lost	Men on strike	Days lost	Men on strike	Days lost
Grand total	86,870	4,605,086	58,052	468,453	41,000	1,102,758	110,565	2,127,984
Anthracite (Pa.)	36,128	400,682	39,777	272,511	18,202	112,398	65,907	570,664
Total bituminous	50,742	4,204,404	18,275	195,942	22,798	990,360	44,658	1,557,320
Arkansas	------	------	95	2,177	------	------	860	21,153
Colorado	1,594	57,184	------	------	------	------	------	------
Illinois	21,815	1,463,409	10,162	68,155	9,483	348,779	9,400	397,263
Indiana	3,216	91,842	3,851	58,553	2,008	32,003	883	14,181
Iowa	1,986	68,623	810	2,434	591	3,754	824	24,500
Kansas	1,525	168,766	106	3,341	------	------	38	570
Kentucky	1,130	14,124	561	4,286	6,436	562,067	2,920	59,240
Michigan	430	6,320	762	3,894	630	2,560	597	26,185
Missouri	941	67,585	211	633	50	700	679	34,671
Montana	1,219	9,178	------	------	------	------	------	------
Ohio	9,222	1,576,960	943	46,165	1,143	12,583	5,591	138,155
Oklahoma	------	------	------	------	------	------	501	19,312
Pennsylvania [1]	5,999	658,111	313	4,073	924	14,689	12,783	398,932
Tennessee	265	795	200	1,200	------	------	1,133	28,767
West Virginia	210	18,650	------	------	1,523	13,215	8,441	393,883
Other States	1,190	3,057	261	1,031	10	10	8	8

[1] Bituminous mines only.
[2] Owing to unusual conditions, figures tend to understate extent of the strike and number of idle miners.

Source: Bureau of Mines, Department of Commerce.

No. 699.—COAL: RETAIL PRICES, FOR HOUSEHOLD USE, AS OF JANUARY 15

[Prices (in dollars) of coal per ton of 2,000 pounds unless otherwise specified]

City	Anthracite,[1] chestnut					Bituminous					
	1925	1930	1931	1932	1933	1925	1929	1930	1931	1932	1933
Atlanta, Ga.						7.32	7.97	7.80	7.60	6.46	6.12
Baltimore, Md.	[2] 15.75	13.75	13.75	13.75	12.75	7.38	8.00	7.89	7.75	7.36	6.86
Birmingham, Ala.						7.79	7.66	7.65	7.38	6.31	5.07
Boston, Mass.	16.00	15.50	15.75	15.00	13.50						
Bridgeport, Conn.	15.38	15.50	14.75	14.13	12.75						
Buffalo, N. Y.	13.56	13.32	13.29	13.40	12.21						
Butte, Mont.						11.05	10.93	11.15	10.48	9.98	9.72
Charleston, S. C.	[2] 17.10					11.00	9.67	9.67	9.67	9.50	8.67
Chicago, Ill.	16.70	16.40	16.30	16.75	15.50	8.51	[3] 8.20	[3] 8.53	[3] 8.09	[3] 7.92	[3] 7.25
Cincinnati, Ohio						7.21	[3] 5.54	[3] 6.30	[3] 6.30	[3] 5.75	[3] 5.25
Cleveland, Ohio	14.88	14.75	14.50	14.31	13.44	8.37	[3] 7.43	[3] 7.10	[3] 6.81	[3] 6.61	[3] 5.52
Columbus, Ohio						6.68	[3] 6.09	[3] 6.07	[3] 6.09	[3] 5.35	[3] 4.92
Dallas, Tex.	[4] 17.75	[4] 15.50	[4] 15.00	[4] 14.00	[4] 14.00	14.22	13.17	12.92	12.58	10.50	10.75
Denver, Colo.	[5] 16.33	[5] 14.75	[5] 15.25	[5] 15.00	[5] 14.50	9.47	10.52	10.45	10.21	8.21	7.02
Detroit, Mich.	15.38	15.50	14.92	14.50	13.17	8.93	[3] 8.33	[3] 8.39	[3] 7.41	[3] 6.38	[3] 5.80
Fall River, Mass.	15.83	16.25	16.25	16.00	14.25						
Houston, Tex.						12.38	13.20	13.60	12.20	10.80	10.50
Indianapolis, Ind.	16.50					7.15	[3] 6.28	[3] 6.01	[3] 5.93	[3] 5.71	[3] 5.05
Jacksonville, Fla.						12.00	12.00	14.00	10.00	10.00	9.00
Kansas City, Mo.	[4] 15.17	[4] 12.55	[4] 12.44	[4] 11.38	[4] 10.50	8.13	7.33	7.18	6.79	6.04	5.59
Little Rock, Ark.	[4] 15.00	[4] 13.50	[4] 13.50	[4] 12.00	[4] 10.75	11.00	10.25	9.95	10.05	9.22	8.22
Los Angeles, Calif.						16.31	16.25	16.50	16.50	16.25	16.25
Louisville, Ky.						7.37	[3] 7.16	[3] 7.01	[3] 6.24	[3] 5.23	[3] 4.64
Manchester, N. H.	17.00	17.00	16.83	16.50	14.83						
Memphis, Tenn.						8.11	7.37	7.85	7.44	6.78	5.68
Milwaukee, Wis.	16.65	15.85	15.50	16.05	14.80	9.69	[3] 7.80	[3] 7.68	[3] 7.70	[3] 7.45	[3] 6.94
Minneapolis, Minn.	17.95	17.85	16.90	18.05	17.10	10.92	[3] 10.90	[3] 10.56	[3] 9.85	[3] 9.78	[3] 9.56
Mobile, Ala.						10.02	9.57	9.63	9.59	8.88	7.32
Newark, N. J.	13.43	13.46	13.40	13.55	11.88						
New Haven, Conn.	15.20	15.17	14.90	14.90	13.90						
New Orleans, La.						11.19	11.29	10.96	10.93	9.93	8.57
New York, N. Y.	14.33	14.13	13.67	13.83	11.64						
Norfolk, Va.	15.50	14.00	15.00	14.50	13.00	9.27	[3] 7.88	[3] 7.25	[3] 7.38	[3] 7.00	[3] 6.50
Omaha, Nebr.						10.04	9.50	9.69	9.68	8.77	8.35
Peoria, Ill.						6.79	6.90	6.75	6.43	6.25	6.09
Philadelphia, Pa.	[2] 15.32	[2] 14.50	13.50	13.50	11.50						
Pittsburgh, Pa.	16.50	15.00	14.50	14.00	12.75	6.83	5.25	5.29	4.91	4.47	3.26
Portland, Me.	16.56	16.80	16.80	16.80	15.60						
Portland, Oreg.						13.64	13.07	13.46	13.38	12.07	11.52
Providence, R. I.	[6] 16.00	[6] 16.00	[6] 16.00	[6] 15.75	[6] 14.50						
Richmond, Va.	15.50	15.00	15.00	14.50	13.50	8.83	[3] 8.38	[3] 8.38	[3] 8.75	[3] 8.00	[3] 6.83
Rochester, N. Y.	14.15	14.25	14.00	14.38	13.00						
St. Louis, Mo.	16.88	16.45	15.98	16.47	15.22	6.69	6.40	6.75	6.40	5.57	5.44
St. Paul, Minn.	17.95	17.85	16.90	18.05	17.10	11.57	[3] 10.68	[3] 10.27	[3] 9.58	[3] 9.60	[3] 9.40
Salt Lake City, Utah	[5] 18.50	[5] 18.00				8.40	7.86	8.37	8.47	7.58	7.01
San Francisco, Calif.	[7] 26.50	[7] 26.00	[7] 26.00	[7] 26.00	[7] 25.00	17.28	16.75	16.98	17.00	17.00	15.00
Savannah, Ga.	[8] 17.00					[8] 11.50	[8] 10.53	[8] 10.24	[8] 10.53	[8] 8.53	[8] 8.28
Scranton, Pa.	10.62	9.92	9.88	10.03	8.68						
Seattle, Wash.						10.21	10.48	10.68	10.79	10.54	9.79
Springfield, Ill.						4.25	4.24	4.34	4.34	4.34	3.68
Washington, D. C.	[2] 15.67	[2] 15.23	[2] 15.23	[2] 15.40	[2] 14.15	[2,3] 8.88	[2,3] 8.75	[2,3] 8.63	[2,3] 8.61	[2,3] 8.46	[2,3] 8.18

[1] The term "anthracite" signifies Pennsylvania anthracite, except as indicated by notes.
[2] Per ton of 2,240 pounds.
[3] Prepared sizes, high volatile.
[4] Arkansas anthracite, egg or furnace.
[5] Colorado anthracite, furnace, 1 and 2 mixed.
[6] 50 cents per ton additional is charged for binning.
[7] New Mexico anthracite, Cerillos egg.
[8] All coal sold is weighed by the city; charge of 10 cents per ton or half-ton is included in the price.

Source: Bureau of Labor Statistics, Department of Labor.

No. 700.—COAL: AVERAGE AND RELATIVE RETAIL PRICES[1] IN TON LOTS

Year	Anthracite, Chestnut				Anthracite, Stove				Bituminous			
	Average price		Relative price		Average price		Relative price		Average price		Relative price	
	Dollars				*Dollars*				*Dollars*			
1913[2]	7.91		100		7.73		100		5.43		100	
	Jan.	July	Jan.	July	Jan.	July	Jan.	July	Jan.	July	Jan.	July
1919	11.61	12.17	147	154	11.51	12.14	149	157	7.90	8.10	145	149
1920	12.77	14.33	161	181	12.59	14.28	163	185	8.81	10.55	162	194
1921	16.13	14.95	204	189	15.99	14.90	207	193	11.82	10.47	218	193
1922	15.02	14.92	190	189	14.98	14.87	194	192	9.89	9.49	182	175
1923	15.46	15.05	195	190	15.43	15.10	200	196	11.18	10.04	206	185
1924	15.76	15.10	199	191	15.77	15.24	204	197	9.75	8.94	180	165
1925	15.37	14.93	194	189	15.45	15.14	200	196	9.24	8.61	170	159
1926	[3]	15.19	[3]	192	[3]	15.43	[3]	200	9.74	8.70	179	160
1927	15.42	14.81	195	187	15.66	15.15	203	196	9.96	8.91	183	164
1928	15.08	14.63	191	185	15.44	14.91	200	193	9.30	8.69	171	160
1929	15.06	14.63	190	185	15.38	14.94	199	193	9.09	8.62	167	159
1930	15.00	14.53	190	184	15.33	14.84	198	192	9.11	8.65	168	159
1931	14.88	14.59	188	184	15.12	14.61	196	189	8.87	8.09	163	149
1932	14.97	13.16	189	166	15.00	13.37	194	173	8.17	7.50	150	138
1933	13.61	------	172	------	13.82	------	179	------	7.46	------	137	------

[1] Prices represent combined averages for cities shown in Table 699.
[2] Average of prices for January and July; this is the base for relative prices. [3] Insufficient data.

No. 701.—NATURAL GAS AND NATURAL GASOLINE

NOTE.—**Quantities of gas in millions of cubic feet, of gasoline in thousands of gallons; values in thousands of dollars.** Production figures for gas refer only to that marketed, in addition to which considerable quantities are used by producers, and large quantities are wasted or lost. Values given are at the point of consumption. Consumption figures by States differ greatly from production figures by reason of interstate transportation

Yearly average or year	Natural gas produced and marketed		Natural gasoline			Year	Natural gas produced and marketed		Natural gasoline		
	Quantity	Value	Gas treated	Production	Value		Quantity	Value	Gas treated	Production	Value
1906–1910	437,057	57,940	------	------	------	1924	1,141,521	253,856	1,016,276	933,861	82,233
1911–1915	575,708	88,492	11,602	30,317	2,481	1925	1,188,571	265,271	1,040,390	1,127,470	120,383
1916–1920	762,681	154,590	412,787	268,038	48,174	1926	1,313,019	300,168	1,206,300	1,363,090	136,412
1921–1925	947,419	229,002	820,445	762,151	82,205	1927	1,445,428	317,930	1,341,248	1,641,144	118,688
1926–1930	1,637,540	362,238	1,613,811	1,852,490	136,123	1928	1,568,139	363,726	1,473,434	1,814,034	138,944
1920	798,210	196,194	496,431	384,744	71,788	1929	1,917,693	413,276	1,959,294	2,233,688	158,410
1921	662,052	174,617	465,097	449,934	61,815	1930	1,943,421	416,090	2,088,778	2,210,494	128,160
1922	762,546	221,535	545,139	505,832	72,711	1931	1,686,436	392,815	1,790,119	1,831,918	63,732
1923	1,006,976	240,001	875,711	816,226	77,268	1932[1]	1,518,000	357,000	(2)	1,502,400	(2)

State	Natural gas produced and marketed					Natural gas consumed	Natural gasoline produced		
	1915	1920	1925	1930	1931	1931	1930	1931	1932[1]
Total	**628,579**	**798,210**	**1,188,571**	**1,943,421**	**1,686,436**	**1,684,249**	**2,210,494**	**1,831,918**	**1,502,400**
Arkansas	[3] 992	19,050	41,878	18,585	13,300	32,278	30,637	26,282	19,400
California	21,891	66,041	187,789	334,789	305,930	305,930	829,713	680,339	545,400
Illinois	2,690	3,013	4,165	2,890	2,130	14,050	6,867	5,024	(2)
Indiana	2,261	4,435	1,168	1,217	1,337	4,695	2	1	(2)
Kansas	27,046	33,140	26,917	37,630	38,742	65,609	35,106	32,690	24,600
Kentucky	1,667	15,297	10,770	28,023	27,870	15,533	6,641	5,464	(2)
Louisiana	25,540	46,219	152,620	278,341	224,155	131,986	73,693	58,034	46,400
Montana	6	818	1,496	10,060	10,949	[4] 8,359	------	------	(2)
New Mexico	------	------	(5)	9,497	19,354	12,443	3,663	17,775	(2)
New York	7,977	19,127	[6] 6,210	[6] 9,624	[6] 7,868	16,956	208	132	(2)
Ohio	79,510	136,872	43,235	63,394	56,326	107,460	8,937	5,199	(2)
Oklahoma	87,517	126,689	249,285	348,116	263,685	248,949	591,194	454,886	377,700
Pennsylvania	113,682	161,397	101,632	88,706	[7] 74,797	92,629	16,713	14,339	(2)
Texas	13,324	49,467	[8] 134,872	[8] 517,880	[8] 464,580	447,632	491,299	426,695	352,500
West Virginia	244,004	100,289	180,345	144,180	124,797	55,115	63,328	52,844	(2)
Wyoming	[9] 342	10,312	45,539	43,219	39,770	36,622	51,132	51,523	(2)
All other	120	6,044	650	7,270	10,846	88,003	1,361	691	(2)

[1] Preliminary. [2] Not yet available. [3] Includes gas piped from Oklahoma and consumed in Arkansas.
[4] Includes 44,000,000 cubic feet piped from Canada. [5] Included in "All other."
[6] Includes 68,000,000 cubic feet piped to Canada in 1925, 107,000,000 in 1930, and 38,000,000 in 1931.
[7] Includes 36,000,000 cubic feet piped to Canada. [8] Includes 64,000,000 cubic feet piped to Mexico in 1925, 1,691,000,000 in 1930, and 2,157,000,000 in 1931. [9] Includes Colorado.

Sources: Table 700, Bureau of Labor Statistics, Department of Labor; Table 701, Bureau of Mines, Department of Commerce.

No. 702.—MANUFACTURED-GAS INDUSTRY: MATERIALS USED AND PRODUCTS

NOTE.—These figures cover establishments engaged primarily in the commercial manufacture of gas to be delivered through mains; they do not cover establishments which merely distribute purchased gas. Blast-furnace gas, and with some exceptions by-product coke-oven gas, are not included

Material or product	Unit	Quantity (thousands of unit specified)			Cost or value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
Materials used, total cost					211,786	188,416	152,580
Coal for gas making:							
Anthracite	Long ton [1]	113	68	42			
Bituminous	Short ton [2]	8,102	8,918	9,055			
Oil for gas making	Gallon	230,729	196,701	67,496			
Oil for carbureting	do	683,048	673,021	583,498			
Gas purchased	M. cu. ft.	96,618	103,209	96,226			
Products, total value					516,705	512,653	467,751
Commercial plants					509,277	505,590	461,112
Municipal plants					7,428	7,063	6,639
Gas for sale	M. cu. ft.	412,236	408,401	374,068	446,245	438,243	399,681
Coke for sale	Short ton [2]	2,977	3,444	3,599	25,514	26,868	26,673
Tar for sale:							
Coal gas	Gallon	78,691	88,149	89,202	4,449	4,816	4,254
Water gas and oil gas	do	83,479	75,546	60,690	3,768	3,354	2,378
All other products and receipts					36,729	39,372	34,765

[1] 2,240 pounds. [2] 2,000 pounds.

No. 703.—MANUFACTURED-GAS INDUSTRY: SUMMARY OF STATISTICS

NOTE.—Companies formerly distributing manufactured gas but which were distributing natural gas at the beginning of 1931 have been excluded for all years shown in this table. These data are therefore not comparable with data on the manufactured gas industry previously published

	1929	1930	1931	1932
Population served, Dec. 31 (thousands)	48,408	49,568	50,220	50,500
Miles of main, Dec. 31	86,988	90,536	95,166	97,000
Employees, Dec. 31	76,430	75,800	73,510	70,000
Total gas produced and purchased (million cubic feet)	435,106	433,762	419,129	396,600
Gas produced	316,408	310,990	301,269	268,130
Gas purchased	118,698	122,772	117,860	128,470
Average number of customers (thousands)	10,294	10,483	10,480	10,223
Domestic	9,808	9,967	9,937	9,670
House heating	33	44	51	55
Industrial and commercial	446	465	485	490
Miscellaneous	7	7	7	8
Total gas sales to consumers (million cubic feet)	401,154	403,153	391,197	372,208
Domestic	281,201	282,768	276,976	267,281
House heating	14,261	18,384	19,908	21,640
Industrial and commercial	103,490	99,667	92,248	81,271
Miscellaneous	2,202	2,334	2,065	2,016
Total revenue from consumers (thousand dollars)	444,115	446,756	435,390	411,750
Domestic	340,450	341,741	335,429	322,052
House heating	12,076	15,235	16,062	15,965
Industrial and commercial	89,684	87,877	82,297	72,339
Miscellaneous	1,905	1,903	1,602	1,394

No. 704.—AVERAGE NET PRICE OF MANUFACTURED GAS

NOTE.—Net prices for the first 1,000 cubic feet for household use in cities specified in the first section of Table 705

Date	Actual	Relative	Date	Actual	Relative	Date	Actual	Relative
Apr. 15, 1913	$0.95	100	Apr. 15, 1920	$1.09	115	Dec. 15, 1926	$1.22	128
Apr. 15, 1914	.94	99	May 15, 1921	1.32	139	Dec. 15, 1927	1.22	128
Apr. 15, 1915	.93	98	Mar. 15, 1922	1.29	136	Dec. 15, 1928	1.22	128
Apr. 15, 1916	.92	97	Mar. 15, 1923	1.25	132	Dec. 15, 1929	1.21	127
Apr. 15, 1917	.91	96	Mar. 15, 1924	1.24	131	Dec. 15, 1930	1.18	124
Apr. 15, 1918	.95	100	Dec. 15, 1924	1.24	131	Dec. 15, 1931	1.15	121
Apr. 15, 1919	1.04	110	Dec. 15, 1925	1.23	130	Dec. 15, 1932	1.15	121

Sources: Table 702, Bureau of the Census, Department of Commerce; Table 703, American Gas Association; Table 704, Bureau of Labor Statistics, Department of Labor.

No. 705.—RETAIL PRICES OF GAS IN PRINCIPAL CITIES

NOTE.—Prices are net per 1,000 cubic feet of gas for household use. Prices for manufactured gas are based on a family consumption of 3,000 cubic feet per month. In cities where a service charge or a sliding scale is in operation rates are slightly higher for families using less than 3,000 cubic feet per month and slightly lower for those consuming more. Prices for natural gas and for mixed manufactured and natural gas (principally natural gas) are based on a family consumption of 5,000 cubic feet per month

City	Apr. 15, 1913	Apr. 15, 1915	Apr. 15, 1920	May 15, 1921	June 15, 1922	June 15, 1923	June 15, 1924	June 15, 1925	June 15, 1926	June 15, 1927	June 15, 1928	June 15, 1929	June 15, 1930	June 15, 1931	June 15, 1932	Dec. 15, 1932
	MANUFACTURED GAS															
Atlanta	$1.00	$1.00	$1.15	$1.90	$1.65	$1.65	$1.55	$1.55	$1.55	$1.55	$1.55	$1.43				
Baltimore	.90	.80	.75	.75	.92	.92	.85	.85	.85	.85	.85	.85	$0.85	$0.85	$0.85	$0.85
Birmingham	1.00	.95	.95	.88	.88	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80	.80
Boston	.81	.80	1.08	1.40	1.32	1.25	1.20	1.18	1.18	1.18	1.18	1.18	1.16	1.16	1.16	1.16
Butte	1.49	1.49	1.49	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10		
Charleston, S. C.	1.10	1.10	1.25	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.45	1.45	1.45
Chicago	.80	.80	.87	1.20	1.07	1.07	1.02	1.02	1.02	1.02	.98	.98	.98	[1] .98		
Cleveland	.80	.80	.80	.80	.80	.80	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Denver	.85	.80	.95	.95	.95	.95	.95	.95	.95	.90	.90					
Detroit	.75	.75	.79	.85	.79	.79	.82	.82	.79	.79	.79	.79	.79	.79	.77	.77
Fall River	.80	.80	1.05	1.25	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.14	1.14	1.14	1.14
Houston	1.00	1.00	1.09	1.09	1.09	1.09	1.09	1.05								
Indianapolis	.60	.55	.60	.90	1.20	1.15	1.15	1.10	1.05	1.05	.95	.95	.95	.95	.95	.95
Jacksonville	1.20	1.15	1.50	1.75	1.65	1.65	1.97	1.97	1.97	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Manchester	1.10	1.00	1.18	1.58	1.48	1.48	1.38	1.38	1.38	1.38	1.34	1.34	1.34	1.34	1.34	1.34
Memphis	1.00	1.00	1.27	1.35	1.20	1.20	1.20	1.20	1.20	1.20	1.20					
Milwaukee	.75	.75	.75	.90	.90	.86	.82	.82	.82	.82	.82	.82	.82	.82	.82	.82
Minneapolis	.85	.80	.95	1.28	1.02	1.05	1.01	.95	.97	.96	.94	.89	1.05	.95	.96	.96
Mobile	1.10	1.10	1.35	1.80	1.80	1.80	1.80	1.80	1.80	1.76	1.76	1.76	1.76			
Newark	1.00	.90	1.15	1.40	1.25	1.25	1.20	1.20	1.20	1.20	1.20	1.20	1.21	1.21	1.21	1.21
New Haven	.90	.90	1.10	1.27	1.18	1.18	1.18	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
New Orleans	1.10	1.00	1.30	1.30	1.45	1.30	1.30	1.30	1.30	1.30	1.30					
New York	.84	.83	.87	1.40	1.31	1.23	1.23	1.23	1.23	1.24	1.25	1.25	1.24	1.24	1.23	1.23
Norfolk	1.00	1.00	1.60	1.40	1.40	1.40	1.40	1.40	1.33	1.33	1.33	1.33	1.32	1.32	1.32	1.28
Omaha	1.15	1.15	1.15	1.47	1.18	1.18	1.18	1.08	1.08	1.08	1.00	.95	.95	.88	.79	.79
Peoria	.90	.90	.85	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20		
Philadelphia	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.95	.95	.88
Portland, Me.	1.10	1.00	1.40	1.85	1.65	1.55	1.55	1.55	1.50	1.42	1.42	1.42	1.42	1.42	1.42	1.42
Portland, Oreg.	.95	.95	.95	1.38	1.25	1.16	1.16	1.16	1.19	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Providence	.85	.85	1.30	1.42	1.42	1.22	1.22	1.17	1.17	1.13	1.13	1.13	1.13	1.13	1.13	1.13
Richmond	.90	.90	1.00	1.30	1.30	1.30	1.30	1.30	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29
Rochester	.95	.95	.95	1.18	1.10	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
St. Louis	.80	.80	.85	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.11	1.11	1.11	[2] 1.10	[3] 1.30
St. Paul	.95	.90	.85	1.00	1.00	.85	.85	.85	.90	.90	.90	.90	.90	.90	.90	.90
Salt Lake City	.87	.87	1.35	1.57	1.57	1.57	1.57	1.54	1.53	1.52	1.51	1.51				
San Francisco	.75	.85	.95	1.05	1.02	.92	1.00	1.05	.95	.95	.94	.90				
Savannah			1.25	1.60	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45
Scranton	.95	.95	1.30	1.70	1.60	1.60	1.50	1.50	1.50	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Seattle	1.00	1.00	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.43	1.43	1.43	1.43
Springfield, Ill.	1.00	1.00	1.10	1.40	1.40	1.35	1.35	1.35	1.25	1.25	1.25	1.25	[4] 1.25			
Washington	.93	.93	.95	1.25	1.05	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.95	.93	.93
	NATURAL GAS AND MIXED MANUFACTURED AND NATURAL GAS															
Atlanta													$1.17	$1.09	$1.09	$1.09
Buffalo							$0.60	$0.60	$0.65	$0.65	$0.65	$0.65	.65	.65	.65	.65
Butte															.70	.70
Chicago															[5] 1.32	[5] 1.32
Cincinnati	$0.30	$0.30	$0.35	$0.35	$0.50	$0.50	.50	.75	.75	.75	.75	.75	.75	.75	.75	.75
Cleveland	.30	.30	.35	.35	.40	.55	.55	.55	.60	.60	.60	.60	.60	.60	.60	.60
Columbus	.30	.30	.30	.30	.45	.45	.45	.55	.55	.48	.48	.48	.48	.48	.48	.48
Dallas	.45	.45	.45	.68	.68	.68	.68	.74	.74	.79	.79	.79	.79	.79	.79	.79
Denver												.99	.99	.99	.99	.99
Houston									.75	.75	.75	.75	.75	.75	.75	.75
Kansas City	.27	.27	.80	.90	.90	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95	.95
Little Rock	.40	.40	.45	.45	.45	.45	.65	.65	.65	.65	.65	.65	.65	.65	.65	.65
Los Angeles										.91	.91	.84	.84	.84	.84	.84
Louisville		.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.45	.38
Memphis												.97	.95	.95	.95	.95
Mobile														1.24	1.24	1.24
New Orleans												.95	.95	.95	.95	.95
Peoria															[6] 1.95	[6] 1.95
Pittsburgh	.28	.28	.35	.45	.50	.50	.53	.60	.60	.60	.60	.60	.60	.60	.60	.60
Salt Lake City													.99	.99	.99	.99
San Francisco													.97	.97	.97	.97
Springfield															[6] 2.00	[6] 2.00

[1] Based on 15.9 therms.
[2] Based on 18 therms.
[3] Based on 24 therms.
[4] Based on 17 therms.
[5] Based on 40 therms.
[6] Based on 50 therms.

Source: Bureau of Labor Statistics, Department of Labor.

No. 706.—PRODUCTION OF CRUDE PETROLEUM

[Quantities in thousands of barrels (42 gallons); values in thousands of dollars]

Yearly average	Quantity	Value	Year	Quantity	Value	Year	Quantity	Value
1861–1865	2,479	9,965	1906	126,494	92,445	1920	442,929	1,360,745
1866–1870	4,013	15,795	1907	166,095	120,107			
1871–1875	8,221	16,430	1908	178,527	129,079	1921	472,183	814,745
1876–1880	16,816	22,926	1909	183,171	128,329	1922	557,531	895,111
			1910	209,557	127,900	1923	732,407	978,430
1881–1885	25,508	22,933				1924	713,940	1,022,683
1886–1890	32,990	23,830	1911	220,449	134,045	1925	763,743	1,284,960
1891–1895	51,095	35,708	1912	222,935	164,213			
1896–1900	59,498	56,836	1913	248,446	237,121	1926	770,874	1,447,760
1901–1905	102,083	83,524	1914	265,763	214,125	1927	901,129	1,172,830
			1915	281,104	179,463	1928	901,474	1,054,880
1906–1910	172,769	119,572				1929	1,007,323	1,280,417
1911–1915	247,739	185,793	1916	300,767	330,900	1930	898,011	1,070,200
1916–1920	362,661	735,698	1917	335,316	522,635			
1921–1925	647,961	999,186	1918	355,928	703,944	1931	851,081	550,630
1926–1930	895,762	1,205,217	1919	378,367	760,266	1932 (prel.)	781,845	680,205

Source: Bureau of Mines, Department of Commerce.

No. 707.—PETROLEUM PRODUCTION, IMPORTS, EXPORTS, AND BUNKER OIL LADEN ON VESSELS IN FOREIGN TRADE

NOTE.—Exports of refined oils include residuum prior to 1913 and exclude it thereafter. Exports exclude reexports of imported oils

Period	Quantity (thousands of barrels of 42 gallons)						Value (millions of dollars)				
	Production, crude oil	Imports		Exports		Bunker oil	Imports		Exports		Bunker oil
		Crude oil	Refined oils	Crude oil	Refined oils		Crude oil	Refined oil	Crude oil	Refined oils	
1871–1880	12,519	(1)	(1)	528	6,026	(1)	(1)	(1)	2.4	37.7	(1)
1881–1890	29,249	(1)	(1)	1,719	12,084	(1)	(1)	(1)	5.1	43.7	(1)
1891–1895	51,095	(1)	(1)	2,606	16,751	(1)	(1)	(1)	5.0	40.8	(1)
1896–1900	59,498	(1)	(1)	2,907	20,240	(1)	(1)	(1)	5.8	57.1	(1)
1901–1905	102,083	(1)	(1)	3,029	22,317	(1)	(1)	(1)	6.3	68.5	(1)
1906–1910	172,769	[2] 295	(1)	3,686	30,521	(1)	[2] 0.7	(1)	6.4	90.4	(1)
1911–1915	247,739	12,080	293	4,134	44,475	(1)	7.6	1.1	6.1	125.8	(1)
1916–1920	362,661	49,531	1,396	5,413	58,896	11,681	26.5	5.0	14.1	323.7	24.2
1921–1925	647,961	94,857	12,545	13,330	76,455	36,501	68.0	22.2	22.5	363.6	55.9
1926–1930	895,762	67,919	23,779	20,062	119,700	50,198	78.6	51.8	30.2	464.7	62.3
1915	281,104	18,139	44	3,768	51,377	3,566	10.4	.2	4.3	138.3	3.2
1916	300,767	20,797	414	4,096	57,833	5,530	12.6	1.3	7.0	194.5	5.6
1917	335,316	30,127	1,401	4,098	58,999	5,908	16.3	4.3	7.7	245.2	7.4
1918	355,928	37,736	1,207	4,901	59,727	6,603	21.3	4.4	12.1	332.2	11.7
1919	378,367	52,822	1,340	5,924	52,641	14,031	26.4	5.0	14.8	327.0	29.4
1920	442,929	106,175	2,619	8,045	65,278	26,335	55.8	10.1	29.0	519.3	66.7
1921	472,183	125,364	3,412	8,865	57,534	27,076	66.5	10.8	20.2	363.5	57.2
1922	557,531	127,308	8,639	9,995	59,592	31,692	70.4	17.8	18.3	312.6	43.7
1923	732,407	82,015	17,592	17,061	77,893	37,582	53.9	24.3	23.1	327.0	52.2
1924	713,940	77,775	16,760	17,605	93,411	43,328	73.8	26.9	26.5	392.3	58.0
1925	763,743	61,824	16,324	13,125	93,843	42,827	75.4	31.3	24.3	422.6	68.2
1926	770,874	60,382	20,902	15,406	108,398	46,662	79.3	44.6	28.5	497.2	71.0
1927	901,129	58,383	13,281	15,843	115,399	50,051	78.6	33.6	25.9	429.7	73.0
1928	901,474	79,767	11,701	18,961	126,159	51,226	90.5	40.9	26.8	465.2	59.4
1929	1,007,323	78,933	29,632	26,394	126,377	52,278	79.9	61.0	37.8	493.4	54.7
1930	898,011	62,129	43,381	23,704	122,167	50,773	64.9	78.7	32.2	438.2	53.6
1931	851,081	47,250	38,702	25,535	91,009	43,714	39.2	52.1	20.8	232.3	38.8
1932	781,845	44,700	30,228	27,391	[3] 69,348	38,152	30.4	29.2	27.1	168.1	29.4

[1] Data are not available.
[2] Average for years 1908–1910 for total mineral oils.
[3] Not including natural gasoline (308,000 barrels in 1932) formerly included with refined oils.

Source: Bureau of Mines and Bureau of Foreign and Domestic Commerce, Department of Commerce.

No. 708.—PETROLEUM, CRUDE: PRODUCTION BY REGIONS AND STATES, AND APPROXIMATE WORLD PRODUCTION

[In thousands of barrels of 42 gallons]

Section	1901–1910 (average)	1911–1915 (average)	1916–1920 (average)	1921–1925 (average)	1926–1930 (average)	1929	1930	1931	1932 (prel.)
World total [1]	236,795	384,345	541,733	944,768	1,316,008	1,485,867	1,411,905	1,372,532	1,305,563
United States [2]	137,426	247,739	362,661	647,961	895,762	1,007,323	898,011	851,081	781,845
Per cent of total	*58.0*	*64.4*	*66.8*	*68.6*	*68.1*	*67.8*	*63.6*	*62.0*	*59.9*
Regions:									
Appalachian	28,943	24,594	27,161	28,504	31,603	33,824	34,105	30,401	29,587
Lima—N. E. Ind.[3]—Mich	17,253	5,052	3,468	2,298	3,603	6,075	5,276	4,941	7,822
Illinois—S. W. Indiana [3]	12,659	24,955	13,918	9,585	7,495	7,237	6,677	5,842	5,437
Mid-continent	25,088	87,656	184,616	343,545	527,944	584,280	531,447	543,736	490,324
Gulf	17,436	12,357	24,273	33,688	54,140	57,106	69,676	57,592	53,146
Rocky Mountain	402	2,605	11,830	35,258	29,468	26,267	23,501	19,739	17,401
California	35,641	90,512	97,384	195,074	241,509	292,534	227,329	188,830	178,128
States:									
Arkansas				36,644	35,010	24,917	19,702	14,791	11,907
California	35,641	90,512	97,384	195,074	241,509	292,534	227,329	188,830	178,128
Colorado	381	211	139	392	2,477	2,358	1,656	1,545	1,177
Illinois	12,659	24,955	13,918	8,815	6,654	6,319	5,736	5,039	4,661
Indiana	6,527	1,167	865	1,011	937	981	994	840	804
Kansas [4]	4,603	2,235	32,556	32,733	41,123	42,813	41,638	37,018	34,300
Kentucky [5]	696	484	5,335	8,044	7,103	7,775	7,389	6,456	6,264
Louisiana	4,310	12,997	19,117	25,759	22,338	20,554	23,272	21,804	21,478
Michigan				1	1,913	4,528	3,911	3,789	6,729
Montana			129	2,729	4,826	3,980	3,349	2,830	2,449
New Mexico [6]				[7] 554	3,171	1,830	10,189	15,227	12,511
New York	1,153	920	864	1,274	2,765	3,377	3,647	3,363	3,501
Ohio	15,677	8,586	7,583	7,045	7,022	6,743	6,486	5,327	4,597
Oklahoma [4]	19,076	68,624	102,209	155,088	235,663	255,004	216,486	180,574	152,621
Pennsylvania	10,538	8,002	7,662	7,607	10,613	11,820	12,803	11,892	12,403
Texas	14,534	16,256	55,008	127,009	245,792	296,876	290,457	332,437	311,069
West Virginia	11,605	10,487	8,311	6,575	5,655	5,574	5,071	4,472	3,882
Wyoming	21	2,394	11,562	31,901	21,145	19,314	17,868	14,834	13,359

[1] Estimated. [2] Includes for certain years small quantities not distributed by regions and States.
[3] Southwestern Indiana reported with Illinois beginning 1921; previously with Lima-Indiana region.
[4] Kansas includes report for Oklahoma in 1905 and 1906.
[5] Kentucky includes report for Tennessee from 1891 to 1907. [6] Not shown separately prior to 1924.
[7] Average for years 1924 and 1925.

No. 709.—STOCKS OF CRUDE AND REFINED MINERAL OILS ON DECEMBER 31

[In thousands of barrels of 42 gallons]

	1926	1927	1928	1929	1930	1931	1932 [1]
Stocks of refinable crude, total [2]	315,029	379,660	392,629	428,445	411,882	370,919	338,718
East of California, total	284,168	359,574	374,874	387,396	368,484	328,805	299,378
Pipe line and tank-farm stocks by field of origin, total	242,180	312,637	327,565	334,891	320,740	286,057	245,376
Appalachian	7,790	7,334	5,515	5,239	6,492	6,115	5,761
Lima-N.E. Indiana-Michigan	666	1,134	1,162	544	1,453	1,560	1,069
Illinois and southwestern Indiana	11,770	12,170	11,367	10,411	10,252	9,790	11,210
Mid-continent	173,848	246,339	265,748	274,187	259,139	231,976	199,627
Gulf coast	20,031	17,922	18,272	20,129	18,255	13,316	12,130
Rocky Mountain	28,075	27,238	25,501	24,381	25,149	23,300	15,579
Refinery and importers' stocks	36,084	39,401	40,788	46,307	41,136	36,546	47,902
Producers' stocks (at wells)	5,904	7,536	6,521	6,198	6,608	6,202	6,100
California, light	30,861	20,086	17,755	41,049	43,398	42,114	39,340
Natural gasoline [3]	455	734	607	604	3,100	2,818	3,197
Stocks of refined products [3] [4]	211,600	216,782	227,774	260,448	251,680	[5] 257,999	[5] 246,257
Grand total stocks all oils	527,084	597,176	621,010	689,497	666,662	631,736	588,172

[1] Preliminary.
[2] Not including California heavy crude and residual fuel.
[3] Natural gasoline at refinery included with refined products prior to 1930.
[4] Includes California heavy crude and residual fuel; also wax, coke, and asphalt.
[5] Includes bulk terminal stocks of gasoline.

Source of Tables 708 and 709; Bureau of Mines, Department of Commerce.

No. 710.—SUPPLY AND DEMAND OF CRUDE AND REFINED OILS

[In thousands of barrels of 42 gallons]

	1926	1927	1928	1929	1930	1931	1932 (preliminary)
Total new supply of all oils	886, 611	1, 014, 084	1, 038, 166	1, 171, 359	1, 058, 949	982, 611	893, 206
Domestic production, total	805, 291	942, 348	946, 609	1, 062, 649	953, 331	896, 524	818, 761
Crude petroleum	770, 874	901, 129	901, 474	1, 007, 323	898, 011	851, 081	781, 845
Natural gasoline	32, 305	38, 657	42, 326	52, 271	52, 631	43, 617	35, 772
Benzol	2, 112	2, 562	2, 809	3, 055	2, 689	1, 826	1, 144
Imports—							
Crude	60, 382	58, 383	79, 767	78, 933	62, 129	47, 250	44, 688
Refined [1]	20, 938	13, 353	11, 790	29, 777	43, 489	38, 837	29, 757
Change in stocks [2]	−26, 419	+70, 092	+22, 775	+68, 156	−24, 000	−44, 989	−43, 564
Total demand	913, 030	943, 992	1, 015, 391	1, 103, 203	1, 082, 949	1, 027, 600	936, 770
Exports [3]—							
Crude	15, 407	15, 844	18, 966	26, 401	23, 705	25, 535	27, 393
Refined [1]	116, 543	125, 805	135, 991	136, 719	132, 794	98, 859	75, 695
Domestic [4]	781, 080	802, 343	860, 434	940, 083	926, 450	903, 206	833, 682
Bunker oil	46, 662	50, 051	51, 226	52, 278	50, 773	43, 714	38, 152

[1] Includes wax, coke, asphalt, and residuum in barrels.
[2] Data include crude petroleum, refined products, and natural gasoline.
[3] Includes shipments to noncontiguous territories.
[4] Includes bunker oil put on vessels engaged in foreign trade.

Source: Bureau of Mines, Department of Commerce.

No. 711.—PETROLEUM REFINING: MATERIALS AND PRODUCTS

Material or product	Quantity (thousands of unit specified)				Cost or value (thousands of dollars)		
	Unit	1927	1929	1931	1927	1929	1931
Materials used, total cost					1, 752, 997	2, 031, 341	1, 210, 517
Crude petroleum	Barrel [1]	831, 332	1, 039, 922	909, 420	(2)	1, 614, 875	(2)
Partially refined oils, etc., purchased and rerun	do	33, 939	51, 549	36, 881	(2)	107, 951	(2)
Natural gasoline	do	26, 383	42, 381	29, 920	(2)	135, 066	(2)
Soda ash	Ton [3]	21	18	9	(2)	655	(2)
Caustic soda	do	95	134	104	(2)	7, 731	(2)
Sulphuric acid purchased and produced in plant	do	873	1, 008	900	(2)	15, 786	(2)
Sulphuric acid, reclaimed and reused	do	344	476	330	(2)	3, 817	(2)
All other, including fuel and power					(2)	145, 460	(2)
All products, total value					2, 142, 649	2, 639, 665	1, 524, 285
Gasoline	Gallon	12, 729, 536	17, 538, 789	17, 100, 621	1, 048, 471	1, 531, 242	831, 386
Naphtha	do	451, 344	662, 642	461, 174	42, 484	64, 904	20, 668
Benzine	do	50, 556	49, 941	33, 247	4, 625	5, 276	1, 808
Tops	do	159, 904	155, 155	14, 161	6, 574	8, 622	214
Illuminating oils	do	2, 217, 591	2, 338, 929	1, 745, 447	147, 925	164, 836	72, 743
Fuel oils:							
Distillates	do	976, 670	1, 024, 364	1, 055, 597	44, 287	39, 338	28, 117
Gas oils	do	2, 576, 591	2, 882, 959	2, 562, 148	99, 328	96, 094	68, 430
Residual fuel oil	do	11, 862, 599	12, 483, 631	10, 591, 948	313, 344	249, 198	175, 021
Partially refined oils sold for rerunning	do	1, 583, 727	1, 466, 861	1, 313, 270	62, 210	49, 143	28, 458
Lubricating oils:							
Pale or paraffin	do	227, 198	157, 669	89, 448	30, 617	19, 653	9, 442
Red or neutral	do	531, 627	564, 640	456, 493	87, 243	90, 603	65, 939
Cylinder oils	do	219, 673	218, 561	178, 071	43, 036	59, 109	27, 212
All other lubricating oils	do	403, 403	612, 840	423, 754	83, 733	135, 308	94, 779
Liquid asphaltic road oils	do	204, 799	323, 002	377, 748	9, 308	11, 041	10, 425
Residuum or tar	do	118, 467	104, 111	67, 468	5, 118	3, 149	1, 663
Greases	do	44, 911	52, 017	45, 816	12, 961	16, 646	12, 376
Paraffin wax	do	94, 257	84, 639	79, 483	23, 432	22, 328	13, 353
Asphalt, other than liquid	Ton [3]	2, 642	3, 115	2, 462	37, 884	34, 506	21, 751
Coke, petroleum	do	1, 244	1, 265	2, 029	7, 170	5, 461	7, 182
Other refinery products					24, 173	21, 076	29, 453
All other products and receipts					8, 726	12, 132	3, 865

[1] 42 gallons. [2] No data. [3] Of 2,000 pounds.

Source: Bureau of the Census, Department of Commerce.

No. 712.—PETROLEUM PRODUCTS: OILS RUN TO STILLS, OUTPUT OF REFINERIES, STOCKS, EXPORTS, AND APPARENT CONSUMPTION OF PRODUCTS

NOTE.—Stocks are those in refiners' hands only. Hence "apparent consumption" represents deliveries by refiners to dealers and consumers. Exports include shipments to noncontiguous territories. Consumption figures for kerosene and lubricants take into account imports not shown separately

[In thousands of barrels of 42 gallons, except as indicated]

Item	1918	1920	1925	1928	1929	1930	1931	1932
Crude oil run to stills	326,025	433,915	739,920	913,295	987,708	927,447	894,608	819,997
Domestic	324,618	372,779	698,582	835,711	912,191	866,615	847,671	777,696
Foreign	1,407	61,136	41,338	77,584	75,517	60,832	46,937	42,301
Natural gasoline run to stills or blended at refineries	2,451	3,153	[1] 19,636	[1] 35,223	[1] 46,457	[1] 43,170	[1] 35,116	[1] 26,332
Stocks of crude oil, end of year	15,750	21,261	[2] 29,200	[2] 40,529	[2] 46,307	[2] 41,136	[2] 36,546	[2] 47,816
Motor fuel:								
Production	86,280	118,022	262,252	380,990	439,393	440,728	437,735	399,524
Exports (gasoline and benzol)	13,650	15,675	31,684	53,412	62,059	65,575	45,716	35,434
Imports (gasoline)	307	964	* 3,813	4,198	8,834	16,927	13,621	8,209
Stocks, end of year	7,080	11,009	38,875	33,092	43,261	40,098	[3] 55,226	[3] 53,805
Apparent consumption	75,672	102,937	226,329	332,033	375,999	394,800	403,418	373,720
Kerosene:								
Production	43,461	55,240	59,689	59,353	55,940	49,208	42,446	43,836
Exports	11,820	20,878	21,212	22,034	20,022	16,884	12,712	10,956
Stocks, end of year	9,050	9,359	7,121	9,001	9,095	6,883	5,332	4,974
Apparent consumption	34,442	33,082	39,969	36,235	36,032	34,736	31,296	33,310
Gas oil and fuel oil:								
Production	174,319	210,987	364,991	427,237	428,219	372,498	336,967	294,754
Exports	29,637	22,080	36,088	44,427	39,151	36,450	29,231	19,874
Stocks, end of year	15,691	19,938	[2] 24,681	[2] 34,926	[4] 39,762	[4] 37,007	[5] 135,856	[5] 129,881
Lubricants:								
Production	20,035	24,938	31,055	34,658	34,359	34,201	26,704	22,433
Exports	6,165	9,643	9,678	11,023	10,860	9,935	8,128	6,857
Stocks, end of year	3,306	3,822	7,253	8,340	8,269	10,971	9,511	8,465
Apparent consumption	13,823	14,742	20,581	23,168	23,609	21,589	20,068	16,641
Wax—production, 1,000 lbs	505,144	541,204	590,577	630,144	630,074	547,680	477,400	458,920
Stocks, end of year, do	199,658	195,368	116,391	110,344	189,592	232,592	180,843	163,628
Coke—production, 1,000 tons [6]	560	577	991	1,427	1,821	1,940	2,032	1,789
Stocks, end of year, do	23	32	238	437	745	1,069	1,512	1,330
Asphalt—production, 1,000 tons [6]	608	1,291	2,677	3,297	3,469	3,308	2,976	2,475
Stocks, end of year, do	77	81	159	236	240	308	302	276
Other finished products	----------	----------	8,044	9,402	9,924	13,179	[7] 47,957	[7] 49,522
Losses	14,557	18,743	22,914	29,040	35,064	37,003	[7] 19,070	[7] 20,652

[1] Includes natural gasoline run through pipe lines in California.
[2] Stocks east of California only.
[3] Includes terminal, transit, and natural gasoline stocks.
[4] Stocks east of California plus gas oil and distillate fuel in California.
[5] Total gas oil and fuel oil stocks, including California heavy crude.
[6] Of 2,000 pounds.
[7] Other finished products include still gas formerly reported also with losses.

No. 713.—PETROLEUM PRODUCTS: CRUDE OIL RUN TO STILLS AND OUTPUT OF REFINERIES, BY REGIONS

[In thousands of barrels of 42 gallons, except wax, which is in thousands of pounds]

Region	Crude oil run to stills		Natural gasoline run to stills or blended		Output of refineries, 1932				
	1931	1932	1931	1932	Gasoline	Kerosene	Gas oil and fuel oil	Lubricants	Wax
Total	894,608	819,997	35,116	26,332	392,623	43,836	294,754	22,433	458,920
East coast	168,790	162,534	1,509	641	68,261	7,150	62,834	6,712	209,440
Appalachian	36,372	34,136	515	377	17,022	3,289	4,673	4,101	85,120
Indiana, Illinois, Kentucky, etc	115,442	106,758	2,898	1,859	61,897	3,517	22,508	2,002	42,560
Oklahoma, Kansas, and Missouri	105,050	87,170	5,351	4,847	51,525	6,564	23,700	2,476	28,840
Texas	217,356	196,578	9,847	6,449	95,933	12,193	69,204	4,996	32,200
Louisiana and Arkansas	59,911	54,150	2,529	1,638	24,242	4,627	20,828	466	50,960
Rocky Mountain	18,679	13,934	1,266	991	7,993	506	3,410	178	9,800
California	173,008	164,737	11,201	9,530	65,750	5,990	87,597	1,502	----------

Source: Tables 712 and 713, Bureau of Mines, Department of Commerce.

No. 714.—PETROLEUM PIPE LINES

[All figures, except miles of line operated, in thousands of dollars]

Company and State or field served	Miles of line operated	Investment in pipe lines	Other investments	Pipeline operating revenues	Pipeline operating expenses	Pipeline operating income	Net income
ALL REPORTING COMPANIES							
1921	55,260	365,024	287,114	115,950	62,370	25,530	34,400
1922	57,349	382,280	264,344	128,059	64,539	52,720	58,568
1923	64,760	432,065	305,841	131,213	69,234	52,678	62,639
1924	68,185	496,187	282,504	146,921	74,656	63,176	72,234
1925	70,009	511,088	93,896	164,645	80,232	70,966	88,495
1926	72,846	539,410	111,891	173,075	83,098	76,523	80,401
1927	76,070	609,439	105,927	195,561	90,287	92,719	93,239
1928	81,676	659,093	106,688	222,073	96,478	112,221	117,206
1929	85,796	741,010	104,445	251,411	102,101	135,421	142,216
1930	88,727	772,711	96,184	237,910	99,363	121,816	123,741
1931	93,090	845,050	90,505	222,944	96,237	116,767	120,738

Source: Interstate Commerce Commission.

No. 715.—PETROLEUM: PRICES OF CRUDE AND REFINED PRODUCTS

NOTE.—Prices of crude and fuel oil in dollars per barrel of 42 gallons, others in cents per gallon. Compiled by Joseph E. Pogue. The weighted average prices cover five principal grades of crude oil at wells, five markets each for kerosene and gasoline from tank wagon, five refining locations for fuel oil, and lubricating oil at refineries

Year	Crude	Gasoline	Kerosene	Fuel oil	Lubricating oil	Month, 1932	Crude	Gasoline	Kerosene	Fuel oil	Lubricating oil
	Dolls.	*Cents*	*Cents*	*Dolls.*	*Cents*		*Dolls.*	*Cents*	*Cents*	*Dolls.*	*Cents*
1921	1.86	22.3	12.9	1.30	--------	January	0.955	8.6	9.2	0.546	14.0
1922	1.78	21.7	12.4	1.24	--------	February	.955	8.6	9.2	.559	14.1
1923	1.71	17.5	12.8	1.20	--------	March	.951	8.7	9.2	.573	14.3
1924	1.84	15.9	12.7	1.35	--------	April	1.02	9.0	9.2	.611	14.6
1925	1.96	16.6	12.3	1.46	24.3	May	1.08	9.2	9.5	.635	15.5
1926	2.03	17.5	14.7	1.47	23.3	June	1.08	9.1	9.5	.636	15.9
1927	1.55	15.0	12.9	1.14	21.2	July	1.08	9.5	9.5	.657	16.4
1928	1.54	14.7	12.9	.91	20.7	August	1.08	9.1	9.5	.652	16.0
1929	1.67	13.9	13.4	.89	26.3	September	1.06	9.1	9.5	.624	14.3
1930	1.39	11.7	12.1	.78	19.8	October	1.03	8.3	9.5	.643	13.3
1931	.91	8.7	10.3	.57	14.7	November	1.03	8.6	9.5	.677	12.6
1932	1.02	8.9	9.4	.62	14.5	December	.963	8.5	9.7	.677	12.5

No. 716.—ASPHALT: PRODUCTION, EXPORTS, AND IMPORTS

Quantity and value	1915	1920	1925	1930	1931	1932
QUANTITY (TONS OF 2,000 POUNDS)						
Manufactured asphalt produced and sold [1]	1,052,821	1,746,275	3,178,370	4,153,994	4,073,870	3,797,864
From domestic petroleum	664,503	700,496	1,206,700	2,167,068	2,206,568	2,308,785
From foreign petroleum	388,318	1,045,779	1,971,670	1,986,926	1,867,302	1,489,079
Native asphalt produced and sold [2]	75,751	198,497	584,850	702,777	503,383	340,019
Asphalt (chiefly lake) imported	138,248	128,414	122,162	53,197	73,672	20,473
Asphalt exported:						
Native, unmanufactured	42,787	51,706	32,835	23,160	18,977	12,365
Petroleum asphalt	----------	----------	89,014	410,389	288,099	206,006
VALUE (THOUSANDS OF DOLLARS)						
Manufactured asphalt produced and sold [1]	8,446	26,258	42,826	42,032	31,806	25,911
From domestic petroleum	4,716	11,985	15,306	20,851	16,615	14,898
From foreign petroleum	3,730	14,273	27,520	21,181	15,191	11,013
Native asphalt produced and sold [2]	526	1,214	4,148	4,463	2,930	1,943
Asphalt (chiefly lake) imported	680	1,068	907	457	726	251
Asphalt exported:						
Native—						
Unmanufactured	736	1,356	826	629	531	449
Manufactured, including roofing	439	842	2,526	1,808	969	573
Petroleum asphalt	----------	----------	1,762	7,277	4,941	3,168

[1] Including road oil.
[2] Native asphalt and related bitumens.

Source: Bureau of Mines, Department of Commerce.

No. 717.—PORTLAND CEMENT: PRODUCTION, SHIPMENTS, AND IMPORTS

NOTE.—Imports are "Imports for consumption" and include all kinds of hydraulic cement, most of which is Portland. "Shipments" include exports made directly by manufacturers and shipments made by them to noncontiguous territories. (See Table 718.) Data for 1932 are preliminary; leaders indicate separate data not yet available.

State	1910	1915	1920	1925	1929	1930	1931	1932
	Thousands of barrels of 376 pounds							
Production, total	76,550	85,915	100,023	161,659	179,646	161,197	125,429	76,509
Alabama	[1] 1,481	([2])	1,132	6,288	5,006	4,821	4,447	----------
California	[3] 6,386	4,503	7,098	13,098	13,092	10,124	7,740	5,508
Illinois	4,459	5,157	5,539	7,101	8,243	7,935	6,407	----------
Iowa	[4] 2,010	4,560	4,849	4,648	6,373	7,088	5,804	----------
Kansas	5,656	3,580	4,341	6,511	6,740	6,012	4,145	----------
Michigan	3,688	4,765	4,891	10,936	13,749	11,511	6,133	4,329
Missouri	4,456	4,627	6,018	8,332	8,113	7,809	5,667	----------
New York	3,296	5,044	5,885	8,770	10,761	10,373	9,487	----------
Ohio	1,528	1,949	1,780	5,715	9,427	8,632	6,069	----------
Pennsylvania	26,676	28,649	28,269	42,347	39,355	37,844	28,510	----------
Tennessee	([2])	([2])	([2])	([2])	4,442	3,875	3,303	----------
Texas	[5] 2,287	1,939	2,562	4,858	7,374	6,782	6,189	3,750
Other States	14,627	21,142	27,659	43,055	37,971	38,393	31,528	----------
Shipments	([6])	86,892	96,312	157,295	169,868	159,059	127,151	80,579
Imports	307	42	525	3,667	1,745	985	470	468
Stocks, end of year	([6])	11,463	8,833	18,336	23,701	25,899	24,177	20,200

[1] Includes Georgia and Tennessee.
[2] Included in other States.
[3] California includes Washington.
[4] Includes Kentucky and West Virginia.
[5] Includes Oklahoma.
[6] Not available.

No. 718.—PORTLAND CEMENT: SHIPMENTS BY DESTINATIONS

[In thousands of barrels of 376 pounds]

State	1929	1930	1931	1932 [1]
Shipped from cement plants	169,868	159,059	127,151	80,579
Shipments to States	168,754	158,030	126,405	79,930
New England	7,733	7,528	6,367	4,171
Maine	600	836	527	410
New Hampshire	666	560	437	266
Vermont	929	582	312	259
Massachusetts	2,908	3,091	3,044	2,124
Rhode Island	721	705	570	305
Connecticut	1,909	1,754	1,477	807
Middle Atlantic	42,190	40,479	32,745	18,598
New York	21,040	20,147	19,756	11,045
New Jersey	8,015	6,536	5,066	2,850
Pennsylvania	13,135	13,796	7,923	4,703
East North Central	46,404	39,391	28,010	19,903
Ohio	10,033	9,699	6,645	4,702
Indiana	5,675	4,928	3,880	3,001
Illinois	13,491	11,164	7,925	5,822
Michigan	11,687	8,626	5,582	3,428
Wisconsin	5,518	4,975	3,978	2,950
West North Central	19,347	21,178	16,705	11,515
Minnesota	3,213	3,669	3,716	3,146
Iowa	5,463	6,412	3,800	2,591
Missouri	5,621	6,145	4,259	3,453
North Dakota	445	338	258	176
South Dakota	530	541	637	334
Nebraska	1,470	1,676	1,903	771
Kansas	2,605	2,398	2,132	1,044
South Atlantic	12,641	12,693	12,373	7,063
Delaware	365	374	347	298
Maryland	2,426	2,555	2,014	1,559
District of Columbia	1,127	1,079	1,250	1,069
Virginia	1,765	1,648	1,596	904

State	1929	1930	1931	1932 [1]
Shipments to States—Con.				
South Atlantic—Continued.				
West Virginia	1,415	1,599	1,421	858
North Carolina	1,753	1,165	1,015	448
South Carolina	1,190	1,655	2,251	368
Georgia	1,423	1,562	1,714	1,132
Florida	1,176	1,057	765	427
East South Central	7,498	5,999	4,800	3,394
Kentucky	1,576	1,695	1,628	1,370
Tennessee	2,935	2,411	1,396	1,166
Alabama	1,958	1,274	1,251	391
Mississippi	1,029	620	525	467
WestSouth Central	14,149	14,166	13,028	6,752
Arkansas	1,556	1,459	1,223	270
Louisiana	1,657	2,892	3,906	1,286
Oklahoma	3,352	3,397	2,214	1,237
Texas	7,584	6,418	5,685	3,959
Mountain	3,495	2,979	2,511	1,949
Montana	552	319	263	150
Idaho	261	312	189	94
Wyoming	193	179	136	83
Colorado	892	844	776	492
New Mexico	286	298	265	174
Arizona	657	463	438	161
Utah	521	417	311	166
Nevada	133	147	133	629
Pacific	15,297	13,599	9,630	6,484
Washington	2,478	3,102	2,087	1,289
Oregon	1,017	1,070	927	523
California	11,802	9,427	6,616	4,672
Unspecified	----------	16	235	99
Exports direct by manufacturers [2]	1,114	1,030	746	649

[1] Preliminary.
[2] Includes shipments to Alaska, Hawaii, and Puerto Rico.

Source of Tables 717 and 718: Bureau of Mines, Department of Commerce.

No. 719.—CEMENT PRODUCTION: QUANTITY, BY KINDS, AND TOTAL VALUE

NOTE.—Portland cement is expressed in barrels of 376 pounds; masonry, natural, and puzzolan cement in 1921 and later years in 376-pound barrels but prior to 1921 in barrels of 240, 265, and 320 pounds, respectively. For 1912 through 1924 the figures for masonry, natural, and puzzolan cement represent shipments

Year	Production in thousands of barrels			Total value in thousands of dollars	Year	Production in thousands of barrels			Total value in thousands of dollars
	Total	Portland	Masonry, natural, and puzzolan			Total	Portland	Masonry, natural, and puzzolan	
1890	7,777	336	7,441	4,527	1918	71,515	71,082	433	114,132
1895	8,731	990	7,741	5,482	1919	81,307	80,778	529	138,714
1900	17,231	8,482	8,749	13,284	1920	100,791	100,023	767	203,198
1905	40,102	35,247	4,855	35,932	1921	99,381	98,842	539	187,708
1907	52,230	48,785	3,445	55,904	1922	115,679	114,790	889	203,324
1908	52,911	51,073	1,838	44,478	1923	138,732	137,460	1,272	263,122
1909	66,690	64,991	1,698	53,611	1924	150,777	149,358	1,418	272,345
1910	77,785	76,550	1,235	68,752	1925	163,388	161,659	1,729	[1] 281,076
1911	79,548	78,529	1,019	66,705	1926	166,635	164,530	2,105	[1] 280,786
1912	83,351	82,438	913	67,462	1927	175,330	173,207	2,124	[1] 281,736
1913	92,949	92,097	852	93,001	1928	178,509	176,299	2,210	[1] 278,883
1914	89,050	88,230	820	82,204	1929	172,856	170,646	2,209	[1] 255,105
1915	86,708	85,915	794	74,285	1930	162,989	161,197	1,792	[1] 231,249
1916	92,363	91,521	842	101,379	1931	126,671	125,429	1,242	[1] 142,580
1917	93,454	92,814	639	126,106	1932 [2]		76,509		[1] 81,500

[1] Value of shipments. [2] Preliminary; leaders indicate data not yet available.

Source: Bureau of Mines, Department of Commerce.

No. 720.—STONE: PRODUCTION (SALES), BY VARIETIES AND USES

Variety and use	Quantity sold, thousands of short tons (2,000 pounds)[1]							Value, 1,000 dollars	
	1925	1926	1927	1928	1929	1930	1931	1930	1931
Total	115,851	124,496	136,345	133,870	141,110	126,996	97,933	178,949	135,086
Granite	8,074	9,330	10,707	9,556	10,827	10,047	8,068	30,424	25,974
Basalt and related rocks	11,842	12,978	13,211	15,328	14,872	14,532	12,553	17,053	13,823
Sandstone	4,499	4,979	5,051	4,717	5,790	4,594	4,582	10,285	7,575
Marble	564	563	600	579	554	477	350	12,906	10,420
Limestone	85,649	91,888	99,662	96,865	100,687	88,741	66,751	100,002	71,876
All other	5,242	4,759	7,115	6,825	8,380	8,604	5,629	8,279	5,418
Building stone	2,392	2,609	2,485	2,453	2,647	2,322	1,669	39,112	28,111
Monumental	363	360	358	348	366	291	237	13,158	9,634
Paving blocks	381	66	367	349	300	295	197	2,670	1,938
Curbing	393	346	378	383	336	262	171	3,176	2,242
Flagging	56	66	55	75	88	82	50	706	447
Rubble	1,197	540	809	908	908	1,067	432	922	592
Riprap	3,079	4,060	4,618	3,993	4,213	4,292	4,223	4,739	4,277
Crushed stone	75,673	82,516	94,949	91,265	92,721	87,111	72,624	87,554	70,405
Furnace flux (limestone and marble)	22,861	23,859	21,666	23,124	24,394	17,091	9,727	12,362	7,194
Refractory stone	1,261	1,531	1,363	1,348	1,558	1,198	611	1,407	633
Manufacturing industries (limestone and marble)	5,172	4,954	5,352	5,640	7,431	6,021	4,501	5,324	3,842
Agricultural limestone and other	3,023	3,289	3,944	3,983	6,147	6,967	3,490	7,820	5,771

[1] Quantities of stones not sold by the short ton are expressed in the approximate equivalent in short tons; expressed in their selling units the quantities are as follows for 1931: Building stone, 21,461,000 cubic feet; monumental stone, 2,869,000 cubic feet; paving blocks, 22,441,000; curbing, 2,136,000 cubic feet; and flagging, 612,000 cubic feet.

Source: Bureau of Mines, Department of Commerce.

No. 721.—CLAY AND GLASS PRODUCTS: PRODUCTION

Industry and product	Unit	Quantity (thousands of unit specified)			Value (thousands of dollars)		
		1927	1929	1931	1927	1929	1931
CLAY PRODUCTS (EXCEPT POTTERY) AND NONCLAY REFRACTORIES							
Total value					319,710	294,488	127,468
Brick:							
Common	Number	7,060,984	5,505,359	2,314,664	78,408	58,733	21,652
Vitrified	do	503,400	367,650	207,386	10,764	7,504	4,266
Face	do	2,412,903	2,139,408	903,226	41,521	36,120	13,271
Enameled	do	18,097	17,137	8,605	1,375	1,259	484
Drain tile	Ton[1]	734	859	253	5,511	6,516	1,667
Sewer pipe	do	2,116	1,675	823	29,426	21,330	9,448
Architectural terra cotta	do	156	134	55	16,628	13,921	5,492
Hollow building tile or block	do	4,114	4,164	1,928	26,499	30,142	11,172
Tile (not drain):							
Roofing	Squares	368	371	285	5,349	3,944	3,125
Floor (including plain, vitreous, encaustic, quarry, etc.).	Sq. ft	20,434	15,887	12,181	4,586	3,773	2,052
Ceramic mosaic (vitreous and semivitreous).	do	20,506	18,052	8,744	4,552	3,738	1,781
Faience (including art, enameled, and hand-decorated).	do	10,157	19,357	21,431	5,776	10,136	7,749
Wall (thin, white glazed, etc.)	do	39,537	30,443	17,716	12,503	11,254	4,993
Stove lining	Ton[1]	14	17	9	503	468	317
Fire-clay products (shaped):							
Brick, block, etc.[2]	Number	877,748	962,129	423,061	35,474	38,284	16,419
Special shapes	Ton[1]	133	182	127	2,699	4,092	3,068
All other clay products					14,587	14,068	6,344
Silica brick	Number	245,881	294,402	103,557	12,757	15,165	5,132
Other nonclay refractories					10,791	14,041	9,036
POTTERY							
Total value					111,814	112,019	66,583
Red earthenware (flower pots, etc.).					2,850	2,798	2,034
Stoneware (except chemical) and yellow and Rockingham ware.					4,503	4,144	3,300
White ware, cream color, white granite, semiporcelain, and semivitreous porcelain.					32,692	32,067	20,108
Hotel china					10,020	10,476	6,595
Vitreous china plumbing fixtures.					23,628	24,992	12,894
Porcelain electrical supplies					22,861	22,136	13,154
Saggers					1,916	1,308	645
All other products					14,144	14,098	7,853
GLASS							
Total value					276,762	299,717	211,955
Building glass:							
Window glass	Sq. ft	481,021	402,559	266,772	26,814	25,962	10,307
Obscured glass, including cathedral and skylight.	do	41,545	34,294	17,796	5,093	5,256	2,389
Plate glass, polished	do	118,124	148,743	87,017	44,258	50,192	25,765
Wire glass:							
Polished	do	3,320	3,893	1,448	1,631	1,714	551
Rough, for sale as such	do	25,795	38,924	14,216	2,746	4,278	1,250
Pressed and blown glass (except containers)					76,657	85,552	56,513
Containers					114,381	121,654	105,328
All other products					5,182	5,110	9,852

[1] Of 2,000 pounds.
[2] Brick, block, or tile for locomotive and other fire-box lining, etc. (9-inch equivalent); and high alumina brick.

Source: Bureau of the Census, Department of Commerce.

No. 722.—PRODUCTION OF PRINCIPAL BURNED-CLAY BUILDING MATERIALS

Year	Brick (millions)			Value (thousands of dollars)							
				Brick			Architectural terra cotta	Hollow building tile	Tile (not drain)	Sewer pipe	Fire brick
	Common	Vitrified [1]	Face	Common	Vitrified [1]	Face					
1915	6,851	953	856	42,145	12,231	9,536	4,796	7,801	5,186	11,259	15,800
1916	7,394	942	1,003	49,357	12,257	11,465	6,466	9,943	6,475	13,577	24,437
1917	5,865	707	758	47,936	10,665	10,391	6,174	13,255	6,821	17,307	42,502
1918	3,557	403	356	38,782	7,145	6,095	2,659	13,037	5,082	15,334	51,648
1919	4,752	489	791	63,585	11,615	16,033	3,988	17,965	8,137	16,755	38,016
1920	4,852	468	787	82,216	12,679	19,441	10,852	27,112	12,470	25,371	53,416
1921	4,448	562	873	57,096	12,870	18,128	9,068	14,841	12,560	22,155	24,833
1922	5,899	517	1,417	72,613	10,816	28,234	12,410	19,708	16,597	23,600	31,357
1923	7,282	699	1,931	94,473	15,570	38,892	16,486	28,275	23,804	29,103	46,677
1924	7,159	554	2,030	86,692	12,974	39,931	16,446	24,998	24,842	32,400	40,621
1925	7,562	539	2,475	88,551	11,876	45,428	19,139	29,264	27,124	30,421	41,164
1926	7,517	468	2,440	88,227	10,285	44,516	19,667	27,818	34,985	29,303	42,707
1927	7,061	503	2,413	78,408	10,764	41,521	16,628	26,499	32,766	29,426	38,174
1928	6,413	378	2,412	69,333	7,800	40,034	13,642	25,792	31,523	23,969	37,392
1929	5,505	368	2,139	58,733	7,504	36,120	13,921	30,142	32,846	21,330	42,376
1930	3,631	300	1,482	37,433	6,247	24,615	10,016	22,219	23,934	15,964	36,054
1931	2,315	207	903	21,652	4,266	13,271	5,492	11,172	19,700	9,448	19,487

[1] Vitrified brick or block.

Sources: Bureau of the Census and Bureau of Mines, Department of Commerce.

No. 723.—SALT: PRODUCTION, BY STATES AND KINDS; EXPORTS AND IMPORTS

NOTE.—All quantity figures in short tons (2,000 pounds). Production figures represent sales plus that used by producers; they include Puerto Rico. Imports are imports for consumption

Year	Production	Exports	Imports	Year	Production	Exports	Imports
1880	834,548	1,642	509,703	1922	6,792,849	134,989	113,922
1885	985,411	2,108	440,290	1923	7,130,713	125,529	88,750
1890	1,242,779	2,464	257,323	1924	6,803,115	144,945	88,938
1895	1,913,751	3,602	279,576	1925	7,397,500	155,079	85,788
1900	2,921,708	7,511	199,909	1926	7,371,600	158,908	55,964
1905	3,635,257	34,238	161,159	1927	7,568,690	153,832	44,968
1910	4,242,792	49,013	137,103	1928	8,074,700	145,396	42,856
1915	5,352,409	80,474	122,326	1929	8,543,560	109,222	36,450
1919	6,882,902	119,416	59,514	1930	8,054,440	70,478	54,021
1920	6,840,029	139,272	137,654	1931	7,358,070	93,710	33,216
1921	4,981,154	109,563	93,095	1932	6,447,351	63,581	28,018

State or kind	1910	1915	1920	1925	1930	1931	1932
Production, total	4,242,792	5,352,409	6,840,029	7,397,500	8,054,440	7,358,070	6,447,351
By States:							
Michigan	1,323,283	1,762,430	2,262,915	2,172,600	2,558,290	2,053,980	1,715,304
New York	[1] 1,629,953	1,570,446	1,903,101	2,053,970	2,009,280	1,788,940	1,556,642
Ohio	514,339	823,234	1,057,802	1,173,590	1,311,440	1,398,000	1,196,993
Kansas	393,603	527,123	783,655	812,540	759,800	691,160	688,178
Louisiana	(1)	(2)	265,085	500,350	535,250	529,280	483,805
California	131,252	146,784	212,008	292,480	350,370	334,900	281,349
Texas	53,503	62,297	91,103	(2)	(2)	103,040	139,730
Utah	34,979	55,279	75,259	88,150	85,240	74,010	61,230
West Virginia	21,788	32,513	29,802	25,870	28,670	35,480	49,629
Undistributed	140,093	372,303	159,299	277,950	416,100	349,280	269,491
By kinds:							
Manufactured (evaporated)	1,953,069	2,335,823	2,409,924	2,235,170	2,358,610	2,203,690	2,061,215
In brine	1,314,492	1,851,199	2,819,916	2,819,690	3,718,460	3,300,210	2,769,821
Rock salt	975,231	1,165,387	1,610,189	2,342,640	1,977,370	1,854,170	1,616,315
Total value (dollars)	7,900,344	11,747,686	29,894,075	26,162,361	25,009,480	21,541,012	19,468,096

[1] Louisiana is included with New York. [2] Included in "Undistributed."

Source: Bureau of Mines, Department of Commerce.

No. 724.—ACCIDENT RATES IN ALL BRANCHES OF THE MINERAL INDUSTRY, 1921 TO 1931

Year	Average days active	Men employed		Man shifts	Number killed	Number injured[1]	Number killed or injured per thousand 300-day workers	
		Actual number	Equivalent in 300-day workers				Killed	Injured[1]
1921	188	1,044,001	653,414	196,024,209	2,381	35,416	3.6	198.0
1922	174	1,092,863	635,299	190,589,710	2,529	46,307	4.0	201.1
1923	222	1,153,894	852,145	255,643,525	3,071	59,570	3.6	203.9
1924	220	1,073,630	787,065	236,119,757	3,031	57,766	3.9	201.1
1925	222	1,049,579	777,896	233,368,875	2,826	58,704	3.6	197.2
1926	242	1,058,843	855,632	256,689,813	3,201	52,752	3.7	178.1
1927	225	1,044,537	782,635	234,790,290	2,797	45,618	3.6	163.2
1928	231	951,449	733,728	220,118,341	2,629	38,717	3.6	146.1
1929	243	928,648	752,809	225,842,583	2,728	38,806	3.6	143.1
1930	217	888,514	641,749	192,524,971	2,492	130,580	3.9	203.5
1931	188	784,347	492,009	147,602,799	1,707	96,412	3.5	196.0

[1] Excluding coal mines prior to 1930. Data excluding coal mines are: Number injured, 1930, 26,759; 1931, 16,063; number injured per thousand 300-day workers, 1930, 117.0; 1931, 99.7.

Source: Bureau of Mines, Department of Commerce.

No. 725.—ACCIDENTS IN MINERAL INDUSTRIES: BY GROUPS OF INDUSTRIES

NOTE.—Figures for metal mines include mines producing nonmetallic minerals other than coal

Year	Number employed		Killed	Injured	
	Actual number	Equivalent in 300-day workers		Temporary	Permanent
Metal mines:					
1915	152,118	141,997	553	34,686	609
1920	136,583	134,540	425	32,205	357
1922	105,697	97,138	344	25,840	240
1923	123,279	121,866	367	33,129	434
1924	123,128	119,113	418	32,706	412
1925	126,713	123,908	371	34,458	674
1926	127,823	123,870	430	29,773	577
1927	119,699	113,447	352	24,605	528
1928	113,866	109,345	273	21,914	569
1929	118,735	115,394	350	22,615	477
1930	103,233	92,900	271	15,091	503
1931	80,940	62,405	158	8,402	307
Quarries:					
1915	100,740	82,447	148	9,148	523
1920	86,488	77,089	178	10,880	337
1922	79,081	68,861	132	11,442	397
1923	92,455	85,153	143	14,547	443
1924	94,242	84,426	138	14,307	470
1925	91,872	83,487	149	13,713	452
1926	91,146	82,361	154	12,770	431
1927	91,517	82,609	135	13,094	365
1928	89,667	81,325	119	10,207	361
1929	85,561	76,559	126	9,510	300
1930	80,633	68,531	105	7,152	265
1931	69,100	51,755	61	5,222	205
Metallurgical plants:					
1916	80,201	88,596	83	14,863	217
1920	59,232	65,587	61	8,714	149
1922	44,000	46,008	45	6,600	78
1923	53,871	59,499	58	8,260	164
1924	56,196	62,948	55	8,132	94
1925	58,935	66,220	44	7,480	231
1926	57,726	65,687	48	7,052	227
1927	53,477	60,291	54	5,533	208
Metallurgical Plants—Con.					
1928	45,695	52,668	44	4,473	181
1929	47,399	53,587	43	4,368	207
1930	40,787	44,403	25	2,570	156
1931	28,938	28,807	16	1,304	89
Coke ovens:					
1916	31,603	34,119	45	5,154	83
1920	28,139	29,921	49	3,336	79
1922	19,278	18,236	29	1,674	36
1923	23,729	25,627	45	2,517	76
1924	20,451	20,681	24	1,607	38
1925	23,254	24,054	28	1,652	44
1926	23,115	24,288	51	1,874	48
1927	20,667	23,223	25	1,232	53
1928	19,390	21,710	17	979	33
1929	22,459	25,724	22	1,293	36
1930	19,855	22,936	28	990	32
1931	15,564	18,163	9	499	35
Coal mines:					
1911	728,348	534,122	2,656	(1)	(1)
1915	734,008	511,598	2,269	(1)	(1)
1919	776,569	542,217	2,323	(1)	(1)
1920	784,621	601,283	2,272	(1)	(1)
1922	844,807	405,056	1,984	(1)	(1)
1923	862,536	560,000	2,462	(1)	(1)
1924	779,613	499,896	2,402	(1)	(1)
1925	748,805	480,227	2,234	(1)	(1)
1926	759,033	559,426	2,518	(1)	(1)
1927	759,177	503,065	2,231	(1)	(1)
1928	682,831	468,680	2,176	(1)	(1)
1929	654,494	481,545	2,187	(1)	(1)
1930	644,006	412,979	2,063	101,093	2,728
1931	589,705	330,880	1,463	78,478	1,871
1932	(1)	(1)	1,168	(1)	(1)

[1] Not available.

Source: Bureau of Mines, Department of Commerce.